12-2018

The Usage of Social-Emotional Intelligence by Elementary Principals From the Perception of Teachers and Principals

Tammy M. Stellmach Dr
St. Cloud State University

The Usage of Social-Emotional Intelligence by Elementary Principals From the Perception of Teachers and Principals

by

Tammy Stellmach

A Dissertation

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Doctor of Education in

Educational Administration and Leadership

December, 2018

Dissertation Committee
Kay Worner, Chairperson
Roger Worner
Carol Bertram
Frances Kayona
John Eller

Abstract

The study measured perceptions of select Minnesota elementary school teachers and principals regarding principals' usage of social-emotional intelligence in six subscale constructs and examined differences between teacher and principal perceptions. The study also examined the relationship between reported principals' usage of social-emotional intelligence and school performance in the areas of math, reading, and attendance.

Research questions were answered through analyses of data from two surveys including teachers' perceptions and principals' perceptions regarding the amount of principals' usage of social-emotional intelligence in six social-emotional intelligence constructs: Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall Social-Emotional Influence.

Responses received showed that teacher respondents perceived Self-management as the construct used more often by their principals and that principal respondents perceived Responsible Decision-making as the construct they used more often. Responses showed that both teacher and principal respondents perceived principals' usage of all six constructs positively, although principal respondents reported higher usage of all six constructs. Teacher respondents indicated a perception of higher principals' usage of all six constructs in schools that met performance criteria.

Based on the results of the study, it is recommended that schools in Minnesota examine perceptions of both teachers and principals regarding principals' usage of social-emotional intelligence to assure principals are using all constructs a majority of the time.

Acknowledgement

I give a heartfelt acknowledgement and thank you to my dissertation committee members. My gratitude runs deep and strong; without support for each of my committee members, my dissertation would remain unfinished.

My utmost gratitude to–Dr. Kay Worner, for her wisdom and expertise, she continually gave of her time and talent to help me refine my writing in addition to her never-ending optimism that I would indeed finish; Dr. Roger Worner, for his humor and insight throughout all of the doctoral courses. His "snippets" continue to be a favorite memory and a current practice I use in my leadership. I appreciate his honest candor, indeed, I am not making the watch, just telling time; Dr. Frances Kayona, for challenging my thinking along this journey, and for support and belief in my leadership skills, encouraging me to apply for a women in leadership scholarship and celebrating with me at the awards banquet; Dr. John Eller, for helping with the initial construction of this project and guidance along the way in building the framework, ensuring I had a topic that I loved; Dr. Carol Bertram, for seeing the leader in me that was always there, for encouraging me to be that leader, and for mentoring and guiding me in my journey. My topic evolved from practices I learned from her, centering leadership around social-emotional constructs.

To my colleagues in Cohort Three, thank you for your support and continued encouragement. To my colleagues in the field, thank you for your ceaseless energy and commitment the students, teachers and families we work with each and every day. To my friends, thank you for reminding me to just breathe. I could not have made this journey alone.

Dedication

This dissertation is dedicated to my husband, soulmate, and best friend, Bob Stellmach. You came into my life thirty-four years ago as a friend and now you are so much more. Thank you for your support and encouragement through this laborious process. You always reminded me to keep going, and your Faith and Belief that I could finish kept me writing when I didn't think I could continue. Our frequent conversations about leadership and the changes and challenges in the field of education continue to keep me moving forward as a change leader. I love the balance you bring to our life My Engineer.

This dissertation is also dedicated to my three children, Timothy, Tiffinni, and David, who fill my heart and soul. Each one keeping me grounded in their separate ways, providing me with the wisdom to see the world of education and learning from different angles and perspectives; challenging me to frame life differently. My life is fuller because of each of you.

Table of Contents

Chapter Page

Chapter Page

List of Tables

Table Page

Table Page

List of Figures

Figures Page

Chapter 1: Introduction

Principal and teacher effectiveness accounts for nearly 60% of a school's impact on student achievement (Marzano, Waters, & McNully, 2005). Furthermore, principal effectiveness by itself accounts for a full 25% of overall school impact on student achievement (Marzano et al., 2005). The principal's influence is extremely important because leadership decisions and actions of principals significantly influence teacher effectiveness (Chenoweth, 2007). Thus, principal leadership impacts student achievement. A study by Branch, Hanushek, and Rivkin (2013) provided evidence on the importance of principals in school leadership. According to their study, the impact of a teacher typically affects only the students in the class, while the impact of the principal typically affects all of the students (Branch et al., 2013). "The overall impact from increasing principal quality exceeds the benefit from a comparable increase in the quality of a single teacher" (Branch et al., 2013, p. 64).

Effective leaders are inspirational; they find ways to motivate, ignite and energize the workplace (Goleman, 2006a). In trying to understand and clarify what skills make some leaders more effective than others, Goleman, Boyatzis, and McKee (2002 & 2013) referred to a "hidden, but crucial, dimension in leadership–the emotional impact of what a leader says and does," also known as social-emotional intelligence (SEI) (p. 4). The strength and influence of a leader effectively using SEI in the workplace is noted not only in "tangibles such as better business results and the retention of talent," but leading with emotional intelligence at the forefront of decision-making is reflected in intangibles such as positive culture and climate, stronger staff morale, increased motivation, and a stronger employee commitment to overall success (Goleman et al., 2013, p. 5). A principal with higher levels of SEI can impact student achievement, the

effectiveness of the school, and social and emotional learning (SEL) for staff, students, and even families at even higher levels.

Several authors (Bar-On, 2007; Goleman, 1995 & 2006b; Salovey & Mayer, 1990) advocated that SEI is an important factor in predicting success and the capacity to solve problems. Effective schools' principals understand what it takes to educate all students well. An effective leader knows where his or her strengths are and where the deficits are as well. An effective leader manages emotions and is motivated, reliable and ethical (Salovey & Mayer, 1990). An effective leader is empathetic, understands social situations, and regulates relationships positively (Newstead, Saxton, & Colby, 2008). School leadership accounts for fully one-fourth or more of total school effects on students and student achievement (Gale & Bishop, 2014). School principals need to lead effectively, including the use of SEI.

Public school leaders have reached consensus on factors that impact school effectiveness such as: social connectedness, relationships, more class time, college readiness programs, mentoring and instructional coaching for teaching staff, and analysis and utilization of data to understand and act upon student needs (Newstead et al., 2008). State and federal demands for accountability, i.e. school effectiveness, student achievement measures obtained from standardized testing, and adequate yearly progress (AYP) assessments in math, reading, and attendance. Achievement gaps found in subgroup areas such as socioeconomic status, disability categories, race/ethnicity, and English language proficiency are also required to be measured school by school. Due to changes at the federal level, an education law signed by President Obama in 2015, the Every Student Succeeds Act (ESSA), replaced AYP, and mandated fewer consequences tied to low test scores; more expectations were placed on offering advanced placement (AP) courses and reducing student suspensions. Student achievement matters; leaders

must be willing to make choices about what impacts and affects achievement the most and then align existing resources and efforts behind those decisions (Jackson & Lunenburg, 2010). Eventually, mindful leaders will have more effective schools.

Schools throughout the country, which reflect similar student demographics, comparable budget constraints, and linear student-to-staff ratios' vary dramatically in student achievement results (Newstead et al., 2008). Research indicated that the critical difference between schools that excel and those that do not is the quality of leadership (Branch et al., 2013; Hahn, 2012). Principals in effective schools devote time and resources to creating school culture, evaluating student learning, aligning teacher professional development, and mentoring teachers (Bentley, 2011; Hahn, 2012; Newstead et al., 2008; Reed, 2005). Supportive leaders become an essential component in collaborative efforts to maximize school effectiveness. Key features of effective school leadership include principals with SEI abilities and principals who focus on cultivating partnerships between teachers, parents, and community members based on social-emotional learning so that they become invested in sharing overall responsibility for the school's effectiveness (Bernabei, Cody, Cole, Cole, & Sweeney, 2008; Gale & Bishop, 2014; Hahn, 2012).

Psychologists and analysts use two methods, emotional quotient (EQ), typically referred to as EI, and intelligence quotient (IQ), to label, measure, assess, and predict success. Until only a few decades ago, IQ was the only measure that was viewed as a reliable indicator that correlated with personal success in life (Goleman, 2006b). Research studies on SEI have shown that SEI can be measured as a set of mental abilities (Goleman, 2008: Salovey, & Grewal, 2005). SEI is a combination of personal traits such as happiness, self-esteem, optimism, and self-management; it includes abilities to reason about and use emotions to enhance thought, actions

and interactions more effectively (Goleman, 2006a; Jones & George, 1998; Salovey & Grewal, 2005). Research findings have alluded to a relationship between happiness and success in the workplace (Boehm & Lyubomsky, 2008). Studies found correlations to success and effectiveness in the work place as well as happiness and contentment in both professional and personal realms (Boehm & Lyubomsky, 2008; Rosete & Ciarrochi, 2005). The positive mood of a leader in the work place promotes worker effectiveness and promotes job retention (George & Bettenhausen, 1990; Hahn, 2012). In addition, research found that performance in multiple areas, such as creativity, engagement, productivity, and communication, improves when employees work with a positive mind-set (Achor, 2010; George & Bettenhausen, 1990). Furthermore, positive emotions, calm influence, and harmony SEI are factors impacting effectiveness in the workplace (Barsade & Gibson, 2007).

Researchers examining the formula for success and happiness indicated that in addition to the traditional academic measurement for intelligence, the IQ test, other elements, namely SEI, should be examined (Fullan, 2011; Gardner, 1983; Goleman, 2004; Williams, 2008). While IQ has long been thought of as an essential characteristic for managers, SEI may be more important for authentic leaders. Multiple studies concluded that people with higher levels of social-emotional awareness achieve increased success across multiple life domains, such as work performance, communication skills, and relationships, both personal and professional (Goleman et al., 2013; Lyubomirsky, King, & Diener, 2005; Mayer, Salovey, & Caruso 2004a & b). SEI can be defined as "the ability to perceive and express emotions, understand and reason with emotion, and regulate emotion in self and others" (Bar-On, 2007, p. 27). Self-awareness is incredibly important for success. A study conducted with members of the Harvard Graduate School of Business's Advisory Council found that when asked the most important quality and

skill for leaders to hone and develop, the 75 members surveyed had a nearly unanimous answer: Self-awareness (George, Sims, McLean & Mayer, 2007).

In order to factor in satisfaction and true ability when measuring intelligence, SEI must be considered along with IQ. SEI skills are related to the following constructs: Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall SEI Influence. The study of SEI has been dissected and researched primarily in the business sector, while school climate research has primarily been focused on the area of student achievement (Bardach, 2008; Kline, 2011). Leaders are often flush with knowledge-based, cognitive credentials; leaders typically have "intelligence, ambition, and skill" or a strong intellectual quotient (IQ) (Goleman, 1998, p. 20). However, Goleman (1998) attested that leaders are often incompetent in the SEI area–the human area. SEI and IQ "make separate and discrete contributions" to leadership capacity and performance (Cherniss & Goleman, 2001, p. 22). Currently, research is lacking regarding SEI in leadership in the field of education, but the trend is showing the beginnings of more research and studies in this area examining the impact and relationship of SEI to school effectiveness (Bentley, 2011; Reed, 2005). Gardner (1995) contended that an important contribution education can make to the mindset and development of students is to help them define their own emotions and understand the emotions of others.

Conceptual Framework

The conceptual framework for the quantitative study incorporated six SEI subscale constructs embracing the SEI frameworks of Goleman, Bar-On, and Salovey-Mayer. Basis for the conceptual framework also included fundamental SEI concepts from The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2005). Table 1 contains the detailed conceptual framework for the quantitative study.

Table 1

Conceptual Framework for the Social-Emotional Traits and Abilities of Elementary Principals

Emotional Intelligence Subscale Constructs	Abilities	Skills	Traits
Self-awareness	Understands own emotions	• Identifies: -academic values -personal leadership strengths -weak areas of leadership -social values • Displays: -healthy sense of self-confidence	• Astute • Confident • Assertive
Self-management	Manages own emotions	• Displays & expresses: -healthy sense of impulse control -emotions (appropriately) -perseverance • Regulates: -emotions -stress	• Optimistic • Composed • Positive emotional behaviors • Responsible • Attentive
Social Awareness	Recognizes and understands emotions in others	• Recognizes: -individual differences -group difference -appropriate social norms • Appreciates: -individual differences -group differences • Listens intently	• Compassionate • Builds rapport • Supportive • Empathetic
Relationship Skills	Applies knowledge and awareness of emotions to relationships	• Manages and resolves conflict • Models cooperation • Seeks help when needed • Resists inappropriate social pressures	• Respectful • Loyal • Trustworthy • Personable • Team player • Motivational
Responsible Decision-making	Applies emotional intelligence to decision making	• Makes decisions: -based on safety -based on ethical standards -based on respect for others -after considering likely outcomes • Identifies and addresses areas of weakness within subordinates	• Ethical • Accountable • Conscientious • Reliable • Influential
Overall Social-Emotional Influence	Recognizes the importance of SEI for leaders	• Recognizes SEI strengths • Identifies SEI traits and abilities that are attributed to school effectiveness • Exerts communication skills effectively	• Self-reflective • Intuitive • Composed • Authentic • Approachable • Positive

(Source: Bar-On, 2004 & 2006a b; CASEL, 2005 & 2011; Elias, Ferrito, & Moceri, 2015; Goleman, 2006a & b; Kline, 2011; Mayer et al., 2004a & b; Salovey & Mayer, 1990)

Statement of the Problem

Staff development opportunities for elementary school principals should aim to strengthen and improve their SEI leadership skills so that they can lead their schools more effectively with greater success and higher student achievement. Although the federal government provides nearly one billion dollars annually for professional development for school districts, roughly 90% of those dollars are used for professional learning opportunities for teachers leaving only 10% for principal professional development (Prothero, 2015). Minimal research exists regarding quality staff development opportunities for principals in SEI and school effectiveness (Bardach, 2008; Bentley, 2011; Kline, 2011; Reed, 2005).

The study intends to add to the research on SEI in principal leadership in the state of Minnesota. The study examined the perceptions of select Minnesota elementary teachers and principals as to principal usage of social-emotional intelligence. The study examined school performance data in the areas of mathematics, reading and attendance on the Minnesota State Report card for those schools participating in the study to look for correlations with principal usage of the six SEI subscale constructs.

By integrating coursework related to SEI, administrative licensure programs in Minnesota can help increase SEI knowledge and SEI skills for those pursuing principal certification. In addition, school districts in Minnesota can focus district staff development resources for elementary principals in the subscale constructs of SEI ranked by teachers and principals as rarely or never used.

Research studies support the importance of intentionally incorporating social and emotional competencies within school classrooms for student success (Bernabei et al., 2008; Jennings & Greenberg, 2009; Parker, Hogan, Eastabrook, Oke, & Wood, 2006). Communities

and lawmakers are calling for social and emotional learning (SEL) and character education in schools. Eighteen states have legislation mandating character education and 18 states have legislation encouraging character education, including Minnesota. Another seven states support character education without legislation, while only eight states have no legislation specifically addressing character education (Character Education Legislation, 2016). A growing body of research and studies have determined there is a need for providing additional training to undergraduate students entering the field of education, as well as graduate students studying to be educational leaders, on developing social and emotional skill sets in the children they will be educating and the teachers they will be leading (Fox & Lentini, 2006; Parker et al., 2006; Payton et al., 2000). However, a limited amount of published research has focused on how the social and emotional skills of educational leaders affect the success of the schools in which they operate and serve (Bardach, 2008; Bentley, 2011; Payne, 1986; Reed, 2005).

Purpose of the Study

The purpose of the study was to examine principals' and teachers' perceptions in select Minnesota schools of principals' usage of social-emotional intelligence (SEI) in six subscale constructs: Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall Social-Emotional Influence. The study examined the correlation between the reported principals' usage of SEI constructs and the areas of mathematics, reading and attendance performance data found in the Minnesota State Report Card. The study also examined SEI traits perceived by principals and teachers as important and necessary for a principal in leading a school effectively.

Significance of the Study

The findings of the study may have significance for principals of elementary schools by identifying SEI subscale constructs ranked by teachers and principals in the study as rarely or never used, thus revealing a potential area of need for principal staff development. The findings of the study will also identify if a correlation exists between school performance of schools in the study and SEI subscale constructs ranked by teachers and principals in the study as often or always used. It was intended that the study might offer guidance for educational leadership and administration undergraduate and graduate degree programs and cohorts to compliment, intensify and strengthen courses to include instruction, information and training in SEI, particularly relating to subscale constructs of SEI shown to have a positive relationship with school effectiveness. Gall, Gall, and Borg (2005) reported that higher education institutions continually seek ways to improve their practices for training and preparing the highest quality of future educational leadership. The results of the study will guide school districts with future principal training needs in the area of SEI. The study will to add to the research on SEI in educational leadership.

Assumptions of the Study

Assumptions are typically out of the control of the researcher (Roberts, 2010). Vogt and Johnson (2016) defined an assumption as "a statement that is presumed to be true, often only temporarily for a specific purpose…" and "the conditions under which statistical techniques yield valid results" (p. 22).

The study made the following assumptions:

1. Principals of schools in the study have varying ability levels in the subscale constructs of social-emotional intelligence.

2. Principals who participated in the study answered survey questions honestly and without coercion.
3. Teachers who participated in the study answered survey questions honestly and without coercion
4. Respondents who participated in the study served in the educational position they reported.
5. Data on the MDE website were accurate.

Delimitations

Delimitations are parameters of the study placed on the study by the researcher and, of which the researcher has control over (Roberts, 2010). The study focused on SEI usage by elementary principals in Minnesota by examining perceptions of both teachers and principals regarding principal usage of the six SEI subscale constructs.

1. Participants were only from the state of Minnesota.
2. Participants were only from elementary schools.
3. Only public schools were included.
4. An effective school for the study was a school that met criteria 13 or more times for AYP in reading, math, and attendance combined, using the federal accountability section of the Minnesota State Report Card from the years 2012-2016; it was possible for a school to meet state criteria a total of 15 times in these three areas combined over the 5-year span. (See Appendix A).
5. Gender was not a factor in the study.
6. Convenience sampling was used to identify schools to be in the sample.

Research Questions

1. What did elementary teachers in select Minnesota public schools perceive as principals' usage of social-emotional intelligence in the six subscale constructs?
2. What did elementary principals in select Minnesota public schools perceive as their usage of social-emotional intelligence in the six subscale constructs?
3. What was the difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public elementary schools and as perceived by principals in select Minnesota public elementary schools?
4. A) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study? (See appendix A.)

   B) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study? (See appendix A.)

School performance results on the Minnesota State Report Card were examined in the areas of mathematics, reading and attendance.

Null Hypotheses

1. There was no difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public

elementary schools and as perceived by principals in select Minnesota public elementary schools.

2. There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.
3. There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.

Expert validity: The SELF used for the study was modeled after the survey developed by researcher Kline (2011) with his permission. The coefficient of reliability of all six subscale constructs (Relationship Skills, Self-Awareness, Responsible Decision Making, Self-Management, Social Awareness, and Overall Influence) produced Cronbach's Alpha of 0.964, which exceeded the general standard in social sciences of 0.70 to ensure high internal consistency (Andrews & Crandall, 1976; Peterson, 1994).

Definition of the Terms

Adequate Yearly Progress: Adequate Yearly Progress is a federal assessment that examines academic achievement data of individual schools and collective school districts. This measurement is a component of the Elementary and Secondary Education Act's reauthorization, commonly referred to as the No Child Left Behind Act of 2001 (Editorial Projects in Education Research Center, 2011).

Attendance Rates: The attendance rates for select Minnesota public schools were secured from the Minnesota Department of Education's (MDE) website. Individual school data reports include attendance rates. MDE expects that students will attend school 90% of the time.

Effective Schools: The study used data from the Minnesota Report Card and the federal accountability section to categorize select public elementary schools in the state of Minnesota as effective or not. Data was collected for math, reading and attendance from the following years: 2012, 2013, 2014, 2015, and 2016, totaling 15 possible criteria areas. To meet criteria to be considered an effective school for this study, the school needed be at or above AYP target in 13 out of the 15 possible areas.

Emotional Quotient (EQ): "The degree to which a person has Thinking (self-smarts), Learning (school-smarts) or Communicating (people-smarts) skills" (Bernabei et al., 2008, p. 206).

Intelligence: "The ability to learn or understand from experience. The ability to respond successfully to a new situation" (Webster, 1983, p. 498).

Intelligence Quotient (IQ): A number used to express the apparent relative intelligence of a person. A ratio of mental age, as reported on a standardized test, to the chronological age multiplied by 100 (Binet & Simon, 1916).

Interpersonal Intelligence: The ability to understand other people; what motivates them, how they work, how to work cooperatively with them (Gardner, 1983).

Intrapersonal Intelligence: "…a capacity to form an accurate, veridical model of oneself and to be able to use that model to operate effectively in life" (Gardner, 2006, p. 50).

Minnesota School Report Card: This is a tool designed to provide parents, educators, schools, districts and citizens with easy access to district and school information, test results,

demographic information and other critical data in a centralized location (Minnesota School Report Card, 2017).

No Child Left Behind: A 2002 federal education bill that was designed "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments" (United States Department of Education, 2010).

Overall Social Emotional Intelligence (SEI) Influence: The ability to be authentic, approachable, intuitive, and self-reflective (Kline, 2011).

Race to the Top: An Obama Administration initiative involving a competitive grant for school districts to ignite and encourage systemic reform to increase the quality of teaching and learning (United States Department of Education, 2009).

Self-awareness: The ability to assess your own feelings, interests, values, and strengths. To accurately perceive, understand and accept oneself (Bar-On, 2007; Goleman, 2006a; Salovey & Mayer, 1990).

Self-management: The ability to regulate your own emotions to handle stress, control impulse, and persevere in overcoming obstacles (Bar-On, 2004; Goleman, 2006b; Kline, 2011).

Social Awareness: The ability to recognize and understand emotions in others through language, sound, appearance and behavior. The ability to appreciate individual and group similarities and differences. (Goleman, 2006b & 2011; Mayer & Salovey, 1997; Mayer, Salovey & Caruso, 2004b).

Social-Emotional Intelligence (SEI): The ability to monitor your own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior (Mayer, Salovey, & Caruso, 2004b). "An

array of emotional and social knowledge and abilities that influence our overall ability to effectively cope with environmental demands" (Cherniss &Goleman, 2001, p. 16).

Social-Emotional Educational Leadership Factor (SELF): The Social-Emotional Educational Leadership Factor (SELF) is a survey designed to evaluate the perceptions of teachers and principals regarding principals' usage of social and emotional leadership skills, and is intended for use in the study conducted in Minnesota. The SELF survey contains questions using a five-point Likert-type scale (Kline, 2011). Teacher Edition (SELF:TE) and Principal Edition (SELF:PE) are added to the survey title to signify which version gathered data from teachers and which version gathered data from principals, respectively.

Social and Emotional Learning (SEL): The process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (CASEL, 2015).

Relationship Skills: The ability to apply knowledge and awareness of emotions to relationships. The ability to establish and maintain healthy and rewarding relationships based on cooperation (Bar-On, 2004; Goleman, 2006b; Kline, 2011; Mayer & Salovey, 1997).

Responsible Decision-making: The ability to apply emotional intelligence to decision-making. The ability to make decisions based on the consideration of ethical standards of safety concerns, appropriate social norms, and respect for others (Bar-On, 2004; Goleman, 2006b; Kline, 2011; Mayer & Salovey, 1997).

Summary

The dissertation is organized into five chapters. Chapter 1 consists of the introduction, the problem statement, and the purpose of the study. Chapter 1 also includes the research questions

that guide the study. A brief explanation of the conceptual framework and definitions of key terms in the study are also found in chapter one. Chapter 2, literature review, contains a summary of the research pertaining to emotional intelligence, leadership, and effective schools. The review of literature incorporates summaries of theoretical and empirical research related to SEI, theoretical and conceptual frameworks for SEI, characteristics of effective leadership styles, qualities of effective educational leaders and schools. Chapter 3 details a description of the quantitative methodology used in the study, specifies the population and sample for the study, and discusses the instrumentation and data collection methods. Chapter 4 presents data, an analysis of the data, and findings of the study. Chapter 5 reports the study's conclusions, limitations, and recommendations for future research.

Chapter 2: Literature Review

The literature review identified four themes related to social/emotional intelligence (SEI), leadership, and effective schools. The themes include: 1) Historical background of intelligence, both intellectual and SEI; 2) SEI models; 3) Leadership and SEI; 4) Qualities of Effective Schools

Historical Background of Intelligence

Over the past century, the definition of intelligence has changed and evolved (Whimbey & Shaw-Whimbey, 1975). Similarly, intelligence tests have been challenged, changed, and revised. In their book, Guilford and Hoeptner (1971) defined intelligence based on type intelligence, rather than just defining intelligence by quantity of knowledge. They proposed that intelligence consists of more than 120 thinking abilities that are combinations of operations, contents, and products (Guilford & Hoeptner, 1971). According to Binet and Simon (1905, as cited in Mackintosh, 2011):

> It seems to us that in intelligence there is a fundamental faculty, the alteration or the lack of which, is one of the utmost importance for practical life. This faculty is judgment, otherwise called good sense, practical sense, initiative, the faculty of adapting one's self to circumstances. A person may be a moron or an imbecile if he is lacking in judgment; but with good judgment he can never be either. Indeed the rest of the intellectual faculties seem of little importance in comparison with judgment. (p. 12)

Binet and Simon stated that an intelligence test measures and compares an individual's intelligence to others (as cited by Fancher, 1985). William Stern (1914, as cited in Fancher, 1985) referred to intelligence broadly as the ability of a person to knowingly alter thinking upon observing new problems and situations. He referred to mental ages as different than

chronological ages. In the early 1900s, psychologists began to realize and recognize that non-cognitive aspects to intelligence existed. Among these individuals, Thorndike (1920) theorized three types of intelligence: mechanical, abstract, and social, opening a door to the concept that intelligence was more than just intellectual knowledge.

Whimbey (1975) questioned the assumption that genetically inherited capacities are immutable and urged psychologists to reconsider their basic concept of intelligence. Whimbey and his colleague also argued that intelligence could be taught (Whimbey & Shaw-Whimbey, 1975). The connections between intelligence, leadership, motivation and success have been researched and dissected because public focus and emphasis lead to questioning the relationship between leadership and organizational success (Bernabi et al., 2004; Fullan, 2011; Goleman et al., 2013). In examining effective organizations, the importance and impact of SEI in leadership comes to the forefront. Goleman (2011) cited neurological research by Dr. Daniel Siegel and others that suggested that the human brain is a "social brain" (p. 54) and "includes a multitude of circuitry, all designed to attune to and interact with another person's brain" (p. 54). Goleman (2006a & b) made the case that intelligence is not all cognitive but rather is composed of emotional and social intelligence as well, stating:

> Now science is finally able to speak with authority to these urgent and perplexing questions of the psyche at its most irrational, to map with some precision the human heart. This mapping offers a challenge to those who subscribe to a narrow view of intelligence, arguing that Intelligent Quotient (IQ) is a genetic given that cannot be changed by life experience, and that our destiny in life is largely fixed by these aptitudes. That argument ignores the more challenging question: What can we change that will help our children fare better in life? What factors are at play, for example, when people of

> high IQ flounder and those of modest IQ do surprisingly well? I would argue that the difference quite often lies in the abilities called here *emotional intelligence*, which include self-control, zeal and persistence, and the ability to motivate oneself. And these skills, as we shall see, can be taught to children, giving them a better chance to use whatever intellectual potential the genetic lottery may have given them. (pp. xxi-xxii)

Intelligence measurements. At the turn of the twentieth century, Alfred Binet and his colleague, Thoephile Simon, studied intelligence in depth (Siegler, 1992). The French government asked Binet to develop a test to identify students with learning disabilities or students who required special help in school. This intelligence test was intended to measure their intellectual knowledge at the time of the test (Labby, Lunenburg & Slate, 2012). Binet later showed frustration when others in the field proposed that IQ was static, never to change (Binet & Simon, 1909). Binet indicated this was not his intent.

> Some recent philosophers seem to have given their moral approval to these deplorable verdicts that affirm that the intelligence of an individual is a fixed quantity, a quantity that cannot be augmented. We must protest and react against this brutal pessimism; we will try to demonstrate that it is founded on nothing. (Binet & Simon, 1909, p. 141)

Binet and Simon developed a series of tests designed to assess mental abilities, coining the term "mental age" (Binet & Simon, 1916, p. 144). Rather than focus on learned information, such as math and reading, the authors concentrated instead on other mental abilities, such as attention and memory (Binet & Simon, 1916). The scale they developed became known as the Binet-Simon Intelligence Scale. Binet and Simon (1916) stated that they were not considering a student's past events or his future potential in this test. The authors said "we shall limit ourselves to ascertaining the truth in regard to his present mental state" (Binet & Simon, 1916, p. 37).

The debate continues as to what constitutes intelligence, whether intellectual potential is fixed, and whether other aspects of intelligence should be considered. Binet and Simon (1916) suggested that "[…] in intelligence, there is a fundamental faculty, the alteration or the lack of which, is of the utmost importance for practical life" (p. 42). They asserted that in comparison, the rest of intellectual abilities are significantly less important compared to judgement and personal and social sense and they contended that the ability to adapt to circumstances was an indicator of intellectual ability. And while the Binet-Simon test measures intelligence, Binet argued that it was never his or his colleague's intention to imply that intelligence is permanently fixed (as cited in Gardner, 2000).

Influenced by Binet and his studies of the intelligence of children, William Stern reviewed the main findings of Binet's studies (Stern, 1914). Stern developed the idea to express intelligence in the form of a single number–the combination of the scores from the various facets of Binet's test–and called this number the mental quotient (Stern, 1914). Stern divided the Mental Age (MA) by the Chronological Age (CA) to reach the Mental Quotient [MA/CA = MQ]. In 1916, Lewis Terman multiplied the MQ by 100, to get rid of the decimal, and thus, he used the term, IQ, [MA/CA x 100 = IQ] for the final result (Terman & Merrill, 1960). The first mass administration of the IQ test was during World War I on military soldiers; 1.7 million soldiers were tested and categorized (Sternberg, 1985 & 2005). For a number of years, Terman served with the U.S. Military in a psychological testing role.

In the early 1900s, Edward Thorndike published his dissertation on *Animal Intelligence: An Experimental Study of the Associative* (Joncich, 1968; Thorndike & Stein, 1937). Although his study methods, using animals, were widely controversial, his dissertation, as his biographer Geraldine Joncich would later summarize, was undeniably an important event (Joncich, 1968).

Thorndike's research and eventually his dissertation were foundational pieces that helped to establish comparative psychology as an experimental science; and thus, began a significantly major shift in thinking about both animal learning and human learning (Joncich, 1968). In his research, Thorndike "[…] focused on behavior rather than consciousness. As such, Thorndike's studies constituted the beginning of investigations that were related to social intelligence" (Labby et al., 2012, p. 2). Social intelligence can be defined as the ability to manage and understand people (Labby et al., 2012).

As early as 1903, Thorndike and other graduate students were using human subjects for objective measures of intelligence (Thorndike, 1920). Thorndike developed several tools and methods for measuring intelligence, most noteworthy of which was the method known as the intelligence test for Completion, Arithmetic, Vocabulary, and Directions testing (CAVD) (Thorndike, 1920). Thorndike made a clear distinction among three areas of intelligence: mechanical intelligence, social intelligence and abstract intelligence (Payne, 1986). By comparison, standard intelligence tests measured only abstract intelligence. Thorndike believed further tests needed to be developed to also measure mechanical intelligence and social intelligence (Joncich, 1968). He defined mechanical intelligence as understanding how the physical world works and defined social intelligence as the ability to function successfully in interpersonal situations, to understand and effectively manage other people (Stenberg, 1994).

One of the first women to contribute to the research of intelligence and the development of intelligence tests was Maud Merril; she worked with Terman as a graduate student (Terman & Merrill, 1960). Beginning in 1926, Merril and Terman began collaborative work on the first revision of the Stanford-Binet Intelligence Scale. This task was monumental, and after eleven years they developed two forms of the revised test: Form L and Form M the forms were labeled

L and M after their first name initials (Terman & Merrill, 1960). Then, in the 1950s, Merrill took the lead in revising the Stanford-Binet a second time, selecting the best items from Forms L and M to include in a new version of the test. Terman and Merrill's two 1937 forms were combined to create the Form L-M. The combined form was published in 1960 (Terman & Merrill, 1960).

American Psychologist David Wechsler contributed significantly to the historical timeline of the study of intelligence in the 1950s with the development of Wechsler Intelligence Scales (Fancher, 1985; Wechsler, 1940). Like Binet, Wechsler believed that an individual's verbal and non-verbal tasks could be assessed, and thus, reflect intelligence in the form of a number (Cherry, 2006; Sternberg, 1988 & 2005). Wechsler reported that intelligence was the global capacity of three areas (Cherry, 2006; Wechsler, 1940) and included a person's ability to think rationally, deal with the environment in an effective manner, and act with purposeful intent (Cherry, 2006; Siegler, 1992). Wechsler believed that the limitations of the Stanford-Binet were too great, and therefore, developed his own intelligence test known as the Wechsler Adult Intelligence Scale (WAIS) (Sternberg, 1994 & 2005; Wechsler, 1939 & 1940).

Wechsler also developed two additional tests specific to children called the Wechsler Intelligence Scale for Children (WISC) and the Wechsler Preschool and Primary Scale of Intelligence (WPPSI) (Siegler, 1992). The major difference between Binet's intelligence test and Wechsler's tests is the methodology used for scoring. Rather than using a numbers for mental and chronological ages, Wechsler's WAIS compares the test taker's score to the scores of others in the same age group, where 100 is set as the average. Wechsler's method considers two thirds of the scores as falling within the average range, which is 85-115. This method of scoring intelligence tests has become the standard, with even the modern revised version of the Stanford-Binet test using the Wechsler method (Kamin, 1995). Wechsler described the influence of non-

intellectual (emotional) factors on intelligent behavior, and asserted that intelligence cannot be thoroughly studied without these factors and that the models of intelligence are incomplete without them (Bar-On, 2006b; Wechsler, 1939).

Robert Sternberg, an American psychologist and psychometrician, suffered from test anxiety when he was younger; this sparked his interest in intelligence tests. In junior high school, he studied the Stanford- Binet Intelligence test, and administered it to fellow classmates as a part of his science project (Cherry, 2017). Sternberg (1994) developed the Sternberg Test of Mental Agility (STOMA), which helped to gather data showing that intelligence tests do not consider all of the necessary factors, therefore, results may not accurately represent a person's intelligence. Sternberg's definition of human intelligence was a "mental activity directed toward purposive adaptation to, selection and shaping of, real-world environments relevant to one's life" (Sternberg, 1985, p. 45). He surmised that intelligence is how well an individual adjusts to environmental changes throughout their lifespan and proposed a triarchic theory of intelligence (Sternberg, 1985 & 2005). Sternberg's theory was comprised of three parts: componential, experiential, and practical (Sternberg, 2005). Sternberg (2005) criticized IQ tests saying they are "convenient partial operationalizations of the construct of intelligence, and nothing more. They do not provide the kind of measurement of intelligence that tape measures provide of height" (p. 197)

It is generally agreed upon that intelligence tests assess an individual's mental abilities and then compare those measured abilities with others by means of numeric scores (Bratten & Norman, 2006; Duckworth, Quinn, Lynam, Loeber, & Stouthamer-Loeber, 2011; Sternberg, 2004).

Social-emotional intelligence. In the 1940s, Wechsler proposed that non-intellective elements were present that were as essential to intelligence as the cognitive aspect (Wechsler, 1939). He indicated that these factors were necessary "for predicting a person's capability to be successful in life (as cited in Labby et al., 2012, p. 3). Credit was given to German psychoanalyst Barbara Leuner for the first reference to the term Emotional Intelligence (EI); in 1966 she suggested some women had low EI with a connection of being separated at an early age from their mothers (Dacre-Pool & Qualter, 2018). Payne is credited with the first actual study on SEI in his doctoral dissertation titled: *A study of emotion: Developing emotional intelligence, self-integration, relating to fear, pain, and desire* (Dacre-Pool & Qualter, 2018; Payne, 1986).

Concerned about how society had historically suppressed its members emotions, his framework aimed at exploring how emotional intelligence could be developed in individuals; he asserted that through education, emotionally intelligent individuals could foster and nurture emotional intelligence in others (Payne, 1986). Payne (1986) presented evidence that the mass suppression of emotion has stifled human growth emotionally, leading down a path of emotional ignorance. He hypothesized that many of the problems (depression, addictions, illnesses, violence, etc.) facing society in the "civilized world" were the direct result of emotional ignorance (Payne, 1986, p. 67). Payne questioned whether or not humans have tried too hard to become "civilized, ultimately trying to deny the true animal nature - the inherent emotional nature - along the way" (Payne, 1986, p. 66). His theory and thoughts parallel some of the work by Charles Darwin, tracing the early roots of emotional intelligence. In late 1800s, Darwin conducted work on survival, and the importance of emotional expression for survival and adaption. Payne corroborated that emotional intelligence evolves with life experiences and is related to fear, pain, and desire (as cited in Hein, 1996). Payne advocated for incorporating EI in

schools through access to therapy centered on emotional release (Payne, 1986). Payne (1986) believed that people have suppressed emotions because in general, they had the wrong idea altogether about the nature of emotion and the important function it serves in everyone's lives.

Researchers and scholars shifted their focus from describing and assessing social intelligence to understanding the purpose of interpersonal behavior and its significant role in effective adaptability (Reed, 2005; Salovey & Grewal, 2005). Reuven Bar-On is a leader in the study of social-emotional intelligence (Golman, 2011). Bar-On, an internationally known expert and pioneer in the field, has been involved in defining, measuring and applying various aspects of this construct since 1980 (Walters, 2012). Bar-On stated, "The early roots of Emotional Intelligence can be traced to Charles Darwin's work on the importance of emotional expression for survival first, and second, adaptation" (Bar-On, 2006b, p. 18). The Bar-On model of SEI was described as one of three leading approaches to this construct (Spielberger, 2004). Bar-On used the term emotional quotient (EQ) in 1985 to describe his approach to assessing social-emotional competence. He authored the *Emotional Quotient Inventory* (the *EQ-i*), which is the first test of emotional intelligence to be published by a psychological test publisher in 1997 (Bar-On, 2000 & 2004b). The EQ-i passed the one million mark worldwide in the first five years after its publication, making it the most popularly used EI measure (Spielberger, 2004). In his book about SEI, Bar-On et al. (2007) worked to answer the questions of how important SEI is and how people can be educated to be socially-emotionally intelligent.

> It has been argued for nearly a century that something is missing in the human performance formula that makes it difficult for us to understand why some people do well in life while others do not, irrespective of how cognitively intelligent they are. For almost as long as psychologists have been studying and measuring cognitive

> intelligence they have also been looking for additional predictors of various types of performance. […] Based on my conceptualization of this construct, people who are emotionally and socially intelligent are able to understand and express themselves, to understand and relate well to others, and to successfully cope with the demands of daily life. (p. 2)

Howard Gardner, a researcher and professor at Harvard, proposed a new age view of intelligence that has been widely accepted and embraced since its introduction (Gardner, 1983). In his seminal book, Gardner (1983) unveiled his Theory of Multiple Intelligences, a theory that challenged the dominant definition of intelligence as limited to mathematical and linguistic abilities (verbal and computational intelligences). Gardner theorized that rather than just these two intelligences, a grouping of seven intelligences more accurately accounts for the diversity of ways in which people acquire and utilize knowledge (Gardner, 1983; Goleman, 2006a). Gardner cited research from Sigmund Freud and William James, noting that Freud was "interested in the self as located in the individual" and that James' interest "fell much more on the individual's relationship to the outside community (Gardner, 1983, p. 239).

> On the one side, there is the development of the internal aspects of a person. The core capacity at work here is access to one's own feeling life - one's range of affects or emotions: the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one's behavior. […] The other personal intelligence turns outward, to other individuals. The core capacity here is the ability to notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations, and intentions. (Gardner, 1983, p. 239)

In the early 1990s, Stanley Greenspan, a clinical professor of psychiatry and behavioral science studied the connection between emotions and intelligence in children (Greenspan & Wieder, 1997). He proposed that the traditional understanding of mental development, which separates emotion and reason and emphasizes one or the other, be re-examined to include examination of how emotion and reason work together (Greenspan & Wieder, 1997). Researchers in the field of emotional intelligence worked to soundly and scientifically make the connection between emotion and intelligence (Bar-On, 2011; Fancher, 1985; Goleman, 2006a; Mayer et al., 2004b).

Peter Salovey, Professor of Psychology at Yale, and John D. Mayer, a Personality Psychologist at the University of New Hampshire, partnered in the 1990s to research emotional intelligence (Cherry, 2006). Casey D. Cobb, Professor of the Department of Educational Leadership at the Naeg School of Education, joined in the quest of linking emotion to intelligence (Harrison & Clough, 2006). Salovey and Mayer (1990) as well as Cobb and Mayer (2000) suggested that SEI is a true form of intelligence, which had not been scientifically measured until they began their research work. One definition that they proposed was “the capacity to process emotional information accurately and efficiently” particularly inclusive of the ability “to perceive, assimilate, understand, and manage emotion" (Mayer & Cobb, 2000, p.165). Salovey and Mayer (1990) defined social-emotional intelligence as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feeling and emotions, to discriminate among them, and to use this information to guide one’s thinking and action” (p. 189). One of the three dominant models of SEI comes from Peter Salovey and John Mayer (Goleman, 2011; Salovey, Brackett, Mayer, 2007).

Daniel Goleman studied Salovey and Mayer's work; this eventually led to the writing of his book, *Emotional Intelligence* (Goleman, 1995). Goleman, a psychologist at Harvard, studied and outlined evidence suggesting that social and emotional learning (SEL) was the active ingredient that would enhance and strengthen children's learning while simultaneously prevent problems such as disruptive behavior and violence (Goleman, 1995 & 2006b). Goleman studied children and made the case that helping children improve their confidence and self-awareness would not only improve their behaviors but also academic achievement. According to Goleman (1995), "in a very real sense, we have two minds, one that thinks and one that feels" (p. 8). Goleman developed one of the main models of SEI, including five main domains: self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 2011).

Models of Social-Emotional Intelligence

One traditional view of emotion in Western thought saw emotion as disorganized interruptions of mental activity, concluding that emotions are so potentially disruptive that they must be controlled (Syrus, 1961). A second traditional view identified emotion as an organizing response because it adaptively focuses cognitive activities and subsequently action (Easterbrook, 1959 Easterbrook, 1959; Leeper, 1948). Leeper (1948) contended that emotions are "primarily motivating forces: they are processes which arouse, sustain, and direct activity" (p. 17). Modern theories of emotion also view emotion as directing cognitive activities adaptively with the addition that this skill, this intellect, can be learned, improved, and increased (Bar-On, 2007 & 2011; Goleman, 2006a & 2011; Mayer & Salovey, 1997; Mayer et al., 2004a). Salovey and Mayer (1990) stated that they:

> […] view emotions as organized responses, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivational, and

> experiential systems. Emotions typically arise in response to an event, either internal or external, that has a positively or negatively valenced meaning for the individual. Emotions can be distinguished from the closely related concept of mood in that emotions are shorter and generally more intense. In the present article, we view the organized response of emotions as adaptive and as something that can potentially lead to a transformation of personal and social interaction into enriching experience. (p. 186)

Far from emotion being in opposition or contradictory to intelligence, constructs such as SEI have played lead roles within the traditional field of intelligence (Goleman, 2006a & b). In fact, throughout the years, intelligence researchers have often dissected and examined individual's specific intelligences within a variety of sub areas such as social, behavior, and emotions (Gardner, 1983). The Encyclopedia of Applied Psychology attempted to clarify the models of emotional intelligence, concluding that there are three influential models (Bar-On, 2006a; Spielberger, 2004). Goleman (2011) concurred that there are three dominant, significant models of SEI, and that each model is associated with its own set of measures and tests.

One model comes from John Mayer and Peter Salovey, who first proposed the concept of emotional intelligence in their seminal 1990 article. The Mayer-Salovey model defined emotional intelligence as a person's ability to perceive, manage, understand, and use emotions to better facilitate thinking (Mayer & Salovey, 1997; Mayer, Salovey, Caruso, & Sitarenios, 2001; Salovey, Brackett, & Mayer, 2007; Spielberger, 2004;). A second significant SEI model is attributed to Reuven Bar-On who has been quite active in fostering research in the field of SEI. The Bar-On model described SEI as an array of interrelated social and emotional behaviors, skills, and competencies–personality traits–all impacting intelligent behavior (Bar-On, 2006a & 2011; Spielberger, 2004). The third model comes from Daniel Goleman who has conducted

extensive research examining SEI and leadership. The Goleman model viewed SEI as a variety of social and emotional behaviors, skills, and competencies all of which contribute to an individual's ability to manage aspects of their personal and professional life, specifically contributing to managerial performance and leadership (Goleman 1986, 2006b & 2011; Spielberger, 2004). There are other SEI models as well indicating interest and "a sign of vibrancy in the field" (Goleman, 2011, p. 11). SEI is perhaps one of the most widely researched psychological constructs in the 21st century (Bar-On, 2006a; Boyatzis, Goleman, & Rhee 2000; Goleman, 2011).

The Mayer-Salovey model. The ability-based model of SEI as formulated and developed by Mayer and Salovey proposed that emotion and cognition work together in adaptive ways in four related emotional abilities (Mayer & Salovey, 1997; Mayer, Caruso, & Salovey, 2016). The Mayer-Salovey model viewed emotions as useful sources of information that help people to make sense of and navigate the social environment (Mayer, Salovey, Caruso, & Sitarenios, 2001; Mayer & Salovey, 1997). Through continued research, Mayer and Salovey revised their initial definition of SEI to include ability-based constructs (Mayer et al., 2001; Mayer et al, 2008; Mayer, Salovey, & Caruso, 2012). Their model defined SEI as an individual having the ability to monitor and regulate personal feelings, and synthesizing that information to guide decisions and actions. The Mayer-Salovey model included four types of emotional abilities as shown in Table 2: 1) Emotional Perception: understanding nonverbal signs including body language and facial expressions; 2) Emotional Integration: reasoning with emotions, along with using emotions to stimulate thinking and cognitive activity; 3) Emotional Understanding: reading and interpreting the emotions of others around you; and, 4) Emotional Management: controlling and regulating emotions, thus creating the ability to respond appropriately and consistently when

in social situations (Mayer et al, 2001; Mayer, Caruso, & Salovey, 2016). Their model is based on theory of hierarchy of the abilities with the premise that a person must master each level before moving to the next level and progressing through the model (Mayer et al., 2016). Levels 1, 3, and 4 involve reasoning about emotions and level 2 involves using emotions to enhance reasoning (Mayer et al., 2016).

Table 2

The Mayer-Salovey Ability-based Model of SEI

Levels of Emotional Abilities	Descriptor	Components of each Ability Level
Emotional Perception	Perception, appraisal, and expression of emotion	• Ability to perceive emotion in one's physical states, feelings, and thoughts • Ability to identify emotions in other people 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
Emotional Integration	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 judgement and memory concerning feelings • Emotional mood swings change the individuals perspective, encouraging consideration of multiple view points • Emotional states differentially encourage specific problem approaches
Emotional Understanding	Understanding and analyzing emotions; Employing emotional knowledge	• Ability to label emotions and recognize relations among the words and the emotions themselves (such as the link between liking and loving) • Ability to interpret the meanings that emotions convey regarding relationships (such as sadness accompanies a loss) • Ability to understand complex feelings: simultaneous feelings of love and hate, or blends such as awe as a combination of fear and surprise • Ability to recognize likely transitions between emotions, such as the transition from anger to satisfaction or anger to shame
Emotional Management	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 perceived ability to informative or serve a purpose • Ability to reflectively monitor emotions in relation to oneself and others, recognizing the emotion as clear, typical, influential, or reasonable • Ability to manage emotion in oneself and others by moderating negative emotions and enhancing pleasant ones, without repressing or exaggerating information they may convey

(Source: Mayor & Salovey, 1997; Mayer et al., 2001; Mayer et al., 2004; Mayer et al., 2016)

The Bar-On model. The Bar-On model and theory considered SEI as personality traits (Bar-On, 2007 & 2011). SEI is defined as a "multifactorial array of interrelated emotional, personal, and social abilities that influence our overall ability to actively and effectively cope with daily demands and pressures" (Bar-On, 2000, p. 385). The initial five domains in Bar-On's SEI model were: (a) intrapersonal skills, (b) interpersonal skills, (c) adaptability, (d) stress management, and (e) general mood (Bar-On, 2000 & 2007). Bar-On emphasized traits and psychological well-being more than the Goleman or Mayer and Salovey (Mayer & Salovey, 1997). As further research was conducted, Bar-On revised his model, distinguishing two main areas of SEI as intrapersonal and interpersonal, with the intrapersonal consisting of two domains: self-awareness and self-management; and, the interpersonal consisting of three domains: self-motivation, social awareness, and social skills (Bar-On, 2007). Finally, Bar-On reorganized his model once more. He identified and defined five meta-factorial components of SEI with 15 factors (competencies), grouped in factorial clusters, related to social competencies, skills and behaviors that comprise his model of SEI as shown in Table 3.

Table 3

The Bar-On Traits Model of SEI

Meta-Factorial Components	Competencies	Traits	Traits defined by skills & behaviors
Intrapersonal	Self-awareness	Self-regard	To accurately perceive, understand and accept oneself
	Self-expression	Emotional self-awareness	To be aware of and understand one's emotions
		Assertiveness	To effectively and constructively express one's emotions
		Independence	To be self-reliant and free of emotional dependency on others
		Self-Actualization	To strive to achieve personal goals and actualize one's potential
Interpersonal	Social awareness	Empathy	To be aware of and understand how others feel
	Interpersonal relationship	Social responsibility	To identify with one's social group and cooperate with others
		Interpersonal relationship	To establish mutually satisfying relationships and relate well with others
Stress Management	Emotional management	Stress tolerance	To effectively and constructively manage emotions
	Regulation	Impulse control	To effectively and constructively control emotions
Adaptability	Change management	Reality-testing	To objectively validate one's feelings and thinking with external reality
		Flexibility	To adapt and adjust one's feelings and thinking to new situations
		Problem-solving	To effectively solve problems of a personal and interpersonal nature
General Mood	Self-motivation	Optimism	To be positive and look at the brighter side of life
		Happiness	To feel content with oneself, others and life in general

(Source: Bar-On, 2000, 2006a & b, 2007, 2011)

The Goleman model. Goleman established a framework of SEI, often referred to as the mixed model, which combines traits with abilities, social behaviors and competencies (Bradberry & Su, 2003; Cheriss & Goleman, 2013; Goleman, 2006a). As illustrated in Table 4 it is composed of five domains within personal and social competence (Goleman, 2006a). Under personal competence, Goleman classified three domains: (a) self-awareness, (b) self-regulation, (c) motivation; and, under social competence, he classified two additional domains: (d) empathy (social awareness) and (e) social skills (adeptness in relationships) (Goleman, 2006a; Goleman,

2011). Mastery of personal competence domains, contends Goleman (2006a, 2011), is easier and must come before mastery of social competence domains. Goleman (2006a) listed twenty-five social/emotional competencies spread out among the five domains as shown in Table 4. He contended that we need only to have strength in a small number of these competencies, six or so, but emphasized the importance that traits be spread out across all five domains (Boyatzis et al., 2000).

Table 4

The Goleman Mixed Model of SEI

	Awareness Domains	**Management Domains**
Personal Competence	Self-awareness • Emotional Self -awareness • Accurate Self-assessment • Self-confidence	Self-regulation • Self-control • Trustworthiness • Conscientiousness • Adaptability • Innovation Motivation • Achievement Drive • Commitment • Initiative • Optimism
Social Competence	Empathy • Understanding Others • Developing Others • Service Orientation • Leveraging Diversity • Political Awareness	Social Skills • Influence • Communication • Conflict Management • Leadership • Change Catalyst • Building Bonds • Collaboration and Cooperation • Team Capabilities

(Source: Goleman, 1998, 2006a, 2011)

Leadership and SEI

Goleman (2000) asserted that leaders with stronger SEI are more effective than those lacking such strengths. Self-mastery is an essential component of success. Goleman (2011) stated

that “self-mastery requires self-awareness plus self-regulation” both key components of SEI (Goleman, 2011). Fullan (2011) devoted a chapter of his book to being a resolute leader, a leader who will act with purpose and empathy, both of which are components of SEI. Resolute means to “be set in purpose, characterized by firmness and determination” (Webster, 1983, p. 1541). Through his research, Fullan stated that “we always knew that resolute action was essential but now we have come to appreciate the critical role of impressive empathy” (Fullan, 2011, p. 29). Competencies in SEI such as empathy and trustworthiness are essential in building positive relationships in leadership (Cheniss & Goleman, 2001; Fullan, 2011; Goleman, 2011; Riggio & Lee, 2007). George and Sims (2007) believed that a dramatic three-hundred-sixty degree change was evolving in the caliber and character of leaders.

> Authentic leaders not only inspire those around them, they empower them to step up and lead. Thus, we offer the new definition of leadership: *The authentic leader brings people together around a shared purpose and empowers them to step up and lead authentically in order to create value for all stakeholders.* (George & Sims, 2007, p. xxxi)

Ginsberg (2008) stated that “few if any, leaders are prepared for the emotional side of making hard decisions” (p. 293). He also summarized three key strategies in dealing with emotional situations, more easily done by leaders with a higher SEI: 1) finding order out of chaos, 2) open communication, and 3) following your heart (Ginsberg, 2008). A review of Ginsberg’s research revealed studies of SEI pointing to the importance of being able to regulate emotions in difficult situations (Ginsberg, 2008). Goleman et al. (2013) assert that leaders who are visionary “help people to see how their work fits into the big picture, lending a clear sense not just what they do matters, but also why” (p. 57). Leaders must learn to address emotions and relationships as well as conceptual, cognitive work in order to be effective.

Researchers in the field of education report the importance of managing and handling emotions (Cherniss, 2000; Fullan 2011; Williams, 2008). The success and challenges of a public school administrator relate to many factors, including high stakes testing, politics, social media, technology, student learning, and school climate (DeWitt, 2014). A school principal manages certified staff, students, educational assistants, custodians, secretaries, speech clinicians, school counselors or social workers, school nurses, and more. Effectively managing relationships and emotions is critical to the human relations portion of the principalship. In addition, the school principal must work closely with parents, social service personnel, and the community; thus, requiring a skill set that can be found within SEI. Moore (2009) articulated that "restructuring and reorganizing a school requires a leader skilled in emotional intelligence" (p. 21). Annually, a school principal must look at all of the positions within the building, and work to assign staff to positions that will draw upon their strengths. Budget cuts and seniority structures also force principals to continually examine restructuring and reorganizing building staff to be most effective and efficient. George (1995 & 2000) asserted that SEI is important to the process of leading and should be considered an essential component of effective leadership. Fullan (2011) stated that "in a culture of change, emotions frequently run high" (p. 74). Therefore, SEI constructs such as relationship building and responsible decision-making need to be a priority and responsibility for all principals.

In order to explore and examine the implications of SEI for effective leadership, it is necessary to identify "the role of moods and emotions in human organizational affairs" (George, 2000, p. 1029). Downey (2008) suggested that "emotion-related variables can influence people's evaluative judgments regarding events, other people, and objects they encounter everyday (p. 598). The "affect-as-information" hypothesis asserted that emotions bestow individuals with

critical information regarding whether or not their goals, standards and attitudes have been impacted positively by the people, events, people, or tangibles with which they interact (Clore, Gasper, & Garvin, 2001). A stronger usage of the SEI constructs social awareness and relationship skills would relay a more positive affective message (Clore et al., 2001). Based on the syntheses of Yuki (1999), Kirkpatrick & Locke (1996), and Conger and Kanungo (1998) specific leadership effectiveness elements can be identified. George (2000) restated them as:

> Development of a collective sense of goals and objectives and how to go about achieving them; Instilling in others knowledge and appreciation of the importance of work activities and behaviors; Generating and maintaining excitement, enthusiasm, confidence, and optimism in an organization as well as cooperation and trust; Encouraging flexibility in decision making and change; and, Establishing and maintaining a meaningful identity for an organization. (p. 1039)

Emotions are not just something that people feel; they are also a source of information (Goleman, 2011; Mayer, Roberts, & Barsade, 2008). With emotional and social information, leaders can build trust and cooperation, display empathy to employees, display social awareness, develop collaboration, understand the loss that people experience during the change process and display skill in addressing issues and solving problems (Cherniss & Goleman, 2001; Goleman et al., 2013; Mayer et al., 2008; Moore, 2009). Effective leaders possess the ability to understand and "manage moods and emotions in self and in others" (George, 2000, p. 1027). Research suggested that leaders high in SEI may be more skillful in influencing, inspiring, intellectually stimulating and growing their staff (Goleman, 2011; Goleman et al., 2013; Van Rooy & Viswesvaran, 2004).

Leaders with strength in social awareness and relationship management influence the workplace environment and employee interaction (Riggio & Lee, 2007; Volkwein & Zhou, 2003; Weymes, 2003). Volkwein and Zhou (2003) explored the elements of job satisfaction as related to work environments. They found that environments that are characterized by high levels of teamwork and low levels of interpersonal stress as influenced by leadership result in minimal conflict within the working environment and significantly higher levels of employee job satisfaction. In his research of nearly 200 large, global companies, Goleman (1998) found that SEI was essential for leadership. Compared to technical skills and IQ, it proved to be twice as important at executive levels (Goleman, 1998). George indicated a vast number of ways that SEI may "contribute to leaders developing compelling vision for their groups or organizations" (2000, p. 1040). Research linked positive SEI to the enhancement of information processing, an increase in creativity, more reflection, and effective communication (George, 1995 & 2000). George (2000) proposed that SEI "contributes to effective leadership in organizations" (p. 1027). Feelings (moods and emotions) play a central role in the leadership process (George et al., 2007).

Leadership styles. According to Newstrom and Davis (1993), leadership style is the way that an individual provides direction, carries out and implements plans, and inspires people. Newstrom conducted several surveys and studies of leadership style related to how, within an organization, both groups and individuals act and react. Newstrom maintained that leaders need to be trained in leadership (1993). In 1939, Kurt Lewin conducted the first major study of leadership styles, which lead to the establishment of three major leadership styles (Lewin, Lippit, & White 1939; Scheidlinger, 1994). These three styles remain influential today. 1) Autocratic or Authoritarian 2) Democratic or Participative 3) Laissez-fair or Delegative. Power and decision making tend to come from the leader in the Authoritarian style, with clear division between the

leader and the members. Decision making was found to be less creative in the Authoritarian style. Power and decision-making is left almost exclusively to the employees in the laissez-fair style. Research found that the Laissez-fair style tended to create poorly defined roles and a lack of motivation in the majority of employees (Scheidlinger, 1994). Lewin's study noted that laissez-fair leadership often lead to members blaming each other for mistakes and lack of success as well as a lack of overall direction (Lewin et al., 1939; Scheidlinger, 1994). In the Democratic style, power and decision-making tend to come from both the leader and the employees. Lewin's study found that typically the most effective style of leadership was the democratic style (Lewin et al., 1939; Scheidlinger, 1994). Democratic leaders not only offer guidance to group members, but they also participate in the group, alongside of the group members. (Cherry, 2017).

Business people have for a long time questioned what successful leaders do to be effective. Timeless answers are that leaders create mission statements, create organization vision, and develop culture (Bart & Baetz, 1998; Bart, Bontis, & Taggar, 2001; Hamel & Prahalad, 1993). Another standard question is what should leaders do, and if you have a veteran group of businesspeople you would be apt to hear one standard answer: "the leader's singular job is to get results" (Goleman, 2000, p. 4). In a study for the Wallace Foundation, Portin, Schneider, DeArmond, & Gundlach (2003) employed musical metaphors to distinguish and define three leadership approaches of school principals. Leading solo or being a "one-man band" (p. 25) referred to a leader determined to do it all alone. Leading by gathering others to lead important groups referred to a leader as a "jazz combo" (p. 26) and distinguished this leader as assigning duties, tasks, and jobs to others with leadership potential. The principal would "lay down the basic melody and encourage others to improvise around the theme" (p. 26). Principals who broadly shared and distributed leadership with a variety of members of the school were thought

of as “orchestral leaders” (p. 26) thus being skilled at directing large teams to produce a beautiful melody, while encouraging members in the background to continue with a steady beat forward, all the while encouraging, even putting the spot light on other performers to shine (Portin et al., 2003, pp. 25-26).

Goleman (2006b, 2011), Bar-On (2007, 2011), Salovey and Mayer (1990) suggested that in the quest for the answer, to the right formula to success in leadership, we must incorporate social-emotional intelligence into the formula. A research study by the consulting firm Hay/McBer, which drew data from 3,800 plus executives, found six distinct leadership styles, each branching out from different components of emotional intelligence (Goleman, 1998). The leadership styles themselves were not new; what was new based on the study was the linking of each style to different components of SEI. The study also indicated that the various styles of leadership work better in different situations with different components of SEI present in the leadership style, hence, influencing organizational climate and ultimately performance in different ways to different degrees (Goleman, 1998). Table 5 associates the leadership styles from the Hay/McBer study with Goleman’s traits of SEI. Goleman concluded that leaders with stronger SEI are more effective than those lacking such strengths (1998).

Table 5

Leadership Styles as Related to SEI Abilities and Traits

Leadership Style	Description	Social-Emotional Abilities & Traits	Effect on Climate
Coercive	Demands immediate compliance	Self-management, drive to achieve, initiative, self-control	Negative
Authoritative	Mobilizes people toward a vision	Self-awareness, empathy, change catalyst, influential, relationship skills, responsible decision-making	Positive, most strongly so
Affiliative	Creates emotional bonds and harmony	Relationship skills, empathy, communication	Positive
Democratic	Builds consensus through participation	Social awareness, responsible decision-making, relationship skills, collaboration, team leadership	Positive
Pace Setting	Expects excellence and self-direction	Conscientiousness, motivation, initiative	Negative
Coaching	Develops people for the future	Social awareness, developing others, empathy, relationship skills, assertive	Positive

(Source: Goleman, 1998, 2004, 2006)

The role of school administration is changing, challenging, and more publicized than ever before. According to Labby et al. (2012), "the current literature revealed that very little attention has been devoted to the study of the SEI skills of school administrators" (p. 2). School reform in the 21st Century evolves around keeping up with current technology, testing standards, individualized student learning plans, and professional learning communities for staff. Principals and teachers are responsible for the academic results of their schools' students (Fuhrnam & Elmore, 2004). In an executive summary for the Wallace Foundation (2004), Leithwood, Louis, Anderson, and Wahlstrom report that effective leadership from the principal impacts learning. Their report indicated "that leadership not only matters; it is second only to teaching among school-related factors in its impact on student learning" and that the principal is the most potent factor in setting the tone for school climate (Leithwood et al., 2004, p. 3).

Moore (2009) suggested that "restructuring and re-organizing a school requires a leader skilled in emotional intelligence" (p. 21). Social-emotional intelligence can be defined as an "ability to monitor one's own and others' feelings and emotions to discriminate among them, and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189). Fullan (2001) stated, "In a culture of change, emotions frequently run high," (p. 74). Fullan also articulated that emotional intelligence, creating successful relationships and leading change will be the responsibility of all future principals (Fullan 2001). Transformative leaders have the courage and vision to examine and evaluate their SEI skill and abilities and make more positive sustainable schoolwide change (Elias & Arnold, 2006; Elias, Arnold, & Hussey, 2003). No one style of leadership will work in all schools with all leaders. To find success as a school leader in an era of accountability, Leithwood et al. through their research suggested four leadership objectives: 1) to create and sustain a competitive school; 2) to empower various stakeholders to team when making significant decisions; 3) to provide instructional guidance; and, 4) to develop and implement strategic school improvement plans (Leithwood, Louis, Anderson, & Wahlstrom, 2004).

Dispositions to leadership. Disposition refers to "the predominant or prevailing tendency of one's spirits; natural mental and emotional outlook or mood; characteristic attitude" (Disposition, 2017). Disposition is the everyday visual attitude of a person; it is who they are when no one is looking. A study on school principals' dispositions revealed that teachers believed the following three dimensions of disposition to be most important: 1) team-work, 2) support, 3) vision creating (Baloglu, 2012).

Ranking high on the list of top priorities and action plans for school reform is improving school leadership. In a detailed 2010 survey with the Wallace foundation, Simkin et al. found

that administration both at the school and district levels along with policymakers declared principal leadership among the most pressing issues in public education. Inherent qualities of mind and character, attitude and temperament are the foundation of a leader's disposition. A study from Columbus State University analyzed the relationship between assistant principals' dispositions and their emotional competencies. "Inspirational Motivation," a disposition linked to high levels of emotional competency, was defined as a leader who motivates others, arouses team spirit, displays optimism and enthusiasm, articulates a strong vision, and exudes confidence in the attainment of goals (Hackett & Hortman, 2008. p. 99). "Individual Consideration", a disposition in which the leader acts as a mentor or coach of sorts for individual followers, while creating new learning opportunities in a framework of support, considering abilities and aspirations of individuals was also linked with higher emotional competency levels (Hackett & Hortman, 2008, p. 99). The National Council for the Accreditation of Teacher Education (NCATE, 2008) defined professional dispositions as "attitudes, values, and beliefs that demonstrate both verbal and nonverbal behaviors (pp. 89-90). In addition, NCATE asserted that professional disposition includes "the ideal of fairness and the belief that all students can learn" (NCATE, 2008, p. 22). Social-Emotional Learning. 21st Century Skills. Grit. Mindsets. Character strengths. Habits of Mind. Habits of Heart. People use these words and phrases, and others of similar intent, to describe a set of skills or dispositions that are known as soft, non-cognitive, social-emotional, or skills for success (Conley, 2013; Tooley & Bornfreund, 2014).

The desire to understand, define and explain the essence of leadership has interested researchers and scholars for most of the twentieth century (Bogler, 2002; George, 2007; Goleman, 2011; Fullan, 2011). Social scientists have tried to identify what abilities, traits, behaviors, sources of power or aspects of the situation determine how effective a leader will be

able to influence others. Contrary to popular thinking, the term “leadership” is a recent addition to the English language. In fact the word did not come into usage until the late 19th Century. Although the words “lead” and “leader” have a much longer history, they have typically referred only to figures of authority. The development and growth of the idea of leadership encompasses a much more complex concept that extends beyond the single leader. In fact, contemporary definitions most often reject the idea that leadership revolves around the leader’s cognitive ability, title, or singular style (Riggio & Lee, 2007; Weymes, 2003). Recently, scholars have discussed the basic nature of leadership in terms of the relationships, actions, and interactions between the people involved in the change process: leaders and followers alike (Collins, 2001; Fullan, 2011; Kotter & Cohen, 2002; Kotter & Cohen, 2002). In summary, leadership encompasses not only the work of a single person, but rather, the interrelated and connected work among all group members. Therefore, the essence of leadership is not the leader, but the relationship, and SEI traits and abilities are of upmost importance (Goleman, 2006a, 2011; Rost, 1993; Boyatzis et al., 2000).

If socially and emotionally competent leadership can increase the likelihood of educational success for those respective schools, universities across the nation may find the need to re-examine the quality and quantity of the social and emotional training that has been occurring in pre-service training for students in educational leadership programs. Public school districts may find the need to review hiring practices for principal positions to incorporate SEI questions in interviews. Collins (2001) focused research on skills and abilities necessary to achieve successful enduring leadership while leading others to achieve sustained high levels of performance. Great leadership must also be good leadership, driven by purpose, effectiveness, ethics and satisfaction (Collins, 2001).

Qualities of Effective Schools

School effectiveness is not simply guaranteed by staff showing up to work and students showing up to class, putting in seat time. Effective instructional and administrative leadership is necessary to develop and nurture effective schools. Effective schools are more prevalent where students engage in the learning environment and where staff feel positive about the school climate and culture. Principals higher in SEI themselves use more "deliberate decision making" and are astute at understanding that "creating a positive school culture enables the other areas" of learning to flourish (Habegger, 2008, p. 42). In high performing schools, principals focus on creating climate and culture which are nurturing and positive for staff as well as for students. They engage in social-emotional approaches to building rapport such as visiting and engaging in conversation with teachers before class gets started, greeting students entering the building, and providing common professional planning time for teacher teams (Habegger, 2008). Research indicated that principals play a key role in developing a culture for learning and an atmosphere that fosters trusting relationships, social and personal development (Elias, Ferrito, & Moceri, 2015; Habegger, 2008).

The sole intent of the International Center for Leadership in Education, created in 1991, was assisting all schools to move all learners toward a highly relevant and rigorous education. The world of today, the 21st Century, requires and demands a different core knowledge that all learners need for success than schools of the past could provide. Effective schools must embrace this change, including the push of global competition, advancements in technology and computer skills, and the push for higher standards for all learners. Marzano (2003) reviewed research on school reform and identified five characteristics for highly successful schools that a school leader

must keep at the helm of the ship: 1) guaranteed and viable curriculum, 2) challenging goals and effective feedback, 3) parent and community involvement, 4) safe and orderly environment, 5) collegiality and professionalism. Dr. Larry Lezotte, a pioneer of the Effective Schools movement which began in 1966, added to the research on effective schools. His research intended to prove that schools could have a significant and positive impact on the achievement of their learners regardless of circumstances. The center of his research revolved around seven correlates that can assist school leaders in systematic and continuous school improvement (Lezotte & Snyder, 2011). Table 6 outlines the seven correlates and provides a short summary of each.

Table 6

Correlates for Systematic and Continuous School Improvement

Correlate	Brief Summary of Correlate
Be a Safe and Organized Place	An effective school must be a place where students can feel safe, physically and emotionally. Leaders focus on preventing misbehavior with proactive measures, teaching behavior, stressing social skills and emotional learning.
Set High Expectations for Students	Effective school leaders help teachers make a conscious effort to give equal opportunity for all students to respond during class, provide thoughtful feedback to each student, and be willing to re-teach the students that have not mastered the skill. Leaders at effective schools genuinely believe that every student has the raw materials to be a successful student.
Have a Relatable Leader	The principal is a leader of leaders, understanding best results and solutions come from a collaborative effort. A visible leader inspires and creates an enriching community in the school.
State a Clear Mission	An effective principal upholds a vision for the school and clearly articulates it to all stakeholders. An effective mission focuses on innovation, improvement, opportunity, and success.
Monitor Students' Progress	An effective school has a process of progress monitoring in place to regularly test students in order to measure academic progress, and also encourages students to self-monitor progress. An effective leader makes sure the data is used.
Provide the Opportunity to Learn	Effective schools maximize instructional time. Leaders are aware of limited instructional time and design schedules to maximize core subject time. Leaders help instructors focus on power standards as well as organized abandonment when skills are not mastered, so that re-teaching fundamental skills can occur.
Build a True Partnership Between Home and School	Effective schools have authentic partnerships with parents, working together to put attendance and studying in a place of importance; working together to create trust and continuous communication; working together to include community agencies.

(Source: Lezotte & Snyder, 2011)

Being a highly effective school does not happen overnight. There is no silver bullet-nothing that will quickly and easily solve the school's problems. There is not just one area for principals or teachers to focus on to become, and then stay, highly effective. However, research has found that schools turning in the high performances do have a number of characteristics in common (Shannon & Bylsma 2007). Among the essentials to achieve high performance, and described in Table 7, are nine characteristics compiled through a meta-analysis of more than 20 studies (Shannon & Bylsma, 2007).

Table 7

Characteristics Necessary for Effective Schools

Characteristic	Description according to meta-analysis study
Clear and Shared Focus	• Staff knows where they are going and why • Focus on achieving shared vision and understanding roles • Developed from common values and beliefs with consistent direction
High Standards and Expectations for All Students	• Belief from all staff that students can achieve high standards • Rigor and Challenge • Obstacles not seen as impassable
Effective School Leadership	• Proactive leaders • Focus includes social-emotional aspects of leadership • Responsible decision-making • Relationship skills
High Levels of Collaboration and Communication	• Strong teamwork among certified staff, including vertical and with other staff • Community (parents, businesses, school staff) effort to identify problems as well as solution ideas
Curriculum, Instruction, and Assessments Aligned with State Standards	• School curriculum aligned with core state standards • Staff use and follow curriculum • Teaching strategies research-based
Frequent Monitoring of Learning and Teaching	• Identify students needing help through variety of assessments • Adjust teaching based on student progress and needs • Use of assessment results to adjust, focus, and improve instructional programs
Focused Professional Development	• Needs assessment for staff training • Self-awareness • Provide research based, extensive, and continuing professional development • Align training with district mission • Include Social-Emotional Learning
Supportive Learning Environment	• Safe, healthy environment for students and staff • Respect and relationships are key • Individualize instruction
High Levels of Family and Community Involvement	• Communicate that community matters to students' educational journey • Social awareness • Forge partnership with business community, families, social service, and other organizations

(Source: Shannon & Bylsma, 2007)

Many of the nine characteristics necessary for effective schools include components of social-emotional intelligence. Research continues to show that it is critical to look beyond just the cognitive learning process when considering components of effective schools (Bardach, 2008; Bentley, 2011; Kline, 2011).

Consideration of social-emotional components of effective schools pertains to student achievement as well. The search for elements that most impact student achievement continues to drive leaders in education to examine data, curriculum, and test results. A study on social-emotional learning (SEL) implemented an intervention curriculum with strong SEL standards and skills embedded to one set of students and a curriculum with little to no SEL standards or skills embedded to a control group of students in order to measure and evaluate the impact of SEL curriculum on students' academic achievement (Schonfeld et al., 2015). Twenty-four elementary schools participated in the study. The data revealed that students receiving the SEL intervention curriculum scored higher on academic tests for math, reading and writing than students not receiving the SEL interventions. The study also revealed that many schools are restricting the time that teachers have to devote to non-tested academic areas, with math, reading and writing being the tested academic areas. The findings showed that many important components to a child's learning are being eliminated, such as art and music, as well as SEL curriculum (Schonfeld et al., 2015), thus, impacting student achievement in a negative way.

Along with data-decision making, highly qualified principals and teachers, and improving principal leadership quality, positive student engagement in the classroom weighs in as another cogent factor in student achievement (American Psychological Association, 2015). Although not widely discussed, research showed that positive student engagement was essential to enhancing student achievement (Garcia-Reid, Reid, & Peterson, 2005). Positive student engagement goes hand in hand with social-emotional learning. Students are engaged when they "devote substantial time and effort to a task, when they care about the quality of their work, and when they commit themselves because work seems to have significance beyond its personal instrumental value" (Newmann, 1986, p. 242). SEL strategies and curriculum can help students to more fully and

authentically engage in learning. Teachers need an expansive repertoire of SEL strategies to engage students. Research revealed that engaged students more often outperform unengaged students (Garcia-Reid et al., 2005). SEL strategies are often new to teachers but can include creating a culture for relationship building and safety, developing relevant and interactive activities for lessons, and providing and promoting an encouraging and supportive classroom environment for all students (Akey, 2006; American Psychological Association, 2015).

In order to make school a more successful place for everyone, schools need to make emotional health a priority, habit. Teachers and administrators need to look beyond the focus of teaching only content, and include, as a purpose, guiding children's emotional health. Rick Wormeli, longtime classroom teacher and now education consultant and writer, borrowed and then modified from Steven Covey (1989) the seven habits, and created the seven habits of highly affective teachers. Wormeli (2015) said that "we can develop constructive responses to our own affective needs" as school staff and "equip our students to do the same" (Wormeli, 2015, p. 13). These seven habits of highly affective teachers included social-emotional strategies such as: find joy in others' success, cultivate perspective and reframe, maintain passion and playfulness, and more. Wormeli said that using all of these affective habits together helps us create a strong feeling of emotional wellness. As we practice such social-emotional strategies on a regular basis, we can "achieve emotional health benefits" and thus can discover a bonus affective habit, "perhaps the most important: Self-renew" (Wormeli, 2015, p. 15).

When emotional well-being becomes integral to the way principals see staff development for teachers, then social-emotional learning will become more inherent and deep rooted in the way that teachers approach teaching students. Principals need to understand the link between an environment flush with SEL and student achievement. Habegger's (2008) research of high-

performing schools connected the impact of school culture to student academic success, and a part of that school culture included SEL. Her research showed that various roles of the principal are important, including alignment of curriculum to standards, continuous improvement plans, and community partnerships; but, her research concluded that positive culture is the most imperative responsibility of principals. (Habegger, 2008). Dr. Martin Luther King, Jr. wrote often about the purpose of education. He wrote of the government's responsibility in the role of educating our children. In the February 1947 edition of the Maroon Tiger, the Morehouse College student newspaper, Dr. King wrote a piece. The following is an excerpt:

> […] We must remember that intelligence is not enough. Intelligence plus character–that is the goal of true education. The complete education gives one not only power of concentration, but worthy objectives upon which to concentrate. The broad education will, therefore, transmit to one not only the accumulated knowledge of the race but also the accumulated experience of social living.

King valued education for all, and promoted more than just the cognitive facet of learning. Dr. King advocated for the social and character pieces of learning to be encouraged and strengthened.

The Collaborative for Academic, Social, and Emotional Learning (CASEL), among the nation's leading educational authorities on social-emotional learning, has conducted research examining which character building skills can improve academic achievement while increasing positive behaviors and decreasing negative behaviors. In their book, *The Other Side of the Report Card,* Elias et al. (2016) included research from CASEL which showed that there are five major social-emotional areas that lead to an improvement in academic performance. These areas were referred to the "CASEL 5" and the skill were defined as "self-awareness, self-management,

social awareness, relationship skills, and responsible decision making" (Elias et al., 2015, p. 2). Their research showed that social-emotional learning and character education are two elements that should claim a place on school report cards (Elias et al., 2015). Social-emotional intelligence lends an important role in successful relationships for both children and adults.

Summary

The study of intelligence and its implications for learning and leading began with a focus on traditional intelligence or intellectual quotient (IQ). However, over time, the study of intelligence and its implications for learning and leading evolved to include the examination of social-emotional intelligence along with the study of IQ. Numerous models of SEI exist today with common themes including skills and abilities in self-awareness, self-management, social awareness, relationship building, responsible decision-making, and overall social-emotional intelligence influence (Bar-On, 2004 & 2006a; Elias et. al., 2015; Goleman, 2006a; Kline, 2011; Mayer, Salovey, & Caruso, 2004; Salovey-Mayer, 1990). Studies report leaders with stronger SEI skills and abilities experience more success (Bentley, 2001; Goleman, 2011; Reed, 2005). The study addresses principal usage of social-emotional intelligence by examining teacher perceptions and principal perceptions.

Chapter 3: Methodology

The methodology chapter details the study purpose, research methods and questions, human subject approval, instruments of data collection and analysis, research design, procedures and timeline, and summary.

Purpose

The purpose of the study was to examine principals' and teachers' perceptions in select Minnesota schools of principals' usage of social-emotional intelligence (SEI) in six subscale constructs: Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall Social-Emotional Influence. The study examined the correlation between the reported principals' usage of SEI constructs and the areas of mathematics, reading and attendance performance data found in the Minnesota State Report Card. The study also examined SEI traits perceived by principals and teachers as important and necessary for a principal in leading a school effectively. Results of the study may guide future principal training needs in the area of SEI and will add to the research on SEI in educational leadership.

Research Methods

In the design process of a research project a decision is made regarding the research methodology for the study. As stated by Huff (2009), "there isn't a perfect method" regarding research methodology, however, "thoughtful choice can support judgments that a contribution is interesting, significant, and trustworthy" (p. 186). Hence, the first step in the design process of the study was to determine research methodology for the study. There are two basic categories used to classify all research methodology, qualitative and quantitative; furthermore, each of these basic categories has numerous sub-methodologies to distinguish the type of research even further

(Roberts, 2010). A research approach can also consist of a combination of these two types. In quantitative research, researchers "seek facts and causes of human behavior and want to know a lot about a few variables so differences can be identified" (Roberts, 2010, p. 142).

A quantitative methodology approach was used in the descriptive study, and was appropriate for the study's research with the purpose of investigating and examining relations and differences among variables that can be measured. Roberts (2010) suggested that quantitative research methodology is "primarily numerical" and data results are gathered through "surveys, tests, experiments, and so on" (Roberts, 2010, p. 142). According to Roberts (2010), "the quantitative approach is called logical positivism. Inquiry begins with a specific plan – a set of detailed questions" (p. 142). In the study, the dependent variables were the six SEI subscales: self-awareness, self-management, social awareness, relationship skills, responsible decision-making, and overall SEI influence. The independent variables included teachers' perceptions, principals' perceptions, and state report card data. A quantitative method is also appropriate when the purpose of the study is to test hypotheses with quantitative propositions and to produce findings that may be generalized to a larger population. The study surveyed teachers and principals in select public elementary schools in Minnesota. The study was directed by a set of detailed research questions.

Research Questions

1. What did elementary teachers in select Minnesota public schools perceive as principals' usage of social-emotional intelligence in the six subscale constructs?
2. What did elementary principals in select Minnesota public schools perceive as their usage of social-emotional intelligence in the six subscale constructs?

3. What was the difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public elementary schools and as perceived by principals in select Minnesota public elementary schools?
4. A) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study? (See appendix A.)

   B) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study? (See appendix A.)

School performance results on the Minnesota State Report Card were examined in the areas of mathematics, reading and attendance.

Null Hypotheses

1. There was no difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public elementary schools and as perceived by principals in select Minnesota public elementary schools.
2. There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.

3. There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.

Participants

Sample selection. Convenience sampling is a form of non-probability sampling. The relative cost and time to implement and conduct a study with convenience sampling is small in comparison to a probability sampling. Convenience sampling was used for the study due to the sensitive nature of the topic in seeking the perceived usage of the social-emotional intelligence of elementary school principals. Permission for participation in the study was obtained from district superintendents since data were collected regarding the building principal's usage of SEI subscales. In order to more likely gain the support of superintendents for district participation, the study used convenience sampling. Regional superintendents were invited to have their principals and teachers participate in the study. Approximately fifteen additional superintendents, known to the researcher or a colleague through professional connections, were also invited to participate.

Population and participants. The researcher attended a Region 5 superintendent meeting in order to explain the purpose of the study and the format in which the survey for the study would be conducted thinking that this personal contact would increase superintendents' willingness to allow principal and teacher participation. Letters explaining the purpose of the study and seeking permission to survey staff, both principals and teachers, were hand delivered to all superintendents at the Region 5 meeting. (See Appendix B). In addition, copies of letters

were sent through the mail to the additional superintendents. A total of approximately 45 superintendents received invitations inviting the 45 respective districts to participate in the study.

This method of convenience sampling resulted in 12 superintendents of the approximate 45 invited superintendents of Minnesota public schools responding that they would allow their districts to participate in the study. Notice of approval forms were sent in the mail to these 12 superintendents. (See Appendix C). Once signed by the superintendent, the approval form authorized permission for the elementary school principals and teachers in their respective districts to participate in the study. Of the 12 public school districts in the state of Minnesota agreeing to participate in the study, eight districts had one elementary school, two districts had two elementary schools, one district had three elementary schools, and one district had six elementary schools, resulting in the possibility of 21 elementary schools participating in the study.

Study sample. Although notice of approval forms were signed and collected from the superintendents of the 12 school districts willing to participate in the study, this approval did not guarantee participation by the principal. A letter of explanation extended an invitation to elementary principals to participate in the study. (See Appendix D). The letter conveyed that the researcher had permission from the district superintendent, provided a brief purpose for the study, and outlined steps for participation regarding the principal survey and the teacher survey. Letters were sent electronically to 22 principals from the 21 public elementary schools with permission to participate in the study. (One school had co-principals). After two weeks, personalized reminder notes were sent electronically to the principals who not yet completed the survey. After four weeks, an additional personalized reminder was sent electronically to those principals who had not yet completed the survey and/or who did not yet have any teachers with

completed surveys. This method of convenience sampling produced results from 10 out of the 12 districts, including participation from 11 elementary schools out of 21 possible elementary schools which reflected a participation rate of 52% for elementary schools. Elementary principals participating in the survey included 12 out of 22 which represented a response rate of 54.5% for elementary principal participation. This method of convenience sampling also produced results from 170 teachers participating in the survey.

Human Subject Approval

Institutional Review Board: The researcher completed the Collaborative Institutional Training Initiative (CITI) on June 24, 2014, receiving 100% on the Belmont Report and CITI Course Introduction, 70% on Students in Research, 100% on informed consent, and 100% on the Regulations.

The research design did not pose any physical or psychological risk to the participants, as the data collection from teachers and principals involved participation in an anonymous on-line survey. Participant anonymity was ensured as the survey did not collect personal identification data. All survey data were coded to protect the identity of the participant, the school, and the district. Individual school names were not used to describe any findings in this study. No identifying information which described a specific school district or employee within that district was used for the study.

The teachers and principals participating in the study were provided an introductory e-mail explaining the research and that their participation in the research was their consent. Each of the two surveys used for the study contained an introduction with information regarding consent and data privacy. Procedures were stated, including notation that the completion time for the survey was approximately 5 minutes. Benefits of the study were stated. Participants were

informed that the dissertation would be made public and added to the Saint Cloud State University (SCSU) repository. Contact information was provided for the researcher and the committee chair should a participant have any questions. Confidentiality was discussed, indicating that individuals and districts would not be identifiable in the study findings and that all data collected would be presented in aggregate form with no more than one to two descriptors presented together. Information was provided to participants indicating that participation in the study was voluntary, that they could choose not to participate or that they could withdraw at any time, for any reason, and without penalty. Participants were informed that their decision whether to participate or not would not affect their current or future relations with SCSU or the researcher. Data for the study were kept on a secure data base at SCSU

Instrumentation

Survey instruments. Based on the conceptual framework of the study, the two survey instruments were adapted and used to collect data regarding the degree of SEI in public elementary school principals in Minnesota, both as perceived by teachers at public elementary schools and by principals at public elementary schools. The study utilized the SELF:TE and the SELF:PE, adapted and revised with permission (Kline, 2011). (See Appendix E). Kline (2011) researched and analyzed instruments that focused on social and emotional attributes, and reported the lack of quality tools available that assess both social and emotional skills in elementary school principals was evident.

The first survey instrument, “Social-Emotional Educational Leadership Factor: Certified Teacher Edition” (SELF:TE), measured and evaluated teacher perceptions of their principal’s usage of social-emotional intelligence subscales. (See Appendix F). Different subscales of emotional intelligence characteristics (self-awareness, self-management, social awareness,

relationship skill, responsible decision-making, overall social-emotional influence) were related to various questions on the survey. Influenced by the Collaborative for Academic, Social, and Emotional Learning (CASEL), five to seven survey questions were aligned with each of the different subscales. Teachers were asked to provide perceptions of the elementary principal's usage of SEI skills by answering thirty-three core questions, which pertained directly to social-emotional leadership skills, using a five-point Likert-type scale. The scale assigned numeric value to a range of answers as follows: 1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Always. Two additional questions asked teachers to reflect on SEI traits and abilities they perceive to be most important for a principal in leading a school effectively. The survey concluded with five demographic questions that gathered information such as current position, years in the district, years in the profession, type of district, and student population.

The second survey instrument, "Social-Emotional Educational Leadership Factor: Principal Edition" (SELF:PE), measured and evaluated principals' perceptions of their own usage of social-emotional intelligence subscales. (See appendix G). Different subscales of SEI characteristics (self-awareness, self-management, social awareness, relationship skill, responsible decision-making, overall social-emotional influence) were related to various questions on the survey. Influenced by the CASEL, five to seven survey questions were aligned with each of the different subscales. Principals were asked to provide perceptions of their own usage of SEI subscales by answering thirty-three core questions, which pertained directly to social and emotional leadership skills, using a five-point Likert-type scale. The scale assigned numeric value to a range of answers as follows: 1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Always. Two additional questions asked principals to reflect on SEI traits and abilities they perceive to be most important for a principal in leading a school effectively. An additional five

questions gathered demographic information such as years in current administrative position, total years in administration, type of school, student and staff population.

CASEL contended that social-emotional learning centers on five cluster competencies (Durlak, Domitrovich, Weissberg, & Gullotta, 2015; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The SELF survey incorporated these five competencies along with an additional category into six SEI subscales: 1) Self-awareness was defined as accurately assessing one's feelings, interests, values, and strengths; 2) Self-management was defined as regulating one's emotions to handle stress, control impulses, and persevere in overcoming obstacles; 3) Social Awareness was defined as being able to recognize and appreciate individual and group similarities and differences; 4) Relationship Skills was defined as establishing and maintaining healthy and rewarding relationships based on cooperation; and 5) Responsible Decision-making was defined as making decisions based on the consideration of ethical standards safety concerns, appropriate social norms, and respect for others; 6) Overall SEI Influence was defined as being authentic, approachable, intuitive and, self- reflective (Bar-On, 2007; Goleman, 2006b; Kline, 2011; Salovey-Mayer, 1990).

The SELF instrument was assessed through "expert validity criteria as determined by seven highly qualified individuals" (Kline, 2011, p. 40). This group included a variety of professionals including professors of early childhood, educational leadership, and educational psychology. Also included were a director of a university principal preparation program and two elementary principals, one from a public school and one from a private school (Kline, 2011). The study from Kline (2011) also indicated that once all surveys were completed and data were complied, a "reliability analysis was administered" and that the coefficient of reliability of all six subscales "[…] produced Cronbach's Alpha of 0.964, which meets the general standard in social

sciences of 0.70 to ensure high internal consistency" (p. 41). Each individual subscale was evaluated for dependability with a reliability analysis with the following results: 1) The Self-awareness subscale, including survey questions 2, 4, 13, 20, 25, and 33 had a Cronbach's Alpha of 0.763. 2) The Self-management subscale, including survey questions 6, 9, 14, 21, and 30 had a Cronbach's Alpha of 0.849. 3) The Social Awareness subscale, including survey questions 3, 7, 10, 18, 23, 26, and 28 had a Cronbach's Alpha of 0.889. 4) The Relationship Skill subscale including survey questions 1, 11, 17, 24, and 29 had a Cronbach's Alpha of 0.807. 5) The Responsible Decision-making subscale, including survey questions 5, 16, 22, 27, and 31 had a Cronbach's Alpha of 0.853. Finally, the Overall SEI Influence subscale, including questions 8, 12, 15, 19, 32, and 33 had a Cronbach's Alpha of 0.870 (Kline, 2011). The minor adaptions made to the SELF-1 were not significant enough to alter the reliability.

Data collection methods. Data collection began in October of 2016 and was completed in January of 2017. The study surveyed principals and teachers from eleven public elementary schools in Minnesota during the 2016-17 academic school year using the Social-Emotional Educational Leadership Factor (SELF), a 40-item questionnaire administered digitally through SurveyMonkey®. The research instruments were the SELF: TE (teacher edition) and the SELF: PE (principal edition). (See Appendix B and C respectively). In preparation for data analysis, 33 survey items were categorized into the six subscale constructs of SEI and two items were used to gather additional information on SEI traits and abilities. A final five questions collected demographic information. (See Appendix H).

An excel spreadsheet was created to record data for these 11 schools. In order to protect the anonymity of the schools, the principals, the teachers and the school districts, a coding system was devised. Each district was assigned a letter, using letters "A" through "K" (omitting

the letter “I” so as not to confuse it with the number “1”). (See Appendix A). One district had two schools that participated, so each school was also assigned a number. The study then gathered public information from the Minnesota Department of Education (MDE) website, under the data center tab and then specifically under the data reports and analytics tab. From there, data were taken from the Minnesota Report Card and the federal accountability section. Data were collected for math, reading and attendance from the following years: 2012, 2013, 2014, 2015, and& 2016, totaling 15 possible criteria areas. The excel spreadsheet contained a column for each of these years. From the MDE website school report card data, a “yes” or “no” was found for each public elementary school in each year based on whether the district met the state metrics for AYP in each of the three criteria areas or not. This information was recorded in the excel spreadsheet by placing an “R” in the year column if the school met AYP criteria for reading that year, by placing an “M” in the year column if the school met AYP criteria for math that year, and by placing an “A” in the column if the school met AYP criteria for attendance that year. To meet criteria to be considered an effective school for the study, the school needed be at or above AYP target in 13 out of the 15 possible areas. Finally, the public elementary schools that met criteria for highly effective were highlighted green in the spreadsheet while schools that did not meet criteria for effective were left white. Seven of these schools meet the criteria set for the study as effective schools, while four schools did not meet the criteria.

Data analysis. The results of the SELF:TE and the SELF:PE were down loaded from SurveyMonkey® into excel spreadsheets. Data were imported into the International Business Machine Statistical Package for the Social Sciences Statistics 22 (IBM SPSS Statistics 22) which is a software used to analyze research data results by means of ad-hoc analysis, hypothesis testing, and predictive analytics. The data analysis commenced with numerical scores assigned to

33 items of the Social-Emotional Educational Leadership Factor surveys: 1 - Never, 2 - Rarely, 3 - Sometimes, 4 - Very Often, and 5 - Always. Each survey item was scored for each respondent from all of the participating schools on each of the survey questions.

To answer research question one, computations were made using the data from the SELF:TE survey questions which teacher respondents completed, based on personal perceptions, to rate principal usage of social-emotional intelligence. Questions were grouped according to the SEI subscale construct with which they corresponded, and a Friedman Test was conducted to compute mean rank scores. Teacher respondents' ratings for each of the 33 questions were combined to compute a mean average for each SEI subscale construct and a Wilcoxon signed-ranks test was conducted to compute paired differences. A frequency distribution was computed based on teacher respondents' selections of SEI traits.

To answer research question two, computations were made using the data from the SELF:PE survey questions which principal respondents completed, based on personal perceptions, to rank their usage of social-emotional intelligence. Questions were grouped according to the SEI subscale construct with which they corresponded, and a Friedman Test was conducted to compute mean rank scores. Principal respondents' ratings for each of the 33 questions were combined to compute a mean average for each SEI subscale construct and a Wilcoxon signed-ranks test was conducted to compute paired differences. A frequency distribution was computed based on principal respondents' selections of SEI traits.

To answer research question three, a 2-sample t-test was conducted to compare differences, if any, of principals' usage of SEI in the six subscale constructs based on teachers' perceptions and based on principals' perceptions. The frequency distributions of SEI traits

selected by teachers and the frequency distributions of SEI traits selected by principals were compared.

To answer research question four, Pearson product-moment correlation coefficients were computed using data from the SELF:TE and data from the SELF:PE along with school performance data from MDE. For purposes of the study, school performance criteria was associated with the Minnesota State Report Card specifically to third and fourth grade student test results in mathematics and reading, and on overall student attendance at the school. School performance information was collected from the Minnesota Department of Education (MDE) website in the Minnesota Report Card federal accountability section. Data were collected for mathematics and reading and attendance from the following years: 2012, 2013, 2014, 2015, and 2016, totaling 15 possible criteria areas. A school needed to be at or above the AYP target in 13 out of the 15 possible areas to meet criteria to be considered an effective school for the study.

Research Design

The research study employed a quantitative method of inquiry to gain a statistical relationship perspective of teachers' perceptions and principals' perceptions of principal usage of SEI in the six subscale constructs. Quantitative research explains and defines phenomena by gathering data with numerical values and then analyzing that data using mathematically based means (Aliaga & Gunderson, 2006). By analyzing principal usage of SEI subscales through a quantitative lens, the research can signify and reveal SEI subscales perceived to have higher usage by principals as well as SEI subscale constructs perceived to have lower usage by principals.

This research design was non-experimental and correlational research. Non-experimental research includes studies where a researcher cannot manipulate, alter, or control the subjects or

predictor variable, but rather, relies on interpretation, observation or interactions to come to conclusions. Typically, this requires that the non-experimental researcher to rely on surveys or correlations, thus, not allowing the researcher to draw a true cause-and-effect relationship (U of MN Libraries Publishing, 2010). Correlational research "is a type of nonexperimental research in which the researcher measures two variables and assesses the statistical relationship (i.e., the correlation) between them with little or no effort to control extraneous variables" (U of MN Libraries Publishing, 2010, 7.2).

Procedures and Timeline

1. The researcher completed the Collaborative Institutional Training Initiative (CITI) on June 24, 2014.
2. The researcher gained permission from Dr. Andrew Kline to adapt and use his SELF survey (Kline, 2011).
3. Permission was granted from the St. Cloud State University Institutional Review Board to conduct a study, An Investigation of the Social-Emotional Intelligence Traits and Abilities of Elementary Principals, employing the instrument, SELF-MN.
4. October-November 2016, approximately 45 superintendents of school districts in Minnesota were extended the opportunity for their elementary principals and teachers to participate in this study via convenience sampling. The invitation included an introduction to the study, the specific steps necessary and required to participate. (See Appendix B).
5. November-December 2016, notice of approval forms were sent to superintendents who expressed interest for elementary principals and teachers in their district to participate in the study. (See Appendix C).

6. November 2016-January 2017, principals of elementary schools in districts choosing to participate in the study were sent an introductory letter via electronic communication. The communication included links to the surveys on SurveyMonkey®: one link for the principals to complete the survey and one link for principals to complete the survey. The communication also included a paragraph for principals to forward to the teachers in the building explaining the study. (See Appendix D).
7. November 2016, data collection began.
8. January 2017, data collection concluded.
9. January 2017, data analysis began.

Summary

The study examined principals' usage of SEI as perceived by select Minnesota elementary school teachers. The study examined principals' usage of SEI as perceived by select Minnesota elementary school principals. The study examined the differences between teacher and principal perception of principals' usage of SEI skills. The study also examined the differences between principals' usage of SEI skills, as perceived by teachers and principals, based on school performance results on the Minnesota state report card for select elementary schools in Minnesota participating in the study. The significance of the study will assist principals in identifying which SEI subscale constructs were perceived to have higher principal usage and which SEI subscale constructs were perceived to have lower principal usage.

Chapter 4: Results and Discussion

The purpose of the study was to examine principals' and teachers' perceptions in select Minnesota schools of principals' usage of social-emotional intelligence (SEI) in six subscale constructs: Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall Social-Emotional Influence. The study examined the correlation between the reported principals' usage of SEI constructs and the areas of mathematics, reading and attendance performance data found in the Minnesota State Report Card. The study also examined SEI traits perceived by principals and teachers as important and necessary for a principal in leading a school effectively.

Introduction

Chapter 4 reports the findings of the study. The instrumentation and demographic data are discussed, research questions reintroduced, and the outcomes of the statistical analyses are provided. Data were analyzed and findings were organized according to each research question. The chapter concludes with a brief summary of substantive findings.

Research Questions

1. What did elementary teachers in select Minnesota public schools perceive as principals' usage of social-emotional intelligence in the six subscale constructs?
2. What did elementary principals in select Minnesota public schools perceive as their usage of social-emotional intelligence in the six subscale constructs?
3. What was the difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select public Minnesota public elementary schools and as perceived by principals in select Minnesota public elementary schools?

4. A) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study? (See appendix A)

   B) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study? (See appendix A)

Null Hypotheses

1. There was no difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public elementary schools and as perceived by principals in select Minnesota public elementary schools.
2. There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.
3. There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.

For purposes of the study, school performance criteria was associated with the Minnesota State Report Card, specifically to third and fourth grade student test results in mathematics and

reading, and on overall student attendance at the school. School performance information was collected from the Minnesota Department of Education (MDE) website in the Minnesota Report Card federal accountability section. Data were collected for mathematics and reading and attendance from the following years: 2012, 2013, 2014, 2015, and 2016 totaling 15 possible criteria areas. A school needed to be at or above the AYP target in 13 out of the 15 possible areas to meet criteria to be considered an effective school for the study.

Analysis

Analysis of the data was conducted using the Statistical Package of Social Sciences (SPSS). To answer research question one, computations were made using the data from the SELF:TE survey questions which teacher respondents completed, based on personal perceptions, to rate principals' usage of social-emotional intelligence. Questions were grouped according to the SEI subscale construct with which they corresponded, and a Friedman Test was conducted to compute mean rank scores. Teacher respondents' ratings for each of the 33 questions were combined to compute a mean average for each SEI subscale construct, and a Wilcoxon signed-ranks test was conducted to compute paired differences. A frequency distribution was computed using teacher respondents' selections from a list of fifteen SEI traits.

To answer research question two, computations were made using the data from the SELF:PE survey questions which principal respondents completed, based on personal perceptions, to rank their usage of social-emotional intelligence. Questions were grouped according to the SEI subscale construct with which they corresponded, and a Friedman Test was conducted to compute mean rank scores. Principal respondents' ratings for each of the 33 questions were combined to compute a mean average for each SEI subscale construct, and a

Wilcoxon signed-ranks test was conducted to compute paired differences. A frequency distribution was computed using principal respondents' selections from a list of fifteen SEI traits.

To answer research question three, a 2-sample t-test was conducted to compare differences, if any, of principals' usage of SEI in the six subscale constructs based on teachers' perceptions and based on principals' perceptions. A comparison was made between the SEI traits the teachers identified as most important and necessary for a principal in leading a school effectively and the SEI traits the principals identified as most important and necessary for a principal in leading a school effectively.

To answer research question four, Pearson product-moment correlation coefficients were computed using data from the SELF:TE and data from the SELF:PE compared to school performance data from MDE.

Description of Sample

A convenience sample was implemented in the study. Principals and teachers at public elementary schools in selected Minnesota school districts were contacted and asked to complete the study survey. Of the approximate 45 public school districts invited to participate, 12 superintendents provided approval of consent to participate. The method of convenience sampling produced responses from 10 of 12 school districts, including 12 of 22 principals who participated in the survey. This yielded a principal response rate of 54.5 percent. The method of convenience sampling also produced responses from 170 teachers. However, results from only 119 of the teacher surveys could be utilized in the research since 53 teacher respondents had failed to respond to all questions. All participants were assured of the confidentiality of their responses.

Demographics

The two surveys used for the study were designed to address the research questions. In addition, five items on each survey gathered demographic information. From the SELF:TE instrument, demographic information included certified staff position, years of experience at current school, total years of experience, type of school district, and school enrollment. These demographic data are presented in Table 8.

Table 8

Elementary Teacher Demographics

Demographic	N	Percent of Respondents
Teacher's Current Position		
Elementary School Teacher	82	74.5
Certified Staff Specialist	28	25.5
Years of Experience at Current District		
0-5 years	37	31.1
6-19 years	58	48.8
20-29 years	20	16.8
30+ years	4	3.3
Total Years of Experience as Certified Staff		
0-5 years	17	14.3
6-19 years	59	49.6
20-29 years	34	28.6
30+ years	9	7.5
School District Type		
Metro	2	1.9
Suburban	60	56.1
Out-State	45	42.1
School Enrollment		
0-399 Students	11	10.0
400-599 Students	34	30.9
600+ Students	65	59.1

Table 8 shows the majority of the SELF:TE survey respondents, 74.5% (n = 82), were elementary school teachers. Certified staff specialists, which could include school counselors,

speech pathologists, occupational therapists, and similar certified staff positions, comprised the remaining 25.5% (n=28) of SELF:TE respondents.

Table 8 shows years of experience of teacher respondents at their current school district were distributed as follows: 0-5 years, 31.1% (n = 37); 6-19 years, 48.8% (n = 58); 20-29 years, 16.8% (n = 20); and 30+ years, 3.3% (n = 4). Respondents' years of total experience as certified staff members were distributed as follows: 0-5 years, 14.3% (n = 17); 6-19 years, 49.6% (n = 59); 20-29 years, 28.6% (n = 34); and 30+ years, 7.5% (n = 9).

Table 9 represents demographic information gathered from the SELF:PE instrument included years of experience at current school, total years of experience, type of school district, school enrollment, and number of certified teaching staff in the building.

Table 9 shows years of experience of principal respondents at their current school were distributed as follows: 0-5 years, 25% (n = 3); 6-19 years, 66.7% (n = 8); 20-29 years, 8.3% (n = 1); and 30+ years, 0% (n = 0). Respondents' years of total experience as principals were distributed as follows: 0-5 years, 8.3% (n = 1); 6-19 years, 66.7% (n = 8); 20-29 years, 16.7% (n = 2); and 30+ years, 8.3% (n = 1).

Table 9

Elementary Principal Demographics

Demographic	N	Percent of Respondents
Years as Principal at Current School		
0-5 years	3	25.0
6-19 years	8	66.7
20-29 years	1	8.3
30 + years	0	0.0
Total Years of Experience as Principal		
0-5 years	1	8.3
6-19 years	8	66.7
20-29 years	2	16.7
30+ years	1	8.3
School District Type		
Metro/Suburban	2	16.7
Out-State	10	83.3
School Enrollment		
0-399 Students	0	
400-599 Students	6	54.6
600 + Students	5	45.5
Number of Certified Teaching Staff		
0-20	1	8.3
21-35	8	66.7
36-50	2	16.7
51+	1	8.3

Certified Staff Perception of Principals' SEI

Research question one: What did elementary teachers in select Minnesota public schools perceive as principal's usage of social-emotional intelligence in the six subscale constructs?

To address the question, the researcher examined teacher respondents' perceptions of principals' usage of SEI using the first 33 questions of the SELF:TE. These questions represented the six SEI subscale constructs: the Self-awareness construct was comprised of five questions; the Self-management construct was comprised of five questions; the Social Awareness construct was comprised of seven questions; the Relationship Skills construct was

comprised of five questions; the Responsible Decision-making construct was comprised of five questions; and the Overall SEI Influence construct was comprised of six questions. Rating of the 33 statements was accomplished through the use of a Likert-type scale with the following five descriptors: Never, Rarely, Sometimes, Often, and Always. For data analysis, weight was assigned to each of the descriptors as follows: 1-Never, 2-Rarely, 3-Sometimes, 4-Often, and 5-Always. Participants in the study did not see the weighting on the survey instrument but, rather, they saw only the descriptor words.

Nonparametric tests (NPar tests) make minimal assumptions about the underlying distribution of the data (Siegel & Castellan, 1988). In particular, the study used the Friedman test to test differences between groups when the dependent variable being measured was ordinal (Likert scale). The Friedman test statistics table indicates whether or not there was a statistically significant difference between the mean rank scores of the related groups in the study. It is important to note that the Friedman test is an omnibus test; that is, it relates whether or not there are differences, but it does not depict which groups in particular differ from one another. To determine which groups differ from one another, post hoc tests were required. In the study, the dependent variables were the SEI subscales groups, and teachers used a Likert-scale to indicate their perceptions of their principal's usage of each subscale.

Table 10 and 11 reflect Friedman test data compiled from SELF:TE surveys completed by teachers at select Minnesota elementary schools. Table 10 displays Friedman test statistics for the SELF:TE data and illustrates that responses from 119 teachers respondents were included in the study. Table data reveal that there was a statistically significant difference (p-value < .05) in perceived level of principals' usage of SEI by teachers at select Minnesota elementary schools in the study, $X^2(5) = 28.883$, $p = .000$. Thus, there were differences somewhere between the SEI

subscale constructs as perceived by teachers, indicating that further statistics analysis was warranted.

Table 10

TE Test Statistics–Friedman Test

N	119
Chi-Square	28.883
df	5
Asymp. Sig	.000

Table 11 summarizes teachers' perceptions of their principal's usage of SEI subscales by Friedman test rank order and Friedman group mean rank score. The Friedman test computed a rank score of 1-6 (since there are 6 SEI subscale constructs). Table 11 indicates that teachers perceived principals as demonstrating the most usage of SEI in the subscale construct of Self-management with a group mean score of 3.93. Teachers perceived Overall SEI Influence to be the second highest subscale construct of principal usage of SEI with a group mean score of 3.77. Responsible Decision-making and Social Awareness received the third and fourth highest rankings for principal usage of SEI with group mean scores of 3.64 and 3.51, respectively. Table data also show that teachers ranked Self-awareness (group mean score=3.34) and Relationship Skills (group mean score=2.81) as the two lowest SEI subscales for principal usage of SEI.

Table 11

TE Ranking of Principal Usage of SEI for Each of the Subscale Construct Areas–Friedman Test Ranks

SEI Subscale Construct Areas	Rank Order	Group Mean Rank Score
Self-awareness	5	3.34
Self-management	1	3.93
Social Awareness	4	3.51
Relationship Skills	6	2.81
Responsible Decision-making	3	3.64
Overall SEI Influence	2	3.77

n = 119

Since the Friedman's test statistics revealed statistically significant differences (see Table 10) another NPar test, the Wilcoxon signed-ranks test, was used to further analyze data from the SELF:TE. The Wilcoxon signed-ranks test is a hypothesis test used in comparing two related samples to assess whether or not the population mean ranks differ, in other words, a paired difference test. The Wilcoxon signed-ranks test makes the assumptions that data are paired, that data come from the same population, and that data are measured on an interval scale. The related samples in the study were individual teacher survey data which compared each SEI subscale construct to each of the other SEI subscale constructs; the data come from the same population, the TE survey population; and data were measured on the interval scale of 1 (never) - 5 (always). Each SEI subscale construct was compared to each of the other SEI subscale constructs for the paired difference test in order to identify whether or not individual teachers responded differently to the two SEI subscales that were paired.

Table 12 illustrates the Wilcoxon signed-ranks test summary descriptive statistics; specifically, Column 3 reports the calculated mean scores for all SEI subscale constructs using the averages based on the Likert-scale of 1-5 including scores from all teacher respondents. The table establishes that all mean scores were positive (2.5 or above) and that the means of four SEI subscale constructs were very highly ranked, with scores with values between 4 (often) and 5 (always): Self-management (M = 4.08), Social Awareness (M = 4.02), Responsible Decision-making (M = 4.04), and Overall SEI Influence (M = 4.07). This indicates that teachers in the study had a positive perception of their principals' usage of all six of the SEI constructs with the most confidence in principals' usage of the construct Self-management.

Table 12

TE Wilcoxon Signed-Ranks Test Summary: Descriptive Statistics

SEI Subscale Constructs	N	Mean	Std. Deviation	Minimum	Maximum
Self-awareness	119	3.9726	.69971	2.20	5.00
Self-management	119	4.0838	.71595	2.20	5.00
Social Awareness	119	4.0208	.72121	2.29	5.00
Relationship Skills	119	3.8872	.68400	2.00	5.00
Responsible Decision-making	119	4.0444	.65607	2.20	5.00
Overall SEI Influence	119	4.0726	.68697	2.17	5.00

Test ranks were used to calculate Wilcoxon signed-ranks test statistics, including the negative and positive ranks, as shown in Table 13. Appendix I contains a table that reveals the TE Wilcoxon signed-ranks test ranks. Specifically, results computed from the Wilcoxon signed-ranks test reveal data showing whether or not there are differences comparing how a smaller group of teachers perceived their principal's usage of SEI in the first and second paired SEI subscale construct in relation to the average group mean for SEI subscale constructs. This is important because if the data reveal a statistically significant difference, additional research could be conducted to examine why the difference exists in a small group of teachers' perceptions between specific SEI subscale construct areas as compared to the group average perception.

Table 13

TE Wilcoxon Signed-Ranks: Test Statistics

SEI Paired Data	Z	Asymp. Sig. (2-tailed)
Self-management & Self-awareness	-2.252[a]	.024*
Social Awareness & Self-awareness	-1.204[a]	.229
Relationship Skills & Self-awareness	-2.132[b]	.033*
Responsible Decision-making & Self-awareness	-1.743[a]	.081
Overall SEI Influence & Self-awareness	-3.156[a]	.002*
Social Awareness & Self-management	-1.404[b]	.160
Relationship Skills & Self-management	-4.949[b]	.000*
Responsible Decision-making & Self-management	-1.144[b]	.253
Overall SEI Influence & Self-management	-0.555[b]	.579
Relationship Skills & Social Awareness	-3.443[b]	.001*
Responsible Decision-making & Social Awareness	-0.576[a]	.565
Overall SEI Influence & Social Awareness	-0.718[a]	.473
Responsible Decision-making & Relationship Skills	-4.860[a]	.000*
Overall SEI Influence & Relationship Skills	-4.549[a]	.000*
Overall SEI Influence & Responsible Decision-making	-1.113[a]	.266

a. Based on negative ranks.
b. Based on positive ranks.
*p < .05

In the study, when six SEI subscale constructs were paired to all other SEI constructs, there was a total of fifteen paired constructs as shown in Table 13. Examination of Table 13 denotes a statistically significant difference ($p < .05$) in teachers' perceptions of their principals' usage of SEI in seven paired constructs. This means that even though the majority of teachers perceived principals' usage of a subscale construct higher (or lower) than another subscale construct, a statistically significant group of teachers' perceptions did not follow this pattern. The study identifies the paired constructs where differences exist; however, future research could be conducted to determine why the differences exist.

The following seven paired SEI subscale constructs were shown to have statistically significant differences: (1) Self-management and Self-awareness ($p = .024$); (2) Relationship Skills and Self-awareness ($p = .033$); (3) Overall SEI Influence and Self-Awareness ($p = .002$); (4) Relationship Skills and Social Awareness ($p = .001$); and, most notably the following three

paired subscale constructs: (5) Relationship Skills and Self-management (p = .000); (6) Responsible Decision-making and Relationship Skills (p = .000); and, (7) Overall SEI Influence and Relationship Skills (p = .000). There were no significant differences in the remaining 8 pairs reported in Table 13.

The teacher respondent population ranked Self-management as first (most) in usage by principals and Self-awareness as fifth in usage by principals, while 31.9% (n = 38) of responding teachers ranked Self-management than Self-awareness.

The teacher respondent population ranked Relationship Skills sixth (least) in usage by principals and Self-awareness fifth in usage by principals; however, Relationship Skills was ranked higher than Self-awareness by 28.6 % (n = 34) of responding teachers.

The teacher respondent population ranked Overall SEI Influence second in usage by principals and Self-awareness as fifth in usage by principals, while 35.3% (n = 42) ranked Overall SEI Influence lower in usage than Self-awareness.

The teacher respondent population ranked Relationship Skills sixth (least) in usage by principals and Social Awareness fourth in usage by principals; however, Relationship Skills was ranked higher than Social Awareness by 32.8% (n = 39) of responding teachers.

The teacher respondent population ranked Relationship Skills sixth (least) in usage by principals and Self-management first (most) in usage; however, Relationship Skills was ranked higher than Self-management by 16.8% (n = 20) of responding teachers.

The teacher respondent population ranked Responsible Decision-making third in usage by principals and Relationship Skills sixth (least) usage by principals, while 19.3% (n = 23) ranked Responsible Decision-making lower in usage than Relationship Skills.

The teacher respondent population ranked Overall SEI Influence second in usage by principals and Relationship Skills as sixth (least) in usage by principals, while 32.8% (n = 39) ranked Overall SEI Influence lower in usage Relationship Skills.

The researcher was not able to distinguish why a statistically significant group of teachers' perceptions did not follow the perception of the larger teacher respondent group in these seven paired constructs. Subsequently, examination of these smaller groups could be the subject of further research.

The SELF:TE survey also provided a list of social-emotional traits to teachers participating in the study to choose the three traits that they perceived to be the most important and necessary for a principal to demonstrate in leading a school effectively. A frequency distribution was used to present teachers' perceptions of the importance of the various social-emotional traits. Table 14 reports these results.

Table 14

Frequency Distribution of Teachers Selecting Each SEI Trait from the List Provided

SEI Trait	Number of teachers who selected SEI trait (N=119)	Percent of teachers who selected SEI trait	Frequency Rank (1-15 based on number of teachers who chose each trait)
Supportive	83	60.7	1
Trustworthy	54	45.4	2
Respectful	43	36.1	3
Positive	37	31.1	4
Reliable	30	25.2	5
Compassion	18	15.1	6
Motivational	16	13.4	7
Responsible	15	12.6	8.5
Ethical	15	12.6	8.5
Assertive	11	9.2	10.5
Empathetic	11	9.2	10.5
Composed	9	7.6	12
Confident	8	6.7	13
Conscientious	6	5.0	14
Astute	1	0.8	15

Note: The percentage will not add to 100 because respondents could choose three traits.

Table 14 distinguishes that the SEI trait, Supportive, was perceived by the most teachers, 60.7% (n = 83), as one of the three most important SEI traits for a principal to demonstrate in leading a school effectively. Trustworthy was selected by nearly half of the teachers (n = 54) as one of their three selections. Slightly over one-third of teachers (n = 43) 36.1% perceived Respectful as one of the most necessary SEI traits for principals. Astute (n = 1), Conscientious (n = 6), and Confident (n = 8) were the three SEI traits from the list ranked by teachers as least necessary for a principal in leading a school effectively.

Principal Perception of Principals' SEI

Research question two: What did elementary principals in select Minnesota public schools perceive as their usage of social-emotional intelligence in the six subscale constructs?

To address the question, the researcher examined respondent principals' perceptions of their own SEI usage using the first 33 questions on the SELF: Principal Edition. These questions represented the six SEI subscale constructs: the Self-awareness construct was comprised of five questions; the Self-management construct was comprised of five questions; the Social Awareness construct was comprised of seven questions; the Relationship Skills construct was comprised of five questions; the Responsible Decision-making construct was comprised of five questions; and the Overall SEI Influence construct was comprised of six questions. Rating of the 33 statements was accomplished through the use of a Likert-type scale with the following five descriptors: Never, Rarely, Sometimes, Often, and Always. For data analysis, weight was assigned to each of the descriptors as follows: 1-Never, 2-Rarely, 3-Sometimes, 4-Often, and 5-Always. Participants in the study did not see the weighting on the survey instrument but, rather, they saw only the descriptor words.

Table 15 represents the results of the SELF: Principal Edition and summarizes principals' perceptions of their usage of SEI subscales by Friedman test rank order and Friedman group mean rank score. Friedman's group mean rank score is gathered by sorting and ordering data from each individual respondent. The six subscale area constructs were ranked based on the respondents' ratings on the 33 survey questions. There were six SEI subscale constructs meaning the constructs were all assigned a number 1-6 for each respondent and then the average mean rank score for the group was calculated.

Table 15

PE Ranking of SEI for Each of the Subscale Construct Areas–Friedman Test Ranks

SEI Subscales	Rank Order	Group Mean Rank Score
Self-awareness	6	2.50
Self-management	5	2.79
Social awareness	3	3.54
Relationship skills	4	2.88
Responsible decision-making	1	4.92
Overall SEI influence	2	4.38

N = 12

Responding principals rated themselves highest (mean rank score = 4.92) in the Responsible Decision-making subscale construct and second highest (mean rank score = 4.38) in the Overall SEI Influence construct. Responding principal rated themselves third highest (mean rank score = 3.54) in the SEI subscale construct Social Awareness. Three SEI subscale construct areas were considered to be ranked negatively (under 3): Relationship Skills (mean rank score 2.88), Self-management (mean rank score = 2.79), and Self-awareness (mean rank score = 2.50).

Table 16 reports Friedman test statistics for the SELF:PE data. The data revealed there was a statistically significant difference (p-value < .05) in perceived level of principal usage of SEI by select principals in the study, $X^2(5) = 16.511$, $p = .006$. Thus, there were differences somewhere between the SEI subscale constructs as compared to each other, indicating that further statistical analysis was warranted.

Table 16 also indicates the number of principals participating in the study was 12. The sample size was too small to generalize findings to the larger population, thus, results remain relevant only to the study.

Table 16

PE Test Statistics–Friedman Test

N	12
Chi-Square	16.511
df	5
Asymp. Sig	.006

The Wilcoxon signed-ranks test was conducted to further analyze differences between the SEI subscale constructs based on data from the SELF:PE. Each SEI subscale construct was compared to each of the other SEI subscale constructs for the paired difference test. Table 17 reports the Wilcoxon signed-ranks test summary descriptive statistics including the calculated mean score for each SEI subscale construct based on the Likert-scale of 1-5 including scores from all principal respondents. Table 17 Column 3 reveals that the mean for each of the six SEI constructs was highly positive and fell between 4 (often) and 5 (always) with Responsible Decision-making receiving the highest mean score of 4.45 and Self-awareness receiving the lowest mean score of 4.03. Thus, on the Likert-scale rating, principals indicated a group average perception that they use all of the SEI subscale constructs the majority of the time. This means that principals have a positive perception of the amount of their usage of all six SEI subscale construct, with their perception of the construct Responsible Decision-making reflection the highest amount of usage.

Table 17

PE Wilcoxon Signed Ranks Test: Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Self-awareness	12	4.0333	.39848	3.40	4.80
Self-management	12	4.0667	.45394	3.20	4.80
Social Awareness	12	4.2738	.26171	4.00	4.71
Relationship Skills	12	4.1500	.24309	3.80	4.60
Responsible Decision-making	12	4.4500	.34245	3.80	5.00
Overall SEI Influence	12	4.3472	.36555	3.67	4.83

Test ranks were used to calculate Wilcoxon signed-ranks test statistics, based on negative and positive ranks, as shown in Table 18. Appendix J contains a table that displays the PE Wilcoxon signed-ranks test ranks. Specifically, results from this test reveal data showing whether or not there are differences in the way that a smaller group of principals perceived their usage of SEI in the first subscale construct as compared to the way they perceived their usage of the second SEI subscale construct in relation to the group means.

Table 18

PE Wilcoxon Signed Ranks: Test Statistics

SEI Paired Data	Z	Asymp. Sig. (2-tailed)
Self-management & Self-awareness	-0.302[a]	.763
Social Awareness & Self-awareness	-2.119[a]	.034*
Relationship Skills & Self-awareness	-0.955[a]	.339
Responsible Decision-making & Self-awareness	-2.410[a]	.016*
Overall SEI Influence & Self-awareness	-2.357[a]	.018*
Social Awareness & Self-management	-1.373[a]	.170
Relationship Skills & Self-management	-0.458[a]	.647
Responsible Decision-making & Self-management	-2.430[a]	.015*
Overall SEI Influence & Self-management	-2.514[a]	.012*
Relationship Skills & Social Awareness	-1.958[b]	.050
Responsible Decision-making & Social Awareness	-1.883[a]	.060
Overall SEI Influence & Social Awareness	-0.824[a]	.410
Responsible Decision-making & Relationship Skills	-2.355[a]	.019*
Overall SEI Influence & Relationship Skills	-2.003[a]	.045*
Overall SEI Influence & Responsible Decision-making	-0.824[b]	.410

a. Based on negative ranks.
b. Based on positive ranks.
*p<.05

Examination of Table 18 indicates statistically significant difference ($p < .05$) in seven SEI paired comparison areas. The seven paired SEI subscale constructs in which statistical significance were found are as follows: (1) Overall SEI Influence and Relationship Skills ($p = .045$); (2) Social Awareness and Self-awareness ($p = .034$); and more notably, (3) Responsible Decision-making and Relationship Skills ($p = .019$); (4) Overall SEI Influence and Self-awareness ($p = .018$); (5) Responsible Decision-making and Self-awareness ($p = .016$);

(6) Responsible Decision-making and Self-management (p = .015); and, (7) Overall SEI Influence and Self-management (p = .012). Examination of Table 18 also indicates no statistically significant differences were found in the remaining eight SEI paired comparison areas.

The principal respondent population ranked Overall SEI Influence second in usage and Relationship Skills as fourth in usage, while 16.6% (n = 2) ranked Overall SEI Influence lower in usage than they ranked Relationship Skills.

The principal respondent population ranked Social Awareness third in usage and Self-awareness as sixth (least) in usage, while 16.6% (n = 2) ranked Social Awareness lower in usage than they ranked Self-awareness.

The principal respondent population ranked Responsible Decision-making first (most) in usage and Relationship Skills fourth in usage, while 16.6% (n = 2) ranked Responsible Decision-making lower in usage than they Relationship Skills.

The principal respondent population ranked Overall SEI Influence second in usage and Self-awareness sixth (least) in usage, while 25.0% (n = 3) ranked Overall SEI Influence lower in usage than they ranked Self-awareness.

The principal respondent population ranked Responsible Decision-making first (most) in usage and Self-awareness sixth (least) in usage, while 16.6% (n = 2) ranked Responsible Decision-making lower than they ranked Self-awareness.

The principal respondent population ranked Responsible Decision-making first (most) in usage and Self-management fifth in usage, while 16.6% (n = 2) ranked Responsible Decision-making lower than they ranked Self-management.

The principal respondent population ranked Overall SEI Influence second in usage and Self-management fifth in usage, while 16.6% (n = 2) ranked Overall SEI Influence lower in usage than they ranked Self-management.

The researcher was not able to distinguish why a statistically significant group of principals' perceptions did not follow the perception of the larger teacher respondent group in these seven paired constructs. Subsequently, examination of these smaller groups could be the subject of further research.

Principals participating in the study were provided a list of 15 social-emotional traits in the SELF:PE and were asked to choose three traits that they perceived to be the most important and necessary for a principal to demonstrate to lead a school effectively. A frequency distribution was used to present principals' perceptions of the importance of the various social-emotional traits. Table 19 represents the frequency distribution of SEI traits based on principals' perceptions.

Table 19 shows that the SEI trait, Positive, was perceived by the 58.3% of principals (n = 7) as one of the top three most important SEI traits for them to demonstrate to lead a school effectively. Respectful, Trustworthy and Ethical were perceived by 50.0% of the principals (n = 6) as SEI traits most necessary to demonstrate to lead a school effectively. One-third of principals (n = 4) selected Supportive as one of the most necessary SEI traits needed to lead effectively. Confident (n = 0), Astute (n = 0), Assertive (n = 0), and Conscientious (n = 0) were four SEI traits from the list ranked by principals as least necessary to demonstrate to lead a school effectively with 0% of principals selecting any of those traits.

Table 19

Frequency Distribution of Principals Selecting Each SEI Trait from the List Provided

SEI Trait	Number of principals who selected SEI trait (N=12)	Percent of principals who selected SEI trait	Frequency Rank
Positive	7	58.3	1
Ethical	6	50.0	3
Respectful	6	50.0	3
Trustworthy	6	50.0	3
Supportive	4	33.3	5
Responsible	2	16.7	6
Compassion	1	8.3	9
Composed	1	8.3	9
Empathetic	1	8.3	9
Motivational	1	8.3	9
Reliable	1	8.3	9
Assertive	0	0	13.5
Astute	0	0	13.5
Confident	0	0	13.5
Conscientious	0	0	13.5

Note: The percentage will not add to 100 because respondents could choose three traits.

Teacher Perception vs. Principal Perception of Principals' SEI

Research question three: What was the difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers at select Minnesota public elementary schools and as perceived by principals at select Minnesota public elementary schools?

Null Hypothesis: There was no difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers at select Minnesota public elementary schools and as perceived by principals at select Minnesota public elementary schools?

To address the question, the researcher examined respondent perception data from both the SELF:TE and the SELF:PE. A 2-sample t-test was conducted to compute the differences

from the two groups–teachers and principals. A 2-sample t-test is used when the group responses being compared are independent from one another; thus was the case with the teachers taking the SELF:TE and the principals talking the SELF:PE. This test has three parts and tables displaying the first two parts (2-sample t-test group statistics and 2-sample t-test Levene's test for equality of variances) can be found in appendix K.

The third part of the test, a 2-sample t-test for equality of means, establishes if the means for the two compared groups were statistically different or if they were relatively the same for the study sample. Results depicted in Table 20 reveal a statistically significant difference between the two compared groups, teachers' perceptions and principals' perceptions, in four SEI constructs: Social Awareness (p = .017), Relationship Skills (p = .009), Responsible Decision-making (p = .002), and Overall SEI Influence (p = .037). Thus, the mean perception of the principal group for these four SEI subscale constructs was statistically significantly different (higher) than the mean perception of the teacher group. Therefore, the null hypothesis was rejected.

Table 20

2-Sample T-Test for Equality of Means between Teachers' Perceptions and Principals' Perceptions

SEI Subscale Construct Areas	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Self-awareness	18.878	.651	-.06068	.13197	-.33703	.21566
Self-management	17.223	.909	.01709	.14681	-.29234	.32653
Social Awareness	32.916	.017*	-.25305	.10076	-.45808	-.04803
Relationship Skills	33.993	.009*	-.26282	.09446	-.45479	-.07085
Responsible Decision-making	20.564	.002*	-.40556	.11598	-.64706	-.16405
Overall SEI Influence	20.161	.037*	-.27457	.12316	-.53136	-.01779

*p<.05

The data analysis is 95% confident the average score computed representing principals' perceptions of their usage of Social awareness is 0.048 to 0.458 points higher than the average score computed representing teachers' perceptions of principals' usage of Social Awareness.

The data analysis is 95% confident the average score computed representing principals' perceptions of their usage of Relationship Skills is 0.071 to 0.455 points higher than the average score computed representing teachers' perceptions of principals' usage of Relationship Skills.

The data analysis is 95% confident the average score computed representing principals' perceptions of their usage of Responsible Decision-making is 0.164 to 0.647 points higher than the average score computed representing teachers' perceptions of principals' usage of Responsible Decision-making.

The data analysis is 95% confident the average score computed representing principals' perceptions of their usage of Overall SEI Influence is 0.018 to 0.531 points higher than the average score computed representing teachers' perceptions of principals' usage of Overall SEI Influence.

No significant differences were revealed between teachers' perceptions and principals' perceptions of principals' usage of the SEI subscale constructs Self-awareness or Self-management.

Teacher and principal respondents were provided a list of SEI traits and were asked to choose the three that they perceived to be the most important SEI traits needed by a principal to lead a school effectively. Table 21 reports data from both teachers' perceptions and principals' perceptions illustrating the number and percentage of respondents who choose each SEI trait.

Table 21

Percentage of Teachers and Principals Selecting Each SEI Trait from the List Provided

SEI Trait	Number of teachers who selected SEI trait	Percent of teachers who selected SEI trait	Number of principals who selected SEI trait	Percent of principals who selected SEI trait
Supportive	83	60.7	4	33.3
Trustworthy	54	45.4	6	50.0
Respectful	43	36.1	6	50.0
Positive	37	31.1	7	58.3
Reliable	30	25.2	1	8.3
Compassion	18	15.1	1	8.3
Motivational	16	13.4	1	8.3
Ethical	15	12.6	6	50.0
Responsible	15	12.6	2	16.7
Empathetic	11	9.2	1	8.3
Assertive	11	9.2	0	0
Composed	9	7.6	1	8.3
Confident	8	6.7	0	0
Conscientious	6	5.0	0	0
Astute	1	0.8	0	0

The data reveal similarities. Supportive, Trustworthy, Respectful and Positive are SEI traits that rank in the top five necessary SEI traits for principals to lead a school effectively as perceived by both teacher and principal respondents. Supportive was selected by 60.7% of teacher respondents (n = 83) and 33.3% of principal respondents (n = 4). Trustworthy was selected by 45.4% (n = 54) of teacher respondents and 50.0% of principal respondents (n = 6). Respectful was selected by 36.1% of teacher respondents (n = 43) and 50.0% of principal respondents (n = 6). Positive was selected by 31.1 % of teacher respondents (n = 37) and 58.3% of principal respondents (n = 7).

Figure 1 represents data from Table 19 displaying a side-by-side comparison of the percentage of teachers who chose each SEI trait with the percentage of principals who chose each SEI trait.

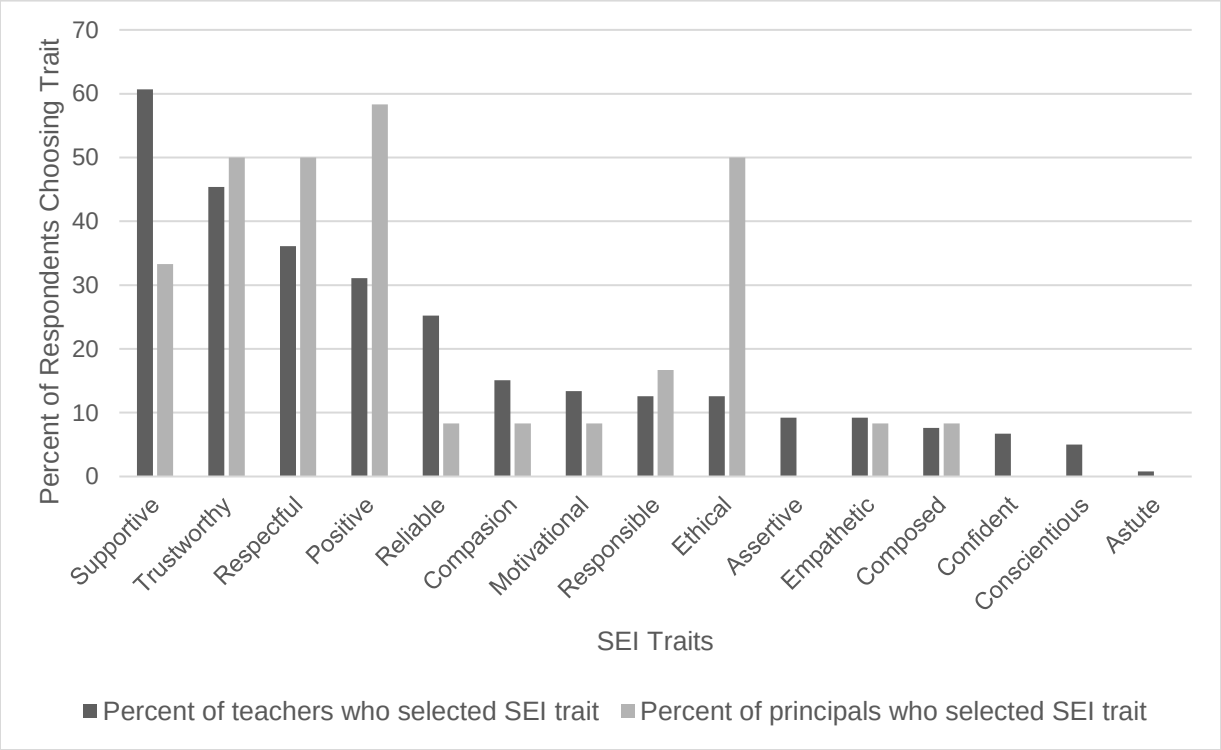

Figure 1. Percentage of teacher respondents and principal respondents choosing SEI traits from the list provided in survey question #34.

Figure 1 illustrates that 60.7% of teachers selected Supportive and 58.3% of principals selected Positive as the SEI trait most necessary for principals to lead a school effectively. Respectful, Trustworthy and Ethical were SEI traits that 50.0% of principals selected as necessary to have in order to lead a school effectively. Although Ethical was in the top five SEI traits for principals, it was ranked 8.5 by teachers with only 12.6% of teachers choosing it as one of the most necessary SEI traits.

Perception of Principals' SEI and School Performance Results

Research question four: A) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study? B) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study?

Null Hypotheses: A) There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study. B) There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study?

For purposes of the study, school performance criteria is associated with the Minnesota State Report Card, specifically to third and fourth grade student test results in mathematics and reading, and on overall student attendance at the school. School performance information was collected from the Minnesota Department of Education (MDE) website in the Minnesota Report Card federal accountability section. Data was collected for mathematics and reading and attendance from the following years: 2012, 2013, 2014, 2015, and 2016, totaling 15 possible criteria areas. A school needed be at or above AYP target in 13 out of the 15 possible areas to meet criteria to be considered an effective school for the study.

To address the question, the researcher examined respondent teachers' perceptions and respondent principals' perceptions by computing Pearson product-moment correlation coefficients. Analyses were conducted to determine the relationship, if any, of principals' usage of the six SEI subscale constructs in schools that met performance criteria for the study and principals' usage of the six SEI subscale constructs in schools that did not meet performance criteria for the study. Seven schools participating in the study met performance criteria and four schools participating in the study did not meet performance criteria. (See Appendix A.)

A Pearson product-moment correlation coefficient (r) was computed to assess the relationship between principals' usage of SEI subscales in schools that met performance criteria for the study and principals' usage of SEI subscales in schools that did not meet performance criteria for the study based on teachers' perception ratings. Schools that met performance criteria were coded as "1" and schools that did not meet were coded as "-1" for school performance for the correlation. Table 22 provides data results from the correlation. Column two displays the relationship among school performance and the six SEI subscale constructs. No statistically significant relationships were found. The null hypothesis was accepted. Although there were no significant relationships found between teachers' perceptions of principals' usage of the SEI subscale constructs and school performance, all relationships were positive. This indicates that there was a relationship with schools that met performance criteria and higher levels of teachers' perceptions of principals' usage of SEI in all of the subscale constructs and there was a relationship with schools that did not meet performance criteria and lower levels of teachers' perceptions of principals' usage of all SEI constructs. Further inspection of Table 22 columns three through seven, illustrate several statistically significant correlations.

Table 22

Correlations between the Six SEI Subscale Constructs and School Performance from Teacher Perceptions

Measure	1	2	3	4	5	6	7
1. School Performance	-----						
2. Self-awareness	.120	-----					
3. Self-management	.095	.776**	-----				
4. Social Awareness	.072	.784**	.782**	-----			
5. Relationship Skills	.122	.799**	.801**	.829**	-----		
6. Responsible Decision-making	.116	.741**	.845**	.753**	.812**	-----	
7. Overall SEI Influence	.122	.853**	.801**	.763**	.742**	.774**	-----

*p<.05, **p<.01, n=119

Column three indicates statistically highly significant relationships between Self-awareness and all other SEI construct areas, indicating that at schools meeting performance criteria when teachers' perceptions of principals' usage of Self-awareness increases their perception of principals' usage of each of the other construct areas increases as well. Self-awareness and Self-management: $r = .776$, $n = 119$, $p < .01$. Self-awareness and Social Awareness: $r = .784$, $n = 119$, $p < .01$. Self-awareness and Relationship Skills: $r = .799$, $n = 119$, $p < .01$. Self-awareness and Responsible Decision-making: $r = .741$, $n = 119$, $p < .01$. Self-awareness and Overall SEI Influence: $r = .853$, $n = 119$, $p < .01$.

Column four indicates statistically significant relationships between Self-management and the remaining SEI construct areas, indicating that at schools meeting performance criteria when teachers' perceptions of principals' usage of Self-management increases their perception of principals' usage of each of the other construct areas increases as well. Self-management and Social Awareness: $r = .782$, $n = 119$, $p < .01$. Self-management and Relationship skills: $r = .801$,

n = 119, p < .01. Self-management and Responsible Decision-making: r = .845, n = 119, p < .01. Self-management and Overall SEI Influence: r = .801, n = 119, p < .01.

Column five indicates statistically significant relationships between Social Awareness and the remaining SEI construct areas, indicating that at schools meeting performance criteria when teachers' perceptions of principals' usage of Social Awareness increases their perception of principals' usage of each of the other construct areas increases as well. Social Awareness and Relationship Skills: r = .829, n = 119, p < .01. Social Awareness and Responsible Decision-making: r = .753, n = 119, p < .01. Social Awareness and Overall SEI Influence: r = .763, n = 119, p < .01.

Column six indicates statistically highly significant relationships between Relationship Skills and the remaining SEI construct areas, indicating that at schools meeting performance criteria when teachers' perceptions of principals' usage of Relationship Skills increases their perception of principals' usage of each of the other construct areas increases as well. Relationship Skills and Responsible Decision-making: r = .812, n = 119, p < .01. Relationship Skills and Overall SEI Influence: r = .742, n = 119, p < .01.

Column seven indicates statistically a highly significant relationship between Responsible Decision-making and the remaining SEI construct area, Overall SEI influence: r = .774, n = 119, p < .01, indicating that at schools meeting performance criteria when teachers' perceptions of principals' usage of Responsible Decision-making increases their perception of principals' usage of each of the other construct areas increases as well.

A Pearson product-moment correlation coefficient was also computed to assess the relationship between principals' usage of SEI subscales in schools that met performance criteria for the study and principals' usage of SEI subscales in schools that did not meet performance

criteria for the study based on principals' perception ratings. Schools that met performance criteria were coded as "1" and schools that did not meet were coded as "-1" for school performance for the correlation. Table 23 provides data results from the correlation. Due to the small sample size, n = 12, these findings are relevant only to the study and not to large generalizations. Column two displays the relationship among school performance and the six SEI subscale construct area indicating one significantly significant relationship in the SEI subscale construct Self-management. The null hypothesis was rejected. The SEI subscale construct Self-management shows a statistically significant positive relationship, which indicates that there was a relationship with schools that met performance criteria and higher levels of principals' perceptions of their usage of SEI in the subscale construct area Self-management than principals' perceptions of their usage of this construct in schools that did not meet performance criteria. $r = .597$, $n = 12$, $p < .05$.

Although not significant beyond the study, column two shows positive relationships with schools that met performance criteria and higher levels of principals' perceptions of their usage of SEI in the subscale constructs Self-awareness and Overall SEI Influence as related to principals' perceptions of their usage of these constructs at schools that did not meet performance criteria. This indicates that in the study, principals in schools that met performance criteria perceived their usage of Self-awareness and Overall SEI Influence as higher than principals in schools that did not meet performance criteria perceived their usage of these same two constructs.

Table 23

Correlations between the Six SEI Subscale Constructs and School Performance from Principal Perceptions

Measure	1	2	3	4	5	6	7
1. School Performance	-----						
2. Self-awareness	.340	-----					
3. Self-management	.597*	.630*	-----				
4. Social awareness	-.336	.203	.401	-----			
5. Relationship skills	.000	.131	.494	.602*	-----		
6. Responsible decision-making	-.216	.253	.421	.529	.339	-----	
7. Overall SEI influence	.196	.558	.743**	.590*	.691*	.357	-----

*p < .05, **p < .01, n = 12

Table 23 column depicts two negative correlations relevant only to the study since they are not statistically significant and the sample size is only n = 12. There is a negative correlation with schools not meeting performance criteria for the study and the SEI subscale area constructs Social Awareness and Responsible Decision-making. Principals in schools not meeting performance criteria for the study ranked their perception of their usage of Social Awareness and Responsible Decision-making higher than principals in schools that met performance criteria ranked their perception of their usage of these SEI constructs. The SEI subscale construct Relationship Skills was neutral.

Table 23 columns three through seven summarize the Pearson correlation relationships between each SEI subscale construct and all other SEI subscale constructs. These data describe four statistically significant relationships and one statistically highly significant relationship, with all other non-significant relationships being positive. These results are relevant only to the study due to the small sample size of principal participants, n = 12. Column three displays a statistically significant relationship between Self-awareness and Self-management that is

positive, thus indicating that in schools meeting performance criteria when principals' perceptions of their usage of Self-awareness increases their perception of their usage of Self-management increases as well. $r = .630$, $n = 12$, $p < .05$.

Column four displays a positive statistically highly significant relationship between Self-management and Overall SEI Influence, thus indicating that in schools meeting performance criteria when principals' perceptions of their usage of Self-management increases their perception of their usage of Overall SEI Influence increases as well. $r = .743$, $n = 12$, $p < .01$.

Column five displays a statistically significant relationship between Social Awareness and two other SEI subscale constructs: Relationship Skills, $r = .602$, $n = 12$, $p < .05$; and Overall SEI Influence, $r = .590$, $n = 12$, $p < .05$. The Pearson product-moment correlations are positive in both of these relationships, thus indicating that in schools meeting performance criteria when principals' perceptions of their usage of Social Awareness increases their perception of their usage of Relationship Skills and Overall SEI Influence increases as well.

Column six displays a statistically significant relationship between Relationship Skills and Overall SEI Influence, thus indicating that in schools meeting performance criteria when principals' perceptions of their usage of Relationships Skills increases their perception of their usage of Overall SEI Influence increases as well. $r = .691$, $n = 12$, $p < .05$.

Although not significant beyond the study, all other Pearson product-moment correlations in columns three through seven depict positive relationships, thus for the study, data shows that in schools that met performance criteria principals' perceptions of their usage of SEI if increased in one SEI subscale construct will increase in all other SEI subscale constructs as well.

In the SELF:TE teacher respondents in the study were provided a list of social-emotional traits and were asked to choose the three traits that they perceived to be the most important and

necessary for a principal in leading a school effectively. A Pearson product-moment correlation coefficient (r) was computed to assess the relationship between teachers' perceptions of the most important and necessary SEI traits in schools that met performance criteria and teachers' perceptions of the most important and necessary SEI traits in schools that did not meet performance criteria. There was a strong positive correlation between the two variables, r = .97, n = 15, p = .00. Table 24 summarizes the results. Thus, teachers in schools that met performance criteria for the study and teachers in schools that did not meet performance criteria for the study had highly similar perceptions regarding which of the listed SEI traits were most important and necessary for principals in leading a school effectively.

Table 24

Correlations for SEI Traits based on Teachers' Perceptions between Schools that Met Performance Criteria and Schools that Did Not Meet Performance Criteria

Measure	1	2
Schools met criteria	----	
Schools did not meet criteria	.970**	----

** p<0.01

In the SELF:PE principal respondents in the study were provided a list of social-emotional traits and were asked to choose the three traits that they perceived to be the most important and necessary for leading a school effectively. A Pearson product-moment correlation coefficient (r) was computed to assess the relationship between principals' perceptions of the most important and necessary SEI traits from schools that met performance criteria and principals' perceptions of the most important and necessary SEI traits from schools that did not meet performance criteria. These results are displayed in Table 25. There was a positive correlation between the two variables, r = .916, n = 15, p = .00. Thus, principals in schools that met performance criteria for the study and principals in schools that did not meet performance

criteria for the study had similar perceptions regarding which of the listed SEI traits were most important and necessary for them to use in leading a school effectively. These results pertain only to the study due to the low number of principal participants (n = 12).

Table 25

Correlations for SEI Traits based on Principals' Perceptions between Schools that Met Performance Criteria and Schools that Did Not Meet Performance Criteria

Measure	1	2
Schools met criteria	----	
Schools did not meet criteria	.916**	----

** p<0.01

To analyze the SEI traits data further, a frequency distribution was used to determine teachers' and principals' perceptions of the importance of the various social-emotional traits, and this was further sorted by whether or not the school at which they were employed met or did not meet school performance criteria for the study. Table 26 represents the frequency distribution of SEI traits based on teachers' perceptions in schools that met performance criteria for the study and teachers' perceptions in schools that did not meet performance criteria for the study.

Table 26

Frequency of Teachers Selecting SEI Traits from the List Provided from Schools that Met Performance Criteria and from Schools that Did Not Meet Performance Criteria

SEI Trait	Number of teachers in schools that met who selected SEI trait (N=81)	Percent of teachers in schools that met who selected SEI trait	Rank Order for teachers in schools that met	Number of teachers in schools that did not meet who selected SEI trait (N=38)	Percent of teachers in schools that met who selected SEI trait	Rank Order for teachers in schools that did not meet
Supportive	58	71.6	1	25	65.8	1
Trustworthy	40	49.4	2	14	36.8	3
Positive	27	33.3	3	10	26.3	5
Respectful	26	32.1	4	17	44.7	2
Reliable	20	24.7	5	10	26.3	5
Compassionate	14	17.3	6	4	10.5	8.5
Motivational	13	16	7	3	7.9	11.5
Responsible	12	14.8	8	3	7.9	11.5
Composed	8	9.9	9	1	2.6	14
Empathetic	7	8.6	10	4	10.5	8.5
Ethical	5	6.2	11.5	10	26.3	5
Confident	5	6.2	11.5	3	7.9	11.5
Assertive	4	4.9	13	7	18.4	7
Conscientious	3	3.7	14	3	7.9	11.5
Astute	1	1.2	15	0	0	15

Review of the frequency data reveals similarities between teachers' perceptions in both schools that met performance criteria and schools that did not meet performance criteria. Supportive, Trustworthy, Positive, Respectful, and Reliable are SEI traits that rank in the top five necessary SEI traits for principals to lead a school effectively as perceived by teacher respondents both in schools that met school performance criteria for the study and in schools that did not meet performance criteria for the study. Supportive was selected by 71.6% of teacher respondents in schools that met (n = 58) and 65.8% of teacher respondents in schools that did not meet (n = 25), being ranked first for both groups. Trustworthy was selected by 49.4% of teacher respondents in schools that met (n = 40) and 36.8% of teacher respondents in schools that did not

meet (n = 14), being ranked second in schools that met and third in schools that did not meet. One-third of teacher respondents (n = 27) in schools that met ranked Positive third, while 26.3% of teacher respondents (n = 10) in schools that did not meet ranked Positive as fifth. The SEI trait Astute was ranked last by teachers both in schools that met and in schools that did not meet performance criteria for the study.

Figure 2 represents data from Table 26 displaying a side-by-side comparison of the percentage of teachers who chose each SEI trait from schools that met performance criteria and from schools that did not meet performance criteria. Figure 2 distinguishes visually the similarities both at schools that met and schools that did not meet performance criteria in the SEI areas teachers perceive as most important: Supportive, Trustworthy, Positive, Respectful, and Reliable.

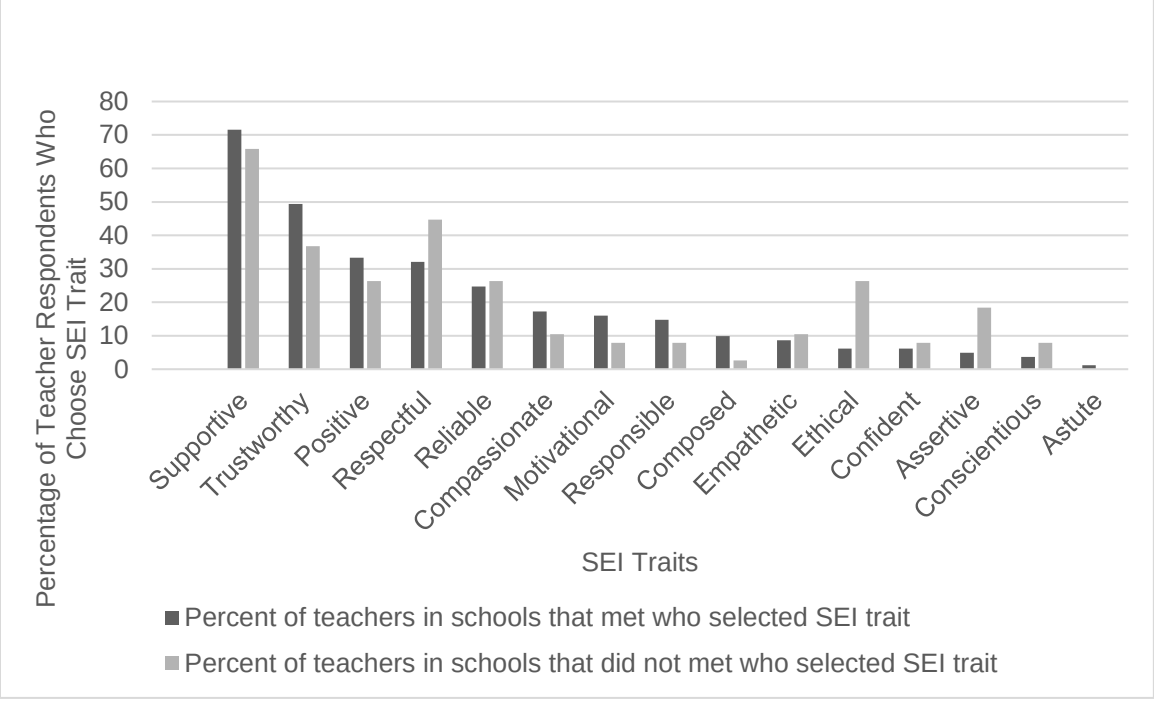

Figure 2. Percent of teacher respondents in schools that met performance criteria for the study and percent of teacher respondents in school that did not meet performance criteria for the study who chose each SEI trait from the list provided in survey question #34.

To analyze the SEI traits data further, a frequency distribution was used to determine principals' perceptions of the importance of the social-emotional traits, and this was further sorted by whether or not the school in which they were employed met or did not meet school performance criteria for the study. Table 27 represents the frequency distribution of SEI traits based on principals' perceptions in schools that met performance criteria for the study and principals' perceptions in schools that did not meet performance criteria for the study.

Table 27

Frequency of Principals Selecting SEI Traits from the List Provided from Schools that Met Performance Criteria and from Schools that Did Not Meet Performance Criteria

SEI Trait	Number of principals in schools that met who selected trait (N=8)	Percent of principals in schools that met who selected trait	Rank Order for principals in schools that met	Number of principals in schools that did not meet who selected trait (N=4)	Percent of principals in schools that did not meet who selected trait	Rank Order for principals in schools that did not meet
Trustworthy	5	62.5	1	0	0	11
Positive	4	50.0	2.5	2	50.0	3
Ethical	4	50.0	2.5	2	50.0	3
Supportive	3	37.5	4	1	25.0	5.5
Respectful	2	25.0	5.5	3	75.0	1
Reliable	2	25.0	5.5	0	0	11
Composed	1	12.5	8.5	0	0	11
Compassionate	1	12.5	8.5	0	0	11
Empathetic	1	12.5	8.5	0	0	11
Conscientious	1	12.5	8.5	0	0	11
Responsible	0	0	13	2	50.0	3
Motivational	0	0	13	1	25.0	5.5
Confident	0	0	13	0	0	11
Astute	0	0	13	0	0	11
Assertive	0	0	13	0	0	11

With data from only 12 principal respondents total, 8 principals in schools that met performance criteria for the study and 4 principals in schools that did not meet performance criteria for the study total, review of the frequency data in Table 27 pertains only to this study

and may not be generalized. Table 27 reveals similarities in the SEI traits in schools that met performance criteria and in schools that did not meet performance criteria based on principal perception. Positive and Ethical are SEI traits that rank in the top three necessary SEI traits for principals to lead a school effectively as perceived by principal respondents both in schools that met school performance criteria for the study and in schools that did not meet performance criteria for the study. Positive was selected by 50.0% of principal respondents in schools that met (n = 4) and 50.0% of principal respondents in schools that did not meet (n = 2). Ethical was selected by 50.0% of principal respondents in schools that met (n = 4) and 50.0% of principal respondents in schools that did not meet (n = 2). Confident, Astute and Assertive were not selected by any principal respondents in either schools that met or did not meet school performance criteria for the study.

Table 27 also portrays some differences between principals' perceptions in schools that met and principals' perceptions in schools that did not meet performance criteria. Nearly 63% of principals in schools that met performance criteria ranked Trustworthy as the number one SEI trait necessary for principals to lead a school effectively (n = 5) while no principal respondents at schools that did not meet selected this SEI trait. Seventy-five percent (n = 3) of principals in schools that did not meet performance criteria for the study selected Respectful as one of the top three necessary SEI traits while only 25.0% (n = 2) of principals in schools that met performance criteria for the study selected this SEI trait.

Summary

The study sought data to help identify and indicate principals' usage of the social-emotional intelligence in six subscale constructs. Data from 119 teacher respondent surveys and 12 principal respondent surveys were analyzed to help identify perceptions from teachers and

perceptions from principals regarding principals' usage of social-emotional intelligence. School performance data was also examined and the study looked for relationships between teachers' and principals' perceptions of principals' usage of SEI in the six subscale constructs as related to school performance data from the Minnesota state report card for select elementary schools in Minnesota.

Data were analyzed to determine teachers' reported perception of principals' usage of SEI skills and abilities with a focus on the six subscale constructs. Principals' responses were analyzed to determine the principals' reported perspective of their usage of SEI skills with a focus on the six subscale constructs. Using analysis through Friedman's tests principals' usage of the SEI subscale constructs were ranked by both teacher and principal respondents. SEI subscale constructs perceived to have higher and lower levels of usage were identified by both groups. Further analysis of data through Wilcoxon signed-ranks tests indicated statistically significant differences in both teachers' and principals' perceptions of principals' usage of SEI in several of the paired subscale constructs. Using analysis through two sampled t-tests data were analyzed to determine differences between teachers' and principals' perceptions of principals' usage of SEI in the six subscale constructs. Findings showed statistically significant differences in the scores of principals' usage of some of the SEI subscales by teachers' perception as compared to principals' perception with principals ranking the average scores higher. Pearson product-moment correlation coefficients were computed to assess the relationship between principals' usage of SEI subscales in schools that met performance criteria for the study and principals' usage of SEI subscales in schools that did not meet performance criteria for the study based on teachers' perception ratings and based on principals' perception ratings.

The study results indicate that there is perception by both teachers and principals that principals demonstrate less usage of some of the SEI subscale constructs when compared to the other SEI subscale constructs. This could indicate a need for additional support, professional development, and practical application skills for principals related to these SEI subscale constructs.

Chapter 5: Conclusion

This chapter includes the following sections: summary, conclusions, discussion, limitations, and the author's recommendations for future research and practice. The summary includes the purpose of the study, research design, and the original research questions of the study.

Introduction

Principals, teachers, and schools are responsible for the academic results of their schools' students; the effectiveness and success of the school, or lack thereof, may result in monetary gains or losses (Fuhrman & Elmore, 2004). The growing movement to hold principals and educators accountable for the academic success and progress of students has forced the education system to examine and identify areas of insufficiency and weakness that need to be strengthened and improved (Chenoweth, 2007; Habegger, 2008; Jackson & Lunenburg, 2010). Key elements in school leadership effectiveness and quality can be defined by engaging in activities that are viewed as fundamentally important and expected of all good leaders to grow and develop professionally (Bentley, 2011; Goleman, 2002; Hackett & Hortman, 2008). However, due to budget constraints in staff development, educational leaders often lack the advantage of participating in research-based training methods or receiving strategies and techniques that would afford them more opportunity to employ effective leadership styles based on the needs of their specific school (Archer, 2004; Bentley, 2011; Kline, 2011). Social and emotional competencies from the Collaborative for Academic, Social and Emotional Learning (CASEL) influenced the conceptual framework for the study (CASEL, 2011 & 2015). Competencies such as self-awareness, self-management, social awareness, relationship skills, responsible decision-making, and overall SEI influence represent what is called social-emotional intelligence and are

predictive of superior performance in leadership, and thus, imperative for successful school leadership (Bar-On, 2011; CASEL, 2015; Goleman, 2001 & 2006; Mayer et al., 2016). School principals must have these SEI skills and abilities to fashion and cultivate school climate to be reflective of warmth and trust (Goleman, 2006; Fullan, 2011).

Purpose of the study. The purpose of the study was to examine principals' and teachers' perceptions in select Minnesota schools of principals' usage of social emotional intelligence (SEI) in six subscale constructs: Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall Social-Emotional Influence. The study examined the correlation between the reported principals' usage of SEI constructs and the areas of mathematics, reading and attendance performance data found in the Minnesota State Report Card. The study also examined SEI traits perceived by principals and teachers as important and necessary for a principal in leading a school effectively.

Research design. The research study employed a quantitative method of inquiry to gain a statistical relationship perspective of teachers' perceptions and principals' perceptions of principal usage of six SEI subscale constructs. The study also examined the relationship of principals' usage of SEI in the six subscale constructs and school performance. By analyzing principals' usage of SEI subscale constructs through a quantitative lens, research can signify and reveal SEI subscale constructs perceived to have higher usage by principals as well as SEI subscale constructs perceived to have lower usage by principals. Analysis of the research can also indicate any relationships between principals' usage of SEI constructs and school performance. The research design was non-experimental and correlational, thus, the researcher did not manipulate, alter, or control the subjects or predictor variable in any way, but rather, relied on interpretation of data from survey results to formulate conclusions.

For the study, the teacher participants were asked to complete the Social-Emotional Leadership Factor: Teacher Edition (SELF:TE) and the principal participants were asked to complete the Social-Emotional Leadership Factor: Principal Edition (SELF:PE). Eleven elementary schools in Minnesota participated in the study through a convenience sample process after their district superintendents provided approval. Twelve principals participated in the study, completing the survey. Initially, 170 teacher respondents began the survey; however, results from a total of 119 teacher respondents were utilized in the research since 53 teacher respondents completed only part of the survey, not enough to insure valid results.

Analysis of data was conducted by importing data into the International Business Machine Statistical Package for the Social Sciences Statistics 22 (IBM SPSS Statistics 22) which is a software used to analyze research data results by means of ad-hoc analysis, hypothesis testing, and predictive analytics.

Research questions. The study used four research questions.

1. What did elementary teachers in select Minnesota public schools perceive as principals' usage of social-emotional intelligence in the six subscale constructs?
2. What did elementary principals in select Minnesota public schools perceive as their usage of social-emotional intelligence in the six subscale constructs?
3. What was the difference, if any, between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public elementary schools and as perceived by principals in select Minnesota public elementary schools?
4. What was the relationship, if any, between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers and as

perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota public elementary schools participating in the study? (See Appendix A.)

For purposes of the study, school performance criteria is associated with the Minnesota State Report Card, specifically to third and fourth grade student test results in mathematics and reading, and on overall student attendance at the school. School performance information was collected from the Minnesota Department of Education (MDE) website in the Minnesota Report Card federal accountability section. Data was collected for mathematics and reading and attendance from the following years: 2012, 2013, 2014, 2015 & 2016, totaling 15 possible criteria areas. A school needed be at or above the AYP target in 13 out of the 15 possible areas to meet criteria to be considered an effective school for the study.

Conclusions and Discussion by Research Question

The conclusions and discussion from the study results are provided in this section and organized by the study research questions.

Research question one. What did elementary teachers in select Minnesota public schools perceive as principals' usage of social-emotional intelligence in the six subscale constructs? Study results revealed teachers' perceptions of their principals' usage of the six SEI subscale constructs. Analyses were conducted to determine teachers' perceptions of principals' usage of the six SEI subscale constructs by computing a rank order score for each SEI construct, based on rankings 1-6, group mean score 3.5 (Friedman test ranks). Analyses were computed to determine teachers' perceptions regarding the amount of their principals' usage of the six SEI subscale constructs by teachers' rating the amount of perceived principals' usage of the six SEI constructs using a Likert-scale (Wilcoxon signed-ranks).

Rank order results indicated a very similar perception of principals' usage of all six SEI subscale constructs from teacher respondents; mean rank scores for all six SEI subscale constructs ranged between 2.81 and 3.93 on a 1-6 rank order scale, 3.5 as the group mean rank score. Results revealed teachers perceived the SEI subscale construct Self-management as used most often by their principals. Self-management is a personal SEI competence skill; mastery of a personal competence skill is easier when compared to achieving mastery of a social SEI competence skill (Bar-On, 2000, 2007, & 2011; Goleman, 1998, 2006, 2011). All other SEI subscale constructs were ranked positively (group mean rank score 3.5 or higher) except the construct Relationship Skills which ranked below 3.5. This means a majority of teachers' perceptions placed the construct Relation Skills in one of the lower three rank order places, 1, 2 or 3; thus, keeping the group mean score for Relationship Skills lower than the other constructs. This lower ranking of Relationship Skills identifies the construct as one that teachers as a group perceive principals to use less often.

Study results also revealed teachers' perceptions regarding the amount of principals' usage of each SEI subscale construct using a 1-5 ranking system: Never = 1, Rarely = 2, Sometimes = 3, Often = 4, and Always = 5. Results from this analysis found that teachers' viewed the amount of principals' usage of SEI subscales positively (above the mean of 2.5) for all six SEI subscale constructs. Self-management was the subscale area perceived by teachers' as having the highest amount of usage by their principals with a mean rating slightly above the Likert-scale indicator for "often." Three additional subscale constructs, Overall SEI Influence, Responsible Decision-making, and Social Awareness, received mean ratings between "often" and "always." The construct, Relationship Skills, was assigned the lowest mean rating even though teachers' perceptions of the amount of principals' usage of this construct was positive,

with the perceived amount of usage between “sometimes” and “often.” These finding are similar to results from previous studies regarding teachers’ perceptions of principals’ usage of SEI subscale constructs which indicated teachers’ perceptions of principals’ usage of SEI subscale constructs were positive (Kline, 2011; Reed, 2005). The lower teacher perception of principals’ usage of Relationships Skills may indicate a need for principals to build and maintain stronger relationships with teachers. Principals may need to develop and offer more opportunities for collaboration with their teachers in order to secure a higher level of trust and thus, increase teachers’ perceptions of their usage of Relationship Skills.

Study results revealed that there were smaller groups of teachers’ whose perceptions differed from the larger group perception. In fact, seven paired SEI subscale constructs indicated a statistically significant difference ($p < .05$) in the way that a smaller group of teachers perceived principals’ usage of SEI subscale constructs in relation to the group mean ratings. In particular, a smaller group of teachers viewed the construct Relationship Skills different than each of the other SEI subscale constructs, perceiving principals’ usage of this construct higher than the other constructs even though the group mean rating was lowest for the construct Relationship Skills.

Study results revealed a majority of teacher respondents selected the SEI trait, Supportive, as the most important and necessary SEI trait for a principal to lead a school effectively, when asked to select three SEI traits from a provide list of 15 SEI traits. Results indicated that over one-third of teacher respondents selected the SEI traits Trustworthy and Respectful as most necessary and important SEI traits for a principal to lead a school effectively. Previous research indicated similar results in teachers’ desire for principals to be supportive,

reflective of the need for principals to be “encouraging and allocating time” for professional development and collaborative conversation (Hahn, 2012, p. 87).

Research question two. What did elementary principals in select Minnesota public schools perceive as their usage of social-emotional intelligence in the six SEI subscale constructs? Results from research question two are not generalizable to the greater population due to small sample size. Study results revealed principals’ perceptions of their usage of the six SEI subscale constructs. Analysis were conducted to determine principals’ perceptions by computing a rank order score for each SEI subscale construct, based on rankings 1-6, group mean score 3.5 (Friedman test ranks). Analyses were computed to determine principals’ perceptions regarding the amount of their usage of each SEI subscale construct based on principals’ rating the amount of their perceived usage of each SEI construct using a Likert-scale (Wilcoxon signed-ranks).

Study results revealed principals perceived Responsible Decision-making as the SEI subscale construct they used most often. Similar findings were recorded from previous studies (Bentley, 2011; Kline, 2011). Kline (2011) reported that principals rated themselves highest on the construct Responsible Decision-making. Overall SEI Influence and Social Awareness, although ranked above a group mean score of 3.5, were perceived as used less often than Responsible Decision-making. Three SEI subscale constructs - Relationship Skills, Self-management, and Self-awareness - were ranked lower than a group mean score of 3.5 based on principals’ perceptions. This indicated that a majority of principal respondents believed that they use these SEI subscale constructs less than the other constructs. Conversely, a majority of principal respondents believed they use the SEI subscale constructs Responsible Decision-making, Overall SEI Influence and Social Awareness more than the other constructs.

Study results also revealed principals' perceptions regarding their amount of usage of each SEI subscale construct using Likert-scale ratings: Never = 1, Rarely = 2, Sometimes = 3, Often = 4, and Always = 5. The study identified that principals rated the amount of their usage of each SEI subscale constructs strongly positive, with mean average ranks above a 4.0 for all six SEI subscale construct areas. These highly positive rankings indicated that principals' have a high self-perception regarding the amount of their usage in all six SEI subscale constructs. Principals perceive that they are "often" or "always" using all of the six SEI subscale constructs. Responsible Decision-making was the subscale construct perceived by principals as used most often when compared to the other constructs.

Study results revealed that there were smaller groups of principals whose perceptions differed from the larger group perception. In fact, seven paired SEI subscale constructs indicated a statistically significant difference ($p < .05$) between a smaller group of principals' perception of their usage of SEI subscale constructs in relation to the group mean ratings. In particular, some principals rated their usage of the SEI subscale construct Responsible Decision-making (rated highest in usage by the group) lower than they rated their usage of the constructs Relationship Skills, Self-management, and Self-awareness which were rated fourth, fifth, and sixth respectively by the group average results. Some principals rated their usage of the SEI subscale construct Overall SEI Influence (rated second in usage by the group) lower than they rated their usage of the constructs Relationship Skills, Self-management Self-awareness which were rated fourth, fifth, and sixth respectively by the group average results.

These statistically significant differences, in which some principals rated certain constructs differently than the group, might be due to some demographic factors such as: age or gender of the principal; student population in the school; number of certified staff in the school;

or years of administrative experience of the principal. These may be factors that would impact principals' perceptions of the amount of their usage of SEI skills (Kline, 2011; Reed, 2005). These differences could also be attributed to principals' levels of trust and rapport with their teachers, or positive and negative relationships with teachers may also be a factor (Hahn, 2012). The groups of principals rating their usage of these paired SEI constructs in a statistically different way than the group average could be examined more closely in an attempt to determine why there is a difference.

Study results indicated that a majority of principal respondents selected the SEI trait, Positive, as the most important and necessary SEI trait for them to lead a school effectively when asked to select from a provided list of 15 SEI traits. Results indicated that half of principal respondents selected the SEI traits Trustworthy, Respectful and Ethical as most necessary and important SEI traits for them to lead a school effectively. One-third of principal respondents selected Supportive as a necessary and important SEI trait in leading a school effectively. To improve and integrate SEI traits into every day practice requires transformative leadership - principals who have the vision to reframe structures and relationships to formulate sustainable growth and change (Elias & Arnold, 2006; Elias, Arnold, & Hussey, 2003).

Research question three. What was the difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public elementary schools and as perceived by principals at select Minnesota public elementary schools? Null hypothesis: There was no difference between principals' usage of social-emotional intelligence in the six subscale constructs as perceived by teachers in select Minnesota public elementary schools and as perceived by principals in select Minnesota public elementary schools. Results of a comparison of perceptions from teachers and principals regarding

principals' usage of SEI subscale constructs revealed some statistically significant differences; thus, the null hypothesis was rejected. Principals reported higher average mean rank scores than teachers reported in four subscale constructs using a 2-sample t-test. The SEI constructs Social Awareness, Relationship Skills, Responsible Decision-making and Overall SEI Influence showed statistically significant differences reflecting higher mean ratings assigned by principals compared to mean ratings assigned by teachers for these same SEI subscale constructs.

Results of a comparison of perceptions between teachers and principals revealed that principals rated their usage of two SEI subscale constructs, Self-awareness and Self-management, with lower mean ratings compared to mean ratings assigned by teachers for those same SEI subscale constructs. The difference was not statistically significant, but it is worth noting that these were the only two areas where principals' perceptions of their SEI usage showed lower mean ratings than teachers' perceptions.

Previous research regarding perception surveys indicated a participant bias that lead to inflated results (Pronin, Gilovich & Ross, 2004; Donaldson & Grant-Vallone, 2002; Paulhus & John, 1998). Kruger and Dunning (1999) found participants often held "favorable views" of their own SEI abilities (p. 1121). Principals and teachers' perceptions differ as to which constructs have the highest and lowest amount of usage. Although principals rated themselves higher in all areas of SEI, the results indicated that both teachers and principals perceived principals' as having a positive amount of usage of all six SEI subscale constructs.

Research question four. A) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select elementary schools in Minnesota participating in the study? Null hypothesis: There was no relationship between

principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select teachers, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.

Study results revealed no significant relationship between principals' usage of SEI subscale constructs and school performance based on teacher perceptions; thus, the null hypothesis was accepted. Results did indicate that all relationships were positive. This means that there is a relationship between schools that met performance criteria for the study and higher levels of teachers' perceptions of principals' usage of SEI in all six subscale constructs. Results also indicate a relationship between schools that did not meet performance criteria and lower levels of teachers' perceptions of principals' usage of SEI in all six SEI subscale constructs.

Study results revealed when teachers' perceptions of principals' usage of any SEI subscale construct increased, teachers' perception of principals' usage of SEI in all other subscale constructs increased as well. This means that teachers in schools that were performing higher would perceive their principal as using more SEI constructs if they believed their principal was using more in any one of the SEI construct areas.

The study results indicated similar perceptions between teachers in schools that met performance criteria and teachers in schools that did not meet performance criteria regarding which SEI traits are most important and necessary for principals in leading a school effectively. The traits Supportive, Trustworthy, Positive, Respectful, and Reliable ranked in the top five traits selected by both groups of teachers.

B) What was the relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select elementary schools in Minnesota participating in the

study? Null hypothesis: There was no relationship between principals' usage of social-emotional intelligence in the six subscale constructs, as perceived by select principals, and school performance results on the Minnesota state report card for select Minnesota elementary schools participating in the study.

Based on principals' perceptions, study results revealed a relationship between schools that met performance criteria and higher levels of principals' perceptions of their usage of the SEI subscale construct Self-management; thus, the null hypothesis was rejected. Principals in schools that met performance criteria also perceived their usage of the constructs Self-awareness and Overall SEI Influence as higher than principals in schools that did not meet performance criteria. Goleman (1998, 2006 & 2011) categorized SEI constructs into categories of personal competence and social competence, indicating that personal competence was easier to master than social competence. Self-management and Self-awareness are categorized as personal competence constructs. Principals in schools that met adequate yearly progress criteria in Minnesota believe that they have a higher level of mastery and usage of the SEI subscale constructs Self-management and Self-awareness, which indicates as well, more personal competence in Overall SEI Influence. Fullan (2011) suggested that "looking inside yourself" influenced leadership capacity and success of an organization (p. 6). Fullan's research stated "change leaders learn to rely on themselves, including questioning themselves as they learn" (Fullan, 2011, p. 11).

The study results indicated similar perceptions between principals in schools that met performance criteria and principals in schools that did not meet performance criteria regarding which SEI traits are most important and necessary for them in leading a school effectively. The traits, Positive and Ethical, ranked in the top three traits selected by both groups of principals.

The study results found a notable difference in perceptions between principals in schools that met performance criteria and principals in schools that did not meet performance criteria with the SEI trait, Trustworthy. Trustworthy was ranked highest in importance by principals in schools that met performance criteria and lowest by principals in schools that did not meet performance criteria.

Discussion and Implications

The conceptual framework for the study was based on research from experts in the field of social-emotional intelligence which illustrated that higher amounts of Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall Social-Emotional Intelligence Influence are indicative of higher success in relationships across multiple domains in life, including both personal and professional areas (Goleman, 2006, 2008, & 2011; Bar-On, 2004, 2006, & 2011; Salovey & Mayer, 1990; Elias et al., 2015). Leaders with competent skills in Self-awareness, Self-management, Social Awareness, Relationship Skills, Responsible Decision-making, and Overall SEI Influence are viewed as more effective, positive leaders than counterparts lacking in these skills (Goleman, 2011; Mayer et al., 2004). The study results indicate both teachers and principals have positive perceptions regarding principals' usage of SEI in select schools in Minnesota.

There has been a vast increase in the study of SEI in education over the last two decades (Durlak, et al., 2011; Durlak, et al., 2015; Humphrey, Lendrum, & Wigelsworth, 2013). Elias et al. (2006, 2015) suggested that an element necessary for school success is a transformative leader, inclusive of a principal with strong SEI skills, a vision and understanding that social-emotional well-being and academic success in school are directly linked. Transformative school leaders have the courage and vision to examine and evaluate their SEI skills and abilities, thus

adding to their leaderships strength and skill to make positive, sustainable schoolwide impact (Elias & Arnold, 2006; Elias, Arnold, & Hussey, 2003; Kline, 2011, Reed, 2005). The study results revealed that teachers' perceptions of principals' usage of SEI in the schools that met state of Minnesota adequate yearly progress (AYP) performance criteria were higher than teachers' perceptions of principals' usage of SEI in schools that did not meet these state of Minnesota AYP performance criteria. The study also revealed relationships among the six SEI subscale constructs in schools that met performance criteria based on teacher perception; thus, when teacher perception of principals' usage of one SEI subscale construct increased, their perception of principals' usage of SEI increased in all other areas. When principals show strong and consistent usage of the six SEI subscale constructs, they lead more effectively; principals who use and display SEI skills and abilities more often will gain higher levels of teacher confidence and trust (Goleman, 2006; Kline, 2011).

Teachers reported Self-management as the construct area with the most principal usage. Self-management encompasses an understanding of emotions and a drive to reach goals, accessing full potential (Bar-On, 2006). Self-management is considered a personal competency inclusive of commitment, optimism, perseverance, and regulation of emotions and stress (Goleman, 1998 & 2011; Salovey, Mayer & Caruso, 2004). In order to elevate teachers' perceptions of the other SEI constructs, principals may need staff development focused on SEI. The Salovey-Mayer model of SEI was based on theory of hierarchy thorough SEI abilities, with the belief that you must master each level prior to moving to the next level and progressing through (Mayer et al., 2016).

Principals reported Self-awareness and Self-management as their least used constructs and Responsible Decision-making as their most used construct. This indicated that principals in

the study believed they use personal competencies less than social competencies. Bar-On contests that emotional intelligence inhabits distinctly different areas in the brain than those areas for IQ (Bar-On, 2007).

Research indicated SEI levels can be increased through direct and intentional social-emotional training and application programs (Bar-On, 2007; Goleman, 2004 & 2011; Meyer et al., 2004). Strategic plans for SEI training through staff development should be adopted by school districts for principals. This training should be designed using the SEI constructs to foster SEI growth and development in principals and should incorporate continual assessment, both by principals and their supervisors, of SEI skills and abilities.

Limitations

Roberts (2010) defines limitations as things that the researcher has no control over. Limitations of the study, including a brief description, are provided below:

1. Self-reporting was a limitation. Principals may have rated themselves higher than teachers rated them. Due to the type of research conducted for the study which involved perception surveys, a major limitation was self-reporting. Previous research has found that self-reporting on surveys produced scores that were inflated (Donaldson & Grant-Vallone, 2002; Kruger & Dunning, 1999; Pronin, Gilovich & Ross, 2004). When asked to make self-assessments, particularly perception-based, participants "tend to hold overly favorable views of their abilities in many social and intellectual domains (Kruger & Dunning, 1999, p. 1121). Pronin, Gilovich, and Ross (2004) stated in their research that "The core of naïve realism is the conviction that one perceives objects and events as they are" (p. 783). Self-reporting can include individual bias from the responder, thus affecting the degree of accuracy of answers.

According to Kline (2011), the SELF was designed to limit individual bias, but it must be assumed that this limitation occurred.

2. Participation of districts. The study addresses a sensitive topic by asking for perceptions of principals' social-emotional intelligence. A limitation was the number of superintendents who allowed principals and teachers from their districts to participate.
3. Participation of respondents. The researcher could not control the percentage of participants willing to complete the SELF-MN:TE and the SELF-MN:PE surveys.
4. Accuracy of teacher perceptions was a limitation. Teaching staff may not have deliberate knowledge of leadership skills hence it may be difficult for them to accurately and fairly depict their principal's usage of SEI.
5. Gender was not factored into the study results.
6. Years of experience was not factored into the study results.
7. The researcher accessed data from the MDE website for participating public schools and could not control the accuracy or availability of this data.

Recommendations for Further Research

Based on the findings of the study, the following recommendations for further research may be helpful for the field and may result in additional recommendations for practice:

1. A qualitative study of teacher and principal perceptions regarding principals' usage of social-emotional intelligence could be undertaken to gain insight and depth of understanding not available in a quantitative study.
2. A study could be replicated in other schools in Minnesota or the country to compare perceptions beyond the study's scope and findings.

3. A quantitative, qualitative, or mixed method study could be conducted to expand the inclusion of perceptions from middle school teachers and principals. The relationship dynamics between teaching staff and principals at the middle school level may yield different results in perceptions from both teaching staff and principals themselves.
4. A quantitative, qualitative, or mixed method study could be conducted to expand the inclusions of perceptions from high school teachers and principals. The relationship dynamics between teaching staff and principals at the high school level may yield different results in perceptions from both teaching staff and principals themselves.
5. A study could be replicated to include demographic categories such as gender, age, and years of teaching or administrative experience to compare perceptions beyond the study's scope and findings.

Recommendations for Practice

Based on the findings of the study, the following recommendations for practice are offered:

1. School districts are encouraged to provide principals with the opportunity to complete a self-assessment of their social-emotional intelligence skills, incorporating the six subscale constructs.
2. School districts are encouraged to provide teachers with the opportunity to complete a perception survey of their principals' social-emotional intelligence skills.
    - Principals should be guided as to how to interpret and use the survey results.
    - Superintendents should incorporate the survey results into ongoing reflective and evaluative conversations with principals throughout the school year.

3. Research indicated that stronger social-emotional intelligence skills enhance the performance and success of leaders. Specific staff development opportunities and experiences for principals related to social-emotional intelligence in all subscale constructs are recommended as a means for increasing and enhancing principals' social-emotional intelligence skills and abilities.
4. Institutions of higher education that provide degree programs for K-12 leadership, i.e. Education Administration and Leadership Masters programs, Principal Licensure Sixth-year programs, Education Administration and Leadership Doctoral programs, should systematically and intentionally incorporate Social-Emotional Intelligence into standards and curriculum; research shows that socially and emotionally competent leaders are ultimately more successful.

Summary and Concluding Remarks

Social-emotional intelligence in leadership has been a focus of many studies in recent years. The purpose of the study was to gather information about elementary principals' usage of social-emotional intelligence in select Minnesota schools as reported by elementary teachers and principals. The study also gathered information on the relationship of principals' usage of social-emotional intelligence and school performance in the areas of mathematics, reading, and attendance. There were slight variations in the perceived amount of principals' usage of each social-emotional subscale construct as reported by teachers and as reported by principals; however, the overall perception by both teacher and principal respondents was positive, indicating a perception that principals showed a positive usage of all SEI subscale constructs.

Research has shown the power of SEI for leaders in terms of success in the work place as well as successful relationships in the workplace (Fullan, 2011; Goleman et al., 2013; Salovey et

al., 2007). The essence of leadership no longer can focus solely on the leader but rather, must encompass the relationships that leader functions within and around, thus, SEI constructs are of utmost importance (Boyatzis et al., 2000; Goleman, 2006, 2011; Rost, 1993). Principals should continue to use social-emotional intelligence as they lead, incorporating the six SEI subscale constructs into their leadership style and philosophy.

References

Achor, S. (2010). *The happiness advantage: The seven principles of positive psychology that fuel success and performance at work*. New York, NY: Broadway Books.

Akey, T. (2006). *School context, student attitudes and behavior, and academic achievement: An exploratory analysis*. New York: MDRC. Retrieved April 23, 2017, from http://www.mdrc.org/publications/419/full.pdf.

Aliaga, M., & Gunderson, B. (2006). *Interactive statistics*. Upper Saddle River, NJ: Pearson Prentice Hall.

American Psychological Association. (2015, November 23). Impact of social-emotional learning on academic achievement. *ScienceDaily*. Retrieved June 30, 2017 from www.sciencedaily.com/releases/2015/11/151123102813.htm.

Andrews, F., & Crandall, R. (1976). The validity of measures of self-reported well-being. *Social Indicators Research*, *3*(1), 1-19.

Archer, J. (2004) Leading for learning. *Education Week* on the Web. http://www.edweek.org/ sreports/special_reports_article.cfm?slug=leadpack_2004.htm Association for Supervision and Curriculum Development. (2000). The contemporary principal: New skills for a new age. Education Update, 42(3), 1-8.

Baloglu, N. (2012, Spring). Relations between value-based leadership and distributed leadership: A casual research on principals' behaviors. *Educational Sciences: Theory & Practice, 12*(2), 1375-1378, (Supplementary Special Issue).

Bardach, R. (2008). *Leading schools with emotional intelligence: A study of the degree of association between middle school principal emotional intelligence and school success*

(Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing (UMI No. 3289486).

Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (363-388). San Francisco, CA: Jossey-Bass.

Bar-On, R. (2004). The Bar-On emotional quotient inventory (EQ-i): Rationale, description and psychometric properties. In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy.* Hauppauge, NY: Nova Science.

Bar-On, R. (2006a). The Bar-On model of emotional-social intelligence (ESI). *Psicothema, 18,* 13-25.

Bar-On, R. (2006b). *EQ-i leadership user's guide*. Toronto, Canada: Multi-Health Systems.

Bar-On, R. (2007). The Bar-On model of emotional intelligence: A valid, robust and applicable EI model. *Organizations and People, 14,* 27-34.

Bar-On, R. (2011). *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace*. San Francisco: Jossey-Bass.

Bart, C., & Baetz, M. (1998). The relationship between mission statements and firm performance: An exploratory study. *Journal of Management Studies, 35,* 823-853.

Bart, C., Bontis, N., & Taggar, S. (2001). A model of the impact of mission statements on firm performance. *Management Decision, 39*(1), 19-35.

Barsade, S., & Gibson, D. (2007). Why does affect matter in organizations? *Academy of Management Executive, 21*(1), 36-59.

Bentley, K. (2011). *An investigation of the self-perceived principal leadership styles in an era of accountability* (Doctoral dissertation). Retrieved from http://scholarcommons.usf.edu/etd/3008.

Bernabei, P., Cody, T., Cole, M., Cole, M., & Sweeney, W. (2008). *Top 20 teens: Discovering the best-kept thinking, learning & communication secrets of successful teenagers*. St. Paul, MN: Top20 Training.

Binet, A., & Simon, T. (1909). *The intelligence of the feeble minded*. Baltimore, MD: Williams & Wilkins Co.

Binet, A, & Simon, T. (1916). *The development of intelligence in children*. Baltimore, MD: Williams & Wilkins Co. Reprinted New York, NY: Arno Press, 1983.

Boehm, J., & Lyubomsky, S. (2008). Does happiness promote career success? *Journal of Career Assessment, 16*(1), 101-116.

Bogler, R. (2002). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly, 37*(5), 662-674.

Boyatzis, R., Goleman, D., & Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the emotional competency inventory (ECI). In R. Bar-On and J. D. A. Parker (Eds.), *Handbook of emotional intelligence*. San Francisco, CA: Jossey-Bass.

Braaten, E., & Norman, D. (2006). Intelligence (IQ) testing. *Pediatrics in Review, 27*(11).

Branch, G., Hanushek, E., & Rivkin, S. (2013). School leaders matter: Measuring the impact of effective principals. *Education Next, 13*(1), 62-69.

Character Education Legislation. (2016, July 8). Retrieved from http://character.org/more-resources/character-education-legislation/.

Chenoweth, K. (2007). *It's being done: Academic success in unexpected schools*. Cambridge, MA: Harvard Education Press.

Cherniss, C. (2000). *Emotional intelligence: What is it and why it matters*. Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA.

Cherniss, C., & Goleman, D. (2001). *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*. San Francisco: Jossey-Bass.

Cherry, K. (2006). History of intelligence testing: The history and development of modern IQ testing. *Educational Psychologist*, p. 41.

Cherry, K. (2017, June 23). The authoritarian leadership style & others you should know. Retrieved June 27, 2017 from https://www.verywellmind.com/leadership-styles-2795312.

Clore, G., Gasper, K., & Garvin, E. (2001). Affect as information. In J. P. Forgas, (Ed.), *Handbook of affect and social cognition* (pp. 121-144). Mahwah, NJ.: Lawrence Erlbaum Associates.

Cobb, C., & Mayer, J. D. (2000). Emotional intelligence: What the research says. *Educational Leadership*, *58*(3), 14-18.

Collaborative for Academic, Social, and Emotional Learning (CASEL). (2005). *Safe and sound: An educational leader's guide to evidence-based social and emotional learning (SEL) programs*. Illinois edition. Chicago, IL: Author.

Collaborative for Academic, Social, and Emotional Learning (CASEL). (2011). *Mission and vision.* Retrieved from http://casel.org/about-us/mission-vision/.

Collaborative for Academic, Social, and Emotional Learning (CASEL). (2015). *Effective social and emotional learning programs.* Chicago, IL: Author.

Collins, J. C. (2001). *Good to great: Why some companies make the leap–and others don't.* New York, NY: HarperBusiness.

Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.

Conley, D. (2013). What's in a name? Rethinking the notion of 'non-cognative.' *Education Week, 32*(18), 20-21.

Covey, S. (1989). *The seven habits of highly effective people*. New York: Free Press.

Dacre-Pool, L., & Qualter, P. (2018). *An introduction to emotional intelligence*. Hoboken, NJ: Wiley.

DeWitt, P. (2014, December). 3 Reasons why high-stakes testing matters. *Education Week.*

Disposition. (2017). In *Dictionary.com*. Retrieved June 17, 2017 from http://www.dictionary.com/browse/disposition.

Donaldson, S., & Grant-Vallone, E. (2002). *Journal of Business and Psychology, 17*, 245. https://doi.org/10.1023/A:1019637632584

Downey, J. (2008). Hierarchy and happiness: The influence of emotion on administrative job satisfaction. *Community College Journal of Research and Practice*, *32*(8), 597-606.

Duckworth, A., Quinn, P., Lynam, D., Loeber, R., & Stouthamer-Loeber, M. (2011). Role of test motivation in intelligence testing. *Proceedings of the National Academy of Sciences of the United States of America*, *108*(19), 7716-7720.

Durlak, J., Domitrovich, C., Weissberg, R., & Gullotta, T. (Eds.). (2015). *Handbook for social and emotional learning*. New York, NY: Guilford.

Durlak, J., Weissberg, R., Dymnicki, A., Taylor, R., & Schellinger, K. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405-432.

Easterbrook, J. A. (1959). The Effects of emotion on cue utilizations and the organization of behavior. *Psychological Review*, *66*, 183-200.

Editorial Projects in Education Research Center. (2011, July 18). Issues A-Z: Adequate yearly progress. *Education Week.* Retrieved July 20, 2016 from http://www.edweek.org/ew/issues/adequate-yearly-progress/.

Elias, M. J., & Arnold, H. (2006). *The educators guide to emotional intelligence and academic achievement: Social-emotional learning in the classroom*. Thousand Oaks, CA: Corwin Press.

Elias, M. J., Arnold, H., & Hussey, C. (2003). *EQ IQ=best leadership practices for caring and successful schools*. Thousand Oaks, CA: Corwin Press.

Elias, M., Ferrito, J., & Moceri, D. (2015). *The other side of the report card assessing students social, emotional, and character development.* Thousand Oaks, CA: SAGE Publications.

Fancher, R. (1985). *The Intelligence men: Makers of the IQ controversy*. New York, NY: W.W. Norton & Company.

Fox, L., & Lentini, R. (2006). "You got it!" Teaching social and emotional skills. *Young Children, 6*(6), 36-42.

Fullan, M. (2011). *Change leader: Learning to do what matters most*. San Francisco, CA: Jossey-Bass.

Fuhrman, S., & Elmore, R. (2004). Introduction. In S. H. Fuhrman & R. F. Elmore (Eds.), Redesigning accountability systems for education (pp. 3-14). New York: Teachers College Press.

Gale, J., & Bishop, P. (2014). The work of effective middle grades principals: Responsiveness and relationship. *Research in Middle Level Education*, *37*(9), 1-23.

Gall, J., Gall, M., & Borg, W. (2005). *Applying educational research: A practical guide*. Boston, MA: Pearson Education, Inc.

Garcia-Reid, P., Reid, R., & Peterson, N. A. (2005). School engagement among Latino youth in an urban middle school context: Valuing the role of social support. *Education and Urban Society, 37*(3), 257-275.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.

Gardner, H. (1995). Perennial antinomies and perpetual redrawings: Is there progress in the study of the mind? *The Science of the mind: 2001 and beyond*. New York, NY: Oxford University Press.

Gardner, H. (2000). *The Disciplined mind: Beyond facts and standardized tests, the K-12 education that every child deserves*. New York, NY: Penguin Putnam.

Gardner, H. (2006). *Changing minds. The art and science of changing our own and other people's minds*. Boston, MA: Harvard Business School Press.

George, B., Sims, P., McLean, A., & Mayer, D. (2007, February). Discovering your authentic leadership. *Harvard Business Review*.

George, J. (1995). Leader positive mood and group performance: The case of customer service. *Journal of American Psychology, 25*(9), 778-794.

George, J. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations*, *53*(8), 1027-1055.

George, J. (2007). Creativity in organizations. *Academy of Management Annals*, *1*(1), 439-477.

George, J., & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology, 75*(6), 698-709.

George, B. & Sims, P. (2007). *True north: Discover your authentic leadership*. San Francisco, CA: Jossey-Bass.

Ginsberg, R. (2008). Being boss is hard: The emotional side of being in charge. *Phi Delta Kappan, 90*(4), 292-297.

Goleman, D. (1986). Rethinking the value of intelligence tests. *The New York Times*, Education Supplement.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.

Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Books.

Goleman, D. (2004). What makes a leader? *Harvard Business Review, 82*(1), 82-91.

Goleman, D. (2006a). *Emotional Intelligence*. New York, NY: Bantam.

Goleman, D. (2006b). The socially intelligent leader. *Educational Leadership*, *66*(1), 76-81.

Goleman, D. (2008). Essential readings condensed for quick review. *Education Digest*, 74(4), 8-9.

Goleman, D. (2011). *Leadership: The power of emotional intelligence*. Florence, MA: More Than Sound.

Goleman, D., Boyatzis, R., & McKee, A. (2002). Primal leadership: *Realizing the power of emotional intelligence*. Boston, MA: Harvard Business School Press.

Goleman, D., Boyatzis, R., & McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence*. Boston, MA: Harvard Business Review Press.

Greenspan, S., & Wieder, S. (1997). Developmental patterns and outcomes in infants and children with disorders in relating and communicating. *Journal of Developmental and Learning Disorders*, *1*(1), 1-38.

Guilford, J., & Hoeptner, R. (1971). *The analysis of intelligence*. New York: McGraw Hill.

Habegger, S. (2008, September-October). The Principal's role in successful schools: Creating a positive school culture. *Principal*, pp. 42-46.

Hackett, P., & Hortman, J. (2008).The relationship of emotional competencies to transformational leadership: Using a corporate model to assess the dispositions of educational leaders. *Journal of Education Research and Policy Studies*, *8*(1), 92-111.

Hahn, H. (2012). *Principal practices and their impact on teacher job satisfaction*. (Doctoral dissertation), Saint Cloud State University.

Hamel, G., & Prahalad, C. (1993, March–April). Strategy as stretch and leverage. *Harvard Business Review*, pp. 75-84.

Harrison, J., & Clough, M. (2006). Characteristics of "state of the art" leaders: Productive narcissism versus emotional intelligence and level 5 capabilities. *The Social Science Journal*, *43*(2), 287-292.

Hein, S. (1996) *EQ for everybody*. Clearwater FL: Aristotle Press.

Huff, A. (2009). *Designing research for publication*. Los Angeles: SAGE.

Humphrey, N., Lendrum, A., & Wigelsworth, M. (2013). Making the most out of school: Lessons from the social and emotional aspects of learning (SEAL) Programme. *Emotional and Behavioural Difficulties, 18*(3), 248-260.

Jackson, S., & Lunenburg, F. (2010). School performance indicators, accountability ratings and student achievement. *American Secondary Education, 39*(1), 27-44.

Jennings, P., & Greenberg, M. (2009). The prosocial classroom: Teach social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491-525.

Joncich, G. (1968). E. L. Thorndike: The psychologist as professional man of science. *American Psychologist, 23*(6), 434-446.

Jones, G. R. & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review, 23*, 531-546.

Kamin, L. (1995). *The pioneers of IQ testing, The bell curve debate*. New York, NY: Times Books.

Kirkpatrick, S., & Locke, E. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitude. *Journal of Applied Psychology, 8*(1), 36-51.

Kline, A. (2011). *Assessing the influence of social and emotional intelligence in effective educational leadership* (Doctoral dissertation), Ball State University.

Kotter, J., & Cohen, D. (2002). *The heart of change.* Boston, MA: Harvard Business School Press.

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology, 77*(6), 1121-1134.

Labby, S., Lunenberg, F., & Slate, J. (2012). Emotional intelligence and academic success: A conceptual analysis for educational leaders. *International Journal of Educational Leadership Preparation, 7*(1), 1-11.

Leeper, R. W. (1948). A motivational theory of emotions to replace "emotions as disorganized response." *Psychological Review, 55,* 5-21.

Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. An executive summary commissioned by the Wallace Foundation.

Lewin, K., Lippit, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology, 10,* 271-301.

Lezotte, L. W., & Snyder, K. M. (2011). *What effective schools do: Re-envisioning the correlates*. Bloomington, IN: Solution Tree Press.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: does happiness lead to success? *Psychological Bulletin, 131*(6), 803-855.

Mackintosh, N. (2011). *IQ and human intelligence*. Oxford: Oxford University Press.

Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: ASCD.

Marzano, R. J., Waters, T., & McNully, B. (2005). *School leadership that works: From research to results*. Alexandria, VA: Association for Supervision and Curriculum Development.

Mayer, J. D., Caruso, D., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review,* special section, 1-11, ISSN 1754-0739.

Mayer, J. D., & Cobb, C. (2000). Education policy on emotional intelligence: Does it make sense? *Educational Psychology Review, 12*, 163-183.

Mayer, J., Roberts, R., & Barsade, S. (2008). Human abilities: Emotional intelligence. *Annual Review of Psychology, 59*, 507-536.

Mayer, J. D., & Salovey, P. (1997). *What is emotional intelligence? Emotional development and emotional intelligence: Implications for educators.* New York: Basic Books.

Mayer, J. D., Salovey, P., & Caruso, D. (2004a). A further consideration of the issues of emotional intelligence. *Psychological Inquiry, 15*, 249-255.

Mayer, J. D., Salovey, P., & Caruso, D. (2004b). Emotional intelligence: Theory, findings, and implications, *Psychological Inquiry, 15*, 197-215.

Mayer, J. D., Salovey, P., & Caruso, D. (2012). The validity of the MSCEIT: Additional analyses and evidence. *Emotion review, 4*(4), 403-408.

Mayer, J. D., Salovey, P., Caruso, D, & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion, 1*, 232-242.

Minnesota School Report Card. (2017, December 30). Retrieved from http://rc.education.state.mn.us.

Moore, B. (2009). Emotional intelligence for school administrators: A priority for school reform. *American Secondary Education*, *37*(3), 20-28.

National Council for the Accreditation of Teacher Educators (NCATE). (2008). *Professional standards for the accreditation of schools, colleges, and departments of education*. National Council for Accreditation of Teacher Education. Retrieved from http://www.ncate.org/~/media/Files/caep/accreditation-resources/ncate-standards-2008.pdf?la=en.

Newmann, F. (1986). Priorities for the future: Toward a common agenda. *Social Education, 50*(4), 240-250.

Newstead, B., Saxton, A., & Colby, S. (2008, Spring). Going for the gold: Secrets of successful schools. *Education Next*, pp. 38-45.

Newstrom, J., & Davis, K. (1993). *Organizational behavior: Human behavior at work*. New York: McGraw-Hill.

Parker, J., Hogan, M., Eastabrook, J., Oke, A., & Wood, L. (2006). Emotional intelligence and student retention: Predicting the successful transition from high school to university. *Personality and Individual Differences, 41*(7), 1329-1336.

Paulhus, D., & John, O. (1998). Egoistic and moralistic biases in self-perception: The interplay of self-perceptive styles with basic traits and motives. *Journal of Personality, 66*(6), 1025-1060.

Payne, W. (1986). A study of emotion: Developing emotional intelligence. (Unpublished dissertation), The Union for Experimenting Colleges and Universities.

Payton, J., Wardlaw, D., Graczyk, P., Bloodworth, M., Tompsett, C., & Weissberg, P. (2000). Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth. *Journal of School Health, 70*(5), 179-185.

Peterson, R. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research, 21*(2), 381-391.

Portin, B., Schneider, D., DeArmond, M., & Gundlach, L. (2003). *Making sense of leading schools: A study of the school principal*. Seattle, WA: A report for the Wallace Foundation, University of Washington.

Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self-versus others. *Psychological Review, 11*(3), 781-799.

Prothero, A. (2015). Continuous learning key for principals. *Education Week, 34*(18), 10-11.

Reed, T. (2005). *Elementary principal emotional intelligence, leadership behavior, and openness: An exploratory study.* (Electronic Thesis or Dissertation). Retrieved from https://etd.ohiolink.edu/.

Riggio, R., & Lee, J. (2007). Emotional and interpersonal competencies and leader development. *Human Resource Management Review, 17*(4), 418-426.

Roberts, C. (2010). *The dissertation journey*. Thousand Oaks, CA: Corwin.

Rosete, D., & Ciarrochi, J. (2005). Emotional intelligence and its relationship to workplace performance and outcomes of leadership effectiveness. *Leadership & Organization Development Journal, 26*(5), 388-399.

Rost, J. (1993). Leadership development in the new millennium. *The Journal of Leadership Studies, 1*, 91-110.

Salovey, P., Brackett, M, & Mayer, J. D. (2007). *Emotional intelligence: Key readings on the Mayer and Salovey model*. Port Chester, NY: Dude Publishing.

Salovey, P., & Grewal, D. (2005). The science of emotional intelligence. *Current Directions in Psychological Science, 14*, 281-285.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9*, 185-211.

Scheidlinger, S. (1994). The Lewin, Lippitt and White study of leadership and "social climates" revisited. *International Journal of Group Psychotherapy, 44*(1), 123-127.

Schonfeld, D., Adams, R., Fredstrom, B., Weissberg, R., Gilman, R., Voyce, C., Tomlin, R., & Speese-Linehan, D. (2015). Cluster-randomized trial demonstrating impact on academic achievement of elementary social-emotional learning**.** *School Psychology Quarterly, 30*(3), 406-420.

Shannon, G., & Bylsma, P. (2007). *The nine characteristics of high-performing schools: A research-based resource for schools and districts to assist with improving student learning* (2nd ed.). Olympia, WA: OSPI.

Siegel, S., & Castellan, N. J. (1988). *Nonparametric statistics for the behavioral sciences*. New York, NY: McGraw-Hill, Inc.

Siegler, R. (1992). The other Alfred Binet. *Developmental Psychology, 28*(2), 179-190.

Spielberger, C. (2004). *Encyclopedia of applied psychology*. Oxford: Elsevier Academic Press.

Stern, W. (1914). *The psychological methods of testing intelligence*. Baltimore: Warwick & York, Inc.

Sternberg, R. (1985). *Beyond IQ: A triarchic theory of human intelligence*. Cambridge: Cambridge University Press.

Sternberg, R. (1988). *The triarchic mind: A new theory of human intelligence*. New York: Viking.

Sternberg, R. (1994). Thinking styles: Theory and assessment at the interface between intelligence and personality. In R. J. Sternberg & P. Ruzgis (Eds.), *Personality and intelligence* (105-127). New York: Cambridge University Press.

Sternberg, R. (2004). Culture and intelligence. *American Psychologist, 59,* 325-338.

Sternberg, R. (2005). The theory of successful intelligence, *Interamerican Journal of Psychology, 39,* 189-220.

Syrus, P. (1961). *Sententiae, in minor Latin poets*. Cambridge: Harvard University Press.

Terman, L, & Merrill, M. (1960). *Stanford-Binet Intellligence Scale: Manual for the third revision form L-M*. Boston: Houghton Mifflin.

Thorndike, E. (1920). Intelligence and its uses. *Harper's Magazine, 140*, 227-335.

Thorndike, R., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence, *Psychological Bulletin, 34*, 275-284.

Tooley, M., & Bornfreund, M. (2014). Skills for success: Supporting and assessing key habits, mindsets, and skills in pre-K-12.

United States Department of Education. (2009). *Race to the top*. Washington, DC: Author.

United States Department of Education. (2010). *No Child Left Behind Act*. Washington, DC: Author.

Van Rooy, D., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior, 65*(1), 71-95.

Vogt, W. P., & Johnson, R. B. (2016). *The Sage dictionary of statistics & methodology: A nontechnical guide for the social sciences*. Los Angeles: SAGE.

Volkwein, J., & Zhou, Y. (2003). *Research in Higher Education, 44*, 149. https://doi.org/10.1023/A:1022099612036

Walters, D. (2012). One vision, many eyes: Reflections on leadership and change. *International Journal of Leadership in Education, 15*, 119-127.

Webster. (1983). Intelligence. *Webster's new world dictionary*. New York, NY: Simon & Schuster.

Wechsler, D. (1939). *The Measure of adult intelligence*. Baltimore, MD: Williams & Witkins.

Wechsler, D. (1940). Nonintellective factors in general intelligence. *Psychological Bulletin, 37*, 444-445.

Weymes, E. (2003). Relationships not leadership sustain successful organizations. *Journal of Change Management, 3*, 319-331.

Whimbey, A., & Shaw-Whimbey, L. (1975). *Intelligence can be taught*. New York: Dutton.

Williams, H. (2008). Characteristics that distinguish outstanding urban principals: Emotional intelligence, social intelligence and environmental adaption. *Journal of Management Development, 27*(1), 36-54.

Wormeli, R. (2015). The 7 habits of highly affective teachers. *Educational Leadership*, *73*(2), 10-15.

Yuki, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly*, *10*(2), 285-306.

Appendix A: School AYP Performance Results from Minnesota School Report Card Data

Table A1

Schools Meeting Performance Criteria and Schools Not Meeting Performance Criteria as Determined by School Report Card Data and Criteria set for This Study

Minnesota Sanctioned Metrics					
School Code	**AYP 2012**	**AYP 2013**	**AYP 2014**	**AYP 2015**	**AYP 2016**
A1	R, M, A	R, M, A	R, M, A	A	A
A2	R, M, A	R, M, A	M, A	A	A
B	R, M, A	R, A	M, A	R, M, A	R, M, A
C	R, M, A	R, M, A	R, M, A	R, M, A	A
D	A	A	M, A	R, M, A	R, A
E	R, M, A	R, M, A	R, M, A	R, M, A	R, M, A
F	R, M, A	R, A	R, M, A	R, M, A	A
G	R, M, A	R, M, A	R, M, A	A	M, A
H	M, A	R, M, A	R, M, A	R, M, A	R, A
J	R, M, A	R, M, A	M, A	A	A
K	R, M, A	R, M, A	R, M, A	R, M, A	M, A

Note: To meet criteria for this study, a school needed to meet AYP criteria 13 or more times in the five year span in the combined areas of reading (R), math (M), and attendance (A). Letters listed under columns for each year indicate the areas in which a school met AYP criteria that year.

Legend	
	School met academic performance criteria set for this study
	School did not meet academic performance criteria set for this study

Appendix B: Letter to Superintendent

Superintendent
School District Name
School District Address
School District Phone Number

Date letters will be sent
Superintendent …….,
My name is Tammy Stellmach and I am a doctoral candidate in the Educational Administration and Leadership program at St. Cloud State University. I am contacting you to see if you would be willing to allow the elementary principals and teachers in your district to volunteer to participate in my doctoral study. For my research, I am conducting a study that examines some of the perceptions of social-emotional intelligence (SEI) in principals that may influence leadership and effectiveness.

Research consistently identifies the building principal as a key factor in academic achievement and school effectiveness. However, there have been few studies conducted that identify specific social-emotional intelligence areas as related to leadership in the education field. Therefore, the purpose of this study is to add to the research on SEI in educational leadership and to examine the relationship between perceived SEI of principals as perceived by teachers and as perceived by principals, specifically examining subscale constructs such as self-awareness, self-management, social awareness, relationship skill, responsible decision-making, and over all influence. In addition, this study will examine perceived principal SEI and the relationship, if any, to state sanctioned metrics.

I have developed two survey tools based on the work of Kline (2011). One survey tool is for principals, asking them to complete a self-perception survey on their levels of social-emotional intelligence. The second survey tool is for teachers, asking for their perception of social-emotional intelligence in regards to their building principal. I have attached a copy of both of the survey tools for your review. Should you choose to participate, I will send an e-mail to the elementary principal(s) in your district, including a brief explanation stating your permission and the links for the two surveys via SurveyMonkey®. The survey itself contains an introduction with information regarding consent and data privacy. After you sign and return the notice of approval form, I will send the e-mail to principals they will have two weeks to complete the survey before the link closes.

After the surveys are completed, I will gather and analyze the data. Once my dissertation is completed, I will provide you with a written summary of the findings if you so request; thus, enabling you to use the information of which subscales of SEI are perceived to be high and lower in principal leadership, allowing for continued reinforcement and building upon the positive relation of these SEI skills and or the addition of staff development in overall weaker areas. I can

assure you that your district will not be identifiable in the study findings. All data collected will be reported out by groups, not by individuals or individual districts.

I am excited and passionate about the topic of my study. Principals have a direct impact on student achievement and school effectiveness and this study would allow you to have specific feedback regarding SEI competences that can improve school effectiveness in your district. I would love to visit more with you about this study. If you are interested in learning more or participating, please contact me. You can contact me at 218-820-4517 or 218-454-6881. My e-mail is tammy.stellmach@isd181.org. Thank you for your time and consideration.

Sincerely,

Tammy M. Stellmach
Doctoral Candidate
St. Cloud State University
218-820-4517

Appendix C: Notice of Approval Form

School Name
School Address
School Phone Number

Date

I, Superintendent (name), give my permission for the study - An Investigation of the Social-Emotional Intelligence Traits and Abilities of Elementary Principals – to be conducted with elementary principals and teaching staff in my district, ISD# (number).

By agreeing to participate in this study, I understand that the elementary principals and teachers that work within ISD # (number) will be asked to voluntarily complete a survey regarding their perceptions of social-emotional intelligence traits and abilities of the building principal. I understand that all data will be confidential and that the data will be reported in group format so that no individual teacher, principal, or district can be identified. I understand that I can withdraw consent to participate at any time.

I have been in contact with the doctoral candidate for this study, Tammy Stellmach, and I have reviewed the survey instruments and understand the protocol of the study. I give permission for the survey to be completed by staff in my district.

_____	_____
Superintendent	Date
_____	_____
Tammy Stellmach–Doctoral Candidate	Date
_____	_____
Dr. John Eller–Chair of Dissertation Committee	Date

Appendix D: Letter of Explanation to Principal

Principal
School Name
School Address
School Phone Number

Date letters will be sent
Principal …….,
My name is Tammy Stellmach and I am a doctoral candidate in the Educational Administration and Leadership program at St. Cloud State University. I have received permission, and have attached a signed copy of the Notice of Approval Form, from your superintendent for you and your certified staff to participate in my doctoral study: An Investigation of the Social-Emotional Intelligence Traits and Abilities of Elementary Principals. For my research, I am conducting a study that examines some of the perceptions of social-emotional intelligence (SEI) in principals that may influence leadership, student achievement, and school effectiveness.
Research consistently identifies the building principal as a key factor in academic achievement and school effectiveness. However, there have been few studies conducted that identify specific social-emotional intelligence areas as related to leadership in the education field. Therefore, the purpose of this study is to add to the research on SEI in educational leadership and to examine the relationship between perceived SEI of principals (perceived both by teachers and principals), and specifically examining subscale constructs such as self-awareness, self-management, social awareness, relationship skill, responsible decision-making, and over all influence. In addition, this study will examine state sanctioned metrics to examine if there are any relationships to perceived principal SEI.
Two survey tools are used for this study and both links are included later in this correspondence. One survey tool is for principals, asking them to complete a self-perception survey on their levels of social-emotional intelligence. You will complete this survey. The second survey tool is for teachers, asking for their perception of social-emotional intelligence in regards to their building principal, and your certified staff will complete that survey. Directions and individual subject consent information are included at the beginning of each on-line survey. Once the surveys are completed, I will gather and analyze the data for your district and provide your district with a written summary of the findings if requested. All data collected will be reported out by groups, not by individuals or individual districts. Please complete the principal survey within two weeks. At the conclusion of this letter is a message for your certified staff. Please copy, paste and e-mail this “Note to Certified Staff” to your building certified staff so that they can complete their survey in a timely manner as well. Please feel to personalize the message to your staff with your own flair if you choose.

You can contact me via e-mail at tammy.stellmach@isd181.org or by phone at 218-820-4517 or 218-454-6050. Thank you to you and your staff for your time and participation in this study.
Sincerely,

Tammy M. Stellmach
Doctoral Candidate
St. Cloud State University
218-820-4517

SELF:PE
(Paste SurveyMonkey® link here.)

SELF:TE
(Paste SurveyMonkey® link here.)

Note to Certified Staff

Dear Staff,

Our district has been invited to participate in a St. Cloud State University doctoral study: An Investigation of the Social-Emotional Intelligence Traits and Abilities of Elementary Principals. This study examines some of the perceptions of social-emotional intelligence (SEI) in principals that may influence leadership, student achievement, and school effectiveness. Attached is a SurveyMonkey® link for a survey for you to complete. At the beginning of survey are directions and implied informed consent information. All surveys will be completed anonymously. The data will only be examined in group format. Your information will be confidential and no answers that could identify a specific individual or district will be used. Participation in this study by completing the survey is voluntary. Again, our district has given approval for our participation, but individual participation remains voluntary.
Thank you.

Appendix E: Permission from Dr. Anthony Kline

From: Andrew Kline [amkline@bsu.edu]
Sent: Monday, July 29, 2013 2:28 PM
To: Dewey, tammy
Subject: dissertation study
Hi Tammy, thanks for your email.

I apologize for my late response. I just moved from Indianapolis to really rural area of Indiana. It took us a couple weeks to find an internet provider that could reach our home. Though now I have access and am connected to the outside world!
I appreciate your interest in emotional intelligence and leadership and certainly grant you permission to use the SELF. I would love to read your study once complete. Also, where did you come across my study; I'm just curious.
Best,
Tony
Anthony M. Kline, Ph.D.
Assistant Professor
Department of Elementary Education
Ball State University

From: Tammy Dewey [tammy.dewey@isd181.org]
Sent: Thursday, July 25, 2013 2:28 PM
To: Kline, Anthony
Subject: dissertation study
Hi Anthony,

Please let me start with an introduction, I am Tammy: A single parent of three, an assistant principal at a middle school, and at heart, forever a student myself. I am currently a student in the St. Cloud State doctoral program in Educational Leadership. My research for the past two years has centered around emotional intelligence and leadership in education. I came across your dissertation just recently. You should be proud - it is amazing! I would like to ask if you would have any objection to me replicating your study? I had been thinking of surveying principals and certified staff all along. It seems like a nice angle to have a comparison study. I would use similar questions, with less focus on the social data (attendance) piece but an addition of staff morale or satisfaction. I would use your SELF survey with adaptations if you are willing to give permission. I have a passion for leadership and social-emotional intelligence, and for incorporating SEI into curriculum as well. I look forward to hearing from you.
Thank you, Tammy

Tammy Dewey
Assistant Principal
Forestview Middle School
218-454-6050
tammy.dewey@isd181.org

"Attitude Reflects Leadership"
Character Challenge of the Week: "It all works out in the end." What are you doing to shape your own path?

Note: This is a copy and paste of original e-mail messages

Appendix F: Social-Emotional Educational Leadership Factor: Teacher Edition

Informed Consent

Procedures
You are invited to complete a short survey regarding your perceptions of the social and emotional skills of school principals. The completion time of this survey is approximately 5 minutes.

Benefits
The results of this survey will be published to better understand social-emotional intelligence and its impact on administrative leadership in school districts. The districts that participate in the study will be able to use the research to influence the professional development and training for administrators, particularly elementary principals.

Contact Information
Upon completion, the researcher's dissertation will be electronically available for you to review the results. Please contact Tammy Stellmach at tammy.stellmach@isd181.org or John Eller, committee chair, 320-308-4272, jfeller@stcloudstate.edu if you have any questions or want a written summary of this research.

Confidentiality
The dissertation will be made public and added to the SCSU Repository. The confidentiality of the information gathered during your participation in this study will be maintained. The results will be presented in aggregate form with no more than 1-2 descriptors presented together. Your personal identity will remain confidential. You will not be identified b your name in any published materials. All printed data will be kept in a locked file cabinet in a locked room and/or on a computer secured with a password. This data will be destroyed within three years.

Risk
There are no serious risks associated with this evaluation/research study. I will carefully maintain the confidentiality of your responses and will not share your data with any district officials – in fact, I will not release any information that would allow any individual to be identified.

Voluntary Participation/Withdrawal
Your participation in this study is voluntary. You may decide not to participate or to withdraw your consent to participate in this study at any time, or any reason, without penalty. Your decision whether or not to participate will not affect your current or future relations with St. Cloud State University or the researcher. Please remember this information is confidential and is designed to better understand social-emotional intelligence and its impact on principal leaders in school districts. If you decide to participate, you are free to withdraw at any time.

Acceptance to Participate in the study
Your completion of this survey indicates that you are at least 18 years of age, you have read the information provided above, and you have given consent to participate.

I agree to participate in this study having read and understood the above consent form.

○ Yes ○ No

The SELF survey is designed to assess perceptions of the social and emotional skills of school principals. Social-emotional intelligence can be defined as the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking, behavior, and relationships. Please answer the following questions and mark the best answer as it pertains to your current building principal.

1. The school principal appropriately manages conflict between individuals.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

2. The school principal accurately identifies his/her academic values.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

3. The school principal makes decisions after considering the appropriate social norms.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

4. The school principal accurately identifies his/her personal leadership strengths.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

5. The school principal makes decisions based on safety.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

6. The school principal displays a healthy sense of impulse control.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

7. The school principal appreciates group differences.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

8. It is important that the school principal demonstrates strong social and emotional skills.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

9. The school principal regulates his/her emotions appropriately.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

10. The school principal empathizes with school classroom teachers.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

11. The school principal appropriately resolves conflict between individuals.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

12. The school principal's social and emotional skills positively influence his/her leadership abilities.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

13. The school principal accurately identifies his/her weak areas of leadership.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

14. The school principal expresses his/her thoughts appropriately.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

15. The school principal's social and emotional skills positively influence the school's social environment.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

16. The school principal makes decisions based on ethical standards.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

17. The school principal appropriately models the attribute of cooperation.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

18. The school principal recognizes individual differences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

19. The social and emotional skills of the school principal positively influence the academic success of the school.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

20. The school principal accurately identifies his/her social values.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

21. The school principal handles his/her stress appropriately.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

22. The school principal makes decisions after considering the likely consequences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

23. The school principal appreciates individual differences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

24. The school principal appropriately seeks help when needed.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

25. The school principal displays a healthy sense of self-confidence.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

26. The school principal listens intently to classroom teachers.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

27. The school principal makes decisions based on respect for others.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

28. The school principal recognizes group differences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

29. The school principal resists inappropriate social pressures.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

30. The principal models the attribute of perseverance
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

31. The principal accurately identifies and addresses areas of weakness within individual teachers.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

32. The principal projects a belief that classroom teacher job satisfaction positively influences the academic success of the school.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

33. Please choose the identifier that most accurately describes your perception of the principal's level of strength in social and emotional skills.
    1. Poor 2. Fair 3. Good 4. Very Good 5. Excellent

34. Below is a list of key social-emotional traits and abilities, Please choose what you perceive to be the **three** most important and necessary social-emotional intelligence traits or abilities for a principal in leading a school effectively.
    Confident, Astute, Assertive, Composed, Responsible, Positive, Compassionate, Supportive, Empathetic, Respectful, Trustworthy, Motivational, Ethical, Conscientious, Reliable, Communication/listening skills

35. Please list any additional social/emotional traits or abilities that a building principal might possess that you believe increases school effectiveness.

36. Current position:
    a. Elementary School Teacher
    b. Certified Staff Specialist (counselor, speech pathologist, etc.)

37. Please enter the number of years that best describes your experience as a certified staff member at your current district.

38. Please enter the number of years that best describes your total experience as a certified staff member including all locations.

39. Please select the district that best describes where you work:
    a. Metro
    b. Suburban
    c. Out-State

40. Please enter the number that best describes the total student population at your current school.

Note: The numbers by the Likert-scale choices Never, Rarely, Sometimes, Very Often, and Always were not visible to the teachers while they were taking the survey.

Appendix G: Social-Emotional Educational Leadership Factor: Principal Edition

Informed Consent

Procedures
You are invited to complete a short survey regarding your perceptions of the social and emotional skills of school principals. The completion time of this survey is approximately 5 minutes.

Benefits
The results of this survey will be published to better understand social-emotional intelligence and its impact on administrative leadership in school districts. The districts that participate in the study will be able to use the research to influence the professional development and training for administrators, particularly elementary principals.

Contact Information
Upon completion, the researcher's dissertation will be electronically available for you to review the results. Please contact Tammy Stellmach at tammy.stellmach@isd181.org or John Eller, committee chair, 320-308-4272, jfeller@stcloudstate.edu if you have any questions or want a written summary of this research.

Confidentiality
The dissertation will be made public and added to the SCSU Repository. The confidentiality of the information gathered during your participation in this study will be maintained. The results will be presented in aggregate form with no more than 1-2 descriptors presented together. Your personal identity will remain confidential. You will not be identified b your name in any published materials. All printed data will be kept in a locked file cabinet in a locked room and/or on a computer secured with a password. This data will be destroyed within three years.

Risk
There are no serious risks associated with this evaluation/research study. I will carefully maintain the confidentiality of your responses and will not share your data with any district officials – in fact, I will not release any information that would allow any individual to be identified.

Voluntary Participation/Withdrawal
Your participation in this study is voluntary. You may decide not to participate or to withdraw your consent to participate in this study at any time, or any reason, without penalty. Your decision whether or not to participate will not affect your current or future relations with St. Cloud State University or the researcher. Please remember this information is confidential and is designed to better understand social-emotional intelligence and its impact on principal leaders in school districts. If you decide to participate, you are free to withdraw at any time.

Acceptance to Participate in the study
Your completion of this survey indicates that you are at least 18 years of age, you have read the information provided above, and you have given consent to participate.

I agree to participate in this study having read and understood the above consent form.

○ Yes ○ No

The SELF survey is designed to assess perceptions of the social and emotional skills of school principals. Social-emotional intelligence can be defined as the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking, behavior, and relationships. Please answer the following questions and mark the best answer as it pertains to you.

1. I appropriately manage conflict between individuals.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

2. I accurately identify my academic values.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

3. I make decisions after considering the appropriate social norms.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

4. I accurately identify my personal leadership strengths.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

5. I make decisions based on safety.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

6. I display a healthy sense of impulse control.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

7. I appreciate group differences.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

8. It is important that principals demonstrate strong social and emotional skills.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

9. I regulate my emotions appropriately.
   1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

10. I empathize with school classroom teachers.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

11. I appropriately resolve conflict between individuals.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

12. My social and emotional skills positively influence my leadership abilities.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

13. I accurately identify my weak areas of leadership.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

14. I express my thoughts appropriately.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

15. My social and emotional skills positively influence the school's social environment.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

16. I make decisions based on ethical standards.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

17. I appropriately model the attribute of cooperation.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

18. I recognize individual differences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

19. My social and emotional skills positively influence the academic success of the school.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

20. I accurately identify my social values.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

21. I handle my stress appropriately.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

22. I make decisions after considering the likely consequences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

23. I appreciate individual differences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

24. I appropriately seek help when needed.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

25. I display a healthy sense of self-confidence.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

26. I listen intently to classroom teachers.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

27. I make decisions based on respect for others.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

28. I recognize group differences.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

29. I resist inappropriate social pressures.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

30. I model the attribute of perseverance.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

31. I accurately identify and address areas of weakness within individual teachers.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

32. I believe classroom teacher job satisfaction positively influences the academic success of the school.
    1. Never 2. Rarely 3. Sometimes 4. Very Often 5. Always

33. Please choose the identifier that most accurately describes your perception of your level of strength in social and emotional skills.
    1. Poor 2. Fair 3. Good 4. Very Good 5. Excellent

34. Below is a list of key social-emotional traits and abilities, Please choose what you perceive to be the **three** most important and necessary social-emotional intelligence traits or abilities for a principal in leading a school effectively.
    Confident, Astute, Assertive, Composed, Responsible, Positive, Compassionate, Supportive, Empathetic, Respectful, Trustworthy, Motivational, Ethical, Conscientious, Reliable, Communication/listening skills

35. Please list any additional social-emotional traits or abilities that a building principal might possess that you believe increases school effectiveness.

36. Please enter the number of years that best describes your experience as a Principal at your current school.

37. Please enter the number of years that best describes your total experience as a Principal including all locations.

38. Please select the district that best describes where you work:
    a. Metro
    b. Suburban
    c. Out-State

39. Please enter the number that best describes the total student population of the building you currently lead.

40. Please enter the number that best describes the number of certified teaching staff at your building.

Note: The numbers by the Likert-scale choices Never, Rarely, Sometimes, Very Often, and Always were not visible to the principals while they were taking the survey.

Appendix H: Social-Emotional Educational Leadership Factor (SELF)

Information Guide and Summary of the SELF Instrument

The SELF survey is designed to assess perceptions of the social and emotional skills of school principals. Social-emotional intelligence can be defined as the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking, behavior and relationships. The questions will be electronically sent through SurveyMonkey® to participating school district personnel in order to survey principal and teacher perceptions regarding the social and emotional leadership abilities of the principal. The SELF survey contains specific questions influenced by the Collaborative for Academic, Social, and Emotional Learning (CASEL) and centered on the following six characteristics: self-awareness, self-management, social awareness, relationship skills, responsible decision-making, and overall SEI influence category. Additional questions fall into a broad SEI area or a demographic category.

SELF: TE – Questions by SEI subscale

Self-awareness questions teacher edition:

2. The school principal accurately identifies his/her academic values.

4. The school principal accurately identifies his/her personal leadership strengths.

13. The school principal accurately identifies his/her weak areas of leadership.

20. The principal accurately identifies his/her social values.

25. The school principal displays a healthy sense of self-confidence.

33. The principal's level of social and emotional skills would accurately be identified with which degree of strength?

Self-management questions teacher edition:

6. The school principal displays a healthy sense of impulse control.

9. The principal regulates his/her emotions appropriately.

14. The principal expresses his/her thoughts appropriately.

21. The school principal handles his/her stress appropriately.

30. The school principal models the attribute of perseverance.

Social Awareness questions teacher edition:

3. The school principal makes decisions after considering the appropriate social norms.

7. The school principal appreciates group differences.

10. The school principal empathizes with school classroom teachers.

18. The school principal recognizes individual differences.

23. The school principal appreciates individual differences.

26. The school principal listens intently to classroom teachers.

28. The school principal recognizes group differences.

Relationship Skill questions teacher edition:

1. The school principal appropriately manages conflict between individuals.

11. The school principal appropriately resolves conflict between individuals.

17. The school principal appropriately models the attribute of cooperation.

24. The school principal appropriately seeks help when needed.

29. The school principal resists inappropriate social pressures.

Responsible Decision-making questions teacher edition:

5. The school principal makes decisions based on safety.

16. The school principal makes decisions based on ethical standards.

22. The school principal makes decisions after considering the likely consequences.

27. The school principal makes decisions based on respect for others.

31. The school principal accurately identifies and addresses areas of weakness within individual teachers.

Overall SEI Influence questions teacher edition:

8. It is important that the school principal demonstrate strong social and emotional skills.

12. The school principal's social and emotional skills positively influence his/her leadership abilities.

15. The school principal's social and emotional skills positively influence the school's social environment.

19. The social and emotional skills of the school principal positively influence the academic success of the school.

32. The principal projects a belief that classroom teacher job satisfaction positively influences the academic success of the school.

33. Please choose the identifier that most accurately describes your perception of the principal's level of strength in social and emotional skills.

Additional SEI questions:

34. Below is a list of key social/emotional traits and abilities, Please list what you perceive to be the three most important and necessary social/emotional intelligence traits or abilities for a principal in leading a school effectively.

35. Please list any additional social/emotional traits or abilities that a building principal might possess that you believe increases school effectiveness.

Demographic questions teacher edition:

36 through 40

SELF: PE – Questions by SEI subscale

Self-awareness questions principal edition:

2. I accurately identify my academic values.

4. I accurately identify my personal leadership strengths.

13. I accurately identify my weak areas of leadership.

20. I accurately identify my social values.

25. I display a healthy sense of self-confidence.

33. I believe my personal level of social and emotional skills would accurately be identified with which degree of strength?

Self-management questions principal edition:

6. I display a healthy sense of impulse control.

9. I regulate my emotions appropriately.

14. I express my thoughts appropriately.

21. I handle my stress appropriately.

30. I model the attribute of perseverance.

Social Awareness questions principal edition:

3. I make decisions after considering the appropriate social norms.

7. I appreciate group differences.

10. I empathize with school classroom teachers.

18. I recognize individual differences.

23. I appreciate individual differences.

26. I listen intently to classroom teachers.

28. I recognize group differences.

Relationship Skill questions principal edition:

2. I appropriately manage conflict between individuals.

11. I appropriately resolve conflict between individuals.

18. I appropriately model the attribute of cooperation.

24. I appropriately seek help when needed.

29. I resist inappropriate social pressures.

Responsible Decision-making questions principal edition:

6. I make decisions based on safety.

16. I make decisions based on ethical standards.

22. I make decisions after considering the likely consequences.

27. I make decisions based on respect for others.

31. I accurately identify and address areas of weakness within individual teachers.

Overall SEI Influence questions principal edition:

8. It is important that principals demonstrate strong social and emotional skills.

12. My social and emotional skills positively influence my leadership abilities.

15. My social and emotional skills positively influence the school's social environment.

19. My social and emotional skills positively influence the academic success of the school.

32. I believe classroom teacher job satisfaction positively influences the academic success of the school.

33. Please choose the identifier that most accurately describes your perception of your level of strength in social and emotional skills.

Additional SEI questions:

34. Below is a list of key social-emotional traits and abilities. Please choose what you perceive to be the three most important and necessary social-emotional intelligence traits or abilities for a principal in leading a school effectively.

35. Please list any additional social-emotional traits or abilities that a building principal might possess that you believe increases school effectiveness.

Demographic questions principal edition:

36 through 40

Appendix I: Teacher Edition (TE) Wilcoxon Signed Ranks Summary

Table I1

TE Wilcoxon Signed Ranks: Test Ranks

		N	Mean Rank	Sum of Ranks
Self-management to Self-awareness	Negative Ranks	38[a]	44.24	1681.00
	Positive Ranks	57[b]	50.51	2879.00
	Ties	22[c]		
	Total	117		
Social awareness to Self-awareness	Negative Ranks	52[d]	49.05	2550.50
	Positive Ranks	56[e]	59.56	3335.50
	Ties	9[f]		
	Total	117		
Relationship skills to Self-awareness	Negative Ranks	54[g]	45.60	2462.50
	Positive Ranks	34[h]	42.75	1453.50
	Ties	29[i]		
	Total	117		
Responsible decision-making to Self-awareness	Negative Ranks	44[j]	42.19	1856.50
	Positive Ranks	52[k]	53.84	2799.50
	Ties	21[l]		
	Total	117		
Overall SEI influence to Self-awareness	Negative Ranks	42[m]	47.50	1995.00
	Positive Ranks	68[n]	60.44	4110.00
	Ties	7[o]		
	Total	117		
Social awareness to Self-management	Negative Ranks	60[p]	51.74	3104.50
	Positive Ranks	43[q]	52.36	2251.50
	Ties	14[r]		
	Total	117		
Relationship skills to Self-management	Negative Ranks	64[s]	45.01	2880.50
	Positive Ranks	20[t]	34.48	689.50
	Ties	33[u]		
	Total	117		
Responsible decision-making to Self-management	Negative Ranks	54[v]	44.01	2376.50
	Positive Ranks	37[w]	48.91	1809.50
	Ties	26[x]		
	Total	117		
Overall SEI influence to Self-management	Negative Ranks	51[y]	50.63	2582.00
	Positive Ranks	47[z]	48.28	2269.00
	Ties	19[aa]		
	Total	117		

Relationship skills to Social awareness	Negative Ranks	66[ab]	58.47	3859.00
	Positive Ranks	39[ac]	43.74	1706.00
	Ties	12[ad]		
	Total	117		
Responsible decision-making to Social awareness	Negative Ranks	49[ae]	53.11	2602.50
	Positive Ranks	56[af]	52.90	2962.50
	Ties	12[ag]		
	Total	117		
Overall SEI influence to Social awareness	Negative Ranks	49[ah]	49.21	2411.50
	Positive Ranks	53[ai]	53.61	2841.50
	Ties	15[aj]		
	Total	117		
Responsible decision-making to Relationship skills	Negative Ranks	23[ak]	35.37	813.50
	Positive Ranks	65[al]	47.73	3102.50
	Ties	29[am]		
	Total	117		
Overall SEI influence to Relationship skills	Negative Ranks	39[an]	36.56	1426.00
	Positive Ranks	68[ao]	64.00	4352.00
	Ties	10[ap]		
	Total	117		
Overall SEI influence to Responsible decision-making	Negative Ranks	50[aq]	51.60	2580.00
	Positive Ranks	58[ar]	57.00	3306.00
	Ties	9[as]		
	Total	117		

Note: This table reflects the ranks from the TE Wilcoxon Signed Ranks Test. Each SEI subscale mean rank was compared to all of the other SEI subscale mean ranks. The ties reflect the number of teachers who selected the same ranking on the Likert-type scale for both of the compared SEI subscales. The negative rank reflects the number of teachers who gave a lower ranking on the Likert-type 1-5 point scale to the SEI subscale listed first, while the positive rank reflects the number of teachers who selected a higher ranking on the scale for the SEI subscale listed first.

Appendix J: Principal Edition (PE) Wilcoxon Signed Ranks Summary

Table J1

PE Wilcoxon Signed Ranks Test: Ranks

		N	Mean Rank	Sum of Ranks
Self-management to Self-awareness	Negative Ranks	5[a]	4.00	20.00
	Positive Ranks	4[b]	6.25	25.00
	Ties	3[c]		
	Total	12		
Social awareness to Self-awareness	Negative Ranks	2[d]	6.00	12.00
	Positive Ranks	10[e]	6.60	66.00
	Ties	0[f]		
	Total	12		
Relationship skills to Self-awareness	Negative Ranks	3[g]	4.83	14.50
	Positive Ranks	6[h]	5.08	30.50
	Ties	3[i]		
	Total	12		
Responsible decision-making to Self-awareness	Negative Ranks	2[j]	4.25	8.50
	Positive Ranks	10[k]	6.95	69.50
	Ties	0[l]		
	Total	12		
Overall SEI influence to Self-awareness	Negative Ranks	3[m]	3.00	9.00
	Positive Ranks	9[n]	7.67	69.00
	Ties	0[o]		
	Total	12		
Social awareness to Self-management	Negative Ranks	5[p]	4.30	21.50
	Positive Ranks	7[q]	8.07	56.50
	Ties	0[r]		
	Total	12		
Relationship skills to Self-management	Negative Ranks	6[s]	4.67	28.00
	Positive Ranks	5[t]	7.60	38.00
	Ties	1[u]		
	Total	12		
Responsible decision-making to Self-management	Negative Ranks	2[v]	3.00	6.00
	Positive Ranks	9[w]	6.67	60.00
	Ties	1[x]		
	Total	12		
Overall SEI influence to Self-management	Negative Ranks	2[y]	3.50	7.00
	Positive Ranks	10[z]	7.10	71.00
	Ties	0[aa]		
	Total	12		

Relationship skills to Social awareness	Negative Ranks	6[ab]	6.50	39.00
	Positive Ranks	3[ac]	2.00	6.00
	Ties	3[ad]		
	Total	12		
Responsible decision-making to Social awareness	Negative Ranks	2[ae]	7.50	15.00
	Positive Ranks	10[af]	6.30	63.00
	Ties	0[ag]		
	Total	12		
Overall SEI influence to Social awareness	Negative Ranks	4[ah]	7.13	28.50
	Positive Ranks	8[ai]	6.19	49.50
	Ties	0[aj]		
	Total	12		
Responsible decision-making to Relationship skills	Negative Ranks	2[ak]	3.50	7.00
	Positive Ranks	9[al]	6.56	59.00
	Ties	1[am]		
	Total	12		
Overall SEI influence to Relationship skills	Negative Ranks	2[an]	5.25	10.50
	Positive Ranks	9[ao]	6.17	55.50
	Ties	1[ap]		
	Total	12		
Overall SEI influence to Responsible decision-making	Negative Ranks	8[aq]	6.19	49.50
	Positive Ranks	4[ar]	7.13	28.50
	Ties	0[as]		
	Total	12		

Note: This table reflects the ranks from the PE Wilcoxon Signed Ranks Test. Each SEI subscale mean rank was compared to all of the other SEI subscale mean ranks. The ties reflect the number of principals who selected the same ranking on the Likert-type scale for both of the compared SEI subscales. The negative rank reflects the number of principals who gave a lower ranking on the Likert-type 1-5 point scale to the SEI subscale listed first, while the positive rank reflects the number of principals who selected a higher ranking on the scale for the SEI subscale listed first.

Appendix K: 2-Sample T-Test Group Statistics and Levene's Equality of Variances Comparing Teacher Perceptions with Principal Perceptions

Table K1

2-Sample T-Test: Group Statistics from SELF:TE and SELF:PE Data

	TE or PE	N	Mean	Std. Deviation	Std. Error Mean
Self-awareness	TE	119	3.9726	.69971	.06469
	PE	12	4.0333	.39848	.11503
Self-management	TE	119	4.0838	.71595	.06619
	PE	12	4.0667	.45394	.13104
Social awareness	TE	119	4.0208	.72121	.06668
	PE	12	4.2738	.26171	.07555
Relationship skills	TE	119	3.8872	.68400	.06324
	PE	12	4.1500	.24309	.07017
Responsible decision-making	TE	119	4.0444	.65607	.06065
	PE	12	4.4500	.34245	.09886
Overall SEI influence	TE	119	4.0726	.68697	.06351
	PE	12	4.3472	.36555	.10553

Note: Means and standard deviations for each of the social-emotional leadership subscales are represented. Means were computed for teachers' and principals' responses separately. Means for the principal group were higher in all SEI subscales, indicating that principals ranked themselves higher than teachers ranked principals in all of the SEI subscale constructs. The responsible decision-making subscale had the largest difference between the means with the principal mean (M, 4.45) exceeding the teacher mean (M, 4.04) by 0.41.

Table K-2

Levene's Test for Equality of Variances – Independent Samples Test from SELF:TE and SELF:PE Data

SEI Subscale Constructs	F	Sig
Self-awareness	4.216	.042
Self-management	5.164	.025
Social awareness	11.475	.001
Relationship skills	11.580	.001
Responsible decision-making	7.139	.009
Overall SEI influence	7.286	.008

Note: For the study, comparing the TE and PE group results, the Levene's test for equality of variances test revealed that equal variances were not assumed; however, the SPSS takes this into account in order to accurately compute the final step of the test, the 2-sample t-test for equality of means.

Appendix L: IRB Human Subjects Approval

ST. CLOUD STATE UNIVERSITY
EDUCATION FOR LIFE.

Institutional Review Board (IRB)
720 4th Avenue South MC 204K, St. Cloud, MN 56301-4498

Name: Tammy Dewey
Address 4765 Brentwood Road
Baxter, MN 56425 USA
Email: tammy.dewey@isd181.org
Co-Investigator Dr. John Eller

IRB PROTOCOL DETERMINATION: Exempt Review

Project Title: An investigation of the social and Emotional Intelligence Traits and Abilities of Elementary Principals

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects. Your project has been: **APPROVED**

Please note the following important information concerning IRB projects:

- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).

- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.

-Exempt review only requires the submission of a Continuing Review/Final Report form in advance of the expiration date indicated in this letter if an extension of time is needed.

- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal is requested and approved, new consent forms will be officially stamped and reflect the new approval and expiration dates.

- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

If we can be of further assistance, feel free to contact the IRB at 320-308-3290 or email ri@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Institutional Official:

Latha Ramakrishnan

Dr. Latha Ramakrishnan
Interim Associate Provost for Research
Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB# 1619 - 2024	**Type:** Exempt Review	**Today's Date:** 9/30/2016
1st Year Approval Date: 9/30/2016	**2nd Year Approval Date:**	**3rd Year Approval Date:**
1st Year Expiration Date:	**2nd Year Expiration Date:**	**3rd Year Expiration Date:**