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Student-Teacher Trust Relationships and Student Performance

Cheryl A. Basch
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Student-Teacher Trust Relationships and Student Performance

Abstract
The quantitative research study described in the dissertation explored the correlation between relational trust of teachers and students, as perceived by the students, and student performance. Researchers have studied trust and student achievement at the secondary school level and from the adult’s perspective; however, research is limited at the elementary school level, particularly from the student’s perspective. A 20-item Student Trust Scale and the spring 2012 New York State English Language Arts scaled scores were collected from a sample population of \(N = 375\) student participants in grades 3, 4, 5 and 6. The purpose of the research was to identify whether there was a significant, positive correlation between the levels of trust of students and teachers, as measured by the students, and student performance levels at grades 3, 4, 5 and 6. The findings indicated there was not a significant correlation between relational trust (as measured by the Student Trust Scale) and achievement (as measured by the 2012 New York State English Language Arts examination). These findings were inconclusive. The literature indicates that relational trust is important for student success. Therefore, the study’s findings built a foundation for future scholarly research and future insight for practice and policy development. The study’s findings conclude that relational trust must be further researched to understand its potential value as an instructional tool, in order for educators to gain further insight into future practice and policy development.

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Student-Teacher Trust Relationships and Student Performance

By
Cheryl A. Basch

Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by
Dr. Michael Robinson

Committee Member
Dr. Janice Kelly

Ralph C. Wilson, Jr. School of Education
St. John Fisher College

August 2012
Dedication

The dissertation process has been a remarkable journey that has changed me forever. It is a journey that offered me the opportunity to grow professionally and personally with many other family members, friends, professionals and professors in varied fields, which especially includes my Committee Chairperson, Dr. Michael Robinson, my Committee Member, Dr. Janice Kelly and my husband, Frank.

I will forever be indebted for the assistance from Dr. Robinson and Dr. Kelly throughout the dissertation process. It was their patience, guidance, knowledge, commitment, respect, expertise, and belief in me, which made this journey a reality. From my viewpoint, they represent two cornerstone professors at St. John Fisher College. They were great teachers who provided me with invaluable skills and opportunities in my research career. I thank Dr. Robinson and Dr. Kelly for allowing me to do a quantitative research study with children. I share this doctoral degree with them. As I go forward, I promise them to continue to “trust the process”, and to share my scholarly experiences. I will always have the utmost respect and gratitude for Dr. Michael Robinson and Dr. Janice Kelly throughout the duration of my lifetime.

I extend a special thanks to Dr. Gloria Jacobs, my editor, and Pamela Kuchens my statistics research assistant. When I needed you both the most, you were there in a heartbeat. You helped to make my journey a smooth and successful one. Thank you for being such wonderful professionals and teachers.
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I extend my gratitude to the district personnel, parents, teachers and students who encouraged me and made my research dream a reality. You all know who I mean.

The support, interest and encouragement provided to me by so many friends and family, across the states, assisted me in the completion of this dissertation. From earth to heaven, I especially extend my deepest heartfelt thanks to you, mom and dad. I accomplished the journey.

I dedicate this dissertation to my husband, Frank. I offer my utmost gratitude, love and respect to him for his support throughout the dissertation process. His patience, unconditional love, hours of reading and re-reading my dissertation, and understanding paved the way for my success. He is my better half and my soul-mate, forever and ever. Frank, this doctoral degree is as much yours as it is mine. Always and forever, thank you.
Biographical Sketch

Mrs. Cheryl Ann Basch attended Mt. St. Mary College from 1975 to 1979 and graduated with a Bachelor of Arts degree in 1979. She attended the College of New Rochelle from 1981 to 1983 and received a Masters of Arts degree in Education, in 1983, and a Professional Diploma Degree in Educational Administration in 1985. She entered St. John Fisher College during the summer of 2010 and began her doctoral studies in the Ed. D. Program in Executive Leadership. Mrs. Basch pursued her research in Student-Teacher Trust Relationships and Student Performance under the scholarly leadership and direction of Dr. Michael Robinson.
Abstract

The quantitative research study described in the dissertation explored the correlation between relational trust of teachers and students, as perceived by the students, and student performance. Researchers have studied trust and student achievement at the secondary school level and from the adult's perspective; however, research is limited at the elementary school level, particularly from the student's perspective. A 20-item Student Trust Scale and the spring 2012 New York State English Language Arts scaled scores were collected from a sample population of (N = 375) student participants in grades 3, 4, 5 and 6. The purpose of the research was to identify whether there was a significant, positive correlation between the levels of trust of students and teachers, as measured by the students, and student performance levels at grades 3, 4, 5 and 6. The findings indicated there was not a significant correlation between relational trust (as measured by the Student Trust Scale) and achievement (as measured by the 2012 New York State English Language Arts examination). These findings were inconclusive. The literature indicates that relational trust is important for student success. Therefore, the study’s findings built a foundation for future scholarly research and future insight for practice and policy development. The study’s findings conclude that relational trust must be further researched to understand its potential value as an instructional tool, in order for educators to gain further insight into future practice and policy development.
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Chapter 1: Introduction

Introduction

The study described in this dissertation provided an understanding about relational trust in the context of school settings. It provided a description of relational trust and an understanding of how relational trust is shaped in society and in school settings. The theoretical rationale about social capital and trust provided an understanding of trust in everyday life through the lens of Putnam’s (1973) scholarship. The connection between social capital theory and the theory of relational trust in schools was examined (Putnam, 1973; Byrk & Schneider, 2004). Based upon these theories, the statement of the problem was developed and connected to the purpose of the study. The statement of the problem and the purpose of the study connected to the development of research questions. The significance of the study was discussed. For the purposes of the study, definitions were stated.

Relational trust. Historical, educational, political, and scholarly perspectives marked trust as a phenomenon bonding people together. The definition of trust also referred to the way people chose to bond together and network (Byrk & Schneider, 2004). Trust has been generally defined as people who share common cares and needs and who value trust in their relationships (Tschannen-Moran, 2004). People value trust because they believed that they uphold each other’s truths and confidences (Tschannen-Moran, 2004).
Although the word trust is used in everyday conversations, various researchers defined it in different ways (Romero, 2010). Sometimes researchers defined trust as a dance that ebbs and flows (Rousseau, Sitkin, & Burt, 1998). Other researchers used a business model to define trust as an expectation that alleviates the fear of opportunism (Braddock & Eccles, 1989). The Japanese viewed trust as goodwill, coupled with deep moral commitment (Sako, 1992). This lack of uniformity about how trust was used and defined by researchers generated confusion about what people mean when they say to each other, “I trust you.” Trust is a complex phenomenon (Byrk & Schneider, 2004). Researchers’ definitions of trust varied widely, and overlapped (Braddock & Eccles, 1989). Various trust definitions overlapped, which researchers chose to emphasize (Byrk & Schneider, 2004). These definitions included facets of trust such as confidence, integrity, reliability, competence and a willingness to be vulnerable and take risks (Byrk & Schneider, 2004; Mayer, Davis, and Schoorman, 1995; Tschannen-Moran, 2004).

Whether relational trust existed between people for personal, social, political, organizational, or business reasons, it is the necessary ingredient to enhance, maintain, expand, and advance common goals (Byrk & Schneider, 2004; Tschannen-Moran, 2004). Relational trust changed its form as relationships moved through critical and social network experiences. The essence of building, maintaining, and sustaining relational trust designated a significant challenge for people everywhere (Braddock & Eccles, 1989; Byrk & Schneider, 2004).

**Relational trust in school settings.** Byrk and Schneider (2004) and Tschannen-Moran (2004) stated that school districts needed to know how to be creative with collaboration and gain their followers’ confidence and trust to successfully implement
change and advance initiatives. They also stated that relational trust was viewed as a bonding agent between school members that is necessary to encourage educational support, student success, change, and reform. It is important for school districts to use resources such as creativity, collaboration, school constituent confidence and trust to successfully implement change and advance initiatives.

For the purposes of the study described in this dissertation, relational trust has been defined as the tool that teachers and students used to cultivate interpersonal and social relationships to enhance behaviors and outcomes in schools. Teachers and students developed and nurtured social exchanges as well as the willingness to be vulnerable toward one another’s expectations and intentions to create better student outcomes (Byrk & Schneider, 2004; Coleman, 1994; Putnam, 2000).

Tschannen-Moran (2004) and Kochanek (2005) argued that trust in school settings has not been widely studied. They further suggested that trust has been studied more from the teacher, parent and administrator perspective

From a social-behavior theoretical lens, trust has been seen to represent social capital networks between people in organizations such as schools (Byrk & Schneider, 2004; Luhman 1979; Putnam, 2000). Teachers and students spend together a minimum of 180 days per year in schools. At least six hours a day, teachers and students shared teaching and learning experiences, especially in elementary school settings where most hours are spent developing, bonding, and cultivating relationships between teachers and students (Byrk & Schneider, 2004). Sandel (2009) argued that educators need to use their moral compass in order to cultivate relational trust with students. He further argued, while cultivating trust, teachers need to consider other factors such as the student’s
culture, race, ethnicity, intellectual potential, gender preference, religion, socio-economic and environmental status in order to improve student performance. Therefore, it is important for teachers to compensate for attitudinal biases to develop trusting relationships with students in order to improve student outcomes (Johnson, 2012).

As teacher-student relationships formed, a relational learning atmosphere was created and both teachers and students responded to that relational tone set in their classroom. The first relationships formed were at home. As children develop, they learned to transfer their family trust relationships to other adults and peers at school. Schools have represented the place where social capital created social ties between teachers and students to develop trusting relationships (Putnam, 2000).

As social-trust ties increased, more opportunities were created for teachers and students to positively affect student achievement levels (Byrk & Schneider, 2004). School constituents maintained that trusting relationships take time to evolve. Teachers and students experienced varying degrees of trust. When any degree of trust was present, researchers stated that trust flourished and impacted student outcomes (Byrk & Schneider, 2004; Tschannen-Moran, 2004).

Other researchers’ interest about trust in schools continued to grow (Dabney, 2008; Durnford, 2010; Romero, 2010). Further research has looked at the topic of trust as a bond that encourages social networks, which may lead to improved teacher-student relationships and student outcomes (Dabney, 2008; Durnford, 2010). While little research was found about trust on the elementary level, research about relational trust has spoken to the adult relationships at the secondary level. Furthermore, very little research existed on trust from the perspective of students, particularly at the elementary level (Byrk &
Schneider, 2004; Durnford, 2010; Romero, 2008). Most research about relational trust has reflected the adult’s perspective in schools. However, very little research about trust that reflected the student’s perspective at the elementary level has been found (Byrk & Schneider, 2004; Durnford, 2010; Romero, 2008).

**Statement of the Problem**

Schools continued to struggle, especially in the United States (Byrk & Schneider). Americans continued to rank education as a top priority despite the United States’ economic crisis (Pew Research Center, 2010). Although the United States took pride in education, the American education system continued to struggle to maintain its competitive edge, nationally and internationally (Tyack, 1974; Tyack & Cuban, 1995). Romero (2010) stated the American education system has two goals, which are to maintain high quality education and achievement for all and to maintain a competitive position internationally. Furthermore, she argued that the achievement gap continues to widen in the American educational system.

Romero (2010) indicated that efforts to reform education to close the achievement gap, improve leadership behaviors and relationships has been tedious and difficult without relief or improvement. Educators spent so much time reviewing instructional approaches, strategies, methodologies, organizational structure and time schedules. She further stated for the past 50 years educational reform has not been enough to close the achievement gap. Rowan, Hall, and Haycock (2010) stated that policy makers in Washington D.C. focus on narrowing the achievement gap. They stated that narrowing the achievement gap is critical for the American educational system, students, parents, their communities at large, and for American democracy. McKinsey and Company
(2009) further implied that the achievement gap does affect the American economy, which further impacts the American recession. Rowan et al., (2010) analyzed data from the National Center for Education Statistics (NAEP). Their analysis reviewed the impact of student socio-economic levels and race on academic achievement. Their analysis concluded with the claim that American educators need to analyze the gap using five perspectives. These perspectives included student (a) demographics, (b) the current size of achievement gaps, (c) finding ways to decrease the achievement gaps, (d) monitoring academic gains students make over time, (e) understanding personal and professional biases, and compensating for those biases and (f) comparing the students’ gains to their counterparts within the United States by using state examinations. Their analysis further concluded that it is urgent for American educators to identify factors causing the achievement gap.

There has been research conducted about trust and its effects on student outcomes, the achievement gap, relationships between principals and superintendents, principals and parents, and a school’s core conditions such as innovation, commitment, and outreach to parents and community members (Byrk & Schneider, 2004; Tschannen-Moran, 2004). This research mostly involved school constituents at the middle and high school levels and little research involved the elementary school level (Byrk & Schneider, 2004).

Byrk and Schneider (2004) and Tschannen-Moran (2004) confirmed that building trust within schools takes time, effort and leadership and argued that trust helps schools succeed by driving their mission toward being productive and becoming a learning community. They stated that when relational trust is broken, dysfunctional behaviors
occur. They further implied that the earlier trust is established between school constituents, the greater the chance for better student outcomes. Durnford (2010), Dabney (2008), Haycock (2010), and Romero (2010) stated that research about trust reflected the impact of trust between teacher-parent relationships and student outcomes. They further stated that research findings did not reflect the impact of trust between teacher-student relationships and student outcomes.

The research studies did not review relational trust, or its connection to elementary teacher-student relationships and student outcomes (Byrk & Schneider, 2004). Educators spent a considerable amount of time reviewing data to improve student performance levels. For instance, they continually examined traditional data analysis of instructional methodology, the underserved and underprivileged students, teacher and principal effectiveness, and student performance levels to inform instructional practices (Byrk & Schneider, 2004; Johnson, 2012; Sandel, 2009). Yet, students continually demonstrated poor outcomes with low student achievement levels in the United States (Romero, 2010; Haycock, 2008). Today’s traditional instructional methods just do not seem to be enough to have a positive impact on student outcomes (Byrk & Schneider, 2004; Putnam, 2000). Haycock (2010), Romero (2010) and Durnford (2010) concluded that two essential elements about student outcomes have been missing which are relational trust and the student’s perspective. These researchers further implied that these missing elements demonstrate a gap in the literature.

Therefore, the problem is that there has not been enough research emphasizing the relationship between relational trust and student achievement from the student’s perspective. Instead, the research has looked at trust and student achievement from the
adult’s perspective and through studying various educational practices such as data analysis, evaluation and accountability. Therefore, the study described in this dissertation researched the levels of relational trust between students and teachers in grades 3, 4, 5 and 6, from the students’ perspective and the student performance levels on a standardized state examination.

**Theoretical Rationale**

The theoretical rationale guiding the study was based primarily on the research of Putnam (2000). Putnam stated trust is viewed as social capital, which is defined as social networks that foster levels of trust. This type of trust represented the reciprocity between people demonstrating added value to their lives such as the value teachers and students add to their relationships in classroom situations. Teachers and students used trust as a tool to enhance relationships to create a positive outcome. As their social capital increased or decreased, trust increased or decreased between them (Putnam, 2000).

Putnam stated social capital is measured by the increase or decrease of social membership in organizations, which symbolizes the level of trust and impacts outcomes. Social membership in schools symbolized social networks between teachers and students. These social networks used trust as a tool to affect the level of support, trust and impact on student outcomes. He further stated that social capital is representative of relational trust in schools.

Putnam (2000) claimed that during the 1940s and 1950s civic networking increased as well as the societal trust levels in schools. However, he stated that during the 1960s, when civic networking and trust decreased, the trust levels decreased in schools, which impacted student outcomes. Putnam further stated that in 1977 social capital and
Trust in the American school system declined without reason. His theory implied that when social relationships are strong, trust increases but when social relationships are weak, trust decreases. His theory further revealed that social capital is necessary to foster trust and social outcomes. Social capital created the momentum to enhance outcomes through social relationships and trust. Putnam’s theoretical premise implied that as social capital increased between teachers and students so did relational trust and student performance levels. His theoretical premise served as the foundation and rationale for the study.

Trust has been an important phenomenon studied by researchers. Trust has the potential to be used as a tool to impact student outcomes, school performance and relationships. It is the work of Putnam (2000) that has influenced the research on relational trust.

**Purpose of the Study**

The purpose of the study was to explore the trust relationship between students and teachers, and student achievement, as perceived by the students. The study examined the correlation between the level of relational trust between teachers and students in grades 3 to 6, as measured by a Student Trust Scale (STS) and student performance levels on the 2012 New York State (NYS) English Language Arts (ELA) examination.

The study focused on three steps. The first step identified the level of relational trust between teachers and students from the students’ perspective who were in grades 3 through 6. The second step examined student performance levels on state examinations. There were four levels on the state examinations ranging from level one to level four. Levels one and two represented student performance below state standards, which
indicated students were in need of some form of academic intervention service or remediation (NYS Report Card, 2011). Level three represented student performance levels meeting state standards. Level four represented student performance levels exceeding state standards (NYS Report Card, 2011). The third step examined the correlation between the levels of relational trust between students and teachers, as perceived by the students and the students’ performance levels on the 2012 NYS ELA examination.

The purpose of the study was to understand the value of relational trust. The study examined the correlation between relational trust of teacher-student relationships, in grades 3 through 6 and student performance levels.

**Research Questions**

The hypothesis for the study is that there is a significant, positive correlation between the level of relational trust of teachers and students, as measured by a Student Trust Scale, in grades 3, 4, 5 and 6, and the student performance levels on the spring 2012 New York State (NYS) English Language Arts (ELA) examination. The questions to be answered by this study are as follows:

1. In grades 3, 4, 5 and 6, what was the level of relational trust between the teachers and students as perceived by the students?
2. What were the student performance levels on the 2012 NYS ELA examination?
3. Was there a significant, positive correlation between the levels of relational trust between teachers and students as perceived by the students and the student performance levels on the spring, 2012 NYS ELA examination?
4. Was there a significant, positive correlation between the levels of relational trust between teachers and students and the gender of teachers and students?

**Potential Significance of the Study**

Ennis and McCauley (2002) and Durnford (2010) focused on the topic of trust and the relationship between teachers and students from the teacher’s perception. Their research findings stated that when relational trust is high from the teacher’s perception, teacher-student relationships improve. Williams and Baber (2007), Hofman, Hofman, and Guldemond (2002), Deasy (2000), and Kochanek (2005) examined the relationship of trust between cultural reciprocity and parent-professional collaboration and student outcomes. Their findings concluded that when a high level of relational trust exists, reciprocity between school constituents, collaboration and student achievement levels increase.

Kochanek (2005) and Dabney (2008) investigated the connection between the level of relational trust in leadership and teacher-principal relationships. Their findings concluded that when relational trust was at a high level, teachers believed more in their principals and teacher-principal relationships improved. Goddard, Hoy, and Hoy (2000) focused on the impact of relational trust on teacher efficacy and student outcomes. Their research findings concluded that when relational trust was high, teacher confidence levels to promote student learning and student achievement levels increased. Sheldon and Biddle (2000) examined the impact of relational trust between teacher-principal accountability and student performance. Their research findings concluded that when relational trust was high between teachers and principals, teacher-student accountability levels, teacher-principal accountability levels and student performance levels increased.
Certainly, researchers have expanded knowledge on relational trust regarding teacher-student relationships. However, there is limited research about how elementary teachers and students experienced relational trust in the classroom or how relational trust impacted elementary student performance levels.

The study described in this dissertation extends the present research findings through an examination of the correlation between the level of relational trust of teachers and students, as measured by a Student Trust Scale in grades 3, 4, 5 and 6 and student performance levels on the New York State English Language Arts examination. Student Trust Scales were administered to determine the level of trust between teachers and students. The survey results demonstrated student perceptions. The students’ perceptions will help educators and administrators understand their perspective on relational trust and its effects on student performance levels.

Most studies focused on trust at the secondary level. The dissertation study focused and expanded insight about the levels of trust between third, fourth, fifth and sixth grade level students and teachers as perceived by the students. This insight includes knowledge for principals, superintendents, and teachers about whether or not a significant, positive correlation existed between student-teacher trust relationships and student performance levels.

Quantitative data obtained from measuring the levels of trust between teachers and students using a Student Trust Scale may offer the insight and knowledge for future curriculum development. The study may also offer the insight and knowledge for future professional development for educators and administrators to use relational trust as a tool to improve student outcomes and performance levels. The study may also inform the
development of building level plans for principals to use as they guide their teachers through new instructional and evaluation practices to improve teacher and student performance levels.

Lastly, it is important to note that as the study measured the independent variable of relational trust between teachers and students, the study continued to examine the direct correlation between relational trust and student achievement. The findings of the study may further expand insight into how school districts direct resources to improve student achievement.

Definitions of Terms

Relational trust. Relational trust is the social capital that allows individuals to bond and network in order to achieve better student performance.

Student performance. Student performance is the achievement levels performed by intermediate level students on the NYS ELA examinations for grades 3, 4, 5 and 6. The performance levels on the NYS ELA examination ranged from one to four (NYS Report Card, 2011). On the NYS ELA examination, levels one and two represented student performance levels below state standards and indicated students in need of some form of academic intervention service or remediation (NYS Report Card, 2011). Level three represented student performance levels meeting state standards and level four represented student performance levels exceeding state standards (NYS Report Card, 2011). Each of these levels was represented by scale score ranges. The scaled score ranges were recorded in the study for each individual student.


**Chapter Summary**

This chapter provided a brief review about relational trust. The research literature offered a conceptual understanding about relational trust in everyday life and in the school setting. The social capital theories developed by Putnam (1973) supported the conceptual understanding that trust plays a role in everyday life and school settings.

Based upon Putnam’s (1973) social capital theory, the statement of the problem was developed by looking at the difficulties American schools have had since the 1950s (Byrk & Schneider, 2004; Putnam, 1973). These challenges involved producing high achieving students and developing sound instructional practices and methodologies. The literature review revealed that developing sound evaluation and accountability practices and developing trust and strong relationships to create a supportive school culture has been the primary over-arching challenge for schools today (Byrk & Schneider, 2004; Ryan, 2008).

The research surrounding schools and relational trust reflected student and teacher relationships at the secondary level (Byrk & Schneider, 2004). Very little research existed about relational trust at the elementary level which connects to the purpose of the study (Byrk & Schneider, 2004). The purpose of the study was to determine if there is value to use relational trust as a tool. The study examined the relationship between levels of relational trust of teachers and students, as measured by a Student Trust Scale, in grades 3, 4, 5 and 6, in a suburban school district and the student performance levels on the NYS ELA examination. A directional, positive hypothesis and research questions were developed. The definitions of terms offered clarity about the meaning of the terms and the terms’ relationships to the research questions and hypothesis of the study.
In conclusion, the topic’s potential significance stemmed from the research, its relevance, and its effects on the educational field. The study’s findings will support school districts by offering knowledge and insight about how teachers and students perceive the role of relational trust and the impact trust may have on student performance levels. The study’s findings will also impact professional learning opportunities and curriculum development for teachers, administrators, student teachers, parents and students. The remainder of the dissertation includes a review of the literature on relational trust and student achievement, an explanation of the methodology used for data collection and analysis, examination of the results, and a discussion of the results along with implications for practice and policy and recommendations for future research.
Chapter 2: Literature Review

Introduction and Purpose

Student achievement has been studied for years with achievement levels continuing to plummet (Dabney, 2008; Durnford, 2010; Putnam, 2000; Romero, 2010). Byrk and Schneider (2004) stated that most research studies examining trust and student achievement take place at the middle school and high school levels. They also stated that there is limited research that examines relational trust at the elementary level. The connection between relational trust of elementary teachers and students and student performance will be explored in the literature review.

The purpose of the study was to determine the value of using relational trust as a tool to improve student performance levels. The study explored the correlation between the levels of relational trust between teachers and students, as measured by a Student Trust Scale, in grades 3, 4, 5 and 6 and the student performance levels on the 2012 NYS ELA examination.

This chapter will discuss the topic of relational trust. The historical background, a social behavior theory and several studies about trust will be explored. School culture, role relations, accountability and evaluation, and student achievement and relational trust in schools will also be reviewed.

Historical Background

During the 20th century, historical, educational, political, and scholarly perspectives marked trust as a phenomenon that bonds people together in all societal
institutions, including schools. As early as Erikson’s (1950) eight stages of social
development, trust has been perceived as the social capital between individuals that is
necessary to create positive relationships and solid outcomes. His first stage of social
development indicated that between the ages of birth to age two, individuals learn the
concept of trust and mistrust. He stated that relationships that nurture an individual’s
functioning creates trust and better outcomes. He also stated that individuals need to
experience mistrust to understand the difference between a trustworthy and an un-
trustworthy person. He further argued that this concept accentuates the power of trust
between individuals and outcomes. This concept may support the notion that a trusting
relationship between students and teachers produces better student outcomes and the
opposite might occur if teachers and students do not experience a trusting relationship.

During the early 1970s, Putnam (1973) developed his theory on social capital,
which is the trust that exists between individuals to produce outcomes. Erikson’s (1950)
first stage of social development, trust versus mistrust, aligned with Putnam’s concept
that trust is the social capital needed between individuals to produce results. For example,
Putnam’s (2000) argument that high social capital levels produces higher student
performance levels follows the concept that increased levels of trust between teachers and
students produces increased student performance levels.

During the 1990s and early 2000s, Rousseau, Sitkin, and Burt (1998) perceived
trust as a dance that ebbs and flows. They stated that it is the ups and downs individuals
experience with trust that creates or does not create solid relationships and improved
outcomes. This concept supported Putnam’s (2000) concept of social capital. They stated
that trust is one way people choose to bond together. Byrk and Schneider (2004) and
Tschannen-Moran (2004) further supported their perception of trust by describing trust as an individual’s shared cares and needs. They stated that people demonstrate a reduction of vulnerability toward one another when they come together over common needs. They proposed that individuals value their relationships because they believe that each party will uphold each other’s truths and confidences. Most importantly, they argued that teachers and students choose to engage because they realize there is a better chance that a collaborative approach and better student outcomes will emerge if trust exists. They further stated that developing trust between teachers and students as a means to improve student performance levels continues to be an issue facing most schools today.

During the early to mid-1990s and 2000s, trust was perceived as a characteristic in a school culture. Tschannen-Moran (2004) stated that trust is about maintaining confidence, integrity, reliability and competence in order to fulfill each other’s expectations within a school culture. Mayer, Davis, and Schoorman (1995) aligned themselves with Tschannen-Moran and stated that people need to show a willingness to be vulnerable, because trust is about taking risks and relying on one another’s interdependence without fear. They suggested that individual belief systems about fear may affect trusting teacher-student relationships and student performance levels or outcomes.

During the late 1980s and early 1990s, Sako (1992) described trust as goodwill, coupled with deep moral commitment. He stated that it is moral commitment that shapes trust between individuals and makes for better outcomes. Furthermore, he questioned whether or not trust can exist without deep moral commitment. His concept supported the idea that moral commitment may be viewed as the end-product of trust. He believed that
whether trust exists between people for personal, social, political, or educational reasons, it is necessary to establish trust to enhance, maintain, expand, and advance outcomes. He considered the critical notion that trust can change its form because trust cycles occur within relationships. For example, student outcomes may be perceived as the end-product of the level of trust between teachers and students. As the levels of trust increase or decrease, so too may the student performance levels. Byrk and Schneider (2004) stated it is the essence of building, maintaining, and sustaining trust over time that poses a significant challenge to improving outcomes when leading people in a school or organization.

Research studies stressed that American educators are under fire today because of poor student achievement levels (Romero, 2010; Ryan 2010). They stated that student outcomes continue to reflect achievement levels below state standards (Pew Center for Research, 2010). For example, the 2011 National Assessment of Educational Progress (NAEP) reported that the achievement gap in reading for grades 4 and 8 did not significantly improve from 2007 to 2009. The NAEP (2011) maintained that a 24-point achievement gap in 2007 and a 25-point achievement gap in 2009 existed between the Hispanic and white student population. Furthermore, the NAEP reported that there was no significant difference in the math achievement gap between 1990 and 2009 among the Hispanic and White student population. As a result, the achievement gap remained unchanged and maintained at a 21-point gap.

Rowan, Hall and Haycock (2010) argued that educators spend a significant amount of time analyzing student data, instructional strategies and teacher-administrative performance levels even as student performance levels continue to decline. They stated
that traditional, instructional methods alone are not having a powerful enough impact on student outcomes.

Romero (2010) and Byrk and Schneider (2004) indicated that when trust exists between teachers and students from the adults’ perspective, student achievement levels improve at the elementary and secondary levels. Durnford (2010) stated that when trust exists from the students’ perspective, student achievement levels improve for students at the secondary level. However, two important elements about student outcomes were missing: relational trust and the elementary teacher-student perspective.

**Review of the Literature**

Based on the findings of the literature review, Putnam’s (1976) theoretical framework on social capital was explored because it is a foundation theory supporting relational trust as a tool for supporting student achievement. Along with other theorists, Putnam’s theory further enhanced the understanding of the history, criticisms, and the way relational trust predisposes itself as a product in today’s civic society.

The review of the literature revealed five themes that will be discussed in this chapter. The themes include culture and relationships, leadership principles, role relations, accountability and evaluations, and student achievement.

**Social capital theorists and relational trust in schools.** Social capital is the basis for Putnam’s (1973) social behavior theory. Social capital is defined as relational trust. Putnam argued that trustworthiness and reciprocity are critical elements to develop social networks and achieve outcomes. He stated that democratic civic engagement is high when trust and tolerance exists amongst its people. He expanded upon social capital by describing it as the foundation people need to develop trusting relationships and
achieve high standards within those societal structures. He inferred that it is crucial for the community and school to develop trusting partnerships if they desire to produce strong student outcomes.

Putnam (2000) stated it is imperative for community members and school district leaders to share the responsibility and accountability for school districts. He defined accountability as the foundation that provides structure within schools, society and the work place. Furthermore, he stated that accountability enhances trust, pride and enjoyment. He claimed that accountability is the result of parent, teacher, student, and administrator trust and collaboration. Putnam stated that trust is multifaceted and embedded within our social societal structures such as schools.

Putnam’s (1973) trust theory established the importance and significance for people’s voluntary, collaborative willingness to address collective concerns within a democratic society. He stated that civic engagement is connected to community members’ social ties and the level of interpersonal trust between them. He described civic engagement as the under-pinning factor that bounds teacher-student relationships together by trust.

Putnam (2000) argued that Americans are more tolerant but less trusting of the educational system than people of other countries. He suggested that the concept of deteriorating trust applies to the idea that it is important for teachers and students to develop trust. He implied that without trust between teachers and students, it would be difficult to create a nurturing, learning environment to yield better student outcomes. He posited that the presence of social capital is essential for school constituents to fully network, engage, trust one another and produce better student outcomes.
Putnam’s (2000) theory on civic engagement described social capital as relational trust. Two characteristics connected to Putnam’s social capital theory are a sense of belonging to some form of a social structure and the individual’s facilitation of actions within that social structure. An example of these characteristics is the facilitation of teacher-student relationships to increase student performance levels. Another example implied that civic engagement in schools may be perceived as social networks. Conceptually, the development of relational trust between administrators, teachers, students and parents allows for improved school and student outcomes. Further application of the social capital, trust theory allows the connection between the levels of relational trust between teacher-student social ties and student outcomes to be viewed from different theoretical perspectives.

Putnam (1976) further stated that networking and bonding establishes social ties through trust. He implied that relational trust between teachers and students hinges on communication and social ties. He further indicated that the quality of social ties across a school community influences the school community’s operations as mentioned by other theorists.


Byrk and Schneider (2004) stated that relational trust is the end product of daily exchanges between people in school environments. Within school environments, they
suggested that social relationships are valued by the degree to which relational trusts exists between the school stakeholders. For example, teachers and students who learn to take risks, and who understand their role obligations to one another will have a higher level of trust between them. They argued that school constituents understand that each party needs the other, and that they can count on one another. As noted by the researchers, each party fulfills each other’s needs, and extend themselves beyond the normal requirements by becoming active listeners. They posited that relational trust is built through social exchanges on a day-to-day basis to influence student-teacher relationships, and student performance levels. They stated that the potential for relational trust as a core influence is vast. The researchers mentioned that school constituents have the potential to develop a more trusting culture, create a more positive climate for exchanges, and improve student outcomes. In addition to Byrk and Schneider, other theorists emerged who studied trust and its impact on some of these facets.

Coleman’s (1988) theory argued that individuals create and form social relationships to build trust. He further stated that forming networks and building trust helps people to access resources that were previously unavailable to them. His concept implied that when people come together and form trusting alliances, they bring resources within themselves to the relationship to accomplish goals. He identified three forms of social capital: (a) obligations, (b) expectations, and (c) trustworthiness. The critical aspect of his social theory is connected to the idea that proper execution of teacher-student relationships may result in better student outcomes. Furthermore, his theory suggested that social bonds and communication foster trust between individuals in schools.
Fukuyama (1995) claimed that the quality of social ties across a school community may influence the school community’s operations. He also suggested that in a high trust society, trust governs schools instead of rules; conversely, in a low trust society, rules govern schools instead of trust. This part of his theory implied that relational trust is the lubricant between teacher-student relationships and student performance. Furthermore, his theory suggested that high levels of social trust impacts the willingness, desires, and the ability of school personnel to improve student outcomes.

Gardner’s (2006) theory personified trust as a person who has the capacity to understand the intentions, desires, and motivations of others as well as people having the capacity to work together in an effective manner.

As with integrity, honesty, truthfulness, trust is not a property that can be faked in the long run. Trust is earned and must periodically be confirmed. If I were to rewrite *Changing Minds*, I could discuss trust in the aegis of resonance or even of resistance. I adhere to the “re” in rule, by invoking “reliability.” But because of its importance in the promotion of good ware and good work, I would address directly the issue of trust. (p. xv)

Application of Gardner’s theoretical concept to individuals within schools implies that it is important for teachers and students to form relationships, and for teachers to place the needs of their students first.

Rogers’ (1965) theory on trust defined trust as an operational expression of belief and confidence in another person.

Can I be in some way which will be perceived by the other person as trustworthy, as dependable or consistent in some deep sense? Both research and experience
indicate that this is very important, and over the years I have found what I believe
are deeper and better ways of answering this question. I use to feel that if I
fulfilled all the outer conditions of trustworthiness – keeping appointments,
respecting the confidential nature of the interviews, etc. – and if I acted
consistently the same during the interviews, then this condition would be fulfilled.
But experience drove home the fact that to act consistently acceptant, for
example, if in fact I was feeling annoyed or skeptical or some other non-acceptant
feeling, was certain in the long run to be perceived as inconsistent or
untrustworthy. I have come to recognize that being trustworthy does not demand
that I be rigidly consistent but that I be dependably real. (p. 56)

Application of Rogers’ theory implied that for a significant, trusting relationship to exist
between teachers and students, both parties must maintain a high level of integrity
between them. His theory further asserted that when both teachers and students
demonstrate actions that match their words, a higher trust level will develop between
them and together they will produce better student outcomes.

Kouzes and Posner’s (2007) leadership principles indicated the importance for
leaders to model for their staff, challenge the process, coach, manage their environment,
carry the vision, lead quietly, nurture their staff and mediate trust breakdowns. Their five
principles included: (a) model the way, (b) inspire a shared vision, (c) challenge the
process, (d) enable others, and (e) encourage the heart.

Kouzes and Posner’s (2007) model allowed leaders to clarify values, set the
example and align their actions to match their values. They defined shared vision as
being a leader who can visualize the future with open-ended possibilities and engage
others to share that vision. They defined challenging the process as engaging oneself and others to demonstrate initiative, seizing opportunities, learning from experience and taking risks. They defined enabling others to act as fostering collaboration, and strengthening others’ self-determination and competence. Their definition of encouraging the heart included recognizing contributions others make, demonstrating appreciation, and celebrating values and victories.

Kouzes and Posner (2007) stated that the “heart” of collaboration is trust and individuals need trust to lead. This concept implied that elementary teachers have the capacity to become leaders. The concept may also suggest that through leadership, school constituents can build relational trust. The concept further indicated that by establishing trusting, collaborative relationships, school constituents may establish value clarification systems, build trust and improve student performance levels.

Tschannen-Moran (2004) discussed competence as one of the most influential facets of relational trust. Competence means teachers who do what they say and walk the talk in order to gain their students’ trust as well as to improve student performance. She defined relational trust as shared vulnerability between people. She identified five facets of trust and established that these facets of benevolence, honesty, openness, reliability, and competence are the facets necessary in order to establish relational trust. Benevolence refers to the confidence people have in one another; honesty means integrity; openness means that a person would not withhold information or distort information; reliability refers to the confidence to predict another person’s actions; and competence refers to skill levels. She argued that all five facets must be present to establish a trusting relationship. She stated that if one of the facets is missing, then the
relationship has the potential to fall apart or become superficial. Her theory implied that teachers and students need to practice the morality of being benevolent, competent, honest, open and reliable with each other, and when teachers and students apply the five facets to their relationship, they will build a more trusting relationship and accomplish higher performance levels.

Fukuyama (1995), Byrk and Schneider (2004) and Putnam (1976) claimed that in a high trust society more responsibility is shared and delegated to all levels of school personnel. They further argued that in a low trust society rules govern school personnel instead of trust. According to these researchers, higher levels of social trust impacted the willingness and ability of school personnel and improved outcomes. As such, relational trust was the lubricant between the schools’ stake-holders support of the learning environment and student performance levels. They suggested that relational trust leads to improved teacher-student relationships and student performance levels as supported by other theorists. They further implied that relational trust is the core for building relationships within organizations, including schools

**Theoretical application and relational trust in schools.** Byrk and Schneider’s (2004) theory on social behavior was applied to schools in a Chicago study between the years of 1994-1997. They examined the link between the base level of the degree of trust measured in 1994 and changes in trust from 1994-1997 by measuring teachers’ orientation of professional community, and school commitment. One of the significant findings of the study demonstrated that schools that were initially low on those facets showed improvement.
During the 1994 Chicago study, Byrk and Schneider (2004) demonstrated that the level of trust improved along with achievement levels in reading and math. During school reform processes to increase reading and math levels at the middle school level, their research findings noted the significant factor that student achievement improved when trust is present. Their findings further indicated that as levels of trust increased, reading and math achievement levels also increase.

In addition to what has already been discussed in this chapter, Table 2.1 shows certain characteristics of the theories, and their application to relational trust and schools.

Table 2.1

Description of Theories as Applied to Study

<table>
<thead>
<tr>
<th>Theorists</th>
<th>Social behavioral/System theory perspective on trust</th>
<th>Application to proposed study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putnam</td>
<td>Social capital as networking and engaging with others to bond and form trust.</td>
<td>Relational trust hinges on communication.</td>
</tr>
<tr>
<td>Coleman</td>
<td>Social capital as obligations, expectations, trustworthy.</td>
<td>Collaboration in school districts: establish a climate for relational trust to grow.</td>
</tr>
<tr>
<td>Fukuyama; Byrk and Schneider; Tschannen-Moran</td>
<td>Social ties and networking influencing stakeholders. Social capital: resource.</td>
<td>Knowing the correct teacher-student leadership behaviors to implement to affect student outcomes.</td>
</tr>
<tr>
<td>Gardner/Rogers</td>
<td>Motivation, confidence, desires, intentions and belief.</td>
<td>Teachers exercising their leadership behaviors to put their students’ needs first.</td>
</tr>
<tr>
<td>Gardner/Rogers</td>
<td>Transparency, walk the talk, listen.</td>
<td>Leadership behaviors: Teacher-student leaders to model, coach, manage their environment, and help to establish their classroom vision and mission.</td>
</tr>
</tbody>
</table>
Thus far, research demonstrated that social capital theory is about building connections between individuals and trust (Putnam, 1973). In contrast to Putnam’s and other’s social capital theory is Bourdieu’s (1997) theory on individualism. Bourdieu’s theory established the concept of symbolic capital whereby an individual makes his or her own decisions without social networking as a team or group. This concept contended that as symbolic capital grows so does relational trust. The dichotomy between these theories leads to the criticisms of the aforementioned social capital behavior theories.

**Criticisms of the theories and relational trust in schools.** Bourdieu’s (1997) theoretical concepts connected economic, cultural and social capital to social class. His theoretical concept of social capital represents symbolic capital amongst the social classes. His theory contended that the greater the symbolic capital the more relational trust grows. He defined symbolic capital as individuals who make conscious choices or decisions about trusting others.

Based upon Bourdieu’s (1977) constructivist concept that people create their own destiny, it is the interaction that either creates or destroys social ties. His theoretical concepts are in contrast to the idea that social capital envelopes trust, respects cultural diversity and opens communication between the social layers of teachers, students, parents, administrators, and community members. He discussed symbolic capital as an individual’s decision to form relationships, to remain open to cultural diversity, to communicate and to trust others.

Bourdieu (1977) implied a belief that decisions to interact or connect with others are made on an individual basis to choose to trust others or to choose not to trust others. In contrast, Putnam’s (1973) social capital theory suggested that trust increases as an end-
product of social networking, rather than as a result of an individual making the choice to trust others or not to trust others. According to Putnam’s theory, this further suggested that when teacher-student social networking levels increase or decrease, the levels of student achievement and learning opportunities also increase or decrease. Bourdieu’s theory intimated that trust and student outcomes increase or decrease as the result of teachers or students making individual decisions to trust one another or not.

Bourdieu (1977) defined capital of recognition as doing what is right for all people. Application of Bourdieu’s theory implied that in order to build trust it is also important for school district personnel to understand its organization as a whole if they are to know what is best for all individuals within the school system. When this occurs, trust can be built. Each individual choosing to bond with another individual may enhance teacher-student relationships and student performance levels may be realized. His theory further implied that without individuals within school cultures making conscious decisions to trust one another, the growth of teacher-student relationships, school improvement and better student outcomes may not be possible.

**School culture and relational trust in schools.** Byrk and Schneider (2004) and Tschannen-Moran (2004) suggested that school constituents embrace cultural values that are grounded by moral imperatives. They also suggested that cultural values consist of a strong work ethic, honesty, integrity, competence, reliability and sense of caring for others. They intimated that trust influences our school community’s relationships, roles, culture, and outcomes. Along with them, Williams and Baber (2007) and Vallas and Crew (2009) also argued that accountability, building confidence in school constituents, listening to your constituents, parent-student-professional collaboration, and role
relations are necessary functions that provide a backbone in school cultures. They also suggested that these interactions between school members build trust and a positive school culture.

Williams and Baber (2007) further stated that trusting cultures create more open communication, collaboration between school members and parents, and better student outcomes. Vallas and Crew (2009) also claimed that school districts need to collaborate, gain their constituent’s confidence, and engage their school communities in the decision making process to enhance trust and student performance levels. They stated that some of the critical challenges facing school districts today include accomplishing goals, engaging with school community members, and gaining trust, respect, and confidence. They further argued that other challenges include creating high expectations, meeting expectations, delivering quality education and striving for high student achievement levels.

The concept of developing trust between principals and teachers was a concept that Dabney (2008) found to be significant in a study conducted to explore the connection of relational trust between principals and teachers and facets of trust as measured by a teacher trust scale. In his study, participants consisted of one principal and 43 teachers in a mid-western, urban high school setting. Dabney explored two research questions:

- What is the level of relational trust between teachers and principal?
- What is the correlation between the levels of trust of the principal and teachers and trust clusters?

Dabney explored clusters of relational trust, which included respect, integrity, school culture and competence. He used self-created questionnaires, interviews and observations
to gather data about the school’s culture and trust. The questionnaire was a five-point Likert Scale with score ranges from agree to strongly agree to measure the facets of relational trust.

With a $p < .05$, Dabney’s (2008) findings showed that relational trust was an important factor when building school relationships amongst all school constituents. The research findings revealed that the trust facets of competence and school culture demonstrated a significant connection between relational trust of leadership and school constituent relationships, behaviors, and student outcomes. The research findings implied that when a principal establishes a positive school culture and belief in himself or herself, it will have an impact on school relationships, behaviors, and student achievement.

Dabney’s (2008) research results also indicated that when relationships form between principals and teachers, it is important for school constituents to share governance of tasks. He stated that the sharing of tasks creates a school culture that will embrace change, reform, student achievement, and shape leadership behaviors. The research findings also implied that school relationships are shaped by the characteristics of relational trust, which include respect, competence, and personal regard. The findings further indicated that relational trust increases when respect, competence, and personal regard increases between teachers and principals. The research findings also suggested that when these facets of relational trust are present, school culture strengthens and student achievement levels improve.

Redburn (2009) explored the facets of relational trust and consensus building through a case study conducted in a Chicago school district. He selected one principal and six staff members from one elementary school and one principal and one district
superintendent from another elementary school. Redburn used a constant comparative method (Glasser & Strauss, 1967) to analyze data from interviews and observations. He examined planning, decision-making efforts, and conflict resolution. From this data, he developed an understanding about how consensus processes foster trust within school cultures.

After analyzing the data, Redburn (2009) identified emerging themes including consensus strategies. Two consensus strategies identified by the participants were collaboration and empowerment. Redburn (2009) further embellished upon collaboration and empowerment as being products of listening to others and being heard by others as noted by the participants. Another theme identified was valuing relationships because people are heard and listened to by others. The final theme identified was facets of trust that include reliability, openness, honesty, competencies, and benevolence. Some of the participants indicated that being validated by colleagues would build trust and consensus between them.

Redburn’s (2009) results indicated that when participants listen to one another and are heard by others, they develop a deeper regard for one another. He stated that when individuals feel heard, they respond with a sense of belonging. He concluded that when these dynamics between people occur, a more trusting culture is promoted.

**Leadership principles and relational trust in schools.** In Montana and Wyoming, Swain’s collective case study (2007) explored the role trust played between teacher union presidents and superintendents and their leadership qualities. He randomly selected over 200 participants in two rural school districts from lists furnished by each district superintendent. The participants from each district included the superintendent,
the union president, classroom teachers, trustees, other administrative staff, parents and community members. The participants engaged in face-face interviews, group interviews, and follow-up interviews with each superintendent. Swain also analyzed primary and secondary sources which included district newsletters, school board meetings, memos to faculty, school improvement plans, teacher/employee handbooks, standard personnel procedures, personnel policies and communication documents sent to parents and community members.

The research explored three areas. The first question explored the working relationship between the union presidents and superintendents. The second question explored the similarities and differences between the two superintendents. The third question explored the school constituents’ perception of the relationship between the union president and superintendent’s leadership roles. The findings concluded that trust plays a significant role in school relationships. The study also concluded that compromise, trustworthiness, communication, collaboration, integrity, and honesty were significant leadership facets in building trusting relationships between school constituents. The research also indicated that the power of trust is a significant variable that exists between school constituent relationships, leadership attributes, and student achievement at the secondary level.

Ogens’ (2008) quantitative study measured the effect trust has on leadership styles and attributes. She examined five facets of trust, which included reliability, competency, benevolence, honesty, and openness. She used a voluntary method for the completion of 502 participant surveys. She used the Omnibus-T Scale (Hoy & Tschannen-Moran, 2003) and the Multifactor Leadership Questionnaire (MLQ) (Bass &
Avolio, 2004) as her measurement tools. The Omnibus-T Scale measured the level of trust as perceived by the participants. The MLQ dimensions measured transformational leadership, transactional leadership, and leadership’s effort, effectiveness and satisfaction (Avolio & Bass, 2004). She used the Omni T-Scale to measure the faculty’s trust in the principal, the faculty’s trust in colleagues and the faculty’s trust in students and parents. The participants included urban principals and teachers from 30 elementary schools, 13 pre-Kindergarten through eighth grade level schools, 11 pre-Kindergarten through fifth grade level schools, two pre-Kindergarten through sixth grade level schools and three middle schools grades 6 through 8 and one middle school grades 7 through 8.

The results yielded a t-scale of 4.5 as compared to the established mean of 4.6 by the Omnibus-T-Scale at p >.05 level. The findings concluded that there is no significant impact made by leadership attributes on the perceived trust of the principals comparing the two means, although, the research findings did conclude that the role trust played between principals and teachers can impact transformational leadership characteristics. The finding implied that principals can motivate their faculty when the faculty trusts them. The concept holds further promise that teachers can motivate students when their students trust them.

Kochanek (2005), along with Byrk and Schneider (2004), conducted a quantitative study about relational trust and leadership abilities that took place during 1997, in the Chicago Public schools. Their study involved 422 elementary schools and included 83% of the principals and 63% of the teachers who responded to a survey. The researchers examined ways to build trust in order to improve student performance. Their study investigated the role relational trust played in terms of building interactions
between principals and teachers and between teachers and parents based upon the five components of trust and improving student achievement levels. Specifically, they considered five trust components of trust and improved student achievement levels. The five components were personal regard, respect, competence, and integrity.

Kochanek (2005) and Byrk and Schneider (2004) used measures from the Rasch Trust Scale (Wright & Masters, 1982). Their findings demonstrated that the complexity and difficulty of questions responded to by teachers, principals, and parents significantly ranged from two standard deviations below the mean. The in-fit or consistency of their responses ranged from one standard deviation above the mean with regards to academic achievement and trust. They concluded that trust correlated to leadership abilities and student performance when integrity, respect, personal, regard and competence were present at a $p < .05$ level. They stated that principals needed to communicate a clear vision, reconfigure the faculty and nurture low risk, and trust exchanges through small group communications. They stated that these interactions would build the capacity and confidence within the faculty as a way to prepare for high risk trust exchanges and a trusting school culture. They concluded that strategies to build trust include putting people at ease, removing barriers to trust, and providing opportunities for people to communicate and interact.

**Role relations and relational trust in schools.** Role relations play a part when people try to establish trust. For example, research found when teachers observe each other’s classes as critical friends, it implies that a high level of relational trust exists (Byrk & Schneider, 2004; Chhuon, Giley, Gonzalez, Daly, & Chrispeels, 2006). Teachers believe they will benefit from one another over the course of their professional
relationship (Byrk & Schneider, 2004). When relational trust builds and becomes a foundation for positive growth, an opportunity is provided for school constituent relationships to flourish and student performance levels to improve (Byrk & Schneider, 2004).

Relational trust between school constituents is composed of integrity. Integrity confirms consistency between what people say and do (Bennett, 1988; Byrk & Schneider, 2004). Application to this concept implies that integrity also highlights moral-ethics based on what people say and do. These behaviors manifest relational trust as a resource for action such as decision-making processes (Byrk & Schneider, 2004). Teachers and students are dependent upon each other, just as principals, parents and teachers are dependent upon each other for decision-making purposes. Sometimes, role relations rely on shared governance, and shared decision-making strategies. Shared governance acts as a platform to develop trust between teachers and students to improve student performance levels (Kochanek, 2005).

Similarly, Durnford’s (2010) qualitative study explored the trust relationship between middle school teachers and students and its impact on teacher methodology, role, and classroom management decisions. Her study examined the level of trust between teachers and students, and her research questions explored how teachers value facets of trust, the degree to which teachers value facets of trust over others, and how teachers’ trust in their students impact teacher behaviors and classroom decisions based upon facets of trust. The facets of trust identified by Durnford were openness, honesty, competence, reliability, and the willingness to be vulnerable. Durnford’s participants
included three teachers and their respective students from a school of 567 seventh and eighth grade students, in a suburban, northeast middle school setting.

Durnford’s (2010) study used a Likert Scale to measure the level of trust between teachers and students. She used Strauss and Corbin’s (1998) constant comparative method to compare the facets of trust demonstrated by the students and teacher roles, methodology and behavior choices. The study revealed that when the students demonstrated the willingness to be vulnerable, open, and competent, teachers adjusted their roles, methodology choices, and behavior choices to meet the needs of their students. Her research findings further implied that when teacher-student trust exists, student achievement levels increased at the secondary level.

A quantitative study by Barry (2008) examined the correlation between the social emotional intelligence of principals and the levels of relational trust of teachers, in urban elementary school districts. His study involved participants from 24 schools in three Virginia divisions. The final sample for his study involved 23 elementary school principals and 230 elementary teachers.

Barry’s research examined teachers’ perceptions of their principals’ emotional intelligence, as well as the relationship between the teachers’ perception of their principals’ emotional intelligence and levels of relational trust. Teachers completed a five point Likert Scale survey named the Teacher-Principal Relational Trust Scale (RTS) developed by Byrk and Schneider (2004). In addition, Barry used the Emotional Social Competence Inventory (ESCI) to measure 12 competencies for four clusters. The social emotional cluster represented empathy and organizational competencies. The self-awareness cluster represented emotional self-awareness competency. The relationship
management cluster represented conflict management, coaching/mentoring, influence, inspirational leadership, and teamwork competencies. The self-management cluster represented achievement, orientation, adaptability, emotional self-control, and positive outlook.

Barry’s statistically significant research findings revealed that a correlation existed between the principals’ emotional intelligence and teacher relational trust at the p < .05. Furthermore, statistically significant findings revealed a correlation between the role relations of the principal and teacher relational trust.

**Accountability, evaluation, and relational trust in schools.** As noted by Ryan (2004), educational accountability and evaluation are at a critical moment in history. She stated that Great Britain has used democratic evaluations for 30 years successfully. She contended that the United States continues with an educational evaluation system that is standards-based and punitive. Additionally, she further explained that democratic evaluations contribute to helping schools create a more democratic institution to explore how evaluators provide support for schools stakeholders’ actions aimed at social change.

Similarly, a case study by Howe and Ashcraft (2005) examined democratic evaluation and the successes and limitations of evaluation choice, in a school district located in Boulder Valley, Colorado. The population of the school district was 27,000 students constituted of 80% Whites, 12% Latinos, and 8% other racial minorities. Since 1961, this district operated with open enrollment as long as space was available.

Prior to the 1994-1995 school year, Howe and Ashcraft (2005) indicated that there were five choice options, and by the end of the 1999-2000 school year, the choice options grew to 21 options. They stated that half of the 16 options offer courses with
academic rigor and college preparation. They further stated that other options included charter schools and focus schools, which were similar to magnet schools. They continued to state that even though these options existed, Middle School parents believed that not enough academic rigor existed within the courses. They concluded that the basis for their study was the disconnection between the realities of the options and the parental perceptions that the courses lacked rigor.

Howe and Ashcraft (2005) selected a population of 700 participants consisting of community members, parents, board of education representatives, and central office administrators. They participated in surveys, focus group discussions and random telephone surveys. The research findings demonstrated that the participants strongly agreed that school choice is an effective means to meet the students’ diverse needs, that transportation limits the opportunities for certain parents and students, and the schools with high academic demands had high student performance levels. Their findings indicated that democratic evaluations involved the entire school community as a means to resolve concerns and issues. This concept further showed that a democratic evaluation of a school system is a collaborative, horizontal approach that fosters trusting relationships, accountability, and increases the opportunity for student success.

A case study by Brooks, Ryan, and Miron (2003) explored the role of democratic evaluators to provide support to school stakeholders aimed at social change. They examined the academic achievement levels of African American students at a suburban high school in Plains, Illinois. Brooks, et al. based their study on a parental campaign to improve student achievement levels. The Urban League worked with teachers and students to develop key areas of concerns. These concerns involved course scheduling
and enrollment, social support systems, and student engagement. The Urban League staff conducted interviews and focus groups. The faculty and students prepared the data analysis.

Brooks et al. (2003) used primary and secondary data to conduct the organizational analysis. They used data from the focus groups conducted by the Urban League, data analysis prepared by the teachers and students, surveys conducted by the Urban League, and the Illinois School Report Card, (ISRC). The ISRC ranged from standards one to four. Students who scored at standards one and two were below state standards. Students who scored at standard three met the state standards and students who scored at standard 4 exceeded state standards. They used a communicative evaluation to explore the types of service supports, availability of those service supports, school climate, social supports, and whether or not English courses were obstacles for students.

The research findings demonstrated that the communicative evaluation offered qualitative data whereas the ISRC offered quantitative data that was collected annually. Their findings indicated that the role of the evaluator changes when the evaluator becomes a co-evaluator. The evaluator role change allowed for collaboration. Their findings implied that when collaboration is high, trust increases as along with accountability and student achievement levels.

Ryan (2004) stated that trust exists when the democratic accountability process is applied in schools. According to Ryan, the democratic accountability concept implies that educators and the school community would become a self-monitoring community and share the responsibility for improvements. Thus, it contradicts the No Child Left Behind Act of 2001 (NCLB) because democratic accountability is not a top-down hierarchical
process. Ryan further contended that most schools in the United States are held accountable by the superintendent and the Board of Education. She stated that under NCLB close to 40% of schools in the United States were designated as needing improvement with limited or no funding available to those schools to make the necessary changes. The democratic accountability concept also implies that the community should self-reflect about the steps to implement programs as well as the necessary fiscal resources needed for program implementation. The concept further implies that teacher trust is necessary between administrators and the public if they are to collaborate and make program implementation possible.

Movement from the No Child Left Behind Act of 2001 (NCLB) to the common core standards has been a governmental attempt to establish an accountability-evaluation system (Sawchuk, 2009). The proposed accountability-evaluation system consists of standards and goals to measure and monitor teacher, student and principal performance (Lewin, 2010; Sawchuk, 2009). In the United States, NCLB standardized performance benchmarks focused on literacy, numeracy, and the natural sciences. NCLB also focused on consequential accountability raising student achievement levels. Furthermore, NCLB was aligned with promotion, oversight of the processes and the creation of a culture of punishing schools and teachers based on standardized testing accountability measures as the prime measure of academic success (Ravitch, 2010).

The NCLB criteria were the cornerstone of educational reform in the United States as well as internationally, with the exception of Finland (Sahlberg, 2007). Today, the United States has moved away from NCLB and has moved toward a set of core standards for math, writing, and reading literacy to be integrated across the curricula.
areas (Lewin, 2010; Sawchuk, 2009). Furthermore, an evaluation system will be publicly released with grades (Salhberg, 2007). However, Romero (2010) argued that the element of encouraging creative solutions while teaching and learning instead of following written standards is the missing link to enhance teacher professionalism and encourage students to take active ownership of their learning through social networking and trust.

According to Ryan (2002), the United States governments’ direction does not provide information about the steps to take or how to improve student outcomes. Instead, she and others argued that, educational programs have been oversimplified, a student’s desire to learn has been diminished, teachers have become more controlling, curriculum has been narrowed down, students have become less likely to perform, and students have lost their competitive edge (Byrk & Schneider, 2004; Ryan, 2004; Sheldon & Biddle, 2000). This type of accountability and evaluation system does not seem to be enough to actually motivate or increase student achievement levels (Sahlberg, 2007). A key element missing from this process includes the moral values and an understanding of social networking driven by trust (Sahlberg, 2007).

In contrast to the United States, Finland has been moving toward educational policies that embrace networking among school constituents in order to work on existing best practices and innovations in their curricula as a means to set learning targets and develop trust (Sahlberg, 2007). Finland’s focus on deep, broad teaching and learning aspects has been shown to enhance the individual’s academic knowledge and skills, moral-ethics, creativity, and trust (Sahlberg, 2007). Additionally, Finland has been moving toward adopting accountability policies by gradually building a culture of trust that values their teachers’ and administrators’ judgment as to what is best for their
students as well as the best way to document student achievement levels (Sahlberg, 2007). As a result, Finnish children have been found to experience 56% less school anxiety as compared to Japan and France, which Sahlberg attributed to Finnish students spending more time learning instead of preparing for tests.

Consistent with the experience of the Finnish students, Sahlberg (2007) and Byrk and Schneider’s (2004) found social networks were bound by the element of trust that helps boost a love for learning and academic success. A high functioning civic society and high social capital is what helps trust, accountability, and academic achievement flourish (Byrk & Schneider, 2004; Putnam, 2000; Sahlberg, 2007).

Like Sahlberg (2007), Fischer’s (2011) qualitative study examined the perceptions of New York State Superintendents on defining and implementing 21st century skills while fulfilling NCLB accountability requirements. Her participants were superintendents from three NCLB accountability designations as noted by the New York State Department of Education. One superintendent represented a district that had one school in need of improvement, the second superintendent represented a district with one school in need of improvement that had been removed from the list, and the third superintendent represented a district that never had any schools on the list for improvement. Fischer’s participants engaged in interviews, and their responses were coded into two categories: those superintendents who have a clear vision to implement 21st century skills and those who acknowledge the need to integrate 21st century skills but are more focused on academic achievement. Her findings concluded that the impact of integrating 21st century skills did not have an effect on those on or off the accountability list. Instead, she
concluded that the participants’ perceptions indicated that integrating 21st century skills is a function of leadership, vision, and planning.

Sawchuk (2009) and Ravitch (2010) stated that President Obama’s accountability structure named *Race to the Top* is a top-down hierarchical accountability structure. They stated that the premise behind this national mandate is teacher-student accountability accomplished by measuring student achievement levels and teacher-principal effectiveness. They clarified that teacher effectiveness is described as teachers increasing their students’ achievement levels by one year or one grade level. They argued that effective teachers must be equitably distributed throughout each state to impact student achievement levels. Sahlberg (2007) stated that professional development opportunities are necessary and must continue to help teachers learn new strategies. In the *Race to the Top* model, student achievement and teacher-principal effectiveness is based on standardized testing instead of social networking and cultural values that embrace trust.

As noted by Sawchuk (2009), educational evaluation structures have continued to be top down processes, which are now evolving into clinical based experiences. He stated that these clinically based experiences resemble communicative evaluation and empowerment evaluation. He argued that this evaluation approach is the government’s way of creating an accountability mechanism to create a shared experience between the teacher-principal and their evaluator(s) in order to discover how to improve student learning. He stated that the new national core standards and teacher-principal evaluation criteria are in place to improve student outcomes. However, he further suggested that this accountability-evaluation approach does not clearly provide the steps needed to ensure student learning, build trust or teacher-student relationships.
Student achievement and relational trust in schools. Haycock (2001) stated that instructional methodologies should be based upon patterns of student achievement and understanding how students learn. She discussed the notion that differentiating instruction and understanding cultural and socio-economic status as it pertains to student outcomes are factors that influence student achievement levels. The concept further implied that teachers should adjust their instructional approach to match the learning styles of students and celebrate cultural diversity with them.

In most United States urban high schools, 50% of under-qualified teachers have been educating greater than 49% of students who fall into the free lunch category (Haycock, 2001). Haycock further contended that closing the achievement gap and heightening achievement levels depends on the belief that all students can learn and must have a challenging curriculum. She further stated that offering extra help to students who are in need and hiring qualified teachers will increase positive student outcomes.

Similar to Haycock (2001), Goddard, Hoy, and Hoy (2000) quantitatively researched collective teacher efficacy and its impact on student achievement. They examined what it takes for a teacher to be successful as well as competent. The researchers referred to these areas as the teaching task and the teaching competence. The convenience sample for their pilot study involved 70 teachers, one from each of the 70 schools in five states selected to complete a Collective Teacher Efficacy survey. One half of the sample participants came from elementary schools where high conflict existed among the faculty members, and the other half of the sample participants came from elementary schools where low conflict existed among the faculty members. They received 46 usable surveys representing 66% of the schools samples. From the 46
schools, 24 were low-conflict and 22 were high conflict. The results of the surveys indicated a statistically significant correlation between teacher efficacy and teacher perceptions of competence. They followed up the study by exploring the correlation of faculty trust in colleagues and collective efficacy in a large urban school district. They investigated the correlation between collective efficacy and student achievement.

Goddard et al.’s (2000) population for the urban study involved 47 elementary schools in one urban school district. They randomly selected 452 teachers to complete the survey. The results of their surveys indicated a significant correlation between trust and teacher efficacy. This implied that teachers trust each other when they demonstrate competency. A final sample of 7,016 elementary students were administered the Metropolitan Achievement test for mathematics and reading in grades 2, 3 and 5. They concluded that there is a significant correlation between teacher efficacy and student achievement at the p>.05 level. The examination of each variable implied that when teacher competency is high, relational trust is high, and student performance levels increase, especially at the secondary level.

Like Goddard et al. (2000), Romero’s (2010) quantitative study involved high school students. In this study, Romero set forth four hypotheses. One of the hypotheses stated that trust had a significant measurable effect on high school outcomes. She defined trust as being multi-faceted with competence, trust, and benevolence as trust facets. The trust facets guided the design of her study.

Romero’s (2010) research questions explored the definition of trust and how trust facets impacted student relationships with their teachers and student outcomes. She used the Educational Longitudinal Study (2002), which is a nationally representative sample
that yielded longitudinal data and multiple outcomes over a span of four years. The participants were from a national stratified sample of 752 participating high schools, and a sample of 24 students at the tenth grade level were selected from those 752 schools.

Romero (2010) employed structural equation modeling (SEM) to yield the multivariate analysis results for the facets of trust. Her findings demonstrated more than 80% variance in benevolence and almost 60% variance in integrity and competence. These statistical results demonstrated that benevolence, integrity and competence were significant factors for students to demonstrate trust towards their teachers. When she measured student outcomes, the results yielded a significant correlation between graduation status and grade point average (GPA) in twelfth grade with a chi-square of 87.90. Her findings demonstrated that students with high trust levels tend to have positive student outcomes at the secondary level.

Like Romero (2010), Mitchell (2004) examined the effects of internal and external trust on student identification and student performance. She defined internal trust as the faculty’s willingness to risk vulnerability based on the confidence that the other school constituents, students, and parents would be open, reliable, competent, and benevolent. She defined external trust as the parents’ willingness to be open, reliable, competent, and benevolent. She viewed trust a resource for increasing student achievement levels. Her participants included 67 randomly selected school districts and included the principal, 10 teachers, 15 randomly selected students in grades 5, 7, and 11, and 15 randomly selected parents.

Mitchell (2004) administered the Trust Scales by Hoy and Tschannen-Moran (1999) to the teachers, the Parental Trust of School Scales (Forsyth, Adams, & Barnes,
to the parents, and the Student Trust of Principal Scale (Forsyth, Adams, & Barnes, 2002) to the students. Other data included the Academic Performance Scale (API) for the 2001-2002 school year to assess the school’s performance. The findings indicated a significant correlation at the p < .05 level between parental trust of the school and academic performance of fifth, seventh and eleventh grade students, parental trust of the principal and academic performance of the fifth, seventh and eleventh grade students, and student trust of the principal and the student academic performance levels at the seventh and eleventh grade levels. The findings indicated that when levels of trust increase, the levels of academic performance also increase.

Similar to Mitchell (2004), Lee (2007) studied the correlation between trust and student achievement. She selected 318 seventh grade students in a middle school. There were 170 male students and 148 female students who participated. Most students came from middle-class families with aspirations and educational values who supported attendance at prestigious Korean colleges and universities after high school graduation.

The short version of the Student’s Trust in Teachers Scale (Lee & Han, 2004) was administered to the students during class time. This scale was a Likert scale that ranged from one, (strongly disagree), to five, (strongly agree). Lee’s (2007) results indicated statistically significant findings that correlated to high trust student-teacher relationships and improved student performance at the p < .05 level when the factors of school adjustment and motivation were present. The total school adjustment score was at a standard deviation of 12.05 and the total motivation score measured at a standard deviation of 8.44. Her study showed that trust can affect student success when adjustment and motivation behaviors are present.
Like Lee (2007), Hoy, Tarter, and Hoy’s (2006) quantitative study examined the correlation between relational trust of academic optimism of schools and elementary student achievement in a mid-western state and school district. They described academic optimism using three dimensions: collective efficacy, academic excellence, and faculty trust in parents and students. They described academic optimism as a cognitive characteristic equated to goals based on knowledge and thinking. They stated that academic optimism has both cognitive and affective dimensions. They further stated that collective efficacy is a group belief and is a cognitive function. Furthermore, they viewed faculty trust as an affective dimension similar to collective efficacy. Therefore, they suggested that collective efficacy reinforces and enhances trust.

Hoy et al. (2006) had two hypotheses. The first hypothesis explored the collective properties of academic emphasis, collective efficacy, and trust as the composite elements of academic optimism. The second hypotheses explored the relationship between academic optimism and achievement. The population sample involved 96 rural, urban and suburban schools and 10 to 40 teachers from each school.

Hoy et al. (2006) surveyed the staff by using a subscale of the Organizational Health Inventory to measure academic optimism. The measure is composed of eight Likert scale items. Their results indicated statistically significant findings that found intra-class variance correlation among the three elements and that academic optimism was composed of those three elements. This concept implied that between-school variance suggests academic optimism as an important school property. To ensure statistical validity, they used statistical software, LISREL 8.5 (Joreskog & Sorborn, 1993) and applied it to their theory on academic optimism and academic achievement. The first
test explored student achievement in mathematics and science. The second test examined student achievement in reading, social studies, and writing. The research results indicated significant findings at the $p < .05$ level that academic optimism is directly related to academic achievement. The findings indicated that when parents and students trust teachers, a higher level of support exists between them. The findings also indicated that when trust exists between teachers and students, student achievement levels increase, students value their own education, and teachers take instructional risks without fear of retribution. The findings further implied that collective efficacy allows teachers to be more effective to meet their students’ needs.

**Chapter Summary**

This chapter discussed the topic of relational trust. The historical background, a social behavior theory, and several studies about trust were explored. School culture, role relations, accountability and evaluation, and student achievement and relational trust in schools were also reviewed.

Some researchers have looked at trust from the adults’ perspective and its impact on student performance levels at the secondary and elementary levels. Very few researchers have looked at trust and its impact on student performance levels from the teacher-student perspective, especially at the elementary level. Given the gap in the research, the purpose of the proposed study is to investigate the correlation between the level of relational trust of teachers and students as measured by a Student Trust Survey in grades 3, 4, 5 and 6, in a suburban school district and the student performance levels on the spring NYS ELA examination.
Chapter 3: Research Design Methodology

Introduction

The goal of the research described in this dissertation was to study the relationship between the levels of student-teacher trust, as perceived by the students, and student performance levels on the 2012 NYS ELA examination. The study’s results were intended to inform efforts to close the achievement gap in schools.

The achievement gap has been a major issue facing educators in the United States (Pew Research Center for People and the Press, 2010; Romero, 2010). Although educators have spent time reviewing data to inform instructional practices and improve student performance, student performance levels have continued to decline. Byrk and Schneider (2004) and Tschannen-Moran (2004) stated that trust is connected to student performance. They also argued that trust must be established early between students and teachers to impact student outcomes. Durnford (2010), Dabney (2008), Haycock (2001), and Romero (2010) stated that research about trust reflected the value of trust between teachers and students as perceived by the adults in schools. They concluded that two essential elements relative to student performance were missing, which are relational trust and the students’ perspective. These researchers further suggested that these missing elements demonstrate a gap in the literature.

Therefore, the problem is that there has not been enough research on relational trust and teacher and student relationships as perceived by the students. The study described in this dissertation researched the levels of relational trust between students and
teachers in grades 3, 4, 5 and 6, from the students’ perspective and the student performance levels on a standardized state examination.

The purpose was to study the trust relationship between students and teachers, and student achievement, as perceived by the students. The study focused on the correlation between the levels of relational trust of teachers and students, as perceived by the students, in grades 3, 4, 5, and 6 and student performance levels on the 2012 NYS ELA examination. The quantitative study tested the hypothesis to determine whether or not there was a significant, positive correlation.

The hypothesis stated a significant, positive correlation between the level of relational trust of teachers and students as measured by a Student Trust Scale, in grades 3, 4, 5 and 6 and the student performance levels on the spring 2012 New York State (NYS) English Language Arts exam (ELA). The questions answered by this study are as follows:

1. In grades 3, 4, 5 and 6, what is the level of relational trust between the teachers and students as perceived by the students?
2. What are the student performance levels on the 2012 NYS ELA examination?
3. Is there a significant, positive correlation between the levels of relational trust between teachers and students as perceived by the students and the student performance levels on the spring, 2012 NYS ELA examination?
4. Is there a significant, positive relationship between the levels of relational trust of teachers and students and teacher and student gender?

Cottrell and McKenzie (2011) described correlational research as non-experimental research that investigates relationships between variables. For example, a
correlation may demonstrate a positive relationship that exists between the independent
variable of student trust and the dependent variable of student performance levels.
Correlational research data may be measured by using Pearson’s Correlation Coefficient
to statistically demonstrate the relationship between variables. The dissertation study
examined the relationship between the levels of relational trust of teachers and students,
in grades 3, 4, 5, and 6 and the student performance levels on the Spring 2012 New York
State (NYS) English Language Arts examination (ELA).

Creswell (2007) viewed quantitative research as a method to test theories to offer
an understanding about the research question responses. He stated that quantitative
research questions look at the relationships between variables. He established that
quantitative hypotheses reflect the researcher’s predictions regarding the expected
relationships between variables. He further clarified that quantitative research uses
numerical data collected from sample populations, which assists the researcher in
drawing inferences from the study’s sample.

Quantitative research was the methodology used for the study. The directional
hypothesis for the research studied a significant, positive correlation between the level of
relational trust of teachers and students in grades 3, 4, 5 and 6, as measured by a Student
Trust Scale, and the student performance levels on the Spring 2012 New York State
(NYS) English Language Arts examination (ELA). The independent variable was the
level of relational trust of teachers and students, in grades three through six. The
dependent variable was the student performance level on the 2012 NYS ELA
examination. The study’s results determined whether or not a significant, positive
correlation existed between the levels of relational trust of teachers and students, as
perceived by the students and the student performance levels on the NYS ELA examination.

Archival data from the New York State School Report Card showing student performance levels was collected from the school district. A student survey measured levels of relational trust. Pearson’s Correlation Coefficient instrument was used to measure the correlation between the levels of trust and student performance levels.

In this chapter, six components explain the study’s methodology. These components include the research context, research participants, data collection instruments, data analysis, research methodology plan and a chapter summary.

**Research Context**

The study was conducted in a suburban school district in the foothills of the Berkshires and the mountains bordering Connecticut. The school district was located north of New York City. On November 7, 2011, the superintendent of schools gave written permission to conduct the study at this site (Appendix A). To maintain confidentiality, the school district was referred to by the fictitious name of Madison. The elementary school, grades 3 to 4 was referred to as Taft, and the middle school, grades 5 to 6 was referred to as Adams. Madison existed within a village and town. The total population was approximately 3,500 residents. Madison School District contained an elementary school, middle school and high school. The total student population was 1,396. There were 135 teachers, 51 non-teaching staff and 14 administrators. Madison’s 2011 New York State Report Card displayed 2011 enrollment figures and the percentage of students scoring above Level 3 on the 2010 New York State English Language Arts examination (Appendix B).
Madison School District was founded by the Quakers in 1788. Madison’s cultural influence came from prominent citizens who resided in the town. The town’s citizens were well-known religious leaders, historians, artists, educators, United States presidents, generals, captains and authors. Presently, Madison’s cultural influence has continued to come from prominent authors, actors, religious leaders, historians and artists.

Until the early 1950s, the present elementary school housed all of Madison’s school district teachers, administrators, non-teaching employees and students. During the 1960s, Madison built a high school, which housed students in grades 7 through 12. During the early 1970s, the district built a middle school. Presently, Madison’s elementary school houses students in kindergarten through grade 4, the middle school students in grades 5 through 8 and the high school students in grades 9 through 12.

The school district offered a variety of courses for kindergarten through 12th grade including college-bound courses in grades 9 through 12. The districts’ teaching and non-teaching staff serviced general education students, students with disabilities, and students with English language learning needs. The majority of students with special needs were educated within the district. These students’ needs were met predominantly in general education programs, and some students’ needs were met in self-contained programs. A few students with special needs were educated in state approved day and residential programs. The high school also housed a Board of Cooperative Educational Services (BOCES) special education program. The BOCES program included students from Madison as well as surrounding school districts.

The district viewed itself as being a small district with diverse opportunities. The district fostered well-rounded students by engaging them in challenging learning
opportunities. The district provided staff with many professional development opportunities. The district’s focus was to improve communication. There were a total of 12 district and building committees to encourage communication. The committees included teachers, administrators, board of education members and community members.

During the early 2000s, the district administered electronic surveys to parents of students who were in kindergarten through twelfth grade. The climate survey yielded statistical results that acknowledged parental concerns. Some of the parental concerns suggested that the building and central office personnel did not present a welcoming and open atmosphere, academic classes needed to be more challenging, administrators needed to demonstrate transparency, and students needed to feel a sense of belonging. Due to the survey’s results, Madison developed Board of Education and district level goals with action plans to improve administrative transparency, academic rigor, district climate, and school-wide communication. To date, these four areas continued to be reflected within the district’s goals.

**Research Participants**

The study’s sample population was 400 students. The population was composed of student participants from Taft Elementary School, grades 3 and 4 and from Adams Middle School, grades 5 and 6. Table 3.1 shows the distribution of the student and teacher population across the schools and grades.
Table 3.1

*Teacher and Student Population*

<table>
<thead>
<tr>
<th>School</th>
<th>Grade Level</th>
<th>Number of Teachers</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taft Elementary</td>
<td>3</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Taft Elementary</td>
<td>4</td>
<td>6</td>
<td>99</td>
</tr>
<tr>
<td>Adams Middle School</td>
<td>5</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>Adams Middle School</td>
<td>6</td>
<td>6</td>
<td>101</td>
</tr>
</tbody>
</table>

The participants were obtained using a non-randomized method known as convenience sampling. Convenience sampling reduced the likelihood of bias and increased the level of inter-relater validity and reliability (Fink, 1995; Vogt, 2005). Ten parents declined having their children complete the survey, two students declined at the time of the survey administration, and 12 students were absent. Due to one student absence, the total sample population completing the survey and the Spring 2012 New York State English Language Arts examination was 376 participants representing third, fourth, fifth, and sixth grade students. The total sample population completing the survey was 378 participants representing third, fourth, fifth, and sixth grade students. The student participants were in classrooms with one teacher or teams with multiple teachers. In either situation, the student participants referred to their English Language Art teacher when responding to the survey. Due to the present controversial educational climate concerning accountability and evaluations, other districts opted not to participate in the study.
Before the survey was administered, an informational letter was sent to the students’ parents (Appendix C). Parents had the right to opt out by contacting their child’s principal. Other informational letters were sent as a matter of professional courtesy (Appendix D). The researcher used two graduate assistants from a local university who were trained to administer the survey to the students (Appendix E). These people were trained early March 2012 prior to administering the surveys in mid-March 2012.

Confidentiality was maintained and promised to the students and to the parents. In addition, confidentiality was also integrated into a well-developed strategic safeguard plan with procedures. The safeguard plan and procedures included a numerical coding system. Numerical codes represented each student, letter codes represented each grade level, and the state standardized exam results were assigned and maintained by the district. The district numerical codes were assigned to the surveys, as well as to individual three by five index cards.

The coded three by five index cards for each student were hand-delivered to each teacher the morning prior to the administration of the survey. On the day the survey was administered and prior to the survey administration time, the teachers placed the index card that belonged to each student on top of his or her desk. When the survey administrator entered each classroom to administer the surveys, the teachers left the room and the survey administrator gave the students the survey that matched the index card code that had been placed on their desks. Upon completion of the surveys, the survey administrator collected the surveys, placed them into sealed envelopes, and signed her name over the flap of each envelope.
During the summer of 2012, the district used the lists to code scaled scores from the 2012 New York State English (NYS) Language Arts examination (ELA). Upon receipt of the coded 2012 NYS ELA results from the school district, a new list with codes for the survey and for the 2012 NYS ELA results was created to provide a second level of confidentiality. The coded list reported survey and NYS ELA results by listing trust values, scaled scores, correlation co-efficient values, t-values, and confidence interval values alongside each student code and grade level code. Table 3.2 demonstrates the steps to maintain student confidentiality.

The raw data will remain in a locked cabinet at the researcher’s home for a minimum period of three years and throughout the completion of the dissertation process.

Data Collection Instruments

The study used two pieces of data that was collected using a Student Trust Scale (STS) and the 2012 New York State English Language Arts examination results. The Omnibus-Trust Scale was modified to match the students’ readability levels on the STS.

Student trust scale. There were a limited number of relational trust survey instruments designed distinctly for children grades three through six. The Omnibus-Trust Scale measures levels of trust and has been used predominantly at the secondary level (Adams, Forsyth & Hoy, 2004; Byrk & Schneider, 2004; NCES, 2011). The Omnibus-Trust Scale for students was originally created by Adams, Forsyth, and Hoy (2004). In order to verify content validity, Adams, et al. used a panel of professional educators to review the alignment of the Omnibus Trust Scale survey items to the facets of trust of reliability, competence, integrity, and benevolence. A pilot study was implemented to establish reliability and validity of the Omnibus Trust Scale survey’s measures. The study
involved 50 teachers and 50 schools nation-wide from five states. The results from the Omnibus-Trust Scale survey were measured against the Sense of Efficacy Scale and the Self-Efficacy Scale measurements to further establish validity and reliability (Forsyth & Hoy, 1978). The results demonstrated a significance level at the p < .01 level. The reliability and validity of the Omnibus Trust Scale is .90 as measured by Cronbach’s Alpha Co-efficient (Cronbach, 1951). This measure suggested a strong internal consistency among the items for the Omnibus-Trust Scale for students and supported concurrent and predictive validity procedures. All items were scored using a Likert Scale of 1 to 4 and 4 serving as the highest score. Question 10 on the Omnibus-Trust Scale was scored in reverse with 1 equaling the highest score: 4 = 1, 3 = 2, 2 = 3 and 1 = 4. The sum of the scores equals a trust value. As the sum of the values increased, the trust levels between teachers and students also increased. The Student Trust Survey also provided descriptive statistics identifying each teacher and student participants’ gender.

**Fry’s readability graph.** On September 2, 2011, Hoy gave written permission (Appendix F) to use his trust scales in the study with the understanding that the trust scale items would be modified and include adjustment for the readability levels of the third, fourth, fifth and sixth grade level students. A modified version of the Omnibus Trust Scale for students was administered to students in grades 3 through 6 in March 2011. Upon receiving approval from Hoy to use the Omnibus-Trust Scales survey, an expert reading specialist used Frye’s Readability Graph to adjust the survey from a 6.0 grade level to a 4.0 grade level.
Table 3.2

Steps to Maintain Student Confidentiality

<table>
<thead>
<tr>
<th>Step</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>All students in grades 3, 4, 5, and 6 were assigned a three digit number by the school district. Only the school district knew the student name and the three digit number for each student.</td>
</tr>
<tr>
<td>2.</td>
<td>Teachers wrote each student’s three digit number on a 3 by 5 index card and placed that card on the student’s desk just prior to the administration of the survey.</td>
</tr>
<tr>
<td>3.</td>
<td>The person administering the student survey did not see any student names and wrote the student’s three digit number on the survey that they gave to the student. When the survey was completed, the person who administered the survey gave the numbered surveys to the researcher for analysis.</td>
</tr>
<tr>
<td>4.</td>
<td>When the district obtained the results from the state examination, they sent those results to the researcher using the three digit numbers. The researcher used only the assigned three digit numbers in completing the analysis.</td>
</tr>
<tr>
<td>5.</td>
<td>The three digit numbers were coded by the researcher. These codes were used in the display of data in the dissertation.</td>
</tr>
</tbody>
</table>

Fry’s Readability Graph examines the number of syllables and the average number of sentences per 100 words. These numbers are plotted onto a graph to determine the readability by grade level. The validity of Fry’s Readability Graph was based upon the instrument’s scores and other assessment scores from other instruments such as Flesch (1948) and Dale and Chall (1949). The Fry Readability Graph has a reliability
factor coefficient of .83. To test for content validity, the modified survey was shared with
an expert panel of nine people who included educators, administrators and parents for
feedback on the survey. The adapted survey was piloted with approximately thirty
students in grades 3, 4, 5 and 6 in a private school in New York State to test for
reliability. A copy of the adapted Omnibus-Trust Scale for students is available in
(Appendix G).

**New York State English Language Arts examination (NYS ELA).** The NYS
ELA examination is a state standardized examination. According to the New York State
Department of Education (2011) validity and reliability of the NYS ELA is measured
annually. The NYS ELA examination’s inter-rater validity was measured by using
diverse panels of educators from various levels and ethnic backgrounds to review the
multiple-choice and construct response questions to measure content validity. The
Cronbach Alpha (Cronbach, 1951) and Feldt Raju (Qualls, 1995) statistical software
applications have been used to measure the NYS ELA reliability factors (New York State
Education Department, 2011). The Cronbach Alpha measures reliability for the multiple
choice items and the reliability values range from .85 to .89. The Feldt Raju measures
reliability for the construct response questions and the reliability values range from .83 to
.88. The NYS ELA was administered to the third, fourth, fifth and sixth grade students on
May 15, 2012 as part of the New York State testing program.

The results from the 2012 NYS ELA was analyzed by the New York State
Education Department during the summer of 2012. The ELA levels are state performance
benchmarks that range from one to four. Levels one and two represent students who are
not meeting the state performance standards. Levels three and four represent students
who are meeting or exceeding state student performance standards. The scale score and benchmark ranges change yearly on these state examinations. The study recorded the scaled scores for individual students. District codes were used rather than student names.

Data Analysis

Cottrell and McKenzie (2011) described correlation research as non-experimental research because it examines the correlation between relationships but does not manipulate any of the variables. For example, the study described in this dissertation examined the levels of relational trust of students in grades 3, 4, 5 and 6 from the students’ perception, as correlated with student performance levels on the 2012 NYS ELA examination and gender. Cottrell and McKenzie further stated that this type of research does not examine cause and effect. As such, if relational trust is high or low the level of trust may not cause performance levels to be high or low. For the purposes of the dissertation, a correlation may demonstrate that a relationship exists between the variables of student trust values, gender and performance levels. Correlation research data may be measured by using Pearson’s Correlation Coefficient instrument.

The analysis for the study was conducted by using the Student Trust Scale values, the NYS ELA scale scores and Pearson’s Correlation Coefficient. Pearson’s Correlation Coefficient statistical application was used to determine if a significant correlation existed between the trust values and the student performance levels. Data from these instruments was used to produce descriptive statistics summarizing data regards to the variables measured in the study (Cottrell & Mc Kenzie, 2011). For example, the Student Trust Scale survey measured the levels of relational trust between teachers and students. The survey described the level of relational trust that existed between them as perceived
by the students. The NYS ELA examination described student performance levels using
scaled scores. The relational trust levels as measured by the Student Trust Scale, gender
and the scaled score on the NYS ELA examination was compared using the Pearson
Correlation Co-efficient value, Scatter Plots, Line Graph, t-Test, and the Confidence
Interval (CI) value to establish significance.

**Pearson correlation co-efficient.** Vogt (2005) defined Pearson’s correlation
coefficient as a linear relationship between two variables, which is measured by intervals
or ratios and symbolized with an r. He stated that Pearson’s correlation coefficients
values and regression line are discussed together because the correlation coefficient
values include a regression line and a scatter gram. Correlation is the degree to which the
points come close to the regression line. If all points were perfect, all points would be on
the line (-1.0 or 1.0) indicating a perfect relationship between variables. Regression also
demonstrates the point at which the regression line intercepts or crosses the y axis
(dependent variable) when the value on the x axis (independent variable) is zero. For
example, the regression line would show a value for the students’ performance levels
when the trust levels are at zero which would be the point of intercept. This would
demonstrate a regression coefficient or slope. The closer the trust values are to the
regression line or 1.0 or -1.0, the stronger or weaker the correlation would be between
student trust and those students’ performance levels. Pearson’s Correlation Co-efficient is
used to measure statistical data in order to show relationships, which supports a
quantitative research approach (Creswell, 2007; Pearson, 1900; Vogt, 2005).

The sign of the correlation (+, -) demonstrates the direction of a relationship
between variables, either positive or negative. The closer the correlation value (r) is to 1.0
and -1.0 the closer the relationship between the variables. If the correlation is zero then no relationship exists between the variables. When the correlation is negative, the value of one variable decreases and the value of the other variable increases. The opposite is also true. If a positive correlation is indicated, the value of both variables will increase. If 0 is demonstrated, then there is no statistical relationship between the variables. For example, a correlation of .50 is stronger than a correlation of .40. Points of correlation are plotted on scattergrams.

**Scatter-plots.** Scatter-plots illustrate how the correlation-co-efficient (r) values change as the linear relationships between two variables is altered. If r = 0, then the points scatter widely resembling a circle. If r = +1.00 or -1.00, then the shape becomes more elliptical until it reaches +1.0 or -1.0 and all points fall onto a straight line. This was evident with the 2012 New York State English Language Arts scale scores for one of the four grade levels.

**Line Graph.** Line graphs use points connected together to show how a variable changes in value. This was demonstrated by using the 2012 New York State English Language Arts scale scores for the four grade levels.

**t-test.** A t-test is available to evaluate the significance of differences between two correlation coefficients in two samples. For example, a difference of .10 between two correlations may not be significant if the two coefficients are .25 and .35, although in the same sample, the same difference of .10 can be highly significant if the two coefficients are .85 and .95. A two tailed test is used when the hypothesis is non-directional. However, in the case of a directional hypothesis, a one tailed test is used to determine significance. The t-test reports a p-level representing the probability of error that will
either accept or reject a hypothesis. It is the p-level that determines significance at a .01 or .05 (99 or 95) confidence level.

Research question four examined the relationship between the level of trust and gender variables. The question was as follows: Is there a significant, positive correlation between the levels of relational trust of teachers and students and teacher and student gender? This question referred to the relationship between the levels of relational trust and gender. Using the t-test, the data determined whether or not a correlation existed between the levels of relational trust between teachers and students and teacher and student gender.

**Confidence interval (CI).** The confidence interval was used to determine significance. It is the p-level that determines significance at a .01 or .05 (99 or 95) confidence level. The study set the significance level at p < .05 for the directional hypothesis. The statistical analysis of the quantitative study specifically identified the correlation values and the significance levels between the level of relational trust between teachers and students as perceived by the students, grades 3 through 6, (independent variable, IV) and student performance levels on the New York State English (NYS) Language Arts (ELA) examination (dependent variable, DV). There are three research questions that were answered to affirm or deny the hypothesis. The questions were as follows:

1. In grades 3, 4, 5 and 6, what is the level of relational trust between the teachers and students as perceived by the students?

2. What are the student performance levels on the 2012 NYS ELA examination?
3. Is there a significant, positive correlation between the levels of relational trust between teachers and students as perceived by the students and the student performance levels on the spring, 2012 NYS ELA examination?

The first research question referred to the level of relational trust. Relational trust was measured by the STS survey for each participating student, grades 3, 4, 5 and 6. The second research question referred to the student performance levels. The level of student performance assessed on the NYS ELA examination yielded scale scores for each participating student. Each student and teacher were listed and coded with a score for relational trust along with a NYS ELA scale score. Using Pearson’s Correlation Coefficient, the third research question explored the correlation between the levels of trust between teachers and students and the student performance levels to determine if a significant positive correlation defined as an r value of 1.0 or an r value of -1.0 existed between them. The Confidence Interval demonstrated a significance level set at p<.05 for the study’s hypothesis.

**Chapter Summary**

This chapter described the quantitative methodology used to determine the correlation between the levels of relational trust between teachers and students using a STS survey and the students’ performance levels on the spring 2012 NYS ELA examination. Five components were explored that further explained the study’s methodology. The five components included research design, research context, research participants, data collection instruments and data analysis. The next chapter describes the findings that resulted from this methodology.
Chapter 4: Results

Introduction

The study focused on student and teacher trust levels from the students’ perceptions and student performance levels. The purpose of the study was to explore whether a correlation existed between the levels of relational trust of teachers and students, as perceived by the students, in grades 3, 4, 5, and 6 and student performance levels on the 2012 New York State English Language Arts examination.

The hypothesis stated that there is a significant, positive correlation between the level of relational trust of teachers and students as measured by a Student Trust Scale, in grades 3, 4, 5 and 6, and the student performance levels on the spring 2012 New York State (NYS) English Language Arts exam (ELA). The research questions were as follows:

1. In grades 3, 4, 5 and 6, what is the level of relational trust between the teachers and students as perceived by the students?
2. What are the student performance levels on the 2012 NYS ELA examination?
3. Is there a significant, positive correlation between the levels of relational trust between teachers and students as perceived by the students and the student performance levels on the spring, 2012 NYS ELA examination?
4. Is there a significant, positive relationship between the levels of relational trust of teachers and students and teacher and student gender?
This chapter presents the study’s results based on a statistical analysis of the
Student Trust Survey (STS) responses and the student performance levels on the 2012
New York State English Language Arts examination. When discussing the results, each
grade level will be referred to as grade levels, xp, xx, xs, and xw. The study’s results
were based on a p < .05 level, which means that the probability that the study’s results
were due to chance or random error is less than five out of one hundred. The results were
called statistically significant, and the events, relational trust and student performance
were considered correlated. Therefore, there was a 95 % or greater confidence level
required for the hypothesis to be accepted; the results to be statistically significant and the
variables to be considered correlated.

The first section of this chapter discusses the results and analysis of the Student
Trust Survey. The second section presents the 2012 New York State English Language
Arts examination scale score results and analysis. The scale scores represent the student
performance levels on the New York State English Language Arts examination. The third
section describes the statistical results based on a correlation analysis between the student
responses on the Student Trust Survey and the student performance levels on the 2012
New York State English Language Arts examination. The fourth section examines gender
and trust. This section describes the statistical results based on a correlation analysis
between the responses on the Student Trust Survey, and student and teacher gender. The
final section presents a summary of the study’s results.

**Trust Value**

Research question one referred to the level of relational trust. Relational trust was
measured by the Student Trust Survey (STS) for each participating student, grades 3, 4, 5,
and 6. The STS part A was composed of 20 questions worth a total of 80 points, which represented the highest trust value. The STS part B also had two questions about student and teacher gender. The overall mean trust value was 67.84 (SD = 11.36, N = 378). This measure was examined for two different groupings of the student participants. Table 4.1 and Figure 4.1 present the distributions of the data and describe the statistics for trust value.

Table 4.1 shows the t-test group statistical trust values for 376 student participants. The female participants had a mean trust value of 68.77 (SD = 10.079, N = 175, SEM = .762). The male participants had a mean trust value of 67.23 (SD = 12.035, N = 201, SEM = .849). The standard deviation and standard error means demonstrate how far or close the female and male trust values were from the overall mean trust value. The female and male mean trust values were close to the overall mean trust value, as indicated by the standard deviations and standard error means. Therefore, the female and male gender mean value results did not vary much from the overall mean trust value for all student participants. The results indicated a higher trust level for female and male students. Furthermore, the statistical results also implied that the female students had a slightly higher trust level than the male students.

Table 4.1

<table>
<thead>
<tr>
<th>Student Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>175</td>
<td>68.77</td>
<td>10.079</td>
<td>.762</td>
</tr>
<tr>
<td>M</td>
<td>201</td>
<td>67.23</td>
<td>12.035</td>
<td>.849</td>
</tr>
</tbody>
</table>
Table 4.2 shows the scores from the Student Trust Survey. Next to each score are the number of student responses or frequency and the percentage of student responses. The trust levels ranged from 25 to 80. Scores indicating a low trust value ranged from 25 to 43. Scores indicating a medium trust value ranged from 44 to 62. Scores indicating a high trust value ranged from 63 to 80. The results implied that some of the medium and high trust values were comparatively close to the overall mean trust values of 68, which also indicated a high trust level.

Figure 4.1 is a histogram displaying the data in Table 4.2. The figure shows that the trust levels clustered at the high end trust value level. The data further shows that there were few outliers at the low and at the lower end of medium trust value levels, as compared to the overall mean trust value of 67.84.

**New York State Scale Scores (SS)**

The second research question referred to the student performance levels. The level of student performance assessed on the NYS ELA examination resulted in scale scores for each participating student.

Table 4.3 presents the English Language Arts scale score mean values for grade levels xx and xp. The scale score mean values represent the student performance levels on the 2012 English Language Arts examination. The overall scale score mean value for the 376 student participants was 673.91. The scale score mean value for grade xx was 672.13. The scale score mean value for grade xp was 682.30. The scale score mean values for both grade levels were close to the overall mean of 673.91 for all student participants. The scale score mean for grade xp was higher than the scale score mean for
grade xx. Therefore, the results implied that the student performance levels were slightly higher for grade level xp than for grade level xx.

Table 4.2

*Trust Values with Frequency and Percent of Student Participants*

<table>
<thead>
<tr>
<th>Trust Value</th>
<th>Frequency</th>
<th>Percent</th>
<th>Trust Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>1</td>
<td>.3</td>
<td>57</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>.3</td>
<td>58</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>28</td>
<td>1</td>
<td>.3</td>
<td>59</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>31</td>
<td>1</td>
<td>.3</td>
<td>60</td>
<td>2</td>
<td>.5</td>
</tr>
<tr>
<td>32</td>
<td>1</td>
<td>.3</td>
<td>61</td>
<td>9</td>
<td>2.4</td>
</tr>
<tr>
<td>33</td>
<td>1</td>
<td>.3</td>
<td>62</td>
<td>11</td>
<td>2.9</td>
</tr>
<tr>
<td>34</td>
<td>1</td>
<td>.3</td>
<td>63</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>35</td>
<td>1</td>
<td>.3</td>
<td>64</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>37</td>
<td>1</td>
<td>.3</td>
<td>65</td>
<td>7</td>
<td>1.9</td>
</tr>
<tr>
<td>38</td>
<td>1</td>
<td>.3</td>
<td>66</td>
<td>8</td>
<td>2.1</td>
</tr>
<tr>
<td>39</td>
<td>2</td>
<td>.5</td>
<td>67</td>
<td>15</td>
<td>4.0</td>
</tr>
<tr>
<td>40</td>
<td>3</td>
<td>.8</td>
<td>68</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>42</td>
<td>1</td>
<td>.3</td>
<td>69</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td>43</td>
<td>4</td>
<td>1.1</td>
<td>70</td>
<td>21</td>
<td>5.6</td>
</tr>
<tr>
<td>44</td>
<td>5</td>
<td>1.3</td>
<td>71</td>
<td>16</td>
<td>4.2</td>
</tr>
<tr>
<td>46</td>
<td>3</td>
<td>.8</td>
<td>72</td>
<td>23</td>
<td>6.1</td>
</tr>
<tr>
<td>47</td>
<td>2</td>
<td>.5</td>
<td>73</td>
<td>21</td>
<td>5.6</td>
</tr>
<tr>
<td>48</td>
<td>3</td>
<td>.8</td>
<td>74</td>
<td>26</td>
<td>6.9</td>
</tr>
<tr>
<td>49</td>
<td>3</td>
<td>.8</td>
<td>75</td>
<td>15</td>
<td>4.0</td>
</tr>
<tr>
<td>50</td>
<td>5</td>
<td>1.3</td>
<td>76</td>
<td>22</td>
<td>5.8</td>
</tr>
<tr>
<td>51</td>
<td>1</td>
<td>.3</td>
<td>77</td>
<td>27</td>
<td>7.1</td>
</tr>
<tr>
<td>52</td>
<td>5</td>
<td>1.3</td>
<td>78</td>
<td>21</td>
<td>5.6</td>
</tr>
<tr>
<td>53</td>
<td>2</td>
<td>.5</td>
<td>79</td>
<td>20</td>
<td>5.3</td>
</tr>
<tr>
<td>54</td>
<td>1</td>
<td>.3</td>
<td>80</td>
<td>16</td>
<td>4.2</td>
</tr>
<tr>
<td>55</td>
<td>3</td>
<td>.8</td>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td>56</td>
<td>3</td>
<td>.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.1. Trust value histogram. This histogram shows the trust values for all students in grades 3, 4, 5, and 6.

Table 4.4 describes the English Language Arts scale score mean values for each grade levels xw and xs as in Table 4.3. The scale score mean values represent the student performance levels on the 2012 English Language Arts examination. The scale score mean value for grade xw was 671.94. The scale score mean value for grade level xs was 669.38. Both grade level scale score means were close to the overall scale score trust value of 673.91 for all student participants. Grade level xw had a higher scale score mean value than grade level xs. The results imply that the student performance levels were higher in grade xw than in grade xs.
Table 4.3

Descriptive Statistic of NYS ELA SS for grades xx and xp:

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>xx</td>
<td>Mean</td>
<td>672.13</td>
</tr>
<tr>
<td></td>
<td>95% Confidence Interval for Mean</td>
<td>Lower Bound: 668.33</td>
</tr>
<tr>
<td></td>
<td>5% Trimmed Mean</td>
<td>672.54</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>672.00</td>
</tr>
<tr>
<td></td>
<td>Variance</td>
<td>329.645</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>18.156</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>616</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>722</td>
</tr>
<tr>
<td></td>
<td>Range</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Interquartile Range</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Skewness</td>
<td>-.319</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>-.647</td>
</tr>
<tr>
<td>xp</td>
<td>Mean</td>
<td>682.30</td>
</tr>
<tr>
<td></td>
<td>95% Confidence Interval for Mean</td>
<td>Lower Bound: 675.61</td>
</tr>
<tr>
<td></td>
<td>5% Trimmed Mean</td>
<td>682.74</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>683.00</td>
</tr>
<tr>
<td></td>
<td>Variance</td>
<td>1065.695</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>32.645</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>583</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>775</td>
</tr>
<tr>
<td></td>
<td>Range</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>Interquartile Range</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Skewness</td>
<td>-.263</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>1.441</td>
</tr>
</tbody>
</table>
Table 4.4

*Descriptive Statistic of NYS ELA SS for grades xw and xs:*

<table>
<thead>
<tr>
<th>Grade Level</th>
<th></th>
<th>Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>xw</td>
<td></td>
<td>671.94</td>
<td>1.610</td>
</tr>
<tr>
<td></td>
<td>95% Confidence Interval for Mean</td>
<td>668.74</td>
<td>675.13</td>
</tr>
<tr>
<td></td>
<td>5% Trimmed Mean</td>
<td>672.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>669.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variance</td>
<td>246.145</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>15.689</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>621</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>705</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Range</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interquartile Range</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skewness</td>
<td>-.204</td>
<td>.247</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>-.567</td>
<td>.490</td>
</tr>
<tr>
<td>xs</td>
<td>Mean</td>
<td>669.38</td>
<td>1.409</td>
</tr>
<tr>
<td></td>
<td>95% Confidence Interval for Mean</td>
<td>666.59</td>
<td>672.18</td>
</tr>
<tr>
<td></td>
<td>5% Trimmed Mean</td>
<td>669.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>670.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variance</td>
<td>192.447</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>13.873</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>621</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>707</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Range</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interquartile Range</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skewness</td>
<td>-.198</td>
<td>.245</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>1.377</td>
<td>.485</td>
</tr>
</tbody>
</table>

Figure 4.2 is a histogram displaying graphic data for the 2012 English Language Arts scale scores shown in Table 4.3 and Table 4.4. The data shows that most of the scale scores were clustered close to the overall scale score mean of 673.91. The data further
shows that there were no extreme outliers as compared to the overall mean scale score value.

Figure 4.2. Histogram: NYS ELA SS responses and frequency of responses.

Figure 4.3 is a graphic representation of English Language Arts scale scores mean values for the four grade levels. Grade level xx had a scale score mean value of 672.13. Grade level xs had a scale score mean value of 669.88. Grade level xw had a scale score mean value of 671.94. Grade level xp had a scale score mean value of 682.30. The data shows that grade level xp had a higher scale score mean level than the other three grade levels. The data also shows that the other three grade level scale score means were more clustered together as compared to the overall mean of 673.91.
Figure 4.3. Line graph shows grade levels and scale score mean values.

Table 4.5 shows the extreme statistical values or outliers for the New York State English Language Arts scale scores results for grade levels xx and xp. The extreme value numbers represent the five highest and the five lowest New York State English Language Arts scale score results for individual students. The case numbers represent the individual students and the values represent the New York State English Language Arts scale score results. The overall scale score mean value was 673.91. For grade level xx, the highest score was 722 and the lowest score was 616. For grade level xp, the highest score was 775 and the lowest score was 583. The results implied that the outlier scale score mean values for each of these grade levels were clustered closely together as compared to the overall scale score mean value. Therefore, the results implied that the outlier scale score mean values compared closely to the overall scale score mean value. The results further implied that there were slight variations in student performance levels between the two grade levels.
Table 4.5

*Extreme Values of the NYS ELA SS for xx and xp*

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Extreme Values</th>
<th>Case Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>xx</td>
<td>Highest</td>
<td>1</td>
<td>218</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>184</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Lowest</td>
<td>1</td>
<td>226</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>193</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>223</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>199</td>
</tr>
<tr>
<td>xp</td>
<td>Highest</td>
<td>1</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Lowest</td>
<td>1</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>277</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>83</td>
</tr>
</tbody>
</table>

Table 4.6 shows the extreme statistical values or outliers for the New York State English Language Arts scale scores for grade levels xx and xs. The extreme value numbers represent the five highest and the five lowest New York State English Language Arts scale score results for individual students. The case numbers represent the individual students and the values represent the New York State English Language Arts scale score results. The overall scale score mean value was 673.91. For grade level xx, the highest
score was 705 and the lowest score was 621. For grade level xp, the highest score was 707 and the lowest score was 621. The results implied that the outlier scale score mean values for each of these grade levels were clustered closely together as compared to the overall scale score mean value. Therefore, the results implied that the outlier scale score mean values compared closely to the overall scale score mean value. The results further implied that there were slight variations in student performance levels between the two grade levels.

**Correlation between the trust value and New York State English Language Arts Scale Scores.** The third research question explored the correlation between the levels of trust between teachers and students and the student performance levels. The correlation was examined to determine if a significant positive correlation defined as an r value of 1.0 or an r value of -1.0 existed between the levels of trust and student performance levels. The closer the r value is to 1.0 or -1.0 demonstrates significance.

Table 4.7 presents the correlation for all student participants. The correlation resulted in a Pearson r correlation that was not statistically significant for the relationship between the student and teacher trust value and the 2012 ELA scale scores (r = .091 and, p > .05). The findings implied that the relationship between teacher and student trust levels and student performance levels on the 2012 ELA examination do not correlate. Therefore, the positive correlation hypothesis was denied. The study’s results indicated a p > .05 level, which means that the probability that the study’s results were due to chance or random error is more than five out of one hundred. The results were called not statistically significant, and the events, relational trust and student performance were considered not correlated. Therefore, there was a 95 % or less confidence level required
for the hypothesis to be denied; the results not to be statistically significant and the variables to be considered not correlated.

Furthermore, the study’s results implied that when trust levels and student performance levels were not widely dispersed from the mean that a correlation did not exist between them.

Table 4.6

*Extreme Values of the NYS ELA SS for Grade Levels xw and xs*

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Extreme Values</th>
<th>Case Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>xw</td>
<td>Highest</td>
<td>1</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>302</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>Lowest</td>
<td>1</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>314</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>317</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>316</td>
</tr>
<tr>
<td>xs</td>
<td>Highest</td>
<td>1</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>136</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>331</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>Lowest</td>
<td>1</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>375</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>373</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>374</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>372</td>
</tr>
</tbody>
</table>
Table 4.7

*Correlation for All Student Participants*

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trust Value</strong></td>
<td><strong>ELA SS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.091*</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.077</td>
<td>1</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>378</td>
<td>376</td>
</tr>
<tr>
<td><strong>ELASS</strong></td>
<td><strong>Pearson Correlation</strong></td>
<td>.091*</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.077</td>
<td>1</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>376</td>
<td>376</td>
</tr>
</tbody>
</table>

Table 4.8 presents the correlation of the study’s findings for one grade level xp that showed a significant correlation (r = .264, p < .05 level). The study’s results were based on a p < .05 level, which means that the probability that the study’s results for grade level XP were due to chance or random error was less than five out of one hundred. The results were called statistically significant, and the events, relational trust and student performance were considered correlated. Although the relationship between trust and student performance for grade level XP was weak, there was a 95 % or greater confidence level required for the hypothesis to be accepted; the results to be statistically significant and the variables to be considered correlated.

This finding demonstrated a significant relationship between the student-teacher trust levels and student performance on the 2012 NYS ELA examination. Therefore, a significant correlation existed between the levels of student teacher trust as perceived by the students and student performance on the 2012 NYS ELA examination. Furthermore, the study’s findings showed that when trust levels and scale scores are more widely dispersed from the mean a correlation will exist between them.
Table 4.8

*Correlation for Grade Level xp*

<table>
<thead>
<tr>
<th></th>
<th>Trust Value</th>
<th>ELA SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Value Pearson Correlation</td>
<td>1</td>
<td>.264*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.010</td>
</tr>
<tr>
<td>N</td>
<td>96</td>
<td>94</td>
</tr>
<tr>
<td>ELASS</td>
<td>Pearson Correlation</td>
<td>.264*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.010</td>
</tr>
<tr>
<td>N</td>
<td>94</td>
<td>94</td>
</tr>
</tbody>
</table>

Figure 4.4 is a scatter plot that demonstrates graphic data for grade xp showing the significant correlation. The fit line in the scatterplot shows the strength of the correlation. When the line is more horizontal, the weaker the correlation is between trust and student performance. When the line is more sloped, the stronger the correlation is between trust and student performance. Although the correlation was significant, the horizontal line shows a weak relationship or correlation between trust and student performance.

*Correlation between Trust Value and Gender*

Research question four referred to the correlation between the levels of relational trust and gender. The overall mean trust value for all student participants was 67.84 (SD = 11.36, n = 378). Table 4.9 shows the results of trust mean values on student-teacher gender, same/opposite. The results demonstrated that there was not a statistical, positive correlation between female and male students on trust value (t = 1.33, df = 374, p > .05, n = 376). The results implied that regardless of student gender, trust values when close...
together in range had a weak correlation between trust levels and student and teacher gender.

Figure 4.4. Scatterplot: English Language Arts scale scores for grade level xp.

Table 4.10 represents the univariate statistics for the trust value of the 376 student participants. Univariate statistics looked at the overall trust value. This measure looked at student gender, teacher gender, and same and different student-teacher gender. The total overall trust value for all students was 68 (SD = 11.36, n = 378).

There were 378 students who completed the Student Trust Survey (STS), with roughly an even distribution across four grade levels: Grade 3, 90 (24%); Grade 4, 96 (25%); Grade 5, 95 (25%); and Grade 6, 97 (26%). Among these, 175 (47%) self-reported as females, 201 (53%) self-reported as males, and two chose not to report this information. The study’s findings demonstrated that trust values on same teacher and student gender is higher than the trust values on opposite teacher and student gender. The
study’s findings indicated that one reason why a correlation may not have existed between gender and student and teacher trust values is because the gender trust values clustered closely to the overall mean trust value of 67.84.

Table 4.9

*t-Test for Equality of Variances and M: Independent Samples Trust Value (Same-Gender Teacher and Opposite Gender Teacher)*

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig. t</th>
<th>df</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td>3.748</td>
<td>.054</td>
<td>1.025</td>
<td>374</td>
<td>.306</td>
<td>1.155</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.088 - 3.456</td>
</tr>
<tr>
<td></td>
<td>1.037</td>
<td>372.300</td>
<td>.300</td>
<td>1.184</td>
<td>1.141</td>
<td>-1.060 - 3.428</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Most of the students in the study reported having a female teacher (n = 353 or 94%), while 23 (6%) reported having a male teacher. Among all participants, 176 (47%) were determined to be of the same gender as their teacher and 200 (53%) were found to be of the opposite gender as their teacher. The mean trust levels ranged from 67.8 to 71.8. The statistical results did not demonstrate a correlation to teacher gender. Furthermore, the study’s results implied that regardless of student-teacher gender, a strong correlation may have not existed between gender and trust levels because of the narrow range between the mean trust levels.
Table 4.10

*Univariate Statistics for Trust Value*

<table>
<thead>
<tr>
<th>Category</th>
<th>Grouping</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td></td>
<td>378</td>
<td>67.8</td>
<td>11.36</td>
</tr>
<tr>
<td>Student Gender</td>
<td>Female</td>
<td>175</td>
<td>68.8</td>
<td>10.08</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>201</td>
<td>67.2</td>
<td>12.04</td>
</tr>
<tr>
<td>Teacher Gender</td>
<td>Female</td>
<td>353</td>
<td>67.7</td>
<td>11.40</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>23</td>
<td>71.8</td>
<td>5.86</td>
</tr>
<tr>
<td>Student-Teacher Gender</td>
<td>Same</td>
<td>176</td>
<td>68.6</td>
<td>9.98</td>
</tr>
<tr>
<td></td>
<td>Opposite</td>
<td>200</td>
<td>67.4</td>
<td>12.14</td>
</tr>
</tbody>
</table>

**Summary of Results**

First, the chapter provided the results and analysis of the student’s responses on the STS survey. The overall mean trust level was 67.84 for the students in grades 3, 4, 5, and 6. The female participants had a mean trust value of 68.77 (SD = 10.079, N = 175, SEM = .762). The male participants had a mean trust value of 67.23 (SD = 12.035, N = 201, SEM = .849). The female and male gender mean value results did not vary much from the overall mean trust value for all student participants. The results indicate that if the gender of the student and the gender of the teacher are the same, a slightly higher trust level existed than if the gender were opposite. The trust levels ranged from 25 to 80. Scores indicating a low trust value ranged from 25 to 43. Scores indicating a medium trust value ranged from 44 to 62. Scores indicating a high trust value ranged from 63 to 80. The results implied that some of the medium and high trust values were
comparatively close to the overall mean trust values of 68, which also indicated a high trust level. The data also showed that there are few outliers at the low and at the lower end of medium trust value levels, as compared to the overall mean trust value of 67.84.

Second, the mean scale score level on the 2012 English Language Arts examination was presented. The overall scale score mean value for the 376 student participants was 673.91. The scale score mean value for grade xx was 672.13. The scale score mean value for grade xp was 682.30. The scale score mean value for grade xw was 671.94. The scale score mean value for grade level xs was 669.38. Although the scale score mean values were slightly higher in grade levels xp and xw, the scale score mean value for the four grade levels clustered closely to the overall scale score mean xs was 669.38.

Third, the correlation between the levels of relational trust of teachers and students as perceived by the students and the student performance levels on the spring, 2012 NYS ELA examination was discussed. The study’s results indicated that there was not a significant, positive correlation between trust and student performance levels \(r = .091\) and, \(p > .05\). Therefore, the study’s hypothesis was denied. The study’s findings implied that the relationship between teacher and student trust levels and student performance levels was weak. The study’s findings further implied that when trust levels and student performance levels were not widely dispersed from the mean that a correlation may not have existed between them. However, the study’s findings for grade level xp showed a significant correlation \(r = 1.264, p < .05\) level. This finding demonstrated a significant relationship between the student-teacher trust levels and student performance on the 2012 NYS ELA examination. The study’s findings showed
that when trust levels and scale scores were more widely dispersed from the mean a
correlation existed between them.

Fourth, the study’s results and analysis of trust value on student and teacher
gender were examined. The overall mean trust value for all student participants was
67.84 (SD = 11.36, n = 378). The results of trust mean values on student-teacher gender,
same/opposite demonstrated that there was not a statistical, positive correlation between
female and male students on trust value (t = 1.33, df = 374, p > .05, n = 376). The results
implied that gender was not a factor in the level of trust between students and their
teachers.
Chapter 5: Discussion

Introduction

Putnam (2000) indicates that trust is the social capital that bonds individuals together in society and in school settings. The research indicates significant differences in student performance levels when trust is present between teachers and principals, parents, and students (Byrk & Schneider, 2004; Durnford, 2010; Putnam, 2000; Romero, 2010; Tschannan-Moran, 2004). These scholars argue that student performance has been studied for years with performance levels continuing to plummet. Byrk and Schneider (2004) state that most research studies examining trust and student performance levels were at the middle school and high school levels. They also state that there was limited research that examined relational trust at the elementary level. However, Byrk and Schneider (2004) studied relational trust at the elementary level.

The problem is that there has not been enough research emphasizing the relationship between relational trust and student achievement from the students’ perspective. Instead, the research looks at trust and student achievement from the adults’ perspective and through studying various educational practices such as data analysis, evaluation and accountability. In their study, Byrk and Schneider (2004) state that trust should be measured from the adult’s perspective because their belief was that student performance levels would improve if teachers and parents had a high trust level between them.
The purpose of the study presented in the dissertation is to understand the value of relational trust between teacher-student relationships from the students’ perspective in relation to student performance. Therefore, the study researches the levels of relational trust between teachers and students as measured by a Student Trust Survey (STS), in grades 3, 4, 5, and 6, and student performance on the 2012 New York State (NYS) English Language Arts (ELA) examination. The study identifies the trust level between students and teachers as perceived by the students. The study also identifies the scale scores as statistically computed by the New York State Department of Education on the 2012 NYS ELA examination.

The hypothesis for the study states that there is a significant, positive correlation between the level of relational trust of teachers and students, as measured by a Student Trust Scale, in grades 3, 4, 5 and 6, and the student performance levels on the spring 2012 New York State (NYS) English Language Arts (ELA) examination. The questions answered by the study are:

1. In grades 3, 4, 5, and 6, what is the level of relational trust between the teachers and students as perceived by the students?
2. What are the student performance levels on the 2012 NYS ELA examination?
3. Is there a significant, positive correlation between the levels of relational trust between teachers and students as perceived by the students and the student performance levels on the spring, 2012 NYS ELA examination?
4. Is there a significant, positive correlation between the levels of relational trust between teachers and students and the gender of teachers and students?
The study’s results deny the hypothesis. The findings from the research indicate there is not a significant correlation between relational trust (as perceived by the students) and achievement (as measured by the 2012 New York State English Language Arts examination). However, the literature indicates that relational trust is important for student success. Therefore, my findings built a foundation for future research, and insight into future practice and policy development on the topic of trust and student performance.

Chapter 5 presents the discussion, interpretation and implications of the findings. The first section provides the implication of the findings. The second section discusses the research limitations. The third section provides recommendations for future research and policy and practice. The final section concludes the dissertation.

**Implications of the Findings**

The study’s findings demonstrate professional implications related to the hypothesis and the research questions. First, the implications address the results from research question one that study trust levels from the Student Trust Scale. Second, the implications discuss the results from research question two that examine the scale score results from the 2012 New York State English Language Arts examination. Third, the implications address the findings from research question three that study the significant positive correlation between the level of relational trust of teachers and students as perceived by the students and the student performance levels on the Spring 2012 New York State (NYS) English Language Arts examination. This section also includes the hypothesis stating that there is a significant, positive correlation between the level of relational trust of teachers and students as measured by a Student Trust Survey in grades 3, 4, 5 and 6, in a suburban school district and the student performance levels on the
spring 2012 New York State (NYS) English Language Arts examination. Fourth, the implications address the results from research question four that examine the positive, significant correlation between relational trust of teachers and students, and student and teacher gender.

**Relational trust values.** The first research question studies the relational trust values measured by a Student Trust Survey. The study’s findings indicate a mean trust level of 67.84 (SD = 11.36, N = 378) for all 378 student participants. The male students have a mean trust value of 67.23 (SD = 12.035, N = 201, SEM = .849). The female participants have a mean trust value of 68.77 (SD = 10.079, N = 175, SEM = .762). The results include four implications in respect to relational trust:

1. When building trust with students, individual students may view trust differently, and that female student trust levels may be higher than male student trust levels.

2. When developing professional development activities and policies, educators may want to consider that in order to build relationships with their students, if the gender of the student and the gender of the teacher are the same, a slightly higher trust level may exist than if the gender were opposite.

**2012 New York State English Language Arts examination results.** The second research question examines the student performance levels measured using the 2012 New York State English Language Arts scale score results. The scale score mean values represent the student performance levels on the 2012 English Language Arts examination. The overall scale score mean value for the 376 student participants is 673.91. The scale score mean value for grade xx is 672.13. The scale score mean value
for grade xp is 682.30. The scale score mean values for both grade levels are close to the overall mean of 673.91 for all student participants. The scale score mean for grade xp is higher than the scale score mean for grade xx. Therefore, the results imply that the student performance levels are slightly higher for grade level xp than for grade level xx. The scale score mean value for grade xw is 671.94. The scale score mean value for grade level xs is 669.38. Both grade level scale score means are close to the overall scale score trust value of 673.91 for all student participants. Grade level xw has a higher scale score mean value than grade level xs.

The study also considers the outliers for the New York State English Language Arts scale score results. The outliers represent the five highest and the five lowest New York State English Language Arts scale score results for individual students at each grade level. The overall scale score mean value is 673.91. For grade level xx the highest score is 722, and the lowest score is 616. For grade level xp the highest score is 775, and the lowest score was 583. The results imply that the outlier scale score mean values for each of these grade levels are clustered closely to the overall scale score mean value. The results further imply that there are slight variations in student performance levels between the two grade levels. For grade level xx the highest score is 705, and the lowest score is 621. For grade level xp the highest score is 707, and the lowest score is 621. The results imply that the outlier scale score mean values for each of these grade levels are clustered closely to the overall scale score mean value. The results imply that there are slight variations in student performance levels between the two grade levels.
For all four grade levels, the scale score means cluster closely to the overall scale score mean. The results imply that the student performance levels are higher in grade levels xx and xp than in grade levels xw and xs.

**Correlation between relational trust values and student performance values.**

The third research question explores the correlation between the levels of trust between teachers and students and the student performance levels. The correlation has been studied to determine if a significant positive correlation, defined as an r value of 1.0 or an r value of -1.0, exists between the trust and student performance. An r value is close to 1.0 or -1.0 demonstrates significance. The study’s findings result in a Pearson r correlation value that is not statistically significant for the relationship between the student and teacher trust value and the 2012 ELA scale scores (r = .091 and, p > .05). The study’s results indicated a p < .05 level which means that the probability that the study’s results were due to chance or random error was more than five out of one hundred. The results were called not statistically significant, and the events, relational trust and student performance were considered not correlated. Therefore, there was a 95 % or less confidence level required for the hypothesis to be denied; the results not to be statistically significant and the variables to be considered not correlated.

The study’s findings also imply that the relationship between trust levels and student performance levels are weak. Therefore, the significant, positive correlation hypothesis was denied. Although trust may be important, trust does not have a positive, significant correlation to student performance. The study’s results further imply that when trust levels and student performance levels are not widely dispersed from the mean a correlation may not exist.
However, the findings for grade level x, show a significant correlation ($r = 1.264$, $p < .05$ level). The study’s results were based on a $p < .05$ level, which means that the probability that the study’s results for grade level XP were due to chance or random error was less than five out of one hundred. The results were called statistically significant, and the events, relational trust and student performance were considered correlated. Although the relationship between trust and student performance for grade level XP was weak, there was a 95% or greater confidence level required for the hypothesis to be accepted; the results to be statistically significant and the variables to be considered correlated.

This finding demonstrates a significant relationship between the student-teacher trust levels and student performance levels. Therefore, a significant correlation exists between the levels of student teacher trust as perceived by the students and student performance on the 2012 NYS ELA examination. Furthermore, the study’s findings show that when trust levels and scale scores are more widely dispersed from the mean, a correlation will exist.

Like the Student Trust Scale, the study’s results imply that when measuring trust and student performance, the New York State examination scale score results may not be the best measure for student performance. The implications include a small sample size, which may be the reason for the results being so closely clustered to the trust value means and scale score means. The study’s findings imply that the clustering of mean values may be one reason why there is not a significant, positive correlation. However, the study’s findings found a significant correlation ($r = 1.264$, $p < .05$ level) for grade level xp, which demonstrate a weak correlation between trust levels and student performance levels. The study’s findings also imply that trust between teachers and students may matter at certain
grade levels in order to improve student performance levels. The study’s findings further imply that school districts may need to revisit performance policies with the understanding that building trust with elementary students at certain grade levels may be important to improving student performance.

**Relational trust and gender.** The fourth research question studies the correlation between student and teacher trust levels and the same and opposite student and teacher gender. The overall mean trust value for all student participants is 67.84 (SD = 11.36, n = 378). The t-t-test results demonstrates that there is no statistical positive correlation between female and male students on trust value (t = 1.33, df = 374, p > .05, n = 376). The results imply that regardless of student gender, trust values when close together in range do not have a correlation between trust levels, and gender. The study implies that when teachers and students develop trusting relationships in classrooms, same student and teacher gender may matter to elementary level students. The study’s findings also imply that hiring policies for teachers at the elementary level may need to consider same student and teacher gender, because same student and teacher gender may be an important variable when developing student and teacher trust.

**Limitations**

The study’s methodological design measured trust, student performance levels, the correlation between trust levels of teachers and students using a Student Trust Scale, in grades 3, 4, 5 and 6, and student performance levels on the Spring 2012 New York State English Language Arts examination and the correlation between teacher and student trust levels and teacher and student gender. The study measured exactly what the study’s
methodological design was developed to measure. Therefore, the study does not have any limitations.

**Recommendations**

The study’s recommendations address the four research questions, which includes the hypothesis. First, a recommendation addresses research question one, which studies trust levels from the Student Trust Scale. Second, recommendations address the results from research question two, which examines the scale score results from the 2012 New York State English Language Arts examination. Third, recommendations address research question three, which studies the significant, positive correlation between the level of relational trust of teachers and students as perceived by the students and the student performance levels on the spring 2012 New York State (NYS) English Language Arts examination. This section includes the hypothesis stating that there is a significant, positive correlation between the level of relational trust of teachers and students as measured by a Student Trust Survey in grades 3, 4, 5 and 6, in a suburban school district and the student performance levels on the spring 2012 New York State (NYS) English Language Arts examination. Fourth, a recommendation addresses research question four, which examines the positive, significant correlation between relational trust of teachers and students, and student and teacher gender.

**Relational trust values.** The first question studies the relational trust values demonstrated on the Student Trust Scale by students in grades, 3, 4, 5, and 6. The overall mean trust value is 67.84 (SD = 11.36, N = 378). Based upon the study’s findings on relational trust values between students and teachers, a recommendation is for further study on instruments used to measure trust values from the student’s perspective. A
different instrument might capture the developmental levels of the third, fourth, fifth and sixth grade level students more significantly and demonstrate different results. The study’s sample size is 376 student participants. The study’s mean trust values cluster closely to the overall mean trust value. Therefore, another recommendation is to extend the study’s population size to include student participants nationally and internationally, which possibly would demonstrate widely varied trust values. A further recommendation is to inform and offer further insight to teachers that when building trust with students, individual students may view trust differently, and that same gender student trust levels may be higher than opposite gender student trust levels. A final recommendation is to inform professional development activities and policies that relational trust may be higher for female students than male students.

**2012 New York State English Language Arts examination results.** The second research question examines the results for grades 3, 4, 5 and 6 on the 2012 New York State English Language Arts examination. There are 376 student participants. As with the trust levels, the scale score means clusters closely to the overall scale score mean for all four grade levels. Based on the findings and similar to the recommendation for trust values, the recommendation for future research is to study a larger student participant sample size on a national and international level that may demonstrate more widely varied scale score values. A recommendation to inform and offer further insight to the New York State Education Department, school districts, principals and teachers that the 2012 New York State examination may not be an appropriate assessment to measure improved student performance, and that future research is needed to study other assessments that may be better indicators of improved student performance.
Correlation between relational trust values and student performance values.

The third research question studies the correlation between student and teacher trust values, and student performance levels. The Pearson r correlation results in a value that is not statistically significant for the relationship between the student and teacher trust value and the 2012 ELA scale scores (r = .091 and p > .05). However, the correlation of the study’s findings for one grade level shows a significant correlation (r = 1.264, p < .05 level). The finding demonstrates a significant relationship between the student-teacher trust levels and student performance on the 2012 NYS ELA examination.

Furthermore, the study’s findings show that when trust levels and scale scores are more widely dispersed from the mean than the other grade levels, a correlation exists between them. Based on the findings, the first recommendation for further research includes a larger student participant sample size to increase the probability of demonstrating significant results between trust levels and student performance. Because the New York State English Language Arts examination might not be the best instrument to measure student performance on trust levels, the second recommendation for future research is to include other assessments such as classroom observation data or teacher and student behavior data that might better demonstrate a correlation on trust values. The third recommendation for future research includes using other variables other than student performance when measuring student and teacher trust. These variables might include student attendance, engagement, motivation, effort, risk-taking behaviors, work ethic, or multiple intelligences. The fourth recommendation for future research includes measuring the parents’, teachers’, principals’ and superintendents’ perspectives on relational trust instead of measuring elementary level students’ perceptions. Given the study’s findings,
The fifth recommendation is to inform and offer further insight to teachers and principals that trust may not be important to individual students to improve student performance levels, and factors such as religious, racial, gender preference, intellectual potential, socio-economic, cultural and environmental factors may need to be considered. However, based upon the study’s further findings at a particular grade level, XP, the final recommendation is to inform school districts, teachers and principals to review performance policies and building plans with the understanding that building trust with students at certain grade levels may be an important correlation to improving student performance.

**Relational trust and gender.** The fourth research question studies the correlation between student and teacher trust levels and the same and opposite student and teacher gender. The overall mean trust value for all student participants is 67.84 (SD = 11.36, n = 378). The t-test results demonstrate that there is not a statistical, positive correlation between female and male students on trust value (t = 1.33, df = 374, p > .05, n = 376). Based on the results, the first recommendation is for a larger student participant sample including other school districts. A larger sample might demonstrate a significant correlation between student and teacher trust and student and teacher gender. The second recommendation for further research is to include student performance or other variables when measuring gender on trust. Other variables might include student attendance, engagement, motivation, effort, risk-taking behaviors, work ethic, or multiple intelligences. The third recommendation to inform and offer insight to teachers about developing trusting relationships with students in their classrooms, same teacher gender may matter more than opposite teacher gender to elementary level students. The final
recommendation also informs school district’s policies and practices for hiring teachers at the elementary level that teacher gender may not be an important variable when developing student and teacher trust, instead other variables such as age and years of experience may need to be considered.

Conclusion

The dissertation’s topic is trust and student performance. Building trust within schools takes time, effort, and leadership (Byrk & Schneider, 2004). Trust helps schools succeed by driving their mission toward being productive and becoming learning communities (Tschannen-Moran, 2004). Conversely, Byrk and Schneider (2004) state that when relational trust is broken, dysfunctional behaviors occur. Trust makes a difference because it improves communication, organization, teacher leadership behaviors and student outcomes (Byrk & Schneider, 2004). Culture and relationships are embraced by moral imperatives surrounded by a strong work ethic, honesty, integrity, competence, reliability and sense of caring for others (Byrk & Schneider, 2004; Tschannen-Moran, 2002). Trust influences our school community’s relationships, roles, culture, and outcomes (Byrk & Schneider, 2004; Tschannen-Moran, 2002). The concern about school community trust and the need for positive student–teacher relationships to enhance student achievement outcomes is of concern to the success of most public school districts today (Byrk & Schneider, 2004).

The literature review reveals that the trust factor influences a school community’s relationships, roles, culture, and outcomes. The sharing of roles is focused on school improvement and increasing the technical and leadership skills of the school community (Kochanek, 2005). Hence, shared governance is one strategy that school districts should
employ to build relational trust and confidence in its constituents. Kochanek (2005) mentions that shared governance, such as a teacher exercising leadership behaviors to enhance student outcomes, offers a platform to develop trust. It is crucial for teacher leaders to model, coach, manage their environment and help establish their classroom vision and mission (Kouzes & Posner, 2007). Further application implies that teachers need to lead quietly, nurture their students, mediate trust breakdowns, and understand the roles that each plays in the school environment to improve student outcomes.

Alejandre (2009) proposes that districts need to make collaboration a priority among constituents to avoid the pitfalls of school politics, poor student outcomes, and the absence of trust. How districts accomplish this goal and gain their constituent’s trust are some of the critical challenges facing school districts today. Hence, the implications for relational trust to become a potential core influence for schools are vast, (Byrk & Schneider, 2004). Schools continue to struggle in the United States (Byrk & Schneider, 2004), and Americans continue to rank education as a primary priority despite the United States’ economic crisis (Pew Research Center, 2010). Although the United States takes pride in education, the American education system continues to struggle to maintain its competitive edge, nationally and internationally (Tyack, 1974; Tyack & Cuban, 1995).

The achievement gap continues to widen, and schools are struggling to close the gap even with government support (Romero, 2010; Rowan, Hall, & Haycock, 2010). Educators spend a considerable amount of time reviewing data to improve student performance. They traditionally analyze data relating to instructional methodology, teacher and principal effectiveness, underserved, underprivileged and student performance levels to inform instructional practices (Byrk & Schneider, 2004; Johnson,
2012; Sandel, 2009)). Despite the educator’s efforts, student outcomes continue to reflect poor achievement. Very few studies review the connection between student and teacher trust and student performance. Studies that review trust and student achievement are mostly at the secondary level, and examine trust as perceived by the adults (Byrk & Schneider, 2004). It is concluded that two essential elements about student performance are missing: (a) relational trust and (b) the student’s perspective at the elementary level (Durnford 2010; Haycock, 2010; Romero 2010).

The problem is that there has not been enough research emphasizing the relationship between relational trust and student achievement from the student’s perspective. Therefore, the purpose of the study is to understand the value of relational trust. The study examines the correlation between relational trust of teacher-student relationships, in grades 3 through 6, and the student performance levels. The significance of the study is to extend present research findings about the value of trust, expand the level of insight for educators about how districts expend resources, enhance professional development for teachers and principals, to inform instructional methodology and strategies, and to inform curriculum development practices to use relational trust as a tool.

The research methodology used for the study is correlational and quantitative. Cottrell and McKenzie (2011) define correlational research as non-experimental research. Correlational research examines relationships and does not manipulate variables. The study’s independent variable (IV) is the level of relational trust of teachers and students, and the study’s dependent Variable (DV) is student performance levels.
Creswell (2007) stated that a hypothesis tests theories. The hypothesis reflects the researcher’s predictions regarding expected relationships between variables. The research questions determine the relationship that exist between the variables, trust and student performance. The responses to the research questions use numerical data through descriptive statistics to draw inferences from a study sample. The hypothesis is either denied or affirmed.

The study’s hypothesis stated that there is a significant, positive correlation between the level of relational trust of teachers and students, as measured by a Student Trust Scale, in grades 3, 4, 5 and 6, and the student performance levels on the spring 2012 New York State (NYS) English Language Arts (ELA) examination. The questions answered by the study are:

1. In grades 3, 4, 5, and 6, what is the level of relational trust between the teachers and students as perceived by the students?
2. What are the student performance levels on the 2012 NYS ELA examination?
3. Is there a significant, positive correlation between the levels of relational trust between teachers and students as perceived by the students and the student performance levels on the spring, 2012 NYS ELA examination?
4. Is there a significant, positive relationship between the levels of relational trust of teachers and students and teacher and student gender?

The study takes place in a small school district located north of New York City, New York. The resident population is approximately 3500 residents. The district views itself as a small school system that services its students with a diverse education. The district population is 1,396 students. Approximately 5 years prior to the study, the school
district conducted a climate survey. The climate survey identifies facets of trust that the community believes the district needs to improve. These facets of trust include transparency, respect, and integrity.

Hoy has permitted the modification of the Omnibus Trust Scales and the researcher has created a 22 item Student Trust Survey. The researcher has used a nine panel expert team to offer feedback on the survey and has field tested the Student Trust Survey at a private school. The survey has used a Likert Scale Formula which consists of a four point scale from 1-4. The sum of the items determines the level of trust. The researcher also has used the New York State English Arts examination scale score results for each student in grades 3, 4, 5, and 6.

The participants have been obtained using a non-randomized method known as convenience-sampling. Convenience sampling reduces the likelihood of bias and increases the level of inter-relater validity and reliability (Fink, 1995; Vogt, 2005). Ten parents have declined having their children complete the survey, two students have declined at the time of the survey administration, and 12 students have been absent out of 400 student participants. A total of 378 students have completed the Student Trust Survey. Due to one student absence, the total sample population completing the survey and the Spring 2012 New York State English Language Arts examination is 376 participants representing third, fourth, fifth, and sixth grade students. The total sample population completing the survey is 378 participants representing third, fourth, fifth, and sixth grade students.

The student participants are in classrooms with one teacher or teams with multiple teachers. In either situation, the student participants refer to their English Language Art
teacher when responding to the survey. Due to the present controversial educational climate concerning accountability and evaluations, other districts have opted not to participate in the study. Before the survey is administered, an informational letter is sent to the students’ parents (Appendix C). Parents have the right to opt out by contacting their child’s principal. Other informational letters are sent as a matter of professional courtesy (Appendix D). The researcher has used two graduate assistants from a local university who were trained to administer the survey to the students (Appendix E). These people have been trained in early March 2012 prior to administering the surveys in mid-March 2012.

Confidentiality has been maintained and promised to the students and to the parents. In addition, confidentiality also has been integrated into a well-developed strategic safeguard plan. The safeguard plan includes a numerical coding system. Numerical codes represent each student, letter codes represent each grade level, and the state standardized exam results are assigned and maintained by the district.

The study’s data analysis plan used to study each research question involves a Likert Scale, the 2012 New York State English (NYS) Language Arts (ELA) examination, Pearson Co-Efficient and t-Tests. The Likert Scale or Student Trust Scale is used to determine the level of trust, the 2012 NYS ELA results is used to determine the scale scores for each student, Pearson’s Co-Efficient is used to affirm or deny the hypothesis, and the t-tests are used to affirm or deny significance. The quantitative methodology achieves the study’s purpose by providing new information for educators about determining the value of using relational trust as an instructional tool.
Research question one studies the levels of trust in grades 3, 4, 5 and 6 between the teachers and students as perceived by the students. The mean trust value is 67.84 (SD = 11.36, N = 378) for all 378 participants. The male students have a mean trust value of 67.23 (SD = 12.035, N = 201, SEM = .849). The female participants have a mean trust value of 68.77 (SD = 10.079, N = 175, SEM = .762). The Student Trust Scale point system ranges from 0 to 80. Student participant scores range from 25 to 43 indicating a low trust value, 44 to 62 indicating a medium trust level, and 63 to 80 indicating a high trust level. The study’s results imply that if the gender of the student and the gender of the teacher are the same, a slightly higher trust level may exist than if the gender were opposite. The study’s findings also imply that when building trust with students, individual students may view trust differently, and that teachers may also need to consider that gender was not a factor in the level of trust between students and their teachers. Furthermore, the study’s findings imply that when developing professional development activities and policies, relational trust may be higher for female students than male students.

Research question two examines the scale score results on the New York State English Language Arts examination. The scale score mean values represent the student performance levels on the 2012 English Language Arts examination. The overall scale score mean value for the 376 student participants is 673.91. The scale score mean value for grade xx is 672.13. The scale score mean value for grade xp is 682.30. The scale score mean value for grade xw is 671.94. The scale score mean value for grade level xs is 669.38. All four, grade level scale score means are close to the overall scale score trust
value of 673.91 for all student participants. The findings imply that grade levels xx and xp have a higher scale score mean value than grade levels xw, and xs.

The study also researches the outliers for the New York State English Language Arts scale score results. The outliers represent the five highest and the five lowest New York State English Language Arts scale score results for individual students at each grade level. The overall scale score mean value is 673.91. For grade levels xx, the highest score is 722 and the lowest score is 616. For grade level xp, the highest score is 775 and the lowest score is 583. For grade level xs, the highest score is 705 and the lowest score is 621. For grade level xw, the highest score is 707 and the lowest score is 621. Grade levels xp and xx have higher scores than grades levels xs and xw. The results imply that the outlier scale score mean values for each of the four grade levels re clustered closely to the overall scale score mean value. The results imply that there are slight variations in student performance levels between the two grade levels.

For all four grade levels, the scale score means cluster closely to the overall scale score mean. The results imply that the student performance levels are higher in grade levels xx and xp than in grade levels xw and xs. As with the trust values, the study implies that given the small sample size, the results clustered closely to the mean, which may have been the reason for no correlation between trust and student performance.

Research question three studies the correlation between student and teacher trust values, and student performance levels. The Pearson r correlation results in a value that is not statistically significant for the relationship between the student and teacher trust value and the 2012 ELA scale scores (r = .091 and, p > .05). However, the correlation of the study’s findings for one grade level xp shows a significant correlation (r=1.264, p<.05)
level). The finding demonstrates a significant relationship between the student-teacher trust levels and student performance on the 2012 NYS ELA examination. The study implies that when trust levels and scale scores are clustered, a correlation may not exist. The study’s findings show that when trust levels and scale scores are more widely dispersed from the mean than the other grade levels, a correlation exists between them. The study’s findings also imply to teachers and principals that trust may not matter to individual students due to possible religious, ethnic, intellectual potential, gender preference, socio-economic, cultural or environmental factors, which may also be a reason why there is not a significant, positive correlation to student performance. The study’s findings further imply that school districts may need to revisit performance policies with the understanding that building trust with elementary students at certain grade levels may be important to improving student performance.

The fourth research question studies the correlation between student and teacher trust levels and the same and opposite student and teacher gender. The overall mean trust value for all student participants on gender is 67.84 (SD = 11.36, n = 378). The t-test results demonstrate that there is not a statistical positive correlation between female and male students on trust value (t = 1.33, df = 374, p > .05, n = 376). Regardless of gender, the results imply that when trust scores are clustered, trust levels may not correlate. However, the study’s findings also imply that when hiring new teachers at the elementary level, districts may need to consider same student and teacher gender, because same student and teacher gender may be an important variable when developing student and teacher trust.
The study measured exactly what the study’s methodological design was developed to measure. Therefore, the study does not have any limitations.

The recommendations are based upon my findings, which have established a foundation for future scholarly research and for insight into future policy and practice development. The following are the recommendations for the study:

1. Studying a larger student participant sample on a national and international level may demonstrate more widely varied scale score values.

2. Extending the study’s population size to include student participants, nationally and internationally may demonstrate more widely varied trust values on gender and scale score values, as well as a significant correlation between trust levels, gender and student performance levels.


4. Use other assessments that might better demonstrate a correlation on trust values. These assessments might include classroom observational data and teacher and student behavioral measurement data.

5. Use variables other than student performance when measuring student and teacher trust such as student attendance, engagement, motivation, effort, risk-taking behaviors, work ethic, or multiple intelligences.

6. Inform school district hiring policies when hiring teachers at the elementary level, because same student and teacher gender may be an important variable to develop trust with elementary students.
7. Inform school districts to revisit performance policies with the understanding that building trust with students at certain grade levels may be important to improving student performance.

8. Inform and offer further insight to teachers and principals that trust may not be important to individual students to improve student performance levels, because cultural, socio-economic status, intellectual potential, gender preference, race, religion or environmental factors may need to be considered.

9. Based upon the study’s further findings at a particular grade level, xp, the final recommendation is to inform school districts, teachers and principals to review performance policies and building plans with the understanding that building trust with students at certain grade levels may be an important correlation to improving student performance.

10. Inform and offer further insight to teachers that when building trust with students, individual students may view trust differently, and that same teacher and student gender trust levels may be higher than opposite teacher and gender student trust levels.

Teachers and administrators must be ready to face 21st century demands and adapt to tough academic and fiscal challenges by understanding the power of relational trust as an instructional tool. The research findings indicate there is not a significant correlation between relational trust and achievement.

However, the literature indicates that relational trust is important for student success. Therefore, my findings built a foundation for future scholarly research and future insight for practice and policy development. Furthermore, I conclude that relational trust
must be further researched to understand its potential value as an instructional tool, in
due to the diversity of thought, and knowledge to improve performance levels for all students.
References


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Appendix A

Permission from the Site

Cheryl,

At this point I don't see an issue with this.

J.

>>> Frank/Cheryl <fcasch@optimum.net> 11/6/2011 10:00 AM >>>

Hi Joseph,

I have shifted away from teacher surveys. In the light of the present climate, IRB would never approve. So I am back to where I began with my dissertation which are the student surveys. IRB will now approve me doing it in Pawling because I do not supervise the students in my current role.

I will be examining the correlation between levels of student trust values, grades 3,4,5,6 and those students’ scores on the 2012 ELA. I will offer complete anonymity to the students. I would speak to the 3,4,5,6 teachers to ask for volunteers and explain to them that they would have two levels of confidentiality: 1. Teachers would code surveys, have students complete them in February and get them to me. 2. They would list student
names and codes and give list to whomever is designated by you to use the same code to code spring 2012 ELA results.

3. I would re-code surveys/ELA results when I record the results into my dissertation.

4. My results would be recorded in list form by code of survey values and ELA scores (e.g. 525, 300 etc).

I hope this will work and you are still agreeable to me doing my research in Pawling now that I can get IRB approval. I will pilot the survey elsewhere this month.

Will try to touch base with you on Monday but definitely Tuesday.

Thanks-Cheryl
### Appendix B

**Madison School District Student Enrollment for 2009- 2010**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>0</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>90</td>
</tr>
<tr>
<td>1</td>
<td>104</td>
</tr>
<tr>
<td>2</td>
<td>102</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
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<tr>
<td>4</td>
<td>106</td>
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<tr>
<td>5</td>
<td>112</td>
</tr>
<tr>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td>Ungraded Elementary</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>114</td>
</tr>
<tr>
<td>8</td>
<td>111</td>
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</tr>
<tr>
<td>Ungraded Secondary</td>
<td>0</td>
</tr>
<tr>
<td>Total District Enrollment</td>
<td>1396</td>
</tr>
</tbody>
</table>
Appendix C

Parent-Guardian Information Letters

Dear Parents and Guardians:

My name is Cheryl Basch. I am the Director of Pupil Personnel Services in our school district. I am also a student at St. John Fisher College pursuing a doctorate in Executive Leadership. I am conducting a research study titled *Student-Teacher Trust Relationships and Student Performance*. The purpose of the study is to determine if a correlation exists between the trust levels of teachers and students in grades three, four, five and six, as perceived by the students, and measured by a Student Trust Survey, and the student performance levels on the 2012 New York State English Language Arts examination.

Your child’s participation in the study will add greater insight and knowledge about trust and its relationship to student performance. The study’s results will inform the improvement planning for elementary schools. Student names will not be used. All data will be coded to protect the students during and after the review and administration of the data. Confidentiality will be maintained throughout the survey process. Your child’s survey results and the scaled score results from the 2012 New York State examination results will be coded a second time prior to displaying the data in the dissertation. Most importantly, the data will be coded a second time to protect and maintain confidentiality for your son/daughter. A graduate student from a local doctoral program will administer and collect the surveys. The research study will be published by St. John Fisher College.
You have the right to opt out by contacting your child’s building principal at 845-855-4631 or 855-845-4131. If you have further questions about the study, please feel free to contact me at 845-855-4626.

Your child’s participation in collecting important data will have the potential to influence future research about relational trust. The study’s findings will also have the potential to impact future professional development, curriculum development, and instructional practices in the field of education. Your son’s/daughter’s participation in the study is greatly appreciated. Thank you.

Sincerely,

Cheryl Basch
Estimados padres y guardanes:

Mi nombre es Cheryl Basch. Soy el Director de Personal de Servicios Estudiantiles en nuestro distrito escolar. Yo también soy un estudiante de St. John Fisher College siguiendo un doctorado en Liderazgo Ejecutivo. Estoy realizando un estudio de investigación titulado: Maestros y Estudiantes- Relaciones de Confianza y Rendimientos Estudiantiles. El propósito del estudio es determinar si existe una correlación entre los niveles de confianza de los profesores y estudiantes en los grados tres, cuatro, cinco y seis, según la percepción de los estudiantes y se mide por una encuesta de confianza del estudiante, y los niveles de rendimiento de los estudiantes en el 2012 Estado de Nueva York examen de Inglés Lengua y Literatura.

Participación de su hijo en el estudio se añade una mayor comprensión y conocimiento acerca de la confianza y su relación con el desempeño de los estudiantes. Los resultados del estudio se informarán a la planificación de la mejora de las escuelas primarias. Nombres de los alumnos no se utilizarán. Todos los datos serán codificados para proteger a los estudiantes durante y después de la revisión y administración de los datos. La confidencialidad se mantendrá durante todo el proceso de la encuesta. Resultados de su hijo de la encuesta y los resultados de la calificación en base a los resultados de 2012 de Nueva York el examen del Estado se codificarán por segunda vez antes de mostrar los datos de la tesis. Más importante aún, los datos serán codificados por segunda vez para proteger y mantener la confidencialidad de su hijo / hija. Un estudiante de un programa de
doctorado local va administrar las encuestas. El estudio será publicado por St. John Fisher College. Usted tiene el derecho de optar por no participar y se puede ponerse en contacto con el director de la escuela 845-855-4631 o 855-845-4131. Si usted tiene más preguntas sobre el estudio, por favor no dude en ponerse en contacto conmigo en el 845-855-4626.

Participación de su hijo en la recogida de los datos importantes tiene el potencial de influir las investigaciones en el futuro acerca de la confianza relacional. Los resultados del estudio también tienen el potencial de tener impacto en el futuro en las áreas del desarrollo profesional, el desarrollo curricular y las prácticas de enseñanza en el campo de la educación. La participación de su hijo / hija en el estudio es muy apreciada. Gracias.

Atentamente,

Cheryl Basch
Appendix D

Principal-Teacher Information Letter

Dear Principals and Teachers:

My name is Cheryl Basch. I am the Director of Pupil Personnel Services in our school district. I am also a student at St. John Fisher College pursuing a doctorate in Executive Leadership. I am conducting a research study titled *Student-Teacher Trust Relationships and Student Performance*. The purpose of the study is to determine if a correlation exists between the trust levels of teachers and students in grades three, four, five and six, as perceived by the students, and measured by a Student Trust Survey, and the student performance levels on the 2012 New York State English Language Arts examination. The analysis will be done using a student aggregate and will not be analyzed or displayed by classrooms.

Your student’s participation in the study will add greater insight and knowledge about trust and its relationship to student performance. The study’s results will inform the improvement planning for elementary schools. Student names will not be used and data will be coded. Confidentiality will be maintained during and after the review and administration of the data. Your student’s survey and the 2012 New York State examination results will be coded a second time prior to displaying the data in the dissertation. Most importantly, the data will be coded a second time to protect and to maintain confidentiality for your students. A graduate student from St. John Fisher
College will administer the surveys. The results of the survey and the scaled score results from the 2012 New York State English Language Arts examination will be used in the research study. The research study will be published. If you have further questions about the study please feel free to contact me at 845-855-4626. Watch for future communications to save the date and time for an informational group meeting.

Your students’ participation in collecting important data will have the potential to influence future research about relational trust. The study’s findings will also have the potential to influence and impact future professional development, curriculum development, and instructional practices in the field of education. Your assistance and your students’ participation in the study are greatly appreciated. Thank you.

Sincerely,

Cheryl Basch
Appendix E

Guidelines for the Survey Facilitator

ADMINISTRATION/ PROTOCOL:

1. Once facilitator arrives, the teacher is to leave the room and the door is to be closed before any confidential information is opened or distributed. Teachers are not to see surveys.

2. The facilitator will explain and stress to the students that (a) the survey is for a research study about teacher-student relationships and improving student achievement, (b) if a student chooses not complete a survey, then the student will not be encouraged or required to complete the survey, nor should the student be asked to leave the classroom, (c) their survey responses will be helpful to the research study, and the results of the survey will be displayed in the study, (d) it is important to answer the questions honestly, (e) their responses will be kept confidential, (f) their teachers will not see their responses, (g) the students are to turn their completed survey over on their desks, remain quiet and then the facilitator will collect them, (h) students will reference their English Language Art teacher when responding to the survey, and (i) the researcher is appreciative and thankful to them for responding to the survey.
3. The facilitator is to match the number of the survey to the number on the index card on the student’s desk.

4. The facilitator is to tell the students not to write their names on the survey.

5. Third grade students should be read directions and given verbal prompts by reading aloud each statement by the facilitator.

6. Fourth, Fifth and Sixth grade students should be read the directions. The facilitator may read statements if the students request that assistance.

7. The facilitator is to remind students of these instructions and that their responses will be kept confidential, as needed.

8. When students have completed the surveys, they are to be collected, and placed into a sealed envelope and signed over the flap by the facilitator.

9. Once steps 1-6 have been completed, the facilitator is to open the door allowing the teacher to return to the room. The facilitator will then move on to the next classroom and repeat the protocol.
Appendix F

Permission to use Omnibus Trust Scales

From: Wayne Hoy [whoy@me.com]
Sent: Friday, September 02, 2011 6:28 AM
To: Basch, Cheryl A
Subject: Re: permission to use omnibus-t scale

Hi Cheryl--

You have my permission to use any version of the Trust Scales in your research [www.waynekhoy.com].

Good luck.

Wayne

Wayne K. Hoy
Fawcett Professor of
Education Administration

hoy.16@osu.edu
Dear Dr. Tschannen-Moran and Dr. Hoy,

My research is on the correlation between the levels of relational trust between teachers and students, grades 3, 4, and 5 and those students' performance levels on the New York State English language Arts examination. I am hoping you would allow me to use your instrument to measure the levels of relational trust between the teachers and students of those grade levels.

I am requesting permission from each of you to use your Omnibus T-scale as well as permission to modify the questions to the reading level(s) of the students who will be responding to the survey. If given permission by each of you to do so, would you share the reliability and validity data for your instrument.

I am very excited about doing this research and I look forward to hearing from you soon.

Cheryl A. Basch

Doctoral Student at St. John Fisher College, Rochester, NY
Appendix G

Student Trust Scale

Part A Directions:

1. Read each sentence and think about your feelings and experiences in school.

2. After reading the sentence, circle the word that matches how you feel.

3. Be sure to circle only one choice for your feelings for all 20 sentences below.

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Feeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>My teacher helps me.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td>My teacher is easy to talk to.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td>I am well cared for by my teacher.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td>My teacher gives me compliments on my schoolwork.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td>My teacher really listens to me.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td>My teacher is honest with me.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td>My teacher does a terrific job.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td>My teacher is good at teaching.</td>
<td>Never  Sometimes  Most  Always</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9.</td>
<td>My teacher DOES NOT care about students like me.</td>
</tr>
<tr>
<td>10.</td>
<td>I believe what my teacher tells me.</td>
</tr>
<tr>
<td>11.</td>
<td>I learn a lot from my teacher.</td>
</tr>
<tr>
<td>12.</td>
<td>I can depend on my teacher for help.</td>
</tr>
<tr>
<td>13.</td>
<td>My teacher has a good sense of humor.</td>
</tr>
<tr>
<td>14.</td>
<td>My teacher lets me ask questions.</td>
</tr>
<tr>
<td>15.</td>
<td>My teacher DOES NOT allow me to share.</td>
</tr>
<tr>
<td>16.</td>
<td>My teacher makes me feel good about myself.</td>
</tr>
<tr>
<td>17.</td>
<td>My teacher helps me to do my best.</td>
</tr>
<tr>
<td>18.</td>
<td>My teacher is kind to me.</td>
</tr>
<tr>
<td>19.</td>
<td>I like my teacher.</td>
</tr>
<tr>
<td>20.</td>
<td>My teacher wants me to be nice to others.</td>
</tr>
</tbody>
</table>
Part B Directions:

1. Read each sentence and fill in the blank by circling the word that matches if you are a boy or a girl.

2. Read each sentence and fill in the blank by circling the word that matches if your teacher is a boy or a girl.

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. I am a ____________  .</td>
<td>boy</td>
</tr>
<tr>
<td>22. My teacher is a ______ .</td>
<td>boy</td>
</tr>
</tbody>
</table>