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The Relationship Between Student Perceptions of Classroom Climate and TVAAS Student
Achievement Scores in Title I Schools

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

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May 2015

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Dr. James Lampley

Keywords: Poverty, Classroom Climate, Student Perceptions

ABSTRACT

The Relationship Between Student Perceptions of Classroom Climate and TVAAS Student Achievement Scores in Title I Schools

by

Lesley Fleenor

The purpose of this quantitative correlational study was to examine the relationship between student perceptions of classroom climate and student growth in high-poverty schools. More specifically, this study analyzed the relationship between Tripod Student Perception Survey classroom favorability ratings and Tennessee Value-Added Assessment System (TVAAS) gain scores for students in grades 3 through 8 in a medium-sized school district in Northeast Tennessee during the 2012-2013 academic year. The data were gathered from approximately 1,500 fourth and fifth grade students from 6 elementary schools and 2 K-8 schools as well as approximately 1,300 sixth, seventh, and eighth grade students from 3 middle schools and 2 K-8 schools.

The analysis of data found statistically significant relationships between student perceptions of caring and reading TVAAS gain scores among students in grades 4 and 5, student perceptions of conferring and math TVAAS gain scores among students in grades 4 and 5, as well as student perceptions of captivating and math TVAAS gain scores among students in grades 4 through 8. The study did not reveal statistically significant relationships between student perceptions of challenging, clarifying, consolidating, or controlling and reading or math TVAAS gain scores.

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DEDICATION

This work is dedicated first and foremost to my family. Without their constant support and unending sacrifice, I may have never seen the completion of this project.

Throughout the completion of this program, my husband Jamie has put numerous date nights on hold, cleaned the house without complaint, covered for me at family events, and listened to me vent much more often than anyone should ever have to hear. At each bump of the road, he has been by my side to strengthen me and push me along when I needed it. I am so excited to close this chapter of the journey and am looking forward to all of the joy and excitement the next chapter will bring.

Throughout my life, my parents Ed and Kathy Crusenberry have been my greatest and loudest cheerleaders. No matter the difficulty of the task or the length of the assignment, you both have always reminded me that I can accomplish any goal that I am willing to work towards. Most importantly you have lived your lives as you have taught me to live—“...whatsoever ye do, do all to the glory of God” (I Corinthians 10:31, King James Version). My prayer is that Jamie and I may be that same source of encouragement to our children.

Throughout my career my students have been a ceaseless source of inspiration. Every student that I have been blessed enough to call “mine” has motivated me to learn more and work harder so that each of them may feel successful and loved. So many students have encouraged me as they overcame great obstacles in their personal lives. My hope is that all children may not be seen as “those kids”, but rather as individuals who all have gifts too plenteous to name.

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I would also like to acknowledge the support and friendship of my colleagues who have shared this journey with me. Jami Corwin, it was at your insistence that I started this journey. It was through your friendship and encouragement that I finally saw this journey complete. I am thankful, though, that our friendship is not limited to this journey, but will continue throughout this journey called life. Without my accountability partners, Charles Corwin and Kyle Loudermilk, I am not sure that I would have completed this journey in a timely manner. From the late night and weekend texts to the hours spent at boot camp, your entertainment, reassurance, and jibber jabber will never be forgotten. I am truly grateful that you are not only my colleagues but also my friends.

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CHAPTER 1

INTRODUCTION

From the beginning of its history the United States of America has valued education and educational freedoms. While the emphasis and the influence of education have evolved over many years, the right to a quality education has long been a right for all of the nations citizens (Ornstein & Levine, 1985). However, according to the National Assessment of Educational Progress (NAEP), students who were eligible for free and reduced-price meals scored an average of 25 scale score points lower in reading and mathematics than their peers who did not qualify to receive meal assistance (U.S. Department of Education, 2013). Furthermore, researchers found that the effects of poverty including a lack of adequate food supplies, unsafe communities, improper medical care, and insufficient access in well trained teachers can impact multiple future generations (Gorski, 2011; Irvin, Meece, Byun, Farmer, & Hutchins, 2011; Peske & Haycock, 2006).

A 2010 research study published by Arizona State University revealed that the effects of a school's configuration, including the percentage of economically disadvantaged students, had a direct impact on overall students achievement data (Southworth, 2010). However, Cuthrell, Stapleton, and Ledford (2010) found that teachers who focused on a multifaceted view of overcoming poverty significantly impacted educational outcomes for economically disadvantaged students, even if those same teachers were not able to directly impact student living conditions. Though the term is complex and challenging to define, the reach of highly effective teachers is far outside of their classroom walls (Cruikshank & Hafele, 2001; Gordon, Kane, & Staiger, 2006; Strong, 2007). Likewise, highly effective schools focus on making a

meaningful difference in the lives of all students, rejecting excuses for failure, engaging in high-quality collaboration opportunities, and continually working to improve previous successes (Hagelskamp & DiStasi, 2012).

The 2012 MET Policy and Practice Brief, entitled *Asking Students about Teaching*, stated that surveys seeking to better understand the classroom environment should “measure what matters” (p. 7). The measurement tool, the Tripod Student Perceptions Survey, identified seven constructs operationalized to gain an in-depth understanding of the classroom environment through the eyes of a student. Each of the “7 Cs”, including Care, Control, Challenge, Clarify, Confer, Captivate, and Consolidate, is also directly related to studies aimed at identifying the relationship between student perceptions of the classroom environment and academic achievement.

Statement of the Problem

According to the 2010 United States Department of Commerce, Census Bureau, American Community Survey, more than ten million school-age children are currently living in poverty in the United States. This number has continued to increase in all regions of the country (“Children Living in Poverty,” 2014). With that in mind, it is imperative that school leaders understand not only the essence of poverty but also the effects that poverty has on students.

This troubling statistic has warranted that many research studies investigate factors that contribute to positive school experiences and outcomes among students, especially at-risk students. A 1988 National Educational Longitudinal Study (NELS) of eighth graders revealed that “students from low-socioeconomic backgrounds, from minority groups, or whose parents are not directly involved in their education are at risk for educational failure-either by failing to learn

while in school or by dropping out of school altogether” (Kaufman, Bradbury, & Owings, 1992). More recently Felner and DeVries (2013) stated that contemporary societal changes such as violent crime and economic recession have amplified the risk factors for students of poverty. The impact of these factors has led to increased stress for low-socioeconomic students and necessitates supportive actions from teachers and school leaders. It is through a high-quality, readily available education that children gain the knowledge to become productive, well-rounded participants in today’s society (Felner & DeVries, 2013).

The purpose of this quantitative study is to examine the relationships between student academic growth and student perceptions of classroom climate among 11 Title I schools in a medium-size northeast Tennessee school district. Title I schools are generally defined as schools in which 50% or more of students qualify for free or reduced meal prices.

Research Questions

In this study the researcher analyzed the relationship between student perception data, as measured by the Tripod Student Perception Survey and student academic growth as measured by the Tennessee Value-Added Assessment System (TVAAS) student achievement gains as guided by the following questions:

1. Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey?
2. Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey?

3. Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?
4. Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?
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11. Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?
12. Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?
13. Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?
14. Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?

Significance of the Study

Students in the United States are required to attend school nearly 9,000 hours from Kindergarten through Eighth grade, leaving nearly 70,000 hours to be spent in environments outside of the school during that same 9-year period (OECD, 2014). Therefore many teachers are left asking how they can possibly offset the effects of student external environments, in which students spend nearly 80 % of their time. Even in schools, teachers cannot control all aspects of the environment, including student experiences and preparedness in other classes. For

example, one student may come to class with all of the background and prerequisite skills needed to be successful with the current year's content, but another student may lack many skills needed to perform at grade level expectations. Consequently, this study is an examination of the growth of students from previous years rather than students achievement score that only account for 1 year's content.

According to Stronge (2007) effective educators continually analyze and reflect upon the instructional decisions made in their classrooms, the significance of this study will rest in helping educators identify the impact they can have in their classrooms as opposed to educators focusing on the external factors they cannot change. Though it is important to monitor academic progress of students, teachers must remember that many elements factor into student success, including community, climate, culture, and relationships (Parker, 2011). Additionally systematic change and academic improvement are unstable at best. Many factors including sense of urgency, leadership stability, and strength of infrastructure are unpredictable and unreliable (Fullan, 2007). Therefore this study is focused on Tennessee Value-Added Assessment System student gain data and student perception survey data from the same school year.

Definitions of Terms

1. *Economically Disadvantaged* – Students who are considered to be at an educational detriment because of their low socioeconomic status (Parrett & Budge, p.40, 2012).
2. *Engagement* – The state of being actively involved in instruction, including emotional, behavioral, and cognitive participation (Jensen, 2009).

3. *Free or reduced lunch* – During the 2012-2013 school year, a family of four earning less than \$42,643 annually qualified for reduced lunch prices, whereas a family of four earning less than \$29,965 annually qualified for free lunch (Federal Register, 2012).
4. *National School Lunch Program* – Established in 1946 through the National School Lunch Act, the National School Lunch program offers free and reduced-price meals to families whose income falls at or below 180 % and 135 % of the poverty line, respectively. Both private and public schools with students in high school grades and below are eligible to participate in this federal subsidy program (National School Lunch Program Fact Sheet, 2013).
5. *Poverty* – “A chronic and debilitating condition that results from multiple adverse synergistic risk factors and affects the mind, body, and soul” (Jensen, 2009, p.6).
6. *Socioeconomic status* – “a shorthand expression for variables that enable the placement of persons, families, households and aggregates such as statistical local areas, communities and cities in some hierarchical order, reflecting their ability to produce and consume the scarce and valued resources of society” (Hauser & Warren, 1997, p. 178).
7. *Classroom climate* – The collective principles, morals, and dispositions that make-up the interactions between all individuals within the school and establish acceptable behaviors and norms for the learning community (Koth, 2008).
8. *Student Perceptions* – The way a student views the classroom environment, including what the student thinks, feels, sees, and experiences (Koth, 2008).
9. *Tennessee Value-Added Assessment System (TVAAS)* – A longitudinal database measuring student growth in multiple subjects through mixed model methodology.

10. *Tripod Student Perception Survey* – Developed by Ronald F. Ferguson, the Tripod Student Perception Survey is a classroom-level survey that examines a student’s perception of the classroom environment focusing on the seven C’s: care, confer, captivate, clarify, consolidate, challenge, and control (Frameworks and Survey Modules, 2014).

Delimitations and Limitations

The population for this study consisted of students in grades 4 through 8 in a medium-sized school district in northeast Tennessee. Given that only Title I schools in this district are included in the sample, the results of this study will not necessarily be generalizable to other public schools. Although all schools in this study meet the minimum qualifications for Title I status, the percentage of economically disadvantaged students ranges greatly within the sample. Furthermore all fourth through eighth grade Student TVAAS gain scores and Tripod Student Perception Survey results are included, regardless of class size and ethnic diversity. Time of year in which the TCAP assessment and Tripod Student Perception Survey were given were not factors considered in this study.

Overview of the Study

This study is organized into five chapters. Chapter 1 includes an introduction, statement of the problem, research questions, significance of the study, definition of key terms, and delimitations and limitations. Chapter 2 is a review of literature focusing in the areas of poverty and education, including a definition of poverty and the historical significance of poverty in education, as well as information regarding poverty and student achievement, and student

perceptions and academic achievement. Chapter 3 is an explanation of the research methodology chosen for this study including an introduction, why a quantitative design was chosen for this study, research questions with corresponding null hypotheses, population and sample, data collection methods, and data analysis methods. Chapter 4 includes analysis of the data for research questions one through fourteen. Chapter 5 concludes this study with a summary of the findings for each research question, as well as recommendations for practice and future research.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

In 2014 the Children's Defense Fund authored and released *The State of America's Children 2014*. At the time of its publication more than 16 million children in America were living in families that fall under the poverty line. These findings are consistent with the National Center for Education Statistics' *Children Living in Poverty* indicator that reveals more than 11 million school age children were living in poverty in the United States in 2012 ("Children Living in Poverty," 2014). Studies show that children and families living in poverty are more likely to lack basic necessities such as adequate food supplies, safety in their communities, and proper medical care (Mistry & Wadsworth, 2011). Furthermore, the 2013 National Assessment of Educational Progress (NAEP) results revealed that students eligible for the National School Lunch Program, offering free and reduced meal prices, scored an average of 25 scale score points lower in reading and mathematics than students who did not qualify to receive meal assistance (U.S. Department of Education, 2013).

Irvin, Meece, Byun, Farmer, and Hutchins (2011) conducted a 2-year study that examined school features and experiences and consequent outcomes on youth who were transitioning from high school to adulthood in rural areas of the United States. In a design that controlled for student and family backgrounds, more than 6,000 students from 64 schools were surveyed to examine the relationship of educational achievement and school context in rural areas. Ultimately the researchers found that the effects of poverty often last through multiple generations, but school environment is a stronger predictor of educational achievement for

students from high-poverty schools than for students from low-poverty schools. Although the culture of poverty is often seen as a culture that devalues education, discourages proper language, and encourages poor work ethic, Gorski (2011) asserts that these stereotypes focus on the weaknesses of a minority of people rather than concentrating on the needs of the nation's poorest citizens. As a result, many district and school leaders are driven to examine factors that positively affect student achievement scores among the poorest students.

Poverty and Education

Definition of Poverty

The poverty threshold varies from year to year and state to state across the country. However, according to the U.S. Department of Health and Human Services a family of four living in one of the 48 contiguous states and earning less than \$23,850 per year was considered a family living in poverty in 2014 ("Children Living in Poverty," 2014). Similarly, a family of four living in Alaska or Hawaii and earning less than \$29,820 and \$27,430, respectively, was considered a family living in poverty in 2014 ("2014 Poverty Guidelines", 2014).

Historical Significance of Poverty in Education

Reflecting on the role of education, Thomas Jefferson, stated, "Every government degenerates when trusted to the rulers of the people alone. The people themselves are its only safe depositors. And to render them safe, their minds must be improved to a certain degree (Jefferson & Lee, 1961, p.97)." During the early years of America's history as an organized nation public education began to evolve from private and religious based opportunities for the wealthy toward a system that was intended to support social order and the growth of a nation

(Ornstein & Levine, 1985). By the early 1800s, states such as Massachusetts and Connecticut were encouraging towns to establish local school committees. While the focus of school was still primarily teaching literacy using the Bible as the reader, schools began to use supplementary materials like the McGuffey's readers. The mid 1800s saw a rise in compulsory education with the enactment of compulsory attendance laws in the majority of states by 1916 and in all states by 1929 (Coulson, 1999). As a result, the government began taking responsibility for education rather than the parents (Ornstein & Levine, 1985).

The transformation of the public education system has continued throughout the last century in that the structure has shifted from compulsory and controlling toward a structure that values freedom and choice (Rees & Washington, 2000). Beginning in the mid-1900s, Americans started taking notice and demand that education be a right and opportunity for all of its citizens (Green, 2004). In 1953 the historical *Brown v. Board of Education of Topeka* case was brought before the United States Supreme Court. The plaintiff argued that "separate but equal" was in opposition to the Fourteenth Amendment as well as psychologically and socially problematic for the affected students (Guttek, 2012). In the unanimous decision finding in favor of the plaintiff Chief Justice Earl Warren stated that students must be given a judicious and equitable educational opportunity in order to be successful in life (Green, 2004).

Elementary and Secondary Education Act

The Elementary and Secondary Education Act (ESEA) was intended to provide equal opportunities, in the form of funding, to the nation's poorest children. As part of the *War on Poverty* and after years of struggle, President Lyndon Johnson signed ESEA into law in 1965. This piece of federal legislation mandated the concentration of federal funds on those schools

with the uppermost concentrations of poor students. Furthermore ESEA required schools and districts to create budgets in which Title I funds were used solely for supplemental funds, not as a means to provide general operating revenues (Wong, 2003). Schools used the funding for a variety of pullout programs as well as for instructional supplies and materials, hiring additional staff in an effort to give high-poverty students more individualized support, strengthening of teachers' professional learning, and to bolster effective teaching and learning practices by purchasing and supplying programs such as "Reading Recovery" and "Success for All" (Wong, 2003).

John and Anne Hughes, the first administrators of the Title I legislation, identified two major products of this historical reform. First of all, the public education system became responsible for the learning and overall well being of all students. Second, public expectations for improved academic achievement were greatly increased for both high-poverty and minority students. Many school systems used the newly allotted Title I funds to hire teachers to target specific areas of need for struggling students. Therefore action by Congress to set aside financial resources in an effort to fill the lack of resources for high-poverty schools was an admission that money did impact the education of students (Jennings, 2000).

Though the intent was to break the cycle of poverty through providing monetary aid to schools, challengers of the federal law stated that the nearly one billion dollars of federal funding came with equally massive amounts of federal oversight. According to his analysis of the law's implications, Jennings (2000) says "the federal money would follow the disadvantaged child to whatever school he or she attended—public or private. But a public trustee would have to administer the funds for all such children, and that trustee would almost always be the local public school district (p.517)." Therefore, the opportunity to choose a school that meets the

needs of all students, originating with the *Brown v. Board of Education of Topeka* ruling, was to some extent, negated as the federal money increasingly flowed through the public system. In fact, many opponents argued that students and families should directly receive funding to impact their home environment as opposed to the funding going through the local education agency (Jennings, 2000).

A Nation at Risk

Many Americans greatly disagreed with the direction of public education even after the establishment of the United States Department of Education cabinet level position in 1979 (Stallings, 2002). In response, Department of Education Secretary Terrel H. Bell formed an independent committee, known as the National Commission on Excellence in Education, to examine the state of America's educational system. The findings of this committee were startling. In "an open letter to the American people", the committee reported

While we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people...Our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them (Gardener et al., 1983, p.9).

The report focused on four major areas in need of attention—content, expectations, time, and teaching. Consequently, the committee made recommendations in these same four areas. Firstly, according to the committee, high school student education programs were to return to the

basics and require four English courses, three math, social studies, and science courses, and one-half computer science credit. Second, the commission suggested higher expectations for K-12 schools and colleges and universities in the areas of academic and behavioral performance. Thirdly, the commission asked that more time be spent educating students, even suggesting lengthening the school day, week, and year. Lastly, specific recommendations were made regarding teacher preparation and continued professional development of educators (Gardner et al., 1983).

The impact of this report can still be seen in our education system. Although the statistics and authenticity of the findings are highly debated, this report caught the attention of the general public as well as stakeholders in public education. An *Education Week* (2004) policy report found that the *Nation at Risk* report led to “comprehensive school reform efforts” and “was the impetus for the academic-standards movement” (Editorial Projects in Education Research Center, p.2). A significant rise in systems’ accountability to the federal government can also be linked to this report.

The Sandia Report

In response to the *A Nation at Risk* report, Admiral James Watkins, the Secretary of Energy, requested a review of the public education system in the United States by Sandia Laboratories in 1990. Though members of the public questioned the involvement of Sandia Laboratories in public K-12 education, Sandia Laboratories undertook the study in hopes of providing a foundation for planning future educational activities. Many statistics reported in *A Nation at Risk* were inconsistent with the statistics reported in the Sandia Report. For example, *A Nation at Risk* reported that student achievement dropped considerably in the early 1980s;

however The Sandia Report found that average SAT scores increased or remained the same during the 1970s and 1980s. Furthermore, according to The Sandia Report, math and science proficiency held steady or improved during the 1970s and 1980s though the A Nation at Risk report indicated declining math and science scores (Ansary, 2007).

Opponents of the Sandia Report suggested that the report did not rest on facts. As a result, the reported facts were reviewed by the National Science Foundation and the National Center for Educational Statistics. Though minor errors were found, none of the inaccuracies invalidated the findings. Multiple installments of the report were reviewed and revised; however an official publication of the Sandia report was never released to the general public. Though A Nation at Risk and The Sandia report caused much public controversy, the reports did direct attention toward strengthening our nation by supporting a quality education for all students (Tanner, 1993).

No Child Left Behind

No Child Left Behind (NCLB), a reauthorization of the Elementary and Secondary Education Act (ESEA), was passed by Congress in 2001 and signed into law by President George W. Bush in 2002. The federal law required states to mandate annual assessments that measured student academic achievement in order to receive federal dollars for educational funding. Furthermore all students were to test at the proficient level by the 2013-2014 school year. Schools and districts not meeting the required progress were deemed in need of improvement and could be restricted at the state level for repeated failure (Guttek, 2012). This administrative accountability reform system forced local education agencies to be accountable, both directly and visibly, for the progress of all students (DiGaetano, 2014). Additionally NCLB

continued to “reduce the degrees of freedom afforded to local governing institutions in education policy making” (DiGaetano, 2014, p.13).

In 2010 President Obama sought authorization of *A Blueprint for Reform*, his administration’s version of ESEA authorization. However, Congress failed to vote the authorization into law. Without a legal reauthorization in place, President Obama announced an optional waiver system for NCLB that would allow states flexibility without a “one-size-fits-all” approach (*ESEA Flexibility: Highlights of State Plans*, 2012). In order to take advantage of the ESEA flexibility, states were required to:

1. Develop and implement data systems focused on school and student accountability as well as annual growth, based on rigorous, high-quality college and career readiness curriculum standards.
2. Adhere to demanding graduation rate requirements.
3. Expose and improve deficits in achievement gaps between students groups and their peers, specifically focused on federally reported subgroups.

As of 2014, 43 states were approved for ESEA flexibility. However opponents of the waiver warned that ESEA flexibility has greatly increased the executive branch’s involvement in public education decisions and that “regulatory relief in the form of waivers may become the new norm for establishing federal education policy” (Michelman, 2012). Furthermore proponents of public education argue that further delay in the reauthorization of ESEA negatively impacted the public’s perception of schools. Rather than focus on progress, NCLB and the ESEA flexibility waivers continued to identify failure rather than success (Michelman, 2012).

Race to the Top

As a part of the American Recovery and Reinvestment Act of 2009, president Obama announced a discretionary competitive grant program known as Race to the Top (RTTT). RTTT asked states to submit proposals of education reform in the following areas:

1. “Adopting standards and assessments that prepare students to succeed in college and the workplace and to compete in the global economy;
2. Building data systems that measure student growth and success, and inform teachers and principals about how they can improve instruction;
3. Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are need most; and
4. Turning around our lowest-achieving schools.” (Fact Sheet: The Race to the Top, 2009)

RTTT funds differed from other federally funded education programs in that funding proposals were only accepted when states could demonstrate that they “have strong track records and plans for innovation and can demonstrate key stakeholder commitment to reform” (McGuinn, 2012, p. 137).

Poverty and Student Achievement

In 2010 Arizona State University published a research study examining the effects of a school’s composition, including the percentage of economically disadvantaged students, on its overall student achievement data. The researcher, Southworth (2010), found that poverty affects student achievement in three areas: the quality of teachers, peer tutoring and mentoring, and parent involvement. More specifically Southworth found that racially balanced high-poverty

schools receive more funds per student than racially imbalanced high-poverty schools. In addition, teachers in high-poverty schools have fewer degrees and are less experienced than teachers in low-poverty schools.

In another study Cuthrell et al. (2010) surveyed preservice teachers to gauge their cognizance of difficulties faced by students in high-poverty schools. The survey questions concentrated on students experiencing extreme poverty, whose “families earn less than \$7,870 per year (p. 104)”, and focused on both the effects of poverty and strategies to aid families in overcoming those effects. Additionally Cuthrell et al. pinpointed specific areas regarding the multifaceted view of poverty, as described in the research of Payne. Payne’s view of poverty includes eight dimensions—financial, emotional, mental, spiritual, physical, support systems, relationships, and role models. Cuthrell et al. revealed that teachers significantly impact educational outcomes for students even though they may not be able to directly impact student living conditions. Cuthrell et al. also cited Reeves’s 2003 research that found a positive correlation among students whose teachers trusted that a student’s background could be overcome when that same student took personal responsibility for his or her education and the teacher had high expectations for the student’s success (Cuthrell et al., 2010).

According to Teachers College Record (2008), Payne’s A Framework for Understanding Poverty is referenced in more than 38 states across America. Payne’s framework and advice to educators is based on a multitude of claims and self-proclaimed “norms” that are assumed to represent all people living in poverty. Bomer, Dworin, May, and Semingson (2008) conducted a qualitative study examining 607 truth claims found in Payne’s work. After examining Payne’s work, Bomer et al. coded the language of the book and collapsed the codes into four overarching categories: social structures, daily life, language, and characteristics of individuals. Bomer et al.

found that some of Payne's claims, especially those focusing on social structures, were unfounded and could actually lead to damaging perceptions of poor student desire to work to succeed and break the barriers that many stereotypes of poverty suppose. Though Bomer et al. do cite some positive aspects of Payne's work, it is clear that if not carefully balanced with thoughtfulness in addressing the issue of poverty. Teachers may use Payne's work to further lessen expectations for students with a background of poverty. More specifically rather than incorporating strategies for better supporting students from high-poverty backgrounds, Payne's work may make it easier for educators to focus more on the deficits of these students in terms of their cultural deficiencies, lack of educational motivation, and subpar behavior (Bomer et al., 2008).

Highly Effective Teachers

Definitions of teacher effectiveness vary greatly. Patrick and Smart (1998) stated that teacher effectiveness is comprised of three factors: "respect for students, ability to challenge students, organisation and presentation of skills". Stronge (2007) stated that a teacher's effectiveness is a mosaic of "the teacher as an individual; teacher preparation; classroom management; and the way a teacher plans, teaches, and monitors student progress (p. xi)." Absent of a universal definition, researchers in the field of teacher effectiveness agree that many factors are considered in determining if a teacher is deemed "highly effective" (Patrick & Smart, 1998; Stronge, 2007). Historically, federal legislation, such as *No Child Left Behind*, has attempted to measure a teacher's effectiveness by the number of degrees the teacher has earned. However, according to Gordon, Kane, and Staiger (2006) teachers degree attainment only makes a difference after they have gained classroom experience. In an analysis of the characteristics of

effective teachers, Cruikshank and Hafele (2001) found the following “variations of a good teacher (p.29)”: ideal, analytic, effective, dutiful, competent, expert, reflective, satisfying, diversity-responsive, and respected. Though the term is complex and challenging to define, the reach of highly effective teachers is far outside of their classroom walls (Cruikshank & Hafele, 2001; Gordon et al., 2006; Strong, 2007).

Highly Effective Schools

In 2012 Public Agenda conducted a study examining the practices of teachers and school leaders in nine of Ohio’s most effective schools. The study’s publication, *Failure is Not an Option*, identifies 10 characteristics the schools have in common. Characteristics are: principals leading with a problem-solving focus related to the school’s goals, teachers and school administration being dedicated to making a meaningful difference in the lives of students, employing effective collaboration opportunities for teachers to share successful practices, teachers using data-driven decision making, school personnel having high expectations for learning for all students and rejection of excuses for failure, school personnel having high expectations for appropriate behavior for all students, school leaders employing nontraditional incentives for model behaviors, students knowing that their teachers work to help them succeed, giving community stakeholders an opportunity for involvement while realizing success does not rely solely on their involvement, and school leaders and teachers continually work to improve on previous successes (Hagelskamp & DiStasi, 2012).

Student Perceptions and Academic Achievement

Student Perceptions that Teachers Care About Students

In 2012 Public Agenda conducted a study examining the practices of teachers and school leaders in Ohio's most effective, high-poverty schools. One commonly identified characteristic is that teachers and school leaders care for all students in the school. The study revealed that teachers and administrators in these schools choose to be committed and do whatever is necessary to help their students succeed. Additionally, faculty and staff in these effective, high-poverty schools focus less on the needs of adults and more on the needs of the children. Teachers in highly effective schools work to build relationships with students that extend beyond scheduled hours in the classroom. This often occurs as the faculty become mentors and confidantes to students (Hagelskamp & DiStasi, 2012). Students who perceive that their teachers support them socially report those teachers' classes have fewer episodes of disruptive student behaviors and greater amenability among their peers as compared to classrooms in which students do not feel supported (Wang & Holcombe, 2010).

Furthermore, in schools where students perceive that their teachers care school is commonly the place where students feel the safest. Walker and Greene (2009) conducted a study to address motivational variables that are related to a sense of belonging. Using a questionnaire and demographic sheet, Walker and Greene surveyed 249 adolescents between the ages of 14 and 19 years old. Students commented that caring school and classroom environments provide security and structure so that they are able to focus less on their surroundings and more on the instructional content that is being delivered. Moreover, students who exhibited a sense of belonging, specifically during the adolescent period of development, were more likely to

positively participate in learning and gain deeper understanding than their peers who did not feel a part of the learning community (Walker & Greene, 2009).

Adams and Forsyth analyzed the effects of trust on academic achievement in high-poverty environments. After collecting data from 79 public schools in one Midwestern state, Adams and Forsyth (2009) defined trust as “an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open (p.128-129).” Adams and Forsyth found that great levels of trust are highly predictive of a school’s ability to effectively educate its students. However, the study also revealed that trust alone does not produce results. Instead, the supportive and caring effects of trust strengthen the environment and make growth more likely than in environments where trust does not exist (Adams & Forsyth, 2009).

The effects of a caring and trusting environment are also seen in school systems outside of the United States. A Canadian case study conducted by Parker, Grenville, and Flessa (2011) cited nearly 500,000 children live in poverty in Ontario alone (p. 130). This study looked specifically at factors affecting test scores such as school community, climate, and culture. Teachers identified the school’s positive climate and established support system among key factors positively impacting the achievement of students from low socioeconomic homes (Parker et al., p. 135).

Student Perceptions that Teachers Control Student Behavior

Controlling student behavior and providing a safe learning environment is also essential as schools seek to strengthen and support students in their learning. The 2012 Public Agenda report found that time spent redirecting misbehavior is lost instructional time. As a result many

effective, high-poverty schools establish clear and consistent expectations for behavior and rely on a behavior system focused on positive reinforcement for appropriate behaviors. Additionally, students made comments that showed they are conscious of the reasoning behind the structure of highly effective schools, knowing that the structure, consistency, and high expectations can help students reach their goals. For example one student remarked, “Everybody is really strict for a reason. Because in the real world, if we’re acting crazy and everything, then we don’t get detentions or suspensions—we got to jail, or we have to pay a ticket. They teach us responsibility, respect, loyalty and lots of other virtues” (Hagelskamp & DiStasi, 2012).

According to Lynch, Lerner, and Leventhal (2013) there is a high correlation between student achievement and perceived classroom climate. For example, climates containing bullying and antagonism saw lower levels of student mastery than climates in which students felt safe and engaged. Additionally, Wang and Holcombe (2010) found that students who attended class regularly and followed the rules, rather than being pulled from class for disruptive behavior, were more likely to succeed on end of year tests (p.638).

Not only is student behavior well controlled in efficient, high-poverty schools, but instructional resources and time are also managed well. Kannapel, Clements, Taylor, and Hibpshman (2005) conducted a research study examining the practices of eight high-performing, high-poverty schools. Kannapel et al. reviewed audits conducted by state-trained teams in which the teams interviewed teachers and principals at the high-performing schools. Not only did the schools selected for this study have a history of high achievement, but they also showed a pattern of progress and narrow achievement gaps for low-socioeconomic students. Teachers commented that their priority is to “have school” (p.16). In addition interviews with the teachers revealed

that the educators incorporated research-based instructional strategies, high-quality curriculum, and solid assessment at all grade levels (Kannapel et al., 2005).

Student Perceptions that Teachers Captivate Students During Instruction

Many school personnel have begun to realize that all too often instruction is steeped in tradition rather than centered on the needs and interests of students. According to Parrett and Budge (2012) learning should focus on masterful instruction, particularly for students of poverty. Instead of teaching the same content with identical instructional methods day after day, teachers at high-performing, high-achieving schools modify and adapt their curriculum to the needs of the learners in their classrooms on a consistent basis. These instructional strategies center on meeting the needs of the whole child as opposed to caring only for their educational necessities. This includes accelerating learning, providing project-based, high-interest assignments, and even using authentic assessment. In an effort to prove that the results of their learning can truly make a difference, many high-achieving, high-poverty schools engage in service learning tasks that compel students to solve real world problems (Parrett & Budge, 2012).

According to a 2011 study investigating the impact of student's autonomy in learning, student engagement in secondary classrooms dramatically decreases compared to engagement in elementary classrooms. Although disengagement is typical of adolescent behavior, students with lower levels of engagement normally exhibit difficulty with academics and lower grades than their more engaged peers (Hafen et al., 2012). Valentine and Collins (2011) examined the relationship of engagement and performance on achievement tests in more than 10,000 middle school classrooms. The findings revealed that higher achievement scores often follow higher levels of engagement in the classroom. However, the authors also stated that higher achievement

scores should not be the goal, but rather teachers should work to regularly engage students in an effort to encourage the development of students for societal readiness (Valentine & Collins, 2012).

Through his research on engaging students in poverty, Jensen identifies and describes seven factors of engagement—health and nutrition, vocabulary, effort and energy, mind-set, cognitive capacity, relationships, and stress level. Jensen maintains that these engagement factors closely coincide with socioeconomic status. He also states that while not all factors are equal in terms of their significance, educators in the classroom are able to influence each of the seven areas (Jensen, 2013).

Student Perceptions that Teachers Challenge Students

Raphael (2005) identified poverty as “a condition that extends beyond the lack of income and goes hand in hand with a lack of power, humiliation and a sense of exclusion” (p. 36). Furthermore through a review of literature, Amatea and West-Olatunji (2007) cited research by Peske and Haycock (2006) that found students who are poor are far more likely to attend low-achieving schools and be taught by inexperienced teachers. Additionally teachers in high-poverty schools rarely have adequate training regarding proper pedagogy and expectations for students. This often leads to false assumptions about students and their poverty-stricken families. However, she states that a barrier of decreased motivation often negatively affects the student-teacher relationship (Amatea & West-Olatunji, 2007).

Soumah and Hoover (2013) analyzed the perceptions of students of color, including Latinos and African Americans, in two Minnesota communities. As indicated in the 2008 study by Lee, Hill, and Hawkins (2012), students stated that their teacher’s low expectations decreased

their own motivation. In some cases these negative expectations even led students to develop a failure identity (Soumah & Hoover, 2013, p. 21). Ultimately “children can and do rise to a teacher’s expectations, and educators must not assume that because a child is living in poverty that he or she lacks the ability to achieve. The educator’s job is not to expect less but to focus on learning and overcoming the challenges associated with poverty” (Cuthrell et al., p. 107).

A 2008 study was conducted to examine the role of educational expectations in the cycle of intergenerational poverty. Lee et al. (2012) collected longitudinal data from 808 participants from 1998 to 2005. More than 50% of the participants were economically disadvantaged. The purpose of the study was to gauge changes in student educational aspirations throughout adolescence. Lee et al. concluded, “a child’s educational attainment is an important determinant of that person’s adult economic status (p. 141).” However their research cited an earlier study arguing that educational experiences may have the ability to “serve as an economic equalizer”, suggesting that intergenerational poverty is not a static classification (Lee et al., p. 142). This study also reported that a student’s educational aspirations are fluid, especially throughout high school but tended to trend downward beginning in fifth grade. Additionally Lee et al. emphasized the importance of consciously working to maintain elementary student educational aspirations throughout adolescence, knowing that their socioeconomic and family cultures appear to have a negative impact (Lee et al., 2012).

The issue of poverty is not isolated to the United States. Rather, issues surrounding poverty and their impact on education are widespread around the world. Gizir and Aydin (2009) conducted a study of more than 800 eighth grade boys and girls in Turkey. This study focused on examining factors related to academic resilience in adolescents. The study identified nine external factors affecting student resilience: school caring relationships and high expectations,

school meaningful participation, community caring relationships and high expectations, peer high expectations, home caring relationships, home high expectations, and home meaningful participation. According to the data analysis, all factors relating to high expectations were strongly and positively correlated with high student resilience. High home expectations carried the greatest statistical significance (Gizir & Aydin, 2009).

In contrast, a study led by Trask-Tate and Cunningham (2010) in the United States found that “many black children learn, succeed, and have plans for furthering their education despite experiencing the effects of low socioeconomic status, minimal teacher expectations, and inadequate representation of their success (p. 137).” However, this study did find a significant gap between the educational aspirations of white females with those of their African American female peers. In addition, the study found that the effect of parental involvement was statistically significant.

In a case study examining the practices of three high-performing, high-poverty high schools, Masumoto and Brown-Welty (2009) cited “leaders in successful rural high schools maintain a school-wide focus on instruction and high expectations, develop multiple support systems for students with varying needs, and capitalize on strengths of teachers to enhance students outcomes (p.14).”

Although, many forms of motivation drive students to perform, Meece, Anderman, and Anderman (2006) revealed the types of goals set for students does make a difference in achievement. According to Meece et al. achievement goals, those focused on “engaging, choosing, and persisting at different learning activities (p.490)” are associated with both positive achievement patterns and increased self-efficacy in students. For example, the teacher displays and discusses appropriate work that will result in good grades rather than only telling students

that mistakes are learning experiences. Additionally, when using achievement goals rather than mastery goals, the teacher may specifically review and explain how one student's work compares to that of another student rather than merely recognizing the effort of all students (Meece et al., 2006). However, high expectations alone are not enough to raise student achievement in high-poverty schools. High levels of support must also accompany high expectations from teachers and other school staff (Parrett & Budge, 2012, p.121).

In another study Walker (2012) further decomposed achievement goals into three subtypes: mastery, performance-approach, and performance-avoidance. This study, involving 227 students from Midwestern high schools, used the *Approaches to Learning Survey*, to examine student perceptions of classroom achievement goals in the classroom. Walker found “teachers who establish a classroom that promotes mastery goals will likely foster the adoption of personal mastery goals among students (p.98).”

Student achievement trends in high-poverty schools are mirrored in students who are classified as both economically disadvantaged and students with disabilities. In a 5-year study Nagle, Hernandez, Embler, McLaughlin, and Doh (2006) examined elementary schools that were found to have achieved higher than expected results amongst students with disabilities. A data analysis revealed four school-level characteristics: “emphasis on high standards for student performance and behavior and access to the general education curriculum; stability within the school community; close ties between the school, parents, and community; and flexible school instructional arrangements” (Nagle et al., 2006, p. 6).

Student Perceptions that Teachers Confer with Students

Not only do students need to be challenged, but also it is essential that students have choice in the path of their learning. Angelis and Wilcox (2011) contend, “more effective schools reach out to the communities around them”, involving multiple levels of stakeholders in the education process (p.26). Furthermore, in a study examining the role of school-wide peer culture on academic achievement and school engagement, Lynch et al. (2012) found that peer groups and consultation with colleagues are especially meaningful to adolescent groups. The authors of this longitudinal analysis concluded that while relational components of peer culture were not necessarily related to academic achievement, relational components were associated with school engagement, which has been found to impact student achievement. In another study examining adolescents’ perceptions in middle school, Wang and Holcombe identified adolescence as a period of development in which students increasingly seek the support and confirmation of like-minded peers. This study found a statistically significant correlation between promotion of discussion, school participation, and academic achievement, in terms of eighth grade GPA (Wang & Holcombe, 2010).

Student Perceptions that Teachers Clarify and Consolidate Student Learning

Teachers in nine schools studied in the Public Agenda analysis of high-achieving, high-poverty schools in Ohio regularly use formative and summative assessment data to plan their instruction. Students in high-achieving, high-poverty schools recognize that teachers provide wait time, academic feedback, and advancing questions. Students also reported that teachers use assessment data to gain meaningful feedback on student progress and help students take ownership of their own learning (Hagelskamp & DiStasi, 2012). However, effective teachers

also use daily informal assessments to gauge student understanding and to establish next steps for learning. Rather than asking rhetorical or unanswerable questions, these teachers ask questions that students find meaningful and relevant to what they are learning and to their every-day lives (Jensen, 2009).

Students in highly effective classrooms also see the question and answer process as a cycle in which the students and teacher work together to gain greater understanding and meaning of content. Clarifying questions promotes student engagement and ownership in the learning process. Questioning in the effective classroom is more about quality than quantity. According to Stronge's research on effective teachers, both low-level and higher-level questions can be equally effective. However, questions are most valuable when focused on engaging students in meaningful demonstration of their learning (Stronge, 2007).

In Reeves's study of 90/90/90 schools, in which "90% or more of the students were eligible for free and reduced lunch, 90% or more of the students were members of ethnic minority groups, and 90% or more of the students met the district or state academic standards in reading or another area (p.1)", student mastery of a concept dictates the pace of instruction rather than an arbitrary pacing guide or unit map. Students also perceive that their teachers provide multiple opportunities for improvement. Teachers insist that student demonstrate mastery of the content before moving on to more complex concepts. Consequently, teachers apply and share the results of authentic and regular assessments with their students. Rather than waiting for the end of a grading period, students are given feedback of their work in real time, and consequently are placed into intervention or enrichment tracks immediately after assessment rather than at the beginning of a new grading period or school year (Reeves, 2003).

Tennessee Value-Added Assessment System

Beginning in 1993 the Tennessee Value-Added System, often referred to as TVAAS, has been used by the Tennessee Department of Education to provide districts, schools, and teachers with detailed grade and subject specific information regarding student growth (Misconceptions about Value-Added Reporting in Tennessee, 2012). According to Sanders (1994), who is credited with developing the system, “TVAAS analyzes the scale scores students make on the norm-referenced items of the TCAP. The pattern of the scale scores over the child’s school career forms a profile of academic growth” (p. 302).

However, many researchers suggest that the TVAAS model should be used cautiously and should be balanced with other accountability approaches (Glass, 2004; Hibpshman, 2004; Pride, 2012). A 2008 study of school effectiveness measures found that learning effectiveness systems, like TVAAS, were limited as a result of the system’s inability to control factors outside of the school environment (Downey, von Hippel, & Hughes, 2008). In response to negative claims against the Tennessee Value-Added Assessment System, the SAS Institute released a report aimed at clearing ten common misconceptions about TVAAS:

1. Student growth is correlated with certain demographic variables, so TVAAS should control for demographics
2. If students are already high (or low) achieving, it is harder to show growth
3. TVAAS should always indicate growth if the percentage of students scoring proficient or above increase since last year
4. TVAAS cannot measure the progress of systems and schools with high mobility rates
5. TVAAS cannot measure growth for groups of students who have missing data
6. TVAAS reporting is not reliable or valid since it is based only on standardized assessments
7. TVAAS is based on a “black box” methodology

8. The TVAAS methodology is too complex; a more simple approach to measuring system and school effectiveness would provide better information to educators
9. Growth is calculated based on how other schools perform each year
10. Teacher value-added estimates are not reliable enough to be used in high-stakes decisions (Misconceptions about Value-Added Reporting in Tennessee, 2012)

The report argued the system's validity by citing multiple researchers' claims that the TVAAS methodology was sound and robust. In addition the report surmised the researchers claims by presenting a "TVAAS in Practice" section that outlined practical application of the research behind the science of TVAAS (Misconceptions about Value-Added Reporting in Tennessee, 2012).

Tripod Student Perception Survey

Student perception surveys have been used by many researchers to gather information about the insights and views of students in the classroom (Driver, 2002; Greene et al., 2004; Machemer & Crawford, 2007). The Tripod Student Perception Survey, developed by a team from Harvard University, "asks students their level of agreement with a series of statements related to different aspects of classroom climate and instruction...organized under seven constructs: Care, Control, Clarify, Challenge, Captivate, Confer, and Consolidate" (*Gathering Feedback for Teaching*, 2012, p.17). From 2001 through 2012 the Tripod Student Perception Survey has been used by almost a million students (Ferguson, 2012).

Conclusion

Poverty and its far-reaching effects continue to rise in America ("Children Living in Poverty", 2014). Furthermore, expectations for student achievement and classroom engagement

continue to increase (Jensen, 2013). Rather than continually focus on factors outside of the school environment that often cannot be controlled, highly effective educators focus on elements that they can influence, such as caring for their students, controlling student behavior and the classroom environment, captivating students during instruction, challenging students through increase expectations, conferring with students to support understanding, and clarifying and consolidating student learning (Hagelskamp & DiStasi, 2012; Kannapel et al, 2005; Lee et al., 2012; Parrett & Budge, 2012; Stronge, 2007).

CHAPTER 3

RESEARCH METHODOLOGY

The purpose of this quantitative study was to examine the relationship between student perceptions of classroom climate and student academic growth in Title I schools. Academic growth was measured by 2012-2013 Tennessee Value-Added Assessment System (TVAAS) student achievement gains. Student perceptions of classroom climate were measured through Tripod Student Perception Survey data. For this study Title I schools were defined as schools in which 50% or more of students qualify for free or reduced-price meals.

This study was an analysis of the relationship between two sets of numerical data in which the variables were not intentionally influenced by the researcher (Witte & Witte, 2010). Therefore, nonexperimental quantitative research methods were used in this study (Ary, Sorensen, Jacobs, & Walker, 2013). Additionally this study was ex post facto research, indicating that all data were collected prior to the launch of this study. More specifically 2012-2013 TVAAS gain scores were evaluated against 2013 Tripod student perception survey data to determine if there was a linear relationship between the two variables. As a result it was assumed that the variables are bivariately normally distributed and that the scores of both variables are independent of one another (Green & Salkind, 2011). In addition the advantage of choosing a quantitative approach for this study was its generalizability because of the statistical aggregation of the data (Patton, 2002).

Research Questions and Null Hypotheses

Research Question 1

RQ1: Is there a significant relationship between math TVAAS gain scores and the classroom favorability score on the Care Dimension of the Tripod Student Perception Survey?

H₀₁₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₁₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₁₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 2

RQ2: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey?

H₀₂₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₂₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₂₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 3

RQ3: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?

H₀₃₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₃₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₃₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 4

RQ4: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?

H₀₄₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₄₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₄₃: There is no significant relationship between reading TVAAS gain scores and classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 5

RQ5: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey?

H₀₅₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₅₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₅₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

Research Question 6

RQ6: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey?

H₀₆₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₆₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₆₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 7

RQ7: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey?

H₀₇₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₇₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₇₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 8

RQ8: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey?

H₀₈₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀₈₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀₈₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 9

RQ9: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey?

H₀9₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀9₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀9₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 10

RQ10: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey?

H₀10₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀10₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀10₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 11

RQ11: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?

H₀11₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀11₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀11₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 12

RQ12: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?

H₀12₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀12₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀12₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 13

RQ13: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?

H₀13₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀13₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀13₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Research Question 14

RQ14: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?

H₀14₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4 and 5?

H₀14₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

H₀14₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

Instrumentation

This study analyzed two data sources used by the Tennessee Department of Education during the 2012-2013 academic year. The Tripod Student Perceptions Survey was used to measure student perceptions of the classroom climate. Student academic growth was measured by analyzing Tennessee Value-Added Assessment System (TVAAS) gains. Both the Tripod Student Perceptions Survey and TVAAS are further discussed in the following sections.

Tennessee Value-Added Assessment System

Schools in Tennessee have used the Tennessee Value-Added System (TVAAS) to measure individual student growth since 1993. The system is designed to measure both year-to-year and subject-by-subject academic growth (Misconceptions about Value-Added Reporting in Tennessee, 2012). According to Sanders (1994), who is credited with developing the system, “TVAAS analyzes the scale scores students make on the norm-referenced items of the TCAP. The pattern of the scale scores over the child’s school career forms a profile of academic growth” (p. 302). For this study TVAAS academic gain scores were accessed on the public Tennessee Department of Education State Report Card first by individual schools, then by grade level (grades 4-8), and then by subject area (reading and math).

Tripod Student Perception Survey

The Tripod Student Perception Survey, developed by a team from Harvard University, “asks students their level of agreement with a series of statements related to different aspects of classroom climate and instruction...organized under seven constructs: Care, Control, Clarify, Challenge, Captivate, Confer, and Consolidate” (*Gathering Feedback for Teaching*, 2012, p.17). From 2001 through 2012 the Tripod Student Perception Survey has been used by almost a million students (Ferguson, 2012).

Both TVAAS and Tripod Survey results are interval or ratio measures, in that both sets of data “reflect differences in degree based on equal intervals and a true zero” (Witte & Witte, 2010, p.11). Both TVAAS data and Tripod Student Perception Survey questions have been previously tested for statistical validity in that both test what was intended to be measured.

Quantifying the same classroom climate factors at each school against student achievement results from the same test will support the reliability of this study (Patton, 2002).

Population and Sample

The population for this study consisted of approximately 1,500 fourth and fifth grade students from six elementary schools and two K-8 schools as well as approximately 1,300 sixth, seventh, and eighth grade students from three middle schools and two K-8 schools in a medium-size district in Northeast Tennessee during the 2012-2013 academic school year. All schools included in this study met the 50% threshold for free and reduced meals and had all students in attendance participate in the Tripod Student Perception survey during the 2012-2013 academic school year. Furthermore the study sample consisted of 16 cohorts of students enrolled in grades 4 and 5 and 15 cohorts of students in grades 6 through 8. The limited sample size may make this study unreliable in terms of application to a larger population (Ary et al., 2013).

Data Collection

Before data collection began, the researcher requested approval to conduct this study from the East Tennessee State University Institutional Review Board (IRB). Given that all data were pre-existing and were obtained without being linked to confidential, identifying information, the researcher was granted exemption from IRB approval for this study. Therefore after IRB exemption was established, the researcher accessed the TVAAS online database, available to the general public, in order to obtain grade level TVAAS gain score data. TVAAS academic gain scores were gathered first by individual schools, then by grade level (grades 4-8), and then by subject area (reading and math). Additionally, the researcher requested access to

spring 2013 Tripod Survey data for all Title I schools within the district from the director of schools. After the director of schools granted permission to access and analyze the data source, the researcher obtained the data in an electronic format with no identifying information.

Data Analysis

After the electronic data were received, the researcher organized both sets of data by school identifier, subject area, and grade level into a Microsoft Excel spreadsheet. According to Green and Salkind (2010), “The Pearson product-moment correlation coefficient (r) assesses the degree that quantitative variables are linearly related in a sample...The significance test for r evaluates whether there is a linear relationship between the two variables in the population” (p.257). Therefore Pearson correlational coefficients were computed for research questions 1-14 to determine the relationship among the Tripod Student Perception Survey data and student TVAAS gain scores in reading and math.

The Tripod Student Perceptions Survey questions were organized into seven categories, referred to as the seven Cs: captivate, care, challenge, clarify, confer, consolidate, and control. Students in grades 4-5 were given the upper elementary survey with between three and six questions in each of the seven categories, requiring students to answer 27 questions. Students in grades 6-8 were given the secondary survey with three to seven questions in each of the seven categories, requiring students to answer 34 questions. For each question, students were asked to respond if the statement was totally untrue, mostly untrue, somewhat, mostly true, or totally true. A percentage of favorable answers, taken from the mostly true and totally true responses, were then combined for all questions in that category to generate a school favorability rating. A total of forty-two Pearson correlational coefficients were computed in order to analyze the

relationship between school favorability ratings in each of the seven categories and TVAAS gain scores for both reading and math.

Summary

This study analyzed the relationship between student perception data and student academic growth. The population for this study consisted of approximately 2,500 fourth and fifth grade students from seven elementary schools and two K-8 schools as well as approximately 1,800 sixth, seventh, and eighth grade students from four middle schools and two K-8 schools in a medium-size district in Northeast Tennessee during the 2012-2013 academic school year. The Tripod Student Perception Survey, administered in spring 2013, was used to measure student perceptions of the classroom climate. 2012-2013 TVAAS gain scores, available to the public on the Tennessee Department of Education's Report Card website, were used to measure student academic growth. After the data were collected, the researcher used Microsoft Excel software to a Pearson correlation coefficient test to analyze the relationship between student perceptions of the classroom climate and student academic growth.

CHAPTER 4

ANALYSIS OF DATA

The purpose of this quantitative study was to examine the relationship between student perceptions of classroom climate and student academic growth in Title I schools. Student perceptions of the classroom climate were measured through Tripod Student Perception Survey data. Academic growth was measured by 2012-2013 Tennessee Value-Added Assessment System (TVAAS) student achievement gains. The population of this study consisted of approximately 1,500 fourth and fifth grade students from six elementary schools and two K-8 schools as well as approximately 1,300 sixth, seventh, and eighth grade students from three middle schools and two K-8 schools in a mid-size district in Northeast Tennessee during the 2012-2013 academic school year. All schools in this study met the requirements for Title I identification, meaning that at least 50% of students qualified for free or reduced-price meals.

This chapter includes the presentation of the analysis of data that were used to answer the 14 research questions and corresponding 42 null hypotheses. Scatterplot data, based on the Tripod Student Perception Survey and TVAAS academic gain scores in reading and math, were analyzed to determine the relationship between student perceptions of classroom climate and student academic growth.

Research Question 1

RQ1: Is there a significant relationship between math TVAAS gain scores and the classroom favorability score on the Care Dimension of the Tripod Student Perception Survey?

H₀₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between fourth and fifth grade student perceptions that their teachers care and math TVAAS gain scores. The results of the analysis, as shown in Figure 1 below, revealed a weak positive relationship between student perceptions of caring ($M = 0.86$, $SD = 0.13$) and student growth in math ($M = 0.82$, $SD = 6.86$). The correlation was not statistically significant [$r(14) = .016$, $p = .954$]. As a result of the analysis, H₀₁ was not rejected. In general the results suggest that there is not a significant correlation between fourth and fifth grade student perceptions that their teachers care and math TVAAS gain scores.

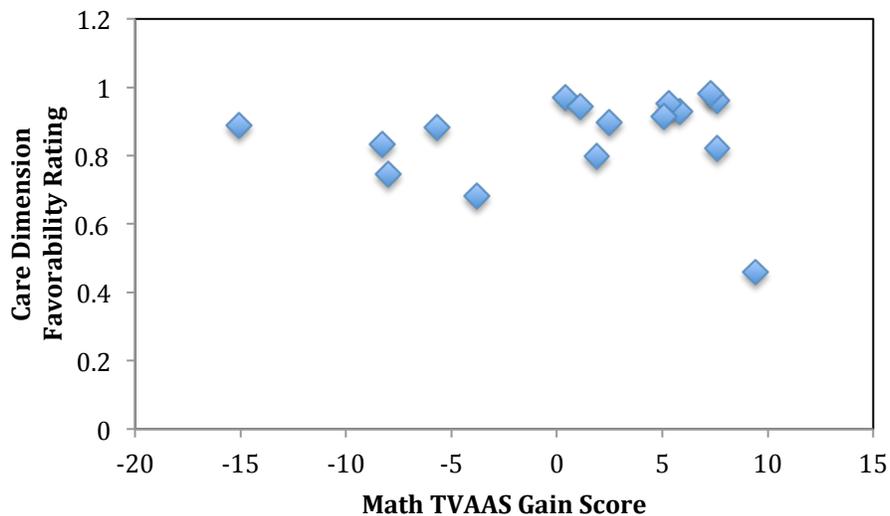


Figure 1. Scatterplot of the Care Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Math TVAAS Gain Scores

H₀₁₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that their teachers care and math TVAAS gain scores. The results of the analysis, as shown in Figure 2 below, revealed a weak positive relationship between student perceptions of caring ($M = 0.63$, $SD = 0.16$) and student growth in math ($M = 4.20$, $SD = 7.72$). The correlation was not statistically significant [$r(13) = .285$, $p = .303$]. As a result of the analysis, H₀₁₂ was not rejected. In general the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that their teachers care and math TVAAS gain scores.

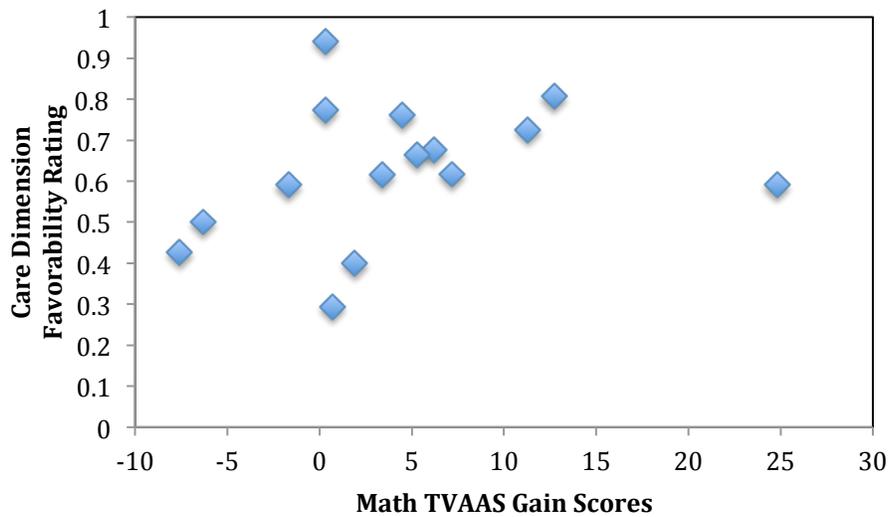


Figure 2. Scatterplot of the Care Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Math TVAAS Gain Scores

H₀₁₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that their teachers care and math TVAAS gain scores. The results of the analysis, as shown in Figure 3 below, revealed a weak negative relationship between student perceptions of caring ($M = 0.74$, $SD = 0.19$) and student growth in math ($M = 2.46$, $SD = 7.48$). The correlation was not statistically significant [$r(29) = -.007$, $p = .970$]. As a result of the analysis, H₀₁₃ was not rejected. In general the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that their teachers care and math TVAAS gain scores.

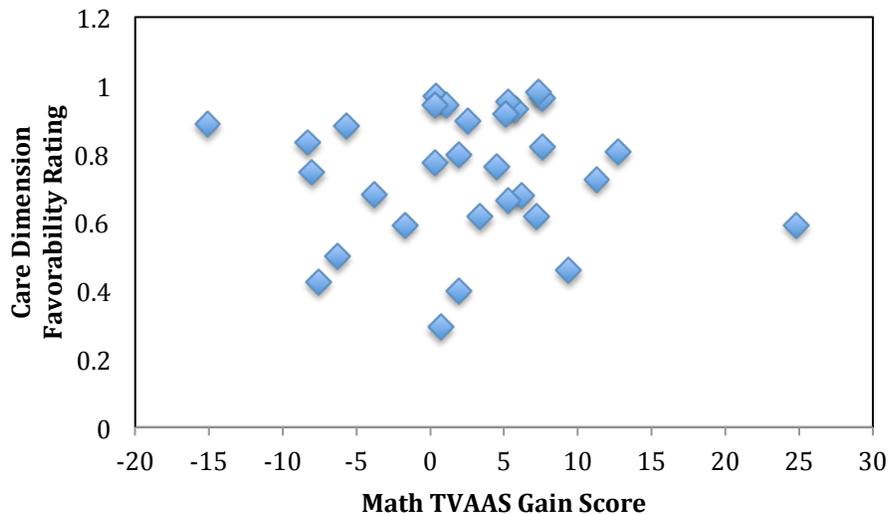


Figure 3. Scatterplot of the Care Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Math TVAAS Gain Scores

Research Question 2

RQ2: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey?

H₀₂₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that their teachers care and reading TVAAS gain scores. The results of the analysis, as shown in Figure 4 below, revealed a strong positive relationship between student perceptions of caring ($M = 0.88$, $SD = 0.11$) and student growth in reading ($M = 1.76$, $SD = 4.62$). The correlation was statistically significant [$r(14) = .545$, $p = .029$]. As a result of the analysis, H₀₂₁ was rejected. In general the results suggest that there is a significant correlation between Fourth and Fifth grade student perceptions that their teachers care and reading TVAAS gain scores.

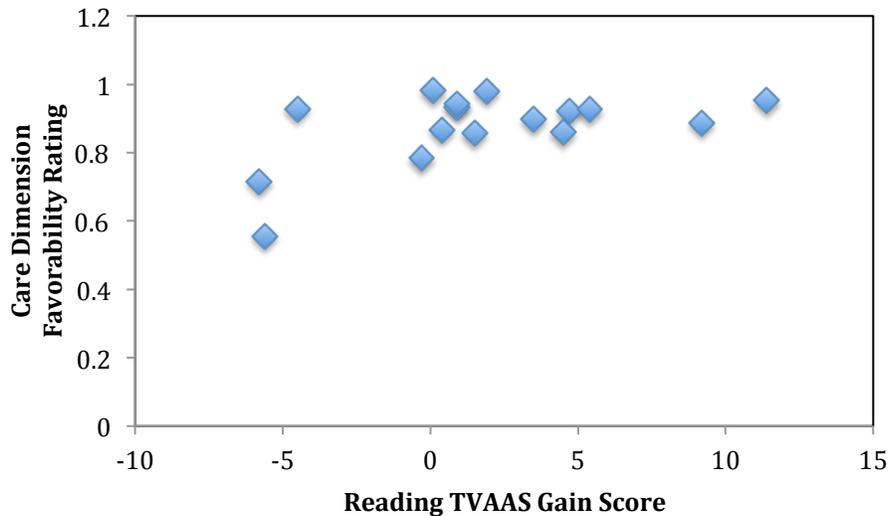


Figure 4. Scatterplot of the Care Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Reading TVAAS Gain Scores

H₀₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that their teachers care and reading TVAAS gain scores. The results of the analysis, as shown in Figure 5 below, revealed a strong negative relationship between student perceptions of caring ($M = 0.62$, $SD = 0.17$) and student growth in reading ($M = 0.79$, $SD = 4.36$). The correlation was not statistically significant [$r(13) = -.468$, $p = .079$]. As a result of the analysis, H₀₂ was not rejected. In general, the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that their teachers care and reading TVAAS gain scores.

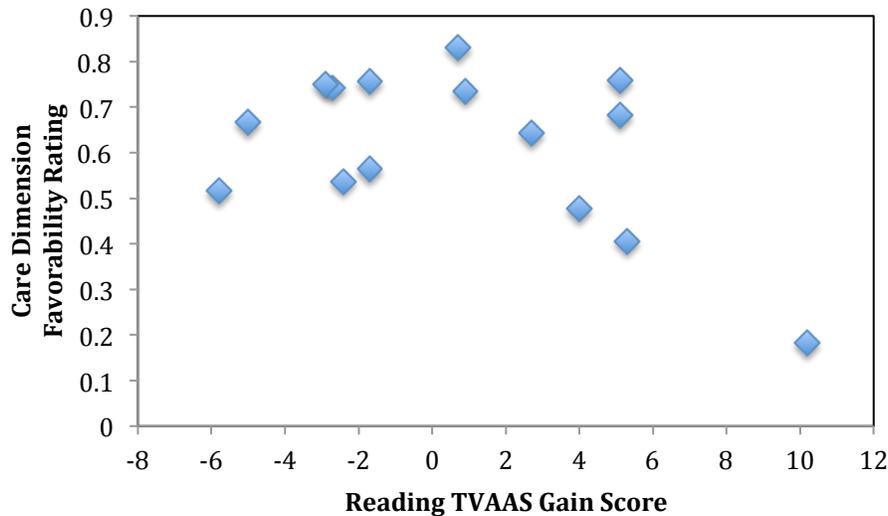


Figure 5. Scatterplot of the Care Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Reading TVAAS Gain Scores

H₀₂₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that their teachers care and reading TVAAS gain scores. The results of the analysis, as shown in Figure 5 below, revealed a strong negative relationship between student perceptions of caring ($M = 0.62$, $SD = 0.17$) and student growth in reading ($M = 0.79$, $SD = 4.36$). The correlation was not statistically significant [$r(13) = -.468$, $p = .079$]. As a result of the analysis, H₀₂₃ was not rejected. In general, the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that their teachers care and reading TVAAS gain scores.

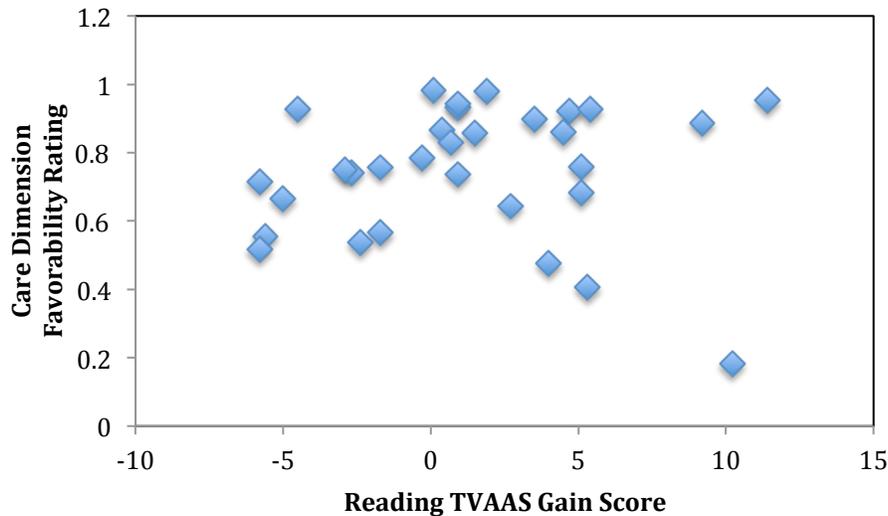


Figure 6. Scatterplot of the Care Dimension of the Tripod Student Perception Survey Compared to Fourth Through Eighth Grade Student Reading TVAAS Gain Scores

Research Question 3

RQ3: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?

H₀₃₁: There is no significant relationship between math TVAAS gain scores and classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that their teachers challenge students and math TVAAS gain scores. The results of the analysis, as shown in Figure 7 below, revealed a weak positive relationship between student perceptions of challenge ($M = 0.86$, $SD = 0.06$) and student growth in math ($M = 0.82$, $SD = 6.86$). The correlation was not statistically significant [$r(14) = .180$,

$p = .506$]. As a result of the analysis, H_{03_1} was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that their teachers challenge students and math TVAAS gain scores.

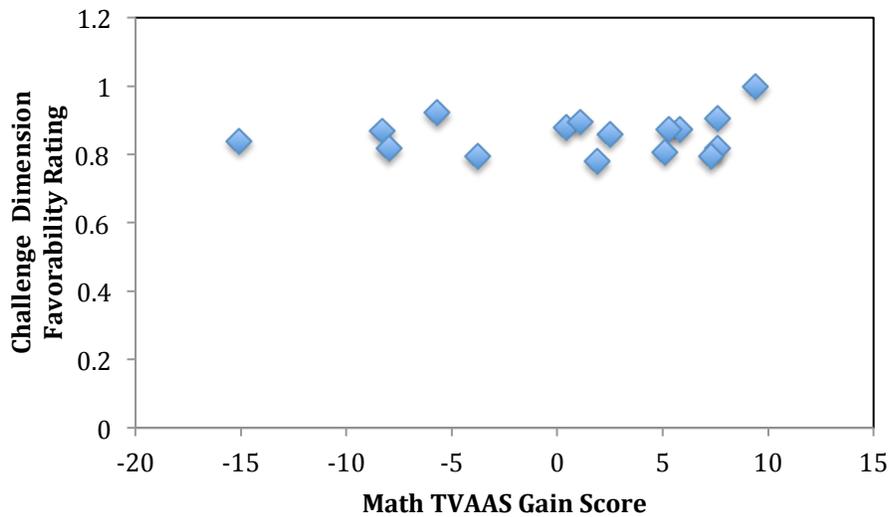


Figure 7. Scatterplot of the Challenge Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Math TVAAS Gain Scores

H_{03_2} : There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers challenge students and math TVAAS gain scores. The results of the analysis, as shown in Figure 8 below, revealed a strong positive relationship between student perceptions of challenge ($M = 0.77$, $SD = 0.12$) and student growth in math ($M = 4.20$, $SD = 7.72$). The correlation was not statistically significant [$r(13) = .402$,

$p = .137$]. As a result of the analysis, H_{03_2} was not rejected. In general the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers challenge students and math TVAAS gain scores.

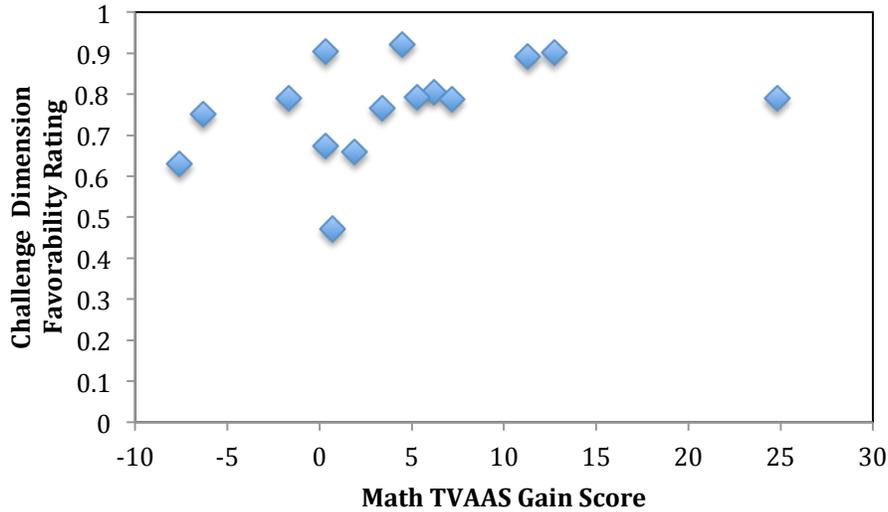


Figure 8. Scatterplot of the Challenge Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Math TVAAS Gain Scores

H_{03_3} : There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers challenge students and math TVAAS gain scores. The results of the analysis, as shown in Figure 9 below, revealed a weak positive relationship between student perceptions of challenge ($M = 0.82$, $SD = 0.10$) and student growth

in math ($M = 2.46$, $SD = 7.48$). The correlation was not statistically significant [$r(29) = .180$, $p = .332$]. As a result of the analysis, H_{03} was not rejected. In general the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers challenge students and math TVAAS gain scores.

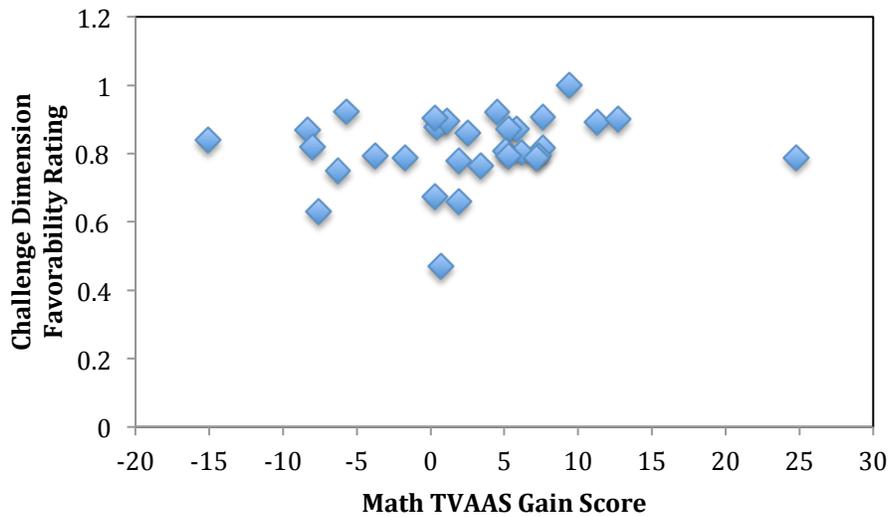


Figure 9. Scatterplot of the Challenge Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Math TVAAS Gain Scores

Research Question 4

RQ4: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?

H₀₄₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers challenge students and reading TVAAS gain scores. The results of the analysis, as shown in Figure 10 below, revealed a strong positive relationship between student perceptions of challenge ($M = 0.84$, $SD = 0.05$) and student growth in reading ($M = 1.76$, $SD = 4.62$). The correlation was not statistically significant [$r(14) = .443$, $p = .086$]. As a result of the analysis, H₀₄₁ was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers challenge students and reading TVAAS gain scores.

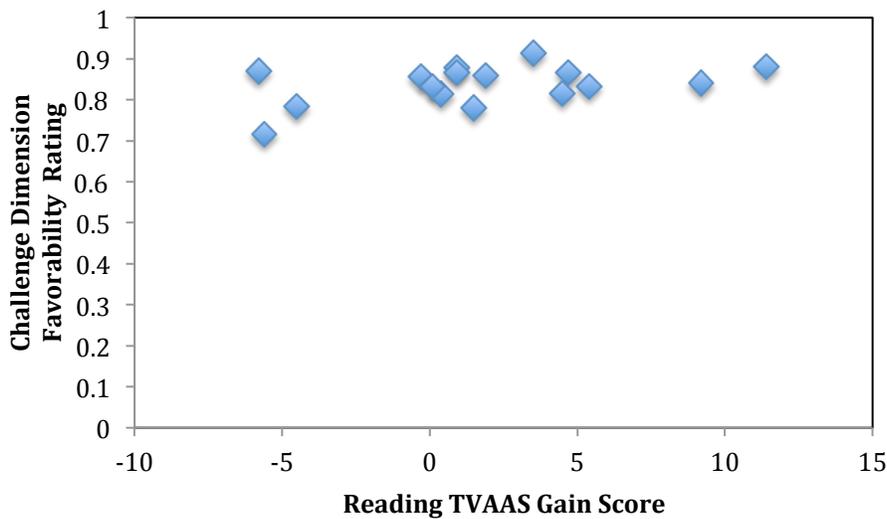


Figure 10. Scatterplot of the Challenge Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Reading TVAAS Gain Scores

H₀₄₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers challenge students and reading TVAAS gain scores. The results of the analysis, as shown in Figure 11 below, revealed a weak negative relationship between student perceptions of challenge ($M = 0.78, SD = 0.11$) and student growth in reading ($M = 0.79, SD = 4.36$). The correlation was not statistically significant [$r(13) = -.275, p = .322$]. As a result of the analysis, H₀₄₂ was not rejected. In general, the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers challenge students and reading TVAAS gain scores.

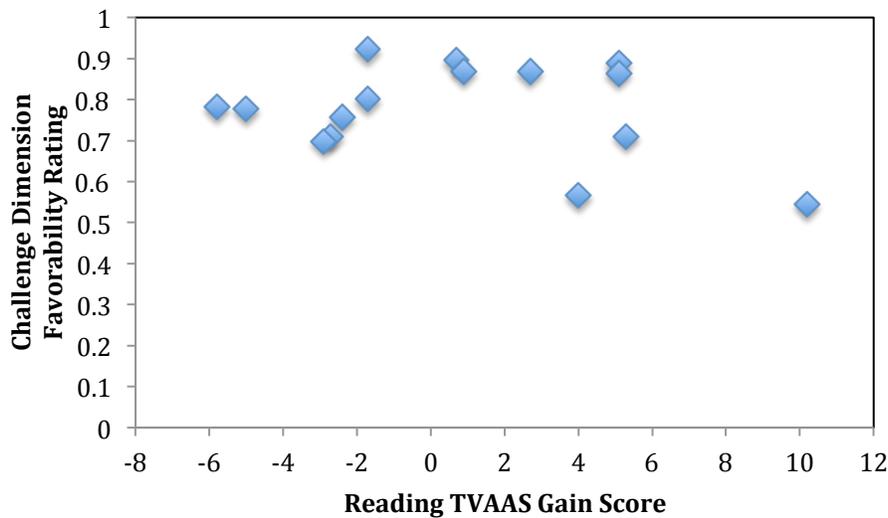


Figure 11. Scatterplot of the Challenge Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Reading TVAAS Gain Scores

H₀₄₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers challenge students and reading TVAAS gain scores. The results of the analysis, as shown in Figure 12 below, revealed a negligible relationship between student perceptions of challenge ($M = 0.81$, $SD = 0.09$) and student growth in reading ($M = 1.29$, $SD = 4.52$). The correlation was not statistically significant [$r(29) = -.001$, $p = .995$]. As a result of the analysis, H₀₄₃ was not rejected. In general, the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers challenge students and reading TVAAS gain scores.

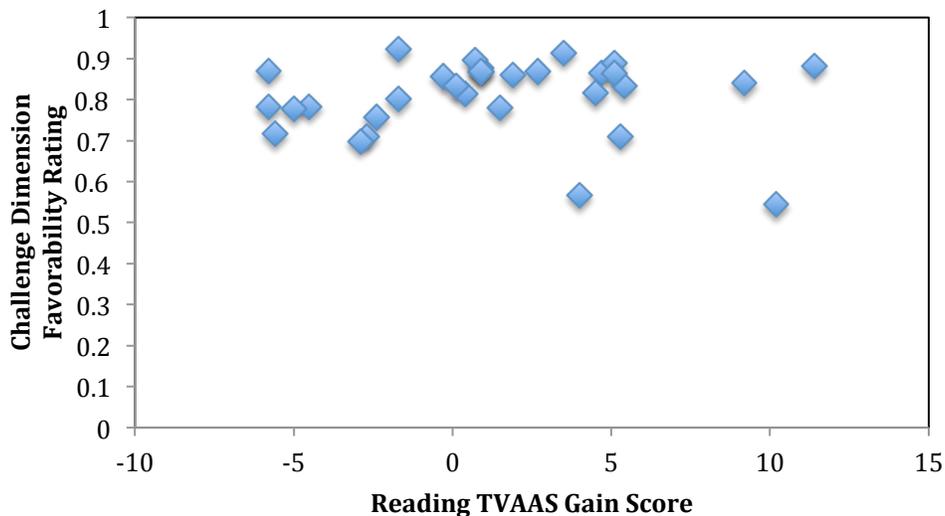


Figure 12. Scatterplot of the Challenge Dimension of the Tripod Student Perception Survey Compared to Fourth Through Eighth Grade Student Reading TVAAS Gain Scores

Research Question 5

RQ5: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey?

H₀₅₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers confer with students and math TVAAS gain scores. The results of the analysis, as shown in Figure 13 below, revealed a strong positive relationship between student perceptions of conferring ($M = 0.57, SD = 0.12$) and student growth in math ($M = 0.82, SD = 6.86$). The correlation was statistically significant [$r(14) = .529, p = .035$]. As a result of the analysis, H₀₅₁ was rejected. In general the results suggest that there is a significant correlation between Fourth and Fifth grade student perceptions that teachers confer with students and math TVAAS gain scores.

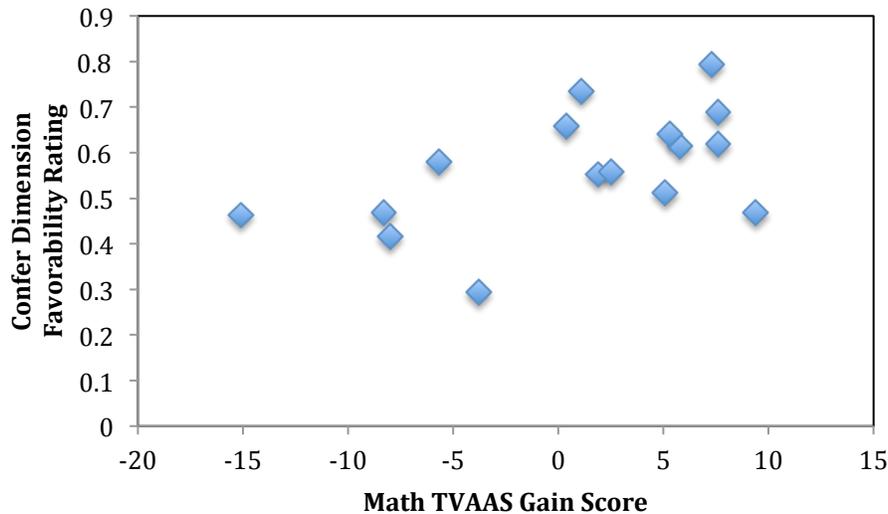


Figure 13. Scatterplot of the Confer Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Math TVAAS Gain Scores

H₀₅₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers confer with students and math TVAAS gain scores. The results of the analysis, as shown in Figure 14 below, revealed a weak positive relationship between student perceptions of conferring ($M = 0.44$, $SD = 0.15$) and student growth in math ($M = 4.20$, $SD = 7.72$). The correlation was not statistically significant [$r(13) = .219$, $p = .432$]. As a result of the analysis, H₀₅₂ was not rejected. In general the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers confer with students and math TVAAS gain scores.

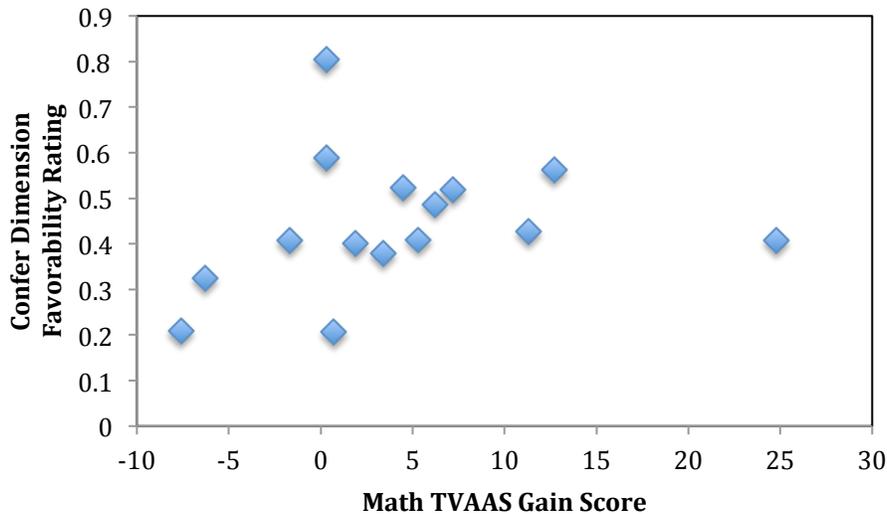


Figure 14. Scatterplot of the Confer Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Math TVAAS Gain Scores

H₀₅₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers confer with students and math TVAAS gain scores. The results of the analysis, as shown in Figure 15 below, revealed a weak positive relationship between student perceptions of conferring ($M = 0.51$, $SD = 0.15$) and student growth in math ($M = 2.46$, $SD = 7.48$). The correlation was not statistically significant [$r(29) = .223$, $p = .228$]. As a result of the analysis, H₀₅₃ was not rejected. In general the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers confer with students and math TVAAS gain scores.

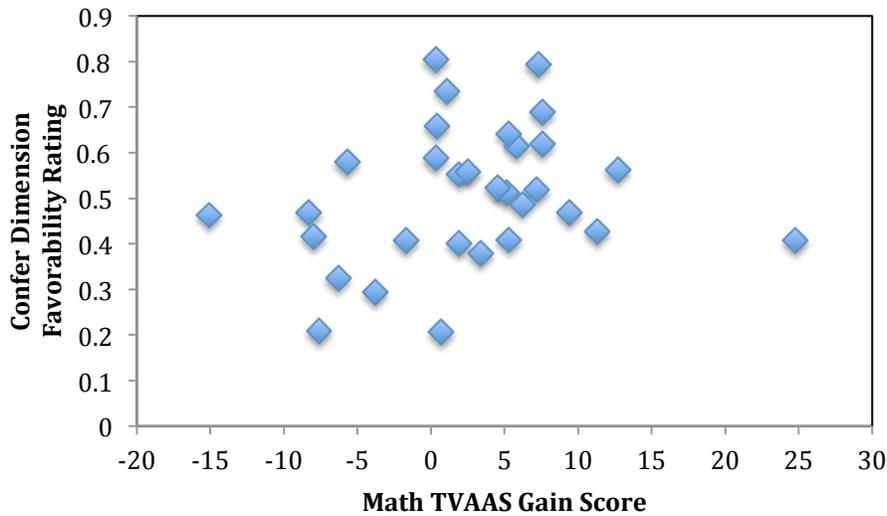


Figure 15. Scatterplot of the Challenge Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Math TVAAS Gain Scores

Research Question 6

RQ6: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey?

H₀₆₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers confer with students and reading TVAAS gain scores. The results of the analysis, as shown in Figure 16 below, revealed a strong positive relationship between student perceptions of conferring ($M = 0.54, SD = 0.113$) and student growth in reading ($M = 1.76, SD = 4.62$). The correlation was not statistically significant

$[r(14) = .425, p = .100]$. As a result of the analysis, H_06_1 was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers confer with students and reading TVAAS gain scores.

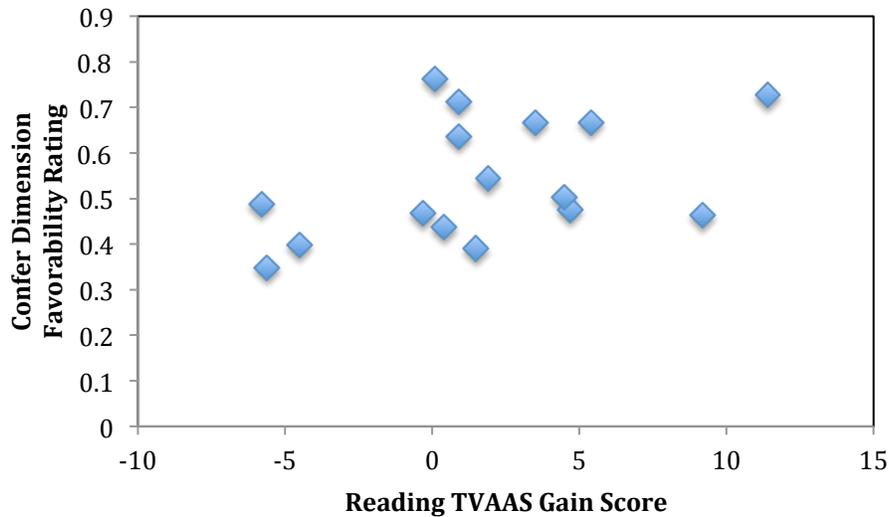


Figure 16. Scatterplot of the Confer Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Reading TVAAS Gain Scores

H_06_2 : There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers confer with students and reading TVAAS gain scores. The results of the analysis, as shown in Figure 17 below, revealed a weak negative relationship between student perceptions of conferring ($M = 0.47, SD = 0.11$) and

student growth in reading ($M = 0.79$, $SD = 4.36$). The correlation was not statistically significant [$r(13) = -.225$, $p = .420$]. As a result of the analysis, H_{062} was not rejected. In general, the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers confer with students and reading TVAAS gain scores.

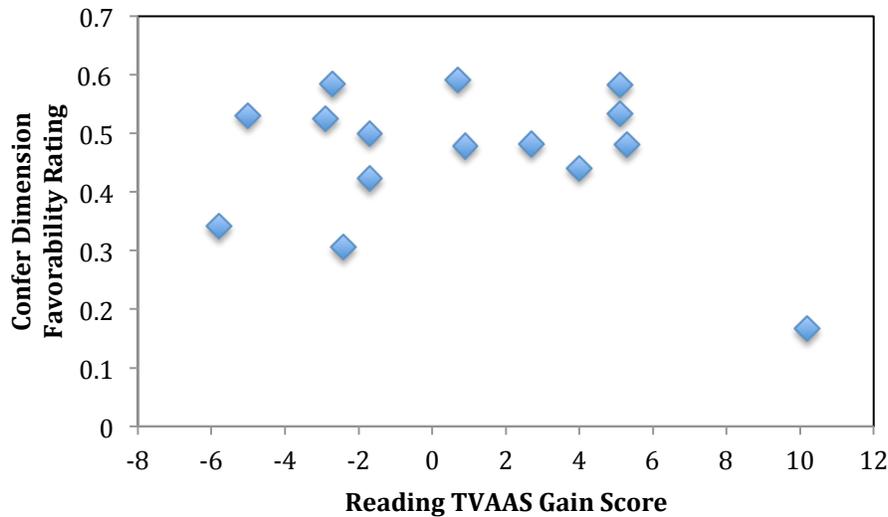


Figure 17. Scatterplot of the Confer Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Reading TVAAS Gain Scores

H_{063} : There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers confer with students and reading TVAAS gain scores. The results of the analysis, as shown in Figure 18 below, revealed a weak positive

relationship between student perceptions of conferring ($M = 0.51$, $SD = 0.13$) and student growth in reading ($M = 1.29$, $SD = 4.52$). The correlation was not statistically significant [$r(29) = .167$, $p = .370$]. As a result of the analysis, H_{063} was not rejected. In general, the results suggest that there is not a significant correlation between Fourth and Eighth grade student perceptions that teachers confer with students and reading TVAAS gain scores.

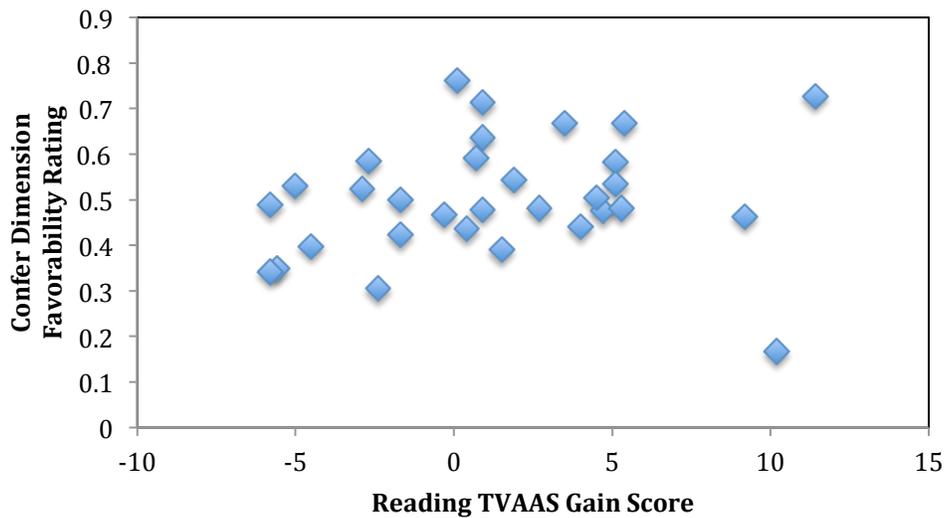


Figure 18. Scatterplot of the Confer Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Reading TVAAS Gain Scores

Research Question 7

RQ7: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey?

H₀₇₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 19 below, revealed a moderate positive relationship between student perceptions of captivating ($M = 0.57, SD = 0.13$) and student growth in math ($M = 0.82, SD = 6.86$). The correlation was not statistically significant [$r(14) = .339, p = .198$]. As a result of the analysis, H₀₇₁ was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores.

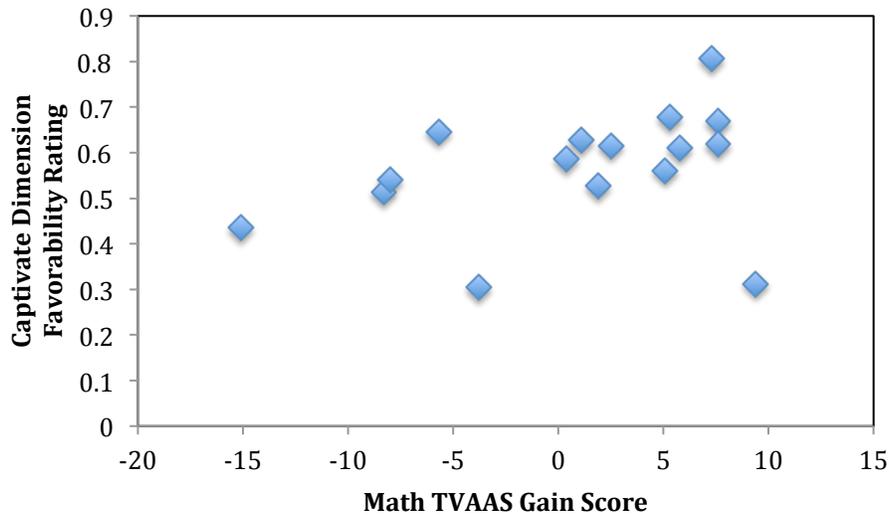


Figure 19. Scatterplot of the Captivate Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Math TVAAS Gain Scores

H₀₇₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 20 below, revealed a moderate positive relationship between student perceptions of captivating ($M = 0.58$, $SD = 0.13$) and student growth in math ($M = 4.20$, $SD = 7.72$). The correlation was not statistically significant [$r(13) = .366$, $p = .180$]. As a result of the analysis, H₀₇₂ was not rejected. In general the results suggest that there is not a significant correlation between Sixth,

Seventh, and Eighth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores.

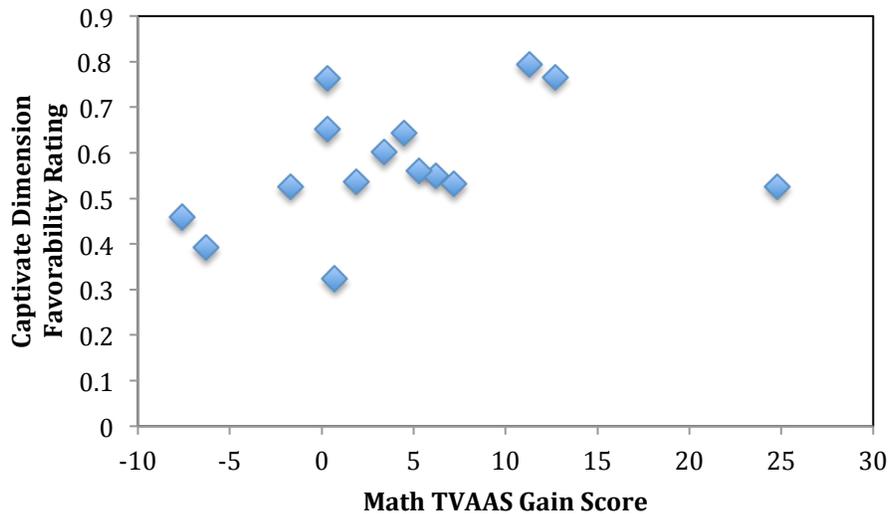


Figure 20. Scatterplot of the Captivate Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Math TVAAS Gain Scores

H₀₇₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 21 below, revealed a moderate positive relationship between student perceptions of captivating ($M = 0.57$, $SD = 0.13$) and student growth in math ($M = 2.46$, $SD = 7.48$). The correlation was statistically significant

$[r(29) = .352, p = .052]$. As a result of the analysis, H_07_3 was rejected. In general the results suggest that there is a significant correlation between Fourth through Eighth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores.

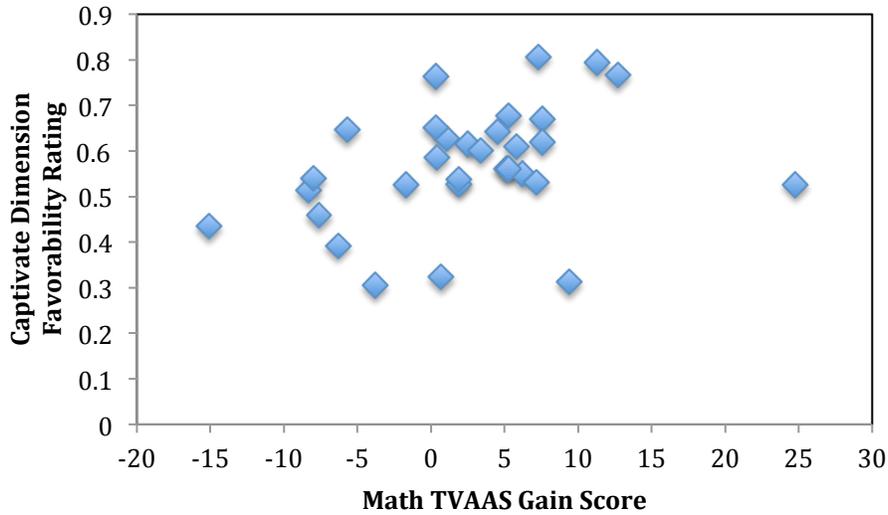


Figure 21. Scatterplot of the Captivate Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Math TVAAS Gain Scores

Research Question 8

RQ8: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey?

H₀₈₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 22 below, revealed a weak positive relationship between student perceptions of captivating ($M = 0.55$, $SD = 0.11$) and student growth in reading ($M = 1.76$, $SD = 4.62$). The correlation was not statistically significant [$r(14) = .262$, $p = .327$]. As a result of the analysis, H₀₈₁ was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores.

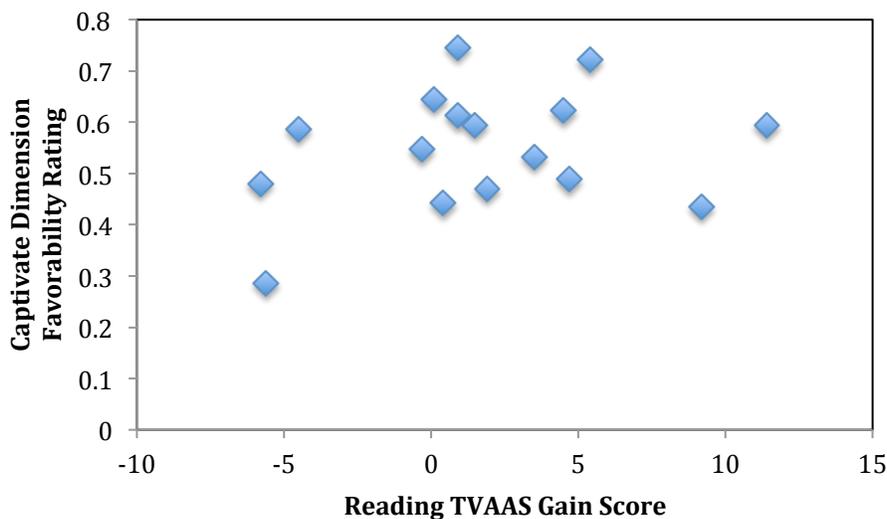


Figure 22. Scatterplot of the Captivate Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Reading TVAAS Gain Scores

H₀₈₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 23 below, revealed a moderate negative relationship between student perceptions of captivating ($M = 0.63$, $SD = 0.18$) and student growth in reading ($M = 0.79$, $SD = 4.36$). The correlation was not statistically significant [$r(13) = -.325$, $p = .237$]. As a result of the analysis, H₀₈₂ was not rejected. In general, the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores.

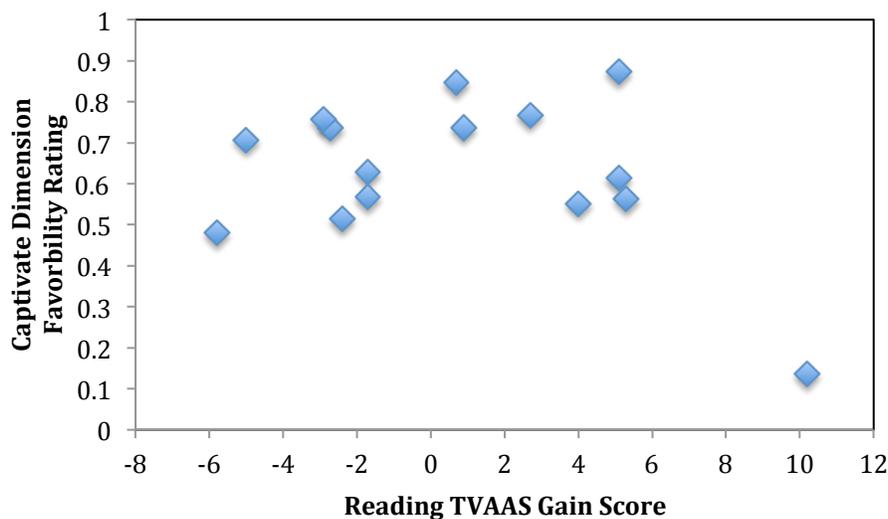


Figure 23. Scatterplot of the Care Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Reading TVAAS Gain Scores

H₀₈₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 24 below, revealed a weak negative relationship between student perceptions of captivating ($M = 0.59$, $SD = 0.15$) and student growth in reading ($M = 1.29$, $SD = 4.52$). The correlation was not statistically significant [$r(29) = -.103$, $p = .583$]. As a result of the analysis, H₀₈₃ was not rejected. In general, the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores.

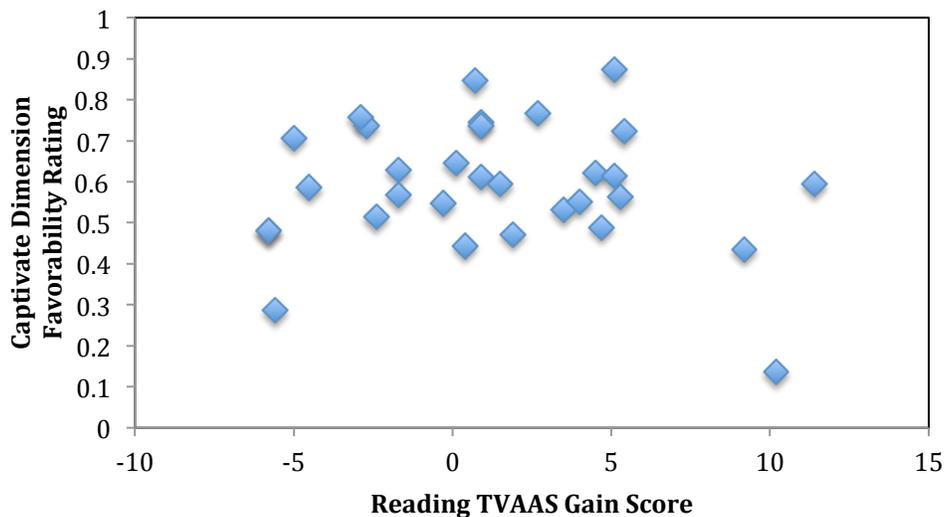


Figure 24. Scatterplot of the Captivate Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Reading TVAAS Gain Scores

Research Question 9

RQ9: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey?

H₀9₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores. The results of the analysis, as shown in Figure 25 below, revealed a strong positive relationship between student perceptions of clarifying ($M = 0.84$, $SD = 0.09$) and student growth in math ($M = 0.82$, $SD = 6.86$). The correlation was not statistically significant [$r(14) = .482$, $p = .059$]. As a result of the analysis, H₀9₁ was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores.

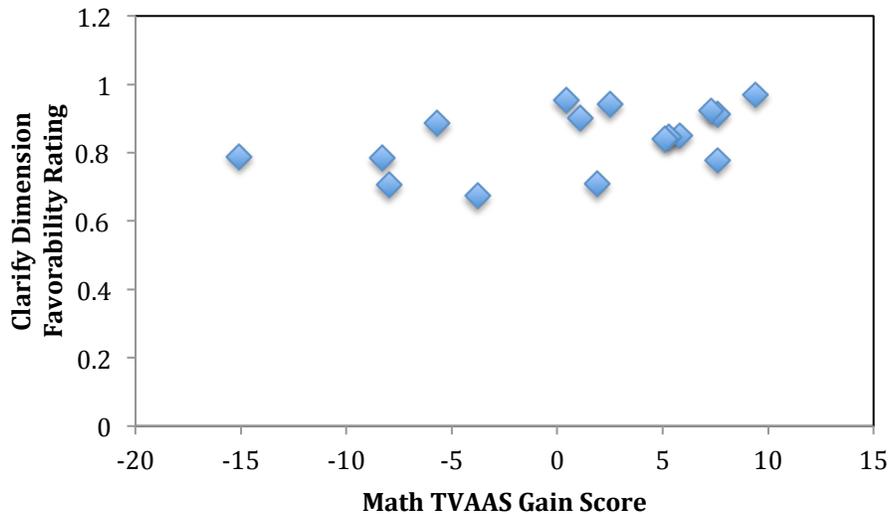


Figure 25. Scatterplot of the Clarify Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Math TVAAS Gain Scores

H₀₉₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores. The results of the analysis, as shown in Figure 26 below, revealed a strong positive relationship between student perceptions of clarifying ($M = 0.74$, $SD = 0.12$) and student growth in math ($M = 4.20$, $SD = 7.72$). The correlation was not statistically significant [$r(13) = .443$, $p = .099$]. As a result of the analysis, H₀₉₂ was not rejected. In general the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores.

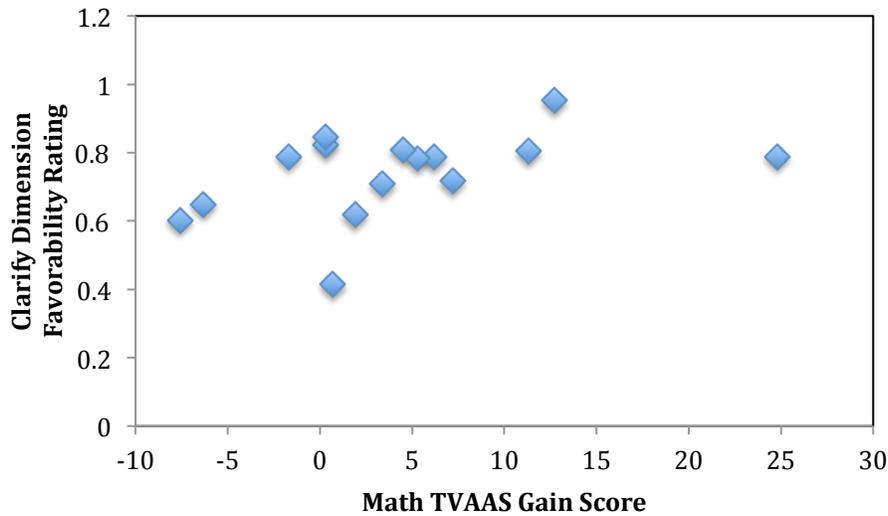


Figure 26. Scatterplot of the Clarify Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Math TVAAS Gain Scores

H₀₉₃: There is no significant relationship between math TVAAS gain scores and classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores. The results of the analysis, as shown in Figure 27 below, revealed a moderate positive relationship between student perceptions of clarifying ($M = 0.79$, $SD = 0.12$) and student growth in math ($M = 2.46$, $SD = 7.48$). The correlation was not statistically significant [$r(29) = .306$, $p = .094$]. As a result of the analysis, H₀₉₃ was not rejected. In general the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores.

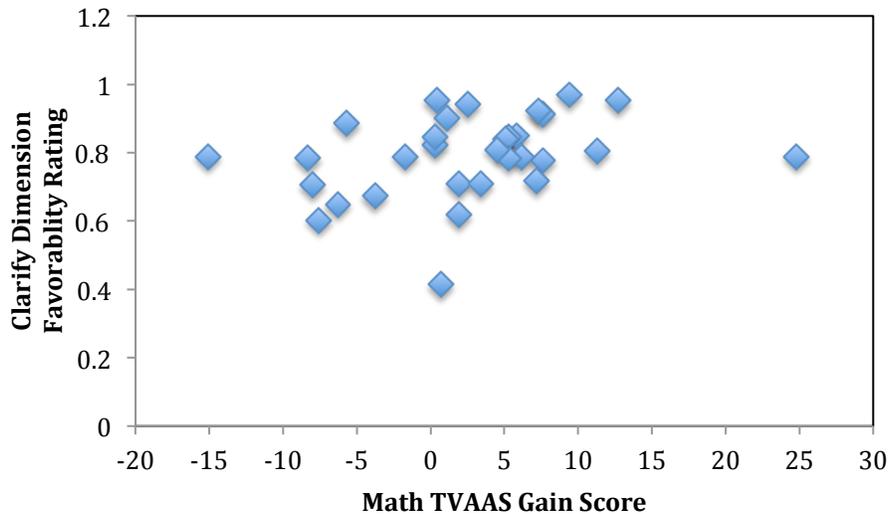


Figure 27. Scatterplot of the Clarify Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Math TVAAS Gain Scores

Research Question 10

RQ10: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey?

H₀10₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers clarify during instruction and reading TVAAS gain scores. The results of the analysis, as shown in Figure 28 below, revealed a strong positive relationship between student perceptions of clarifying ($M = 0.82, SD = 0.10$) and student growth in reading ($M = 1.76, SD = 4.62$). The correlation was not statistically significant

$[r(14) = .405, p = .119]$. As a result of the analysis, H_010_1 was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers clarify during instruction and reading TVAAS gain scores.

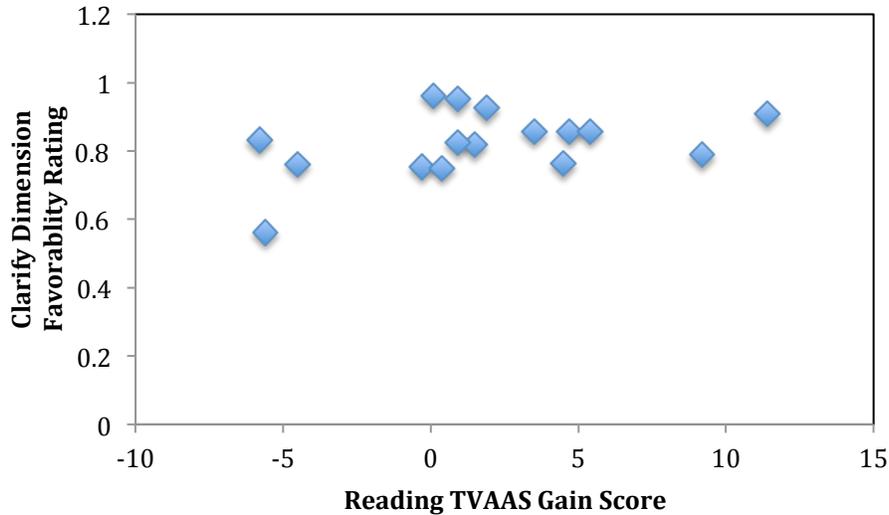


Figure 28. Scatterplot of the Clarify Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Reading TVAAS Gain Scores

H_010_2 : There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers clarify during instruction and reading TVAAS gain scores. The results of the analysis, as shown in Figure 29 below, revealed

a weak negative relationship between student perceptions of clarifying ($M = 0.73$, $SD = 0.13$) and student growth in reading ($M = 0.79$, $SD = 4.36$). The correlation was not statistically significant [$r(13) = -.280$, $p = .312$]. As a result of the analysis, H_010_2 was not rejected. In general, the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers clarify during instruction and reading TVAAS gain scores.

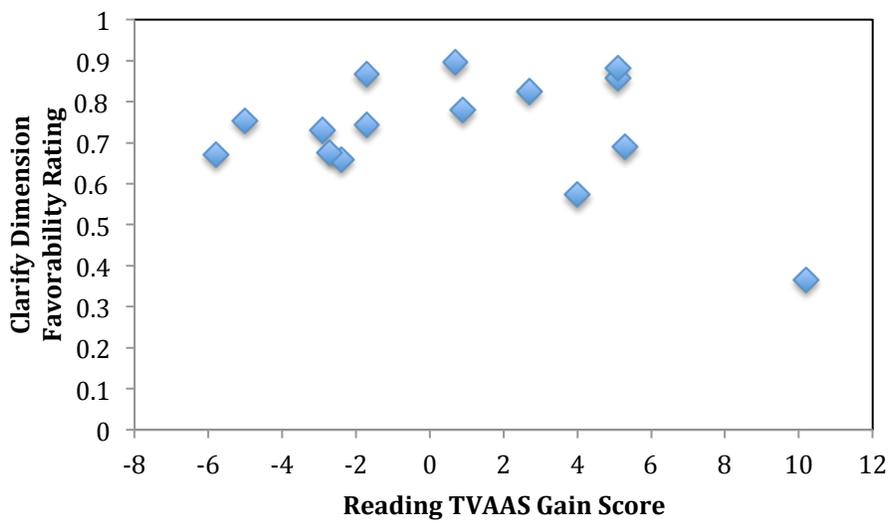
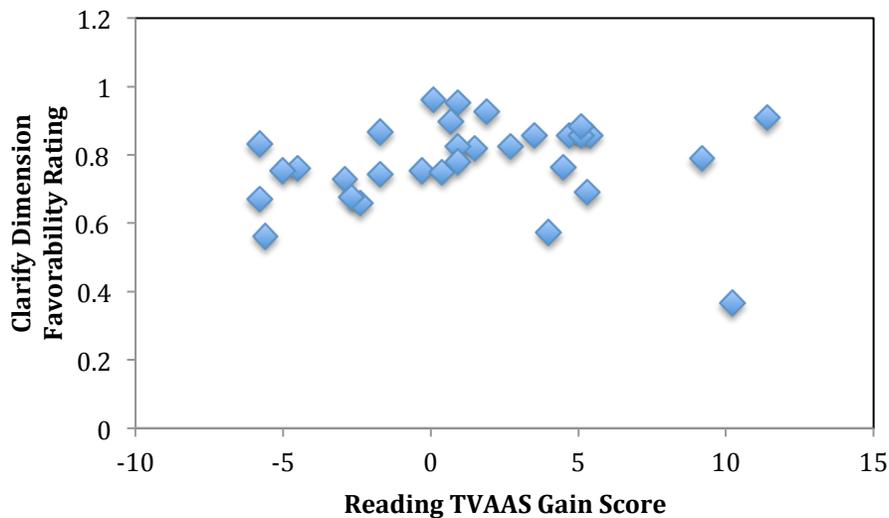


Figure 29. Scatterplot of the Clarify Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Reading TVAAS Gain Scores

H_010_3 : There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers clarify during instruction and reading TVAAS gain scores. The results of the analysis, as shown in Figure 30 below, revealed a weak positive relationship between student perceptions of clarifying ($M = 0.78$, $SD = 0.12$) and student growth in reading ($M = 1.29$, $SD = 4.52$). The correlation was not statistically significant [$r(29) = .063$, $p = .735$]. As a result of the analysis, H_0 was not rejected. In general, the results suggest that there is not a significant correlation between Fourth through Eighth student perceptions that teachers clarify during instruction and reading TVAAS gain scores.



Research Question 11

RQ11: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?

H₀₁₁₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 31 below, revealed a weak negative relationship between student perceptions of consolidating ($M = 0.78, SD = 0.12$) and student growth in math ($M = 0.82, SD = 6.86$). The correlation was not statistically significant [$r(14) = -.066, p = .809$]. As a result of the analysis, H₀₁₁₁ was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores.

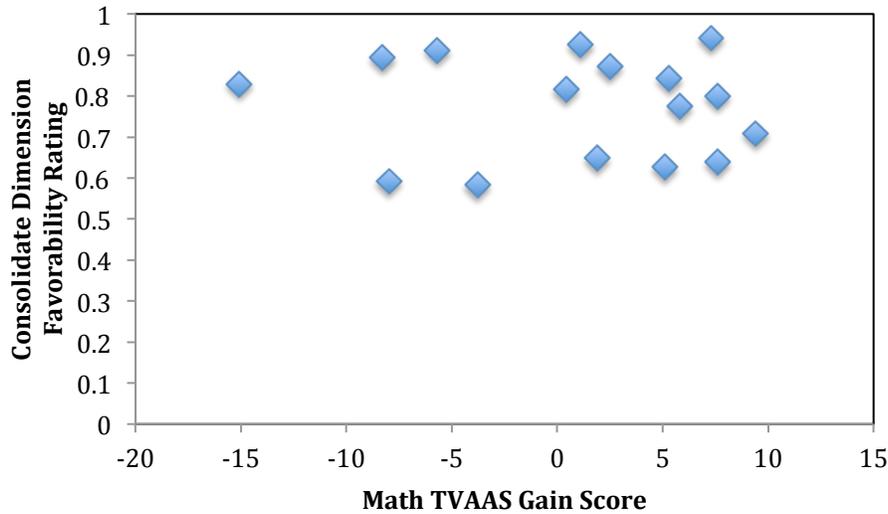


Figure 31. Scatterplot of the Consolidate Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Math TVAAS Gain Scores

H₀ | H₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 32 below, revealed a moderate positive relationship between student perceptions of consolidating ($M = 0.67, SD = 0.14$) and student growth in math ($M = 4.20, SD = 7.72$). The correlation was not statistically significant [$r(13) = .388, p = .153$]. As a result of the analysis, H₀ | H₂ was not rejected. In general the results suggest that there is not a significant correlation between Sixth,

Seventh, and Eighth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores.

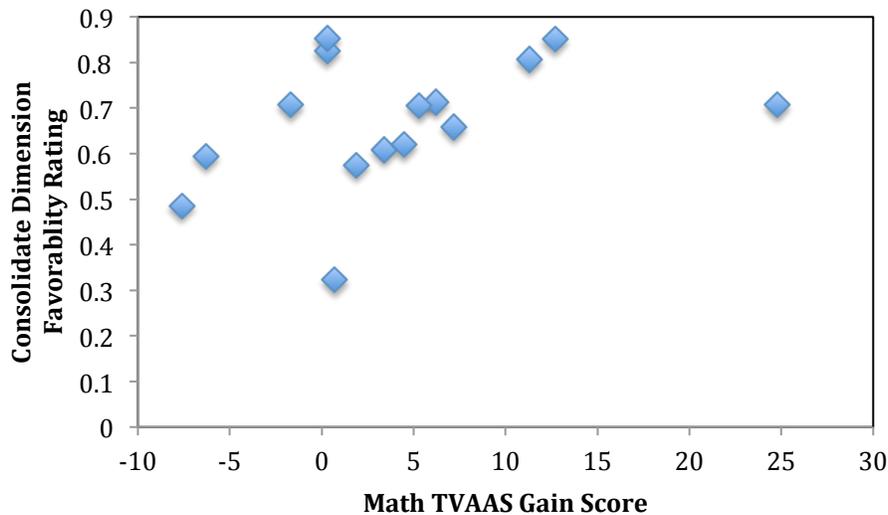


Figure 32. Scatterplot of the Consolidate Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Math TVAAS Gain Scores

H₀₁₁₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 33 below, revealed a weak positive relationship between student perceptions of consolidating ($M = 0.72$, $SD = 0.14$) and student growth in math ($M = 2.46$, $SD = 7.48$). The correlation was not statistically

significant [$r(29) = .079, p = .672$]. As a result of the analysis, H_011_3 was not rejected. In general the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores.

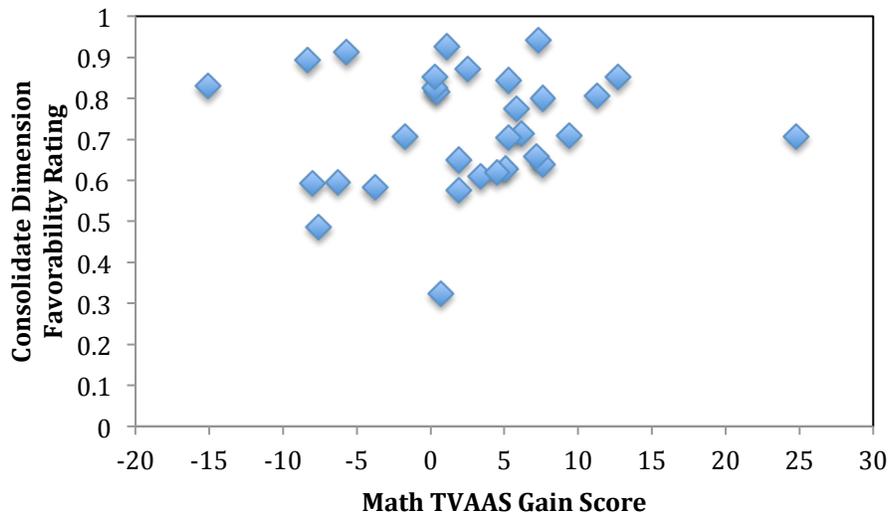


Figure 33. Scatterplot of the Consolidate Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Math TVAAS Gain Scores

Research Question 12

RQ12: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?

H_012_1 : There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 34 below, revealed a weak positive relationship between student perceptions of consolidating ($M = 0.75$, $SD = 0.11$) and student growth in reading ($M = 1.76$, $SD = 4.62$). The correlation was not statistically significant [$r(14) = .258$, $p = .334$]. As a result of the analysis, H_012_1 was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores.

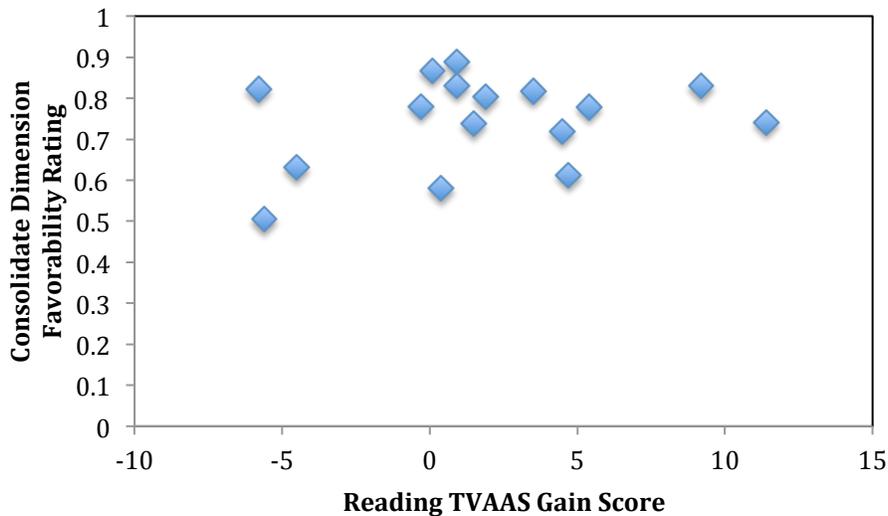


Figure 34. Scatterplot of the Consolidate Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Reading TVAAS Gain Scores

H₀12₂: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 35 below, revealed a strong negative relationship between student perceptions of consolidating ($M = 0.65$, $SD = 0.14$) and student growth in reading ($M = 0.79$, $SD = 4.36$). The correlation was not statistically significant [$r(13) = -.400$, $p = .140$]. As a result of the analysis, H₀12₂ was not rejected. In general, the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores.

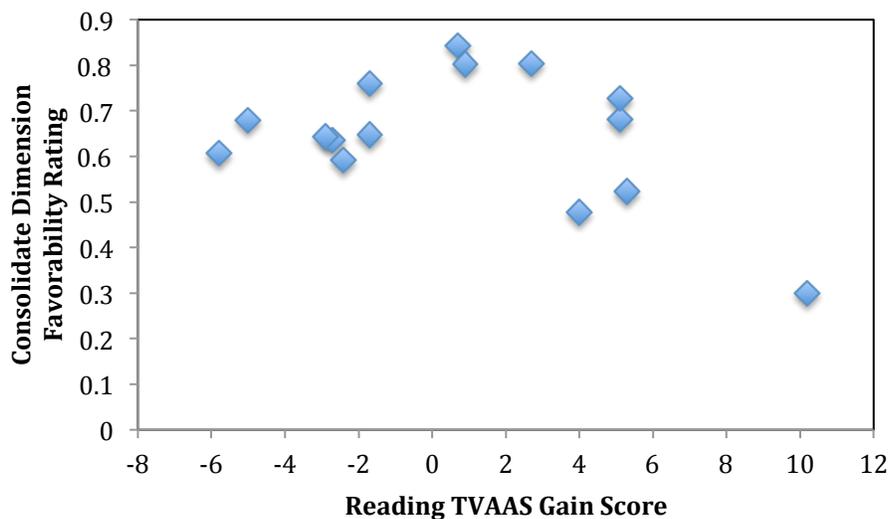


Figure 35. Scatterplot of the Consolidate Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Reading TVAAS Gain Scores

H₀12₃: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student that teachers consolidate learning in the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 36 below, revealed a weak negative relationship between student perceptions of consolidating ($M = 0.70, SD = 0.13$) and student growth in reading ($M = 1.29, SD = 4.52$). The correlation was not statistically significant [$r(29) = -.042, p = .822$]. As a result of the analysis, H₀12₂ was not rejected. In general, the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores.

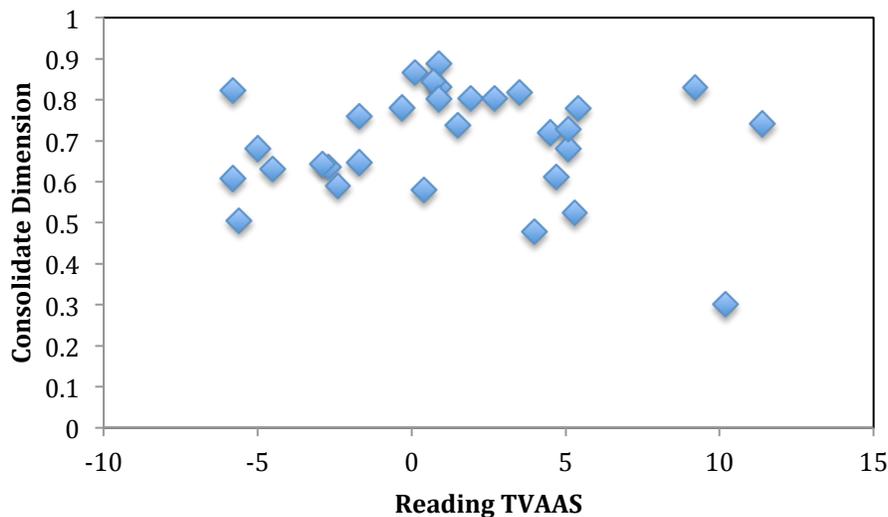


Figure 36. Scatterplot of the Consolidate Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Reading TVAAS Gain Scores

Research Question 13

RQ13: Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?

H₀13₁: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers control the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 37 below, revealed a strong positive relationship between student perceptions of control ($M = 0.54$, $SD = 0.17$) and student growth in math ($M = 0.82$, $SD = 6.86$). The correlation was not statistically significant [$r(14) = .440$, $p = .088$]. As a result of the analysis, H₀13₁ was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers control the classroom and math TVAAS gain scores.

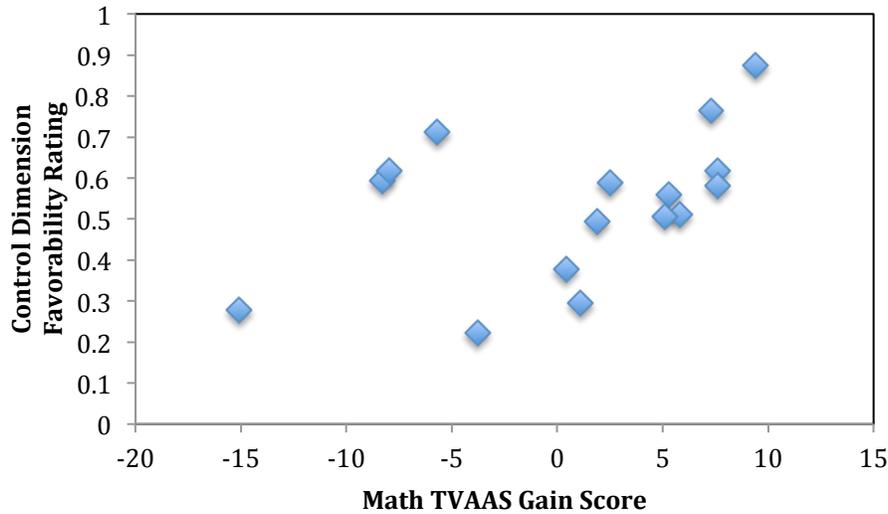


Figure 37. Scatterplot of the Control Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Math TVAAS Gain Scores

H₀13₂: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers control the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 38 below, revealed a weak positive relationship between student perceptions of control ($M = 0.56$, $SD = 0.17$) and student growth in math ($M = 4.20$, $SD = 7.72$). The correlation was not statistically significant [$r(13) = .186$, $p = .506$]. As a result of the analysis, H₀13₂ was not rejected. In general the results suggest that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers control the classroom and math TVAAS gain scores.

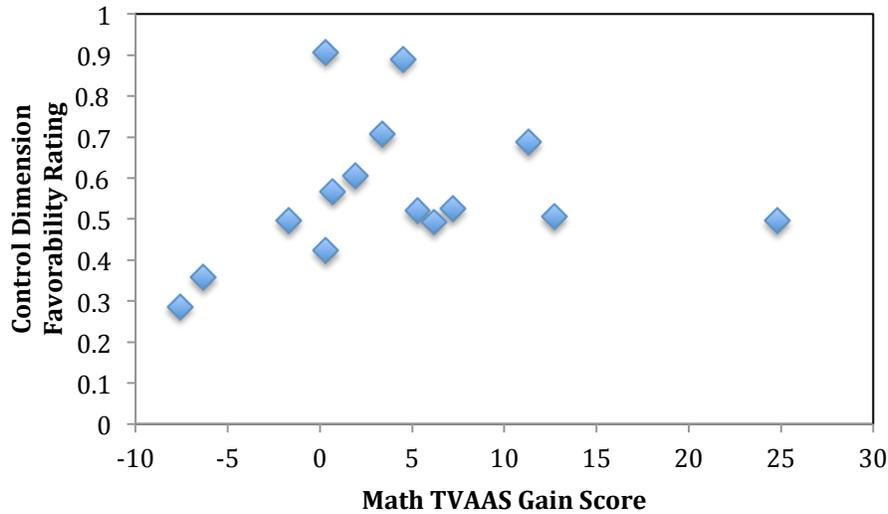


Figure 38. Scatterplot of the Control Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Math TVAAS Gain Scores

H₀13₃: There is no significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers control the classroom and math TVAAS gain scores. The results of the analysis, as shown in Figure 39 below, revealed a moderate positive relationship between student perceptions of control ($M = 0.55, SD = 0.17$) and student growth in math ($M = 2.46, SD = 7.48$). The correlation was not statistically significant [$r(29) = .320, p = .080$]. As a result of the analysis, H₀13₃ was not rejected. In general the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers control the classroom and math TVAAS gain scores.

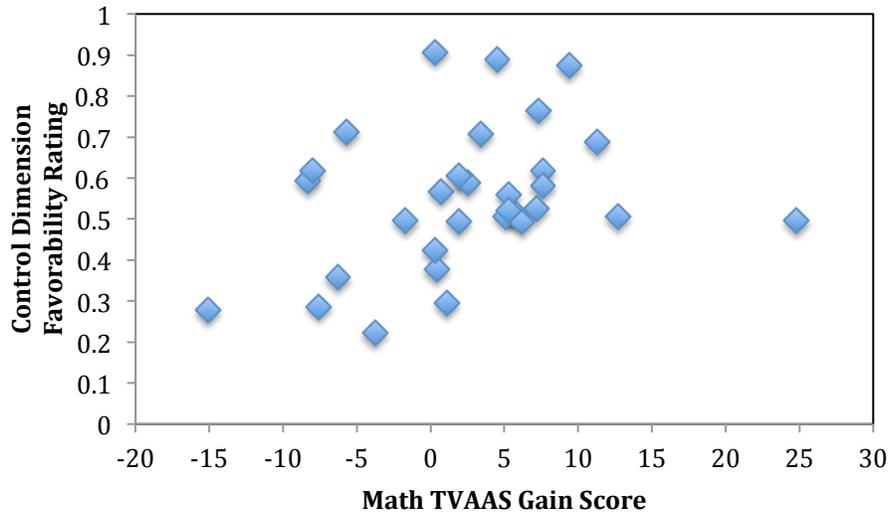


Figure 39. Scatterplot of the Control Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Math TVAAS Gain Scores

Research Question 14

RQ14: Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?

H₀14₁: There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4 and 5?

A Pearson correlation coefficient was computed to test the relationship between Fourth and Fifth grade student perceptions that teachers control the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 40 below, revealed a weak negative relationship between student perceptions of control ($M = 0.55$, $SD = 0.12$) and student growth in

reading ($M = 1.76$, $SD = 4.62$). The correlation was not statistically significant [$r(14) = -.019$, $p = .943$]. As a result of the analysis, H_{014_1} was not rejected. In general the results suggest that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers control the classroom and reading TVAAS gain scores.

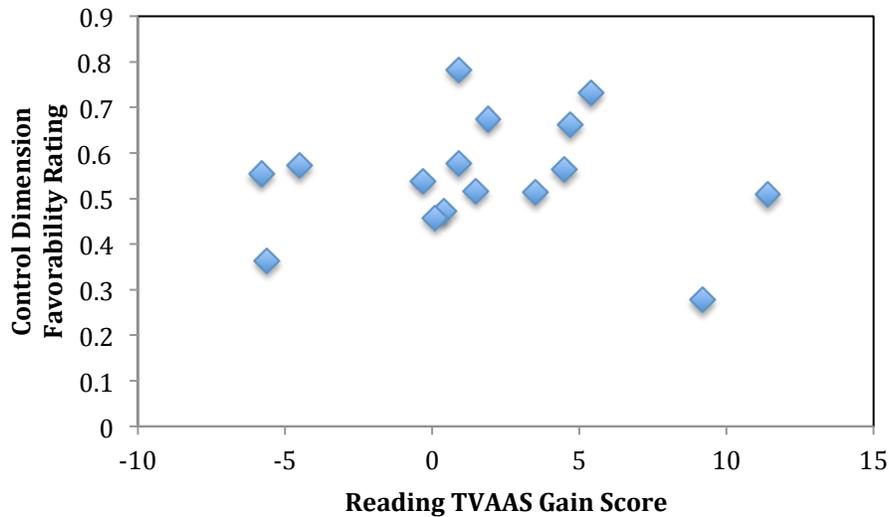


Figure 40. Scatterplot of the Control Dimension of the Tripod Student Perception Survey Compared to Fourth and Fifth Grade Student Reading TVAAS Gain Scores

H_{014_2} : There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Sixth, Seventh, and Eighth grade student perceptions that teachers control the classroom and reading TVAAS gain scores. The results of the analysis, as shown in Figure 41 below, revealed a strong

positive relationship between student perceptions of control ($M = 0.56$, $SD = 0.13$) and student growth in reading ($M = 0.79$, $SD = 4.36$). The correlation was statistically significant [$r(13) = .745$, $p = .001$]. As a result of the analysis, H_{014_2} was rejected. In general, the results suggest that there is a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers control the classroom and reading TVAAS gain scores.

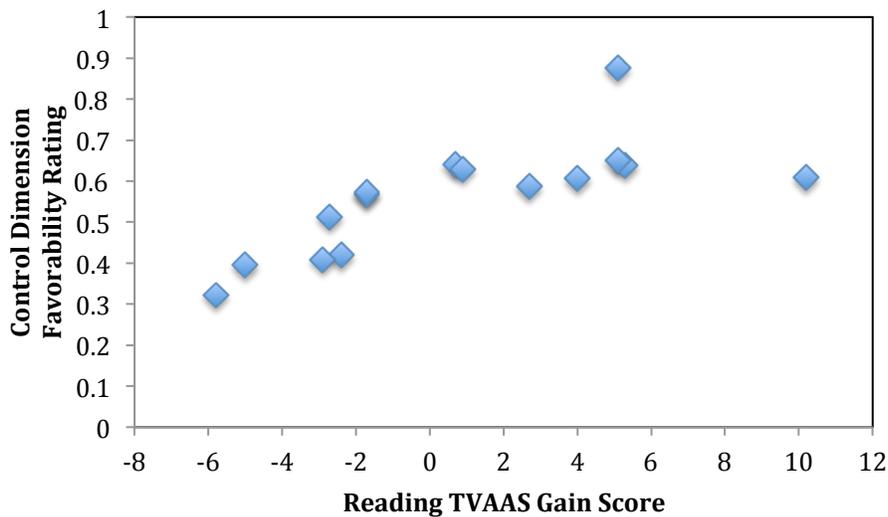


Figure 41. Scatterplot of the Control Dimension of the Tripod Student Perception Survey Compared to Sixth, Seventh, and Eighth Grade Student Reading TVAAS Gain Scores

H_{014_3} : There is no significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey for grades 4, 5, 6, 7, and 8?

A Pearson correlation coefficient was computed to test the relationship between Fourth through Eighth grade student perceptions that teachers control the classroom and reading

TVAAS gain scores. The results of the analysis, as shown in Figure 42 below, revealed a moderate positive relationship between student perceptions of control ($M = 0.56$, $SD = 0.13$) and student growth in reading ($M = 1.29$, $SD = 4.52$). The correlation was not statistically significant [$r(29) = .343$, $p = .059$]. As a result of the analysis, H_{014_3} was not rejected. In general, the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers control the classroom and reading TVAAS gain scores.

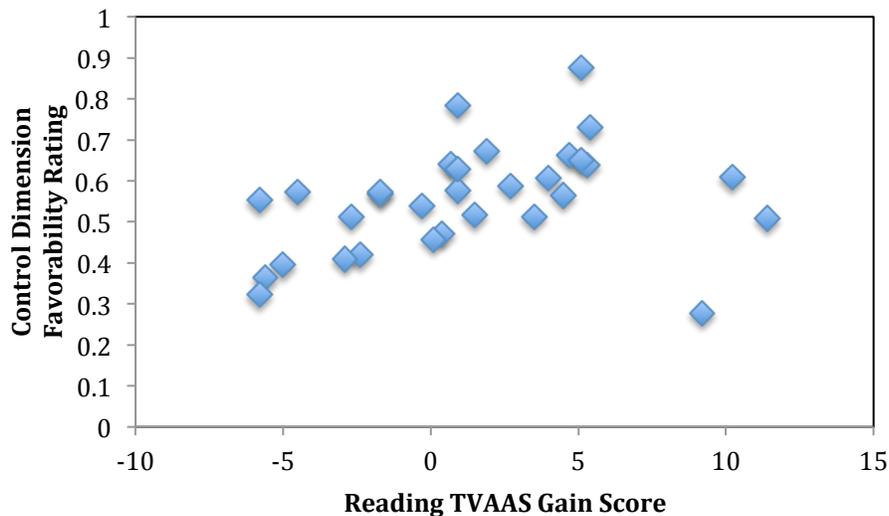


Figure 42. Scatterplot of the Control Dimension of the Tripod Student Perception Survey Compared to Fourth through Eighth Grade Student Reading TVAAS Gain Scores

Summary

In this chapter the relationship between student perceptions of the classroom climate and student academic growth in grades 4 and 5, grades 6, 7, 8, and grades 4 through 8 were presented and analyzed. There were 14 research questions and 42 null hypotheses. TVAAS gain scores

were collected from the public TVAAS online database in order to obtain grade level TVAAS gain score data. Both TVAAS and Tripod Student Perception Survey data were analyzed from approximately 1,500 fourth and fifth grade students from six elementary schools and two K-8 schools as well as approximately 1,300 sixth, seventh, and eighth grade students from three middle schools and two K-8 schools in a medium-size district in Northeast Tennessee during the 2012-2013 academic school year.

In analyzing this study the researcher found statistically significant relationships between 4th and 5th grade reading TVAAS gain scores and student perceptions that teachers care about students, 4th and 5th grade math TVAAS gain scores and student perceptions that teachers confer with students, as well as 4th through 8th grade math scores and student perceptions that teachers captivate students during instruction. This study did not find any statistically significant relationships between reading or math TVAAS gain scores and student perceptions of control, consolidate, clarify, and challenge.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter provides a summary of findings, conclusions, recommendations for practice, recommendations for future research, and a summary. The purpose of this quantitative study was to examine the relationship between student perceptions of classroom climate and student academic growth in Title I schools. Academic growth was measured by 2012-2013 Tennessee Value-Added Assessment System (TVAAS) student achievement gains. Student perceptions of classroom climate were measured through Tripod Student Perception Survey data. For this study Title I schools were defined as schools in which 50% or more of students qualify for free or reduced-price meals. More specifically 2012-2013 TVAAS gain scores were evaluated against 2013 Tripod student perception survey data to determine if there was a linear relationship between the two variables. In particular, the relationship between the two data sets was analyzed in the following areas of student perceptions: care, challenge, confer, captivate, clarify, consolidate, and control. Because of the small sample size, the results of the analyses may be unreliable.

Summary of Findings

The statistical analysis of this study focused on 14 research questions that were presented in Chapters 1 and 3. Each research question had three null hypotheses. Each of the 42 null hypotheses were presented in Chapter 3. Pearson correlational coefficients were computed for research questions 1-14 and each of the 42 null hypotheses to determine the relationship among

the Tripod Student Perception Survey data and student TVAAS academic gain scores. The Pearson correlational coefficients' level of significance was determined by evaluating with the alpha of .05. Additionally, the strength of each relationship was determined by evaluating and finding the correlation coefficients to be weak (between .001 and .290 or between -.001 and -.290), moderate (between .300 and .390 or between -.300 and -.390), or strong (between .400 and .690 or between -.400 and -.690).

Research Question 1

Is there a significant relationship between math TVAAS gain scores and the classroom favorability score on the Care Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that their teachers care and math TVAAS gain scores. The results of the analysis revealed a weak positive relationship between Fourth and Fifth grade student perceptions of caring and student growth in math. The correlation was not statistically significant. Therefore H_01_1 was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that their teachers care and math TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade student perceptions of caring and student growth in math revealed a weak positive relationship between the two data sets. The correlation was not statistically significant. Therefore H_01_2 was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that their teachers care and math TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade student perceptions that their teachers care and math TVAAS gain scores revealed a weak negative relationship. The

correlation was not statistically significant. Therefore H_{013} was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that their teachers care and math TVAAS gain scores.

Research Question 2

Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Care Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that their teachers care and reading TVAAS gain scores. The results of the analysis, revealed a strong positive relationship between Fourth and Fifth grade student perceptions of caring and student growth in reading. The correlation was statistically significant. Therefore H_{021} was rejected. The results indicated that there is a significant correlation between Fourth and Fifth grade student perceptions that teachers care about students and reading TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a strong negative relationship between student perceptions of caring and student growth in reading. The correlation was not statistically significant. Therefore H_{022} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers care about students and reading TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a strong negative relationship between student perceptions of caring and student growth in reading. The correlation was not statistically significant. Therefore H_{023} was not rejected. The results

indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that their teachers care and reading TVAAS gain scores.

Research Question 3

Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that their teachers challenge students and math TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a weak positive relationship between student perceptions of challenge and student growth in math. The correlation was not statistically significant. Therefore H_{03_1} was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that their teachers challenge students and math TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a strong positive relationship between student perceptions of challenge and student growth in math. The correlation was not statistically significant. Therefore, H_{03_2} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers challenge students and math TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak positive relationship between student perceptions of challenge and student growth in math. The correlation was not statistically significant. Therefore, H_{03_3} was not rejected. In general the results suggest that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers challenge students and math TVAAS gain scores.

Research Question 4

Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Challenge Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers challenge students and reading TVAAS gain scores. The results of the analysis revealed a strong positive relationship between student perceptions of challenge and student growth in reading. The correlation was not statistically significant. Therefore, H_{04_1} was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers challenge students and reading TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a weak negative relationship between student perceptions of challenge and student growth in reading. The correlation was not statistically significant. Therefore, H_{04_2} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers challenge students and reading TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak relationship between student perceptions of challenge and student growth in reading. The correlation was not statistically significant. Therefore, H_{04_3} was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers challenge students and reading TVAAS gain scores.

Research Question 5

Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers confer with students and math TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a strong positive relationship between student perceptions of conferring and student growth in math. The correlation was statistically significant. Therefore, H_{05_1} was rejected. The results indicated that there is a significant correlation between Fourth and Fifth grade student perceptions that teachers confer with students and math TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a weak positive relationship between student perceptions of conferring and student growth in math. The correlation was not statistically significant. Therefore, H_{05_2} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers confer with students and math TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak positive relationship between student perceptions of conferring and student growth in math. The correlation was not statistically significant. Therefore, H_{05_3} was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers confer with students and math TVAAS gain scores.

Research Question 6

Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Confer Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers confer with students and reading TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a strong positive relationship between student perceptions of conferring and student growth in reading. The correlation was not statistically significant. Therefore, H_{06_1} was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers confer with students and reading TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a weak negative relationship between student perceptions of conferring and student growth in reading. The correlation was not statistically significant. Therefore, H_{06_2} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers confer with students and reading TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak positive relationship between student perceptions of conferring and student growth in reading. The correlation was not statistically significant. Therefore, H_{06_3} was not rejected. The results indicated that there is not a significant correlation between Fourth and Eighth grade student perceptions that teachers confer with students and reading TVAAS gain scores.

Research Question 7

Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers captivate students in the classroom and math TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a moderate positive relationship between student perceptions of captivating and student growth in math. The correlation was not statistically significant. Therefore, H_{07_1} was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a moderate positive relationship between student perceptions of captivating and student growth in math. The correlation was not statistically significant. Therefore, H_{07_2} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a moderate positive relationship between student perceptions of captivating and student growth in math. The correlation was statistically significant. Therefore, H_{07_3} was rejected. The results indicated that there is a significant correlation between Fourth through Eighth grade student perceptions that teachers captivate students in the classroom and math TVAAS gain scores.

Research Question 8

Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Captivate Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a weak positive relationship between student perceptions of captivating and student growth in reading. The correlation was not statistically significant. Therefore, $H_0\delta_1$ was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a moderate negative relationship between student perceptions of captivating and student growth in reading. The correlation was not statistically significant. Therefore, $H_0\delta_2$ was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak negative relationship between student perceptions of captivating and student growth in reading. The correlation was not statistically significant. Therefore, $H_0\delta_3$ was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers captivate students in the classroom and reading TVAAS gain scores.

Research Question 9

Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers clarify during instruction and math TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a strong positive relationship between student perceptions of clarifying and student growth in math. The correlation was not statistically significant. Therefore, H_09_1 was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a strong positive relationship between student perceptions of clarifying and student growth in math. The correlation was not statistically significant. Therefore, H_09_2 was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a moderate positive relationship between student perceptions of clarifying and student growth in math. The correlation was not statistically significant. Therefore, H_09_3 was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers clarify during instruction and math TVAAS gain scores.

Research Question 10

Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Clarify Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers clarify during instruction and reading TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a strong positive relationship between student perceptions of clarifying and student growth in reading. The correlation was not statistically significant. Therefore, H_010_1 was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers clarify during instruction and reading TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a weak negative relationship between student perceptions of clarifying and student growth in reading. The correlation was not statistically significant. Therefore, H_010_2 was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers clarify during instruction and reading TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak positive relationship between student perceptions of clarifying and student growth in reading. The correlation was not statistically significant. Therefore, H_010_3 was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth student perceptions that teachers clarify during instruction and reading TVAAS gain scores.

Research Question 11

Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a weak negative relationship between student perceptions of consolidating and student growth in math. The correlation was not statistically significant. Therefore, H_011_1 was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a moderate positive relationship between student perceptions of consolidating and student growth in math. The correlation was not statistically significant. Therefore, H_011_2 was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak positive relationship between student perceptions of consolidating and student growth in math. The correlation was not statistically significant. Therefore, H_011_3 was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers consolidate learning in the classroom and math TVAAS gain scores.

Research Question 12

Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Consolidate Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a weak positive relationship between student perceptions of consolidating and student growth in reading. The correlation was not statistically significant. Therefore, H_{012_1} was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a strong negative relationship between student perceptions of consolidating and student growth in reading. The correlation was not statistically significant. Therefore, H_{012_2} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a weak negative relationship between student perceptions of consolidating and student growth in reading. The correlation was not statistically significant. Therefore, H_{012_2} was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers consolidate learning in the classroom and reading TVAAS gain scores.

Research Question 13

Is there a significant relationship between math TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers control the classroom and math TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a strong positive relationship between student perceptions of control and student growth in math. The correlation was not statistically significant. Therefore, H_{013_1} was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers control the classroom and math TVAAS gain scores.

The results of the analysis Sixth, Seventh, and Eighth grade students revealed a weak positive relationship between student perceptions of control and student growth in math. The correlation was not statistically significant. Therefore, H_{013_2} was not rejected. The results indicated that there is not a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers control the classroom and math TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a moderate positive relationship between student perceptions of control and student growth in math. The correlation was not statistically significant. Therefore, H_{013_3} was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers control the classroom and math TVAAS gain scores.

Research Question 14

Is there a significant relationship between reading TVAAS gain scores and the classroom favorability rating on the Control Dimension of the Tripod Student Perception Survey?

A Pearson correlation coefficient was computed to test the relationship between student perceptions that teachers control the classroom and reading TVAAS gain scores. The results of the analysis of Fourth and Fifth grade students revealed a weak negative relationship between student perceptions of control and student growth in reading. The correlation was not statistically significant. Therefore, H_{014_1} was not rejected. The results indicated that there is not a significant correlation between Fourth and Fifth grade student perceptions that teachers control the classroom and reading TVAAS gain scores.

The results of the analysis of Sixth, Seventh, and Eighth grade students revealed a strong positive relationship between student perceptions of control and student growth in reading. The correlation was statistically significant. Therefore, H_{014_2} was rejected. The results indicated that there is a significant correlation between Sixth, Seventh, and Eighth grade student perceptions that teachers control the classroom and reading TVAAS gain scores.

The results of the analysis of Fourth through Eighth grade students revealed a moderate positive relationship between student perceptions of control and student growth in reading. The correlation was not statistically significant. Therefore, H_{014_3} was not rejected. The results indicated that there is not a significant correlation between Fourth through Eighth grade student perceptions that teachers control the classroom and reading TVAAS gain scores.

Conclusions

The purpose of this study was to examine the relationships between student perceptions of classroom climate and student academic growth in Title I schools. More specifically, this study was focused on the seven C's of classroom environment, as identified by the Tripod Student Perception Survey: Care, Challenge, Confer, Captivate, Clarify, Consolidate, and Control (*Gathering Feedback for Teaching*, 2012). Tennessee Value-Added Assessment System (TVAAS) gain scores were used to determine student growth in reading and mathematics.

Care

This study did not find a significant relationship between student perceptions that teachers care about students and student growth in math. Similarly this study did not find a significant relationship between student perceptions that teachers care about students and student growth in reading for grades 6, 7, and 8 or Fourth through Eighth grades collectively. However, this study did reveal a statistically significant, strong positive relationship between student perceptions that teachers care about students and Fourth and Fifth grade reading TVAAS gain scores.

According to Hagelskamp and DiStasi, teachers in highly effective schools work to build relationships with students that extend beyond scheduled hours in the classroom. This often occurs as the faculty become mentors and confidantes to students (2012). Furthermore, Wang and Holcombe found that students who perceive that their teachers support them socially report those teachers' classes have fewer episodes of disruptive student behaviors and greater amenability among their peers as compared to classrooms in which students do not feel supported (Wang & Holcombe, 2010). Adams and Forsyth found that great levels of trust are

highly predictive of a school's ability to effectively educate its students. However, the study also revealed that trust alone does not produce results. Instead, the supportive and caring effects of trust strengthen the environment and make growth more likely than in environments where trust does not exist (Adams & Forsyth, 2009).

Challenge

This study did not find a significant relationship between student perceptions that teachers challenge students in the classroom and student growth in math or reading. According to Amatea and West-Olatunji (2007), teachers in high-poverty schools often lack appropriate training and thorough pedagogy needed to provide a challenging environment for their students. This often leads to false assumptions about students and their poverty-stricken families. However, she states that a barrier of decreased motivation often negatively affects the student-teacher relationship (Amatea & West-Olatunji, 2007). Although many forms of motivation drive students to perform, Meece, Anderman, and Anderman (2006) revealed the types of goals set for students does make a difference in achievement. However, high expectations alone are not enough to raise student achievement in high-poverty schools. High levels of support must also accompany high expectations from teachers and other school staff (Parrett & Budge, 2012).

Confer

This study revealed a statistically significant relationship between Fourth and Fifth grade student perceptions that teachers confer with students and math TVAAS gain scores. However, this study did not find a statistically significant relationship between Fourth through Eighth or Sixth, Seventh, and Eighth grade student perceptions that teachers confer with students and

student growth in math. Additionally, this study did not find a statistically significant relationship between student perceptions that teachers confer with students and reading TVAAS gain scores in any of the analyzed grade level groups.

Wang and Holcombe's study found a statistically significant correlation between discussion, school participation, and academic achievement in terms of Eighth grade GPA (Wang & Holcombe, 2010). Furthermore, a longitudinal study conducted by Lynch, Lerner, and Leventhal (2012) found that peer groups and consultation with colleagues is especially meaningful to adolescent groups. While the authors concluded that relational components of peer culture were not necessarily related to academic achievement, relational components were associated with school engagement, which has been found to impact student achievement.

Captivate

This study revealed a statistically significant relationship between Fourth through Eighth grade student perceptions that teachers captivate students during instruction and math TVAAS gain scores. However, this study did not find a statistically significant relationship between Fourth and Fifth or Sixth, Seventh, and Eighth grade student perceptions that teachers captivate students during instruction and student growth in math. Additionally, this study did not find a statistically significant relationship between student perceptions that teachers captivate students during instruction and reading TVAAS gain scores.

These findings are supported by Parrett and Budge (2012) who found learning should focus on masterful instruction, particularly for students of poverty. Moreover a 2011 study investigated the impact of student's autonomy in learning. The study found that student engagement in secondary classrooms dramatically decreases compared to engagement in

elementary classrooms. Although disengagement is typical of adolescent behavior, students with lower levels of engagement normally exhibit difficulty with academics and lower grades than their more engaged peers (Hafen et al., 2011).

Clarify

This study did not find a significant relationship between student perceptions that teachers clarify content during instruction and student growth in math or reading. Nevertheless, students in high-achieving, high-poverty schools recognize that teachers provide wait time, academic feedback, and advancing questions. Students also reported that teachers use assessment data to gain meaningful feedback on student progress and help students take ownership of their own learning (Hagelskamp & DiStasi, 2012). However, effective teachers also use daily informal assessments to gauge student understanding and to establish next steps for learning. Rather than asking rhetorical or unanswerable questions, these teachers ask questions that students find meaningful and relevant to what they are learning and to their every day lives (Jensen, 2009).

Consolidate

This study did not find a significant relationship between student perceptions that teachers consolidate instruction and student growth in math or reading. However, Reeves's 90/90/90 schools study found that teachers in effective schools apply and share the results of authentic and regular assessments with their students. Rather than waiting for the end of a grading period, students are given feedback of their work in real time, and consequently are

placed into intervention/enrichment tracks immediately after assessment rather than at the beginning of a new grading period or school year (Reeves, 2003).

Control

This study did not find a significant relationship between student perceptions that teachers control the classroom and student growth in math or reading. The 2012 Public Agenda report, found that time spent redirecting misbehavior is lost instructional time (Hagelskamp & DiStasi, 2012). According to an empirical research study conducted by Lynch et al. (2013) there is a high correlation between student achievement and perceived classroom climate. For example, there were lower levels of student mastery in climates containing bullying and antagonism than climates in which students felt safe and engaged.

Recommendations for Practice

The following recommendations for practice, in regards to classroom climate in Title I schools, are made based on the findings and conclusions drawn from this research study and review of literature on the topic:

1. Teachers and administrators should continue to focus on building positive and respectful relationships with students in the classroom. According to Wang and Holcombe, students perceive that teachers with positive student relationships have better control of the classroom and fewer disruptive student behaviors—allowing both students and teachers to focus on learning (Wang & Holcombe, 2010).
2. Teachers should balance challenging curriculum with a supportive classroom environment. Meece et al.'s (2006) research regarding goal setting found that the

- types of goals does make a difference with students. In addition, high expectations without high levels of support have not been shown to raise achievement in high-poverty schools (Parrett & Budge, 2012).
3. Teachers should continue to focus on presenting instructional content as masters of their craft. Though classroom engagement peaks in during the elementary school years, students with lower levels of engagement also have shown greater difficulty with academics (Hafen et al., 2011; Parrett & Budge, 2012).

Recommendations for Future Research

The focus of this study was student perceptions of care, challenge, confer, captivate, clarify, consolidate, and control in classrooms of Title I schools in a medium-sized school district in Northeast Tennessee. The follow recommendations are made for future research:

1. A longitudinal study could be conducted to identify trends in the relationships between student perceptions of the classroom environment and achievement growth over a period of several years.
2. An identical study could be conducted with an increased sample size that includes additional schools from school districts with similar demographics throughout the state of Tennessee.
3. A qualitative component could be added to this study to further analyze specific actions associated with elements of the classroom climate and student academic growth.

Summary

The purpose of this study, organized and presented in five chapters, was to examine the relationships between student perceptions of classroom climate and student academic growth among 11 Title I schools in a medium-size northeast Tennessee school district during the 2012-2013 academic year. Chapter 1 included an introduction, statement of the problem, purpose of the research, research questions, significance of the study, definition of key terms, and delimitations and limitations. Chapter 2 reviewed literature focusing in the areas of poverty and education, including a definition of poverty and the historical significance of poverty in education, as well as information regarding poverty and student achievement, and student perceptions and academic achievement. Chapter 3 explained the research methodology chosen for this study including an introduction, why a quantitative design was chosen for this study, research questions with corresponding null hypotheses, population and sample, data collection methods, and data analysis methods. Chapter 4 included analyses of the data for research questions one through fourteen. Chapter 5 concluded this study with a summary of the findings for each research question, as well as recommendations for practice and future research, and a summary.

The results of this study revealed statistically significant relationships between Fourth and Fifth grade reading TVAAS gain scores and student perceptions that teachers care about students, Fourth and Fifth grade math TVAAS gain scores and student perceptions that teachers confer with students, as well as Fourth through Eighth grade math scores and student perceptions that teachers captivate students during instruction. This study did not find any statistically significant relationships between reading or math TVAAS gain scores and student perceptions of control, consolidate, clarify, and challenge.

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APPENDIX: IRB EXEMPTION LETTER



East Tennessee State University
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Phone: (423) 439-6053 Fax: (423) 439-6060

January 15, 2015

Lesley Fleenor
Fleenorl1@goldmail.etsu.edu

Dear Lesley,

Thank you for recently submitting information regarding your proposed project "The Relationship between Student Perceptions of Classroom Climate and TVAAS Student Achievement Gain Scores in Title I Schools."

I have reviewed the information, which includes a completed Form 129.

The determination is that this proposed activity as described meets neither the FDA nor the DHHS definition of research involving human subjects. Therefore, it does not fall under the purview of the ETSU IRB.

IRB review and approval by East Tennessee State University is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities are human subject research in which the organization is engaged, please submit a new request to the IRB for a determination.

Thank you for your commitment to excellence.

Sincerely,
Stacey Williams, Ph.D.
Chair, ETSU IRB



Accredited Since December 2005

VITA

LESLEY A. FLEENOR

Education:

Ed.D. Educational Leadership
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