CORRELATION STUDY: THE EFFECT OF STUDENT-TEACHER RAPPORT ON HIGH SCHOOL STUDENT PERFORMANCE RATE

by

Robyn Arlisha Clark

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

This study examined the relationship between student-teacher rapport and student performance rate. Convenience sampling was used to gather participants for the study. Graduating senior students at a Henrico County Public High School completed the Student Teacher Relationship Scale created by Dr. Robert C. Pianta. The mean scores of all students were calculated and then grouped and calculated according to gender and post-secondary goals/plans. The students' self-reported Grade Point Averages (GPA) were compared to their survey score to discover if there was a correlation between the students' rapport scale and their GPA. This study tested whether the student-teacher rapport developed was relevant. This correlation study attempted to determine reasons for an increase or decrease in student performance. The variables, predictor – student-teacher rapport and co-variable-performance rate, were evaluated at the start of a study. The population sample was chosen randomly from a convenience sampling design. The results were gathered and analyzed using the Student Teacher Relationship Scale Profile Sheet and the Pearson's correlation coefficient for the purpose of accepting or rejecting the null hypothesis. Suggestions for further research are also included.

Keywords: Student-Teacher Rapport, Performance rate, High school, Student-Teacher Relationship Scale

Dedication

Throughout this entire process, my mother and son have been my rock in the midst of stormy weather. Whenever I wanted to stop or put things off, my mother continued to remind me of the importance of this process and degree. She continued to pray for me and had others join in the movement, which included my father, uncle, and every family member and friend she could rally. She encouraged and motivated me to continue this race, as to fulfill my godly purpose in life. My mom has not only pushed me throughout this process, but she has helped me to discover many things about myself. Like her, I am determined and can achieve anything I decide to accomplish. I know she will be proud of this accomplishment, but even with this, I will continue to strive to be a woman of faith, a woman of virtue, and a symbol of love, just like her.

My son is my reason for succeeding. For him, I want to become all that I've dreamed of, to show him firsthand what hard work and perseverance can do. My love and heart goes out to the male who taught me what true love really is, my son. The unconditional love I have for him is the motivation I need to move forward each day. I thank God for the gift of my son, Emanuel; God is always with us.

I thank them both for being my motivation and for walking every step of the way with me. I love you both more than words can say.

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I want to say thank you, Dr. Pritchard, for being so patient and dedicated. The blessings you have bestowed on me I can only repay you by continuing to strive for greatness and to be all that you believed I can be. I will continue to pray for you and your family after this process, and I know you will be doing the same for me!

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CHAPTER ONE: INTRODUCTION

The No Child Left Behind Act of 2001 set into law that all students should be afforded an opportunity to achieve academic success. Research indicates that a teacher's expectation of his or her student can have an enormous effect on that student's actual performance (Chen & Wesley, 2011). Therefore, it is likely that academic achievement is a significant factor of student-teacher rapport (Hamre & Pianta, 2001). Furthermore, researchers have found that a higher expectation from the teacher can lead to an increase in student IQ scores (Rosenthal & Jacobson, 1968). Many aspects aid in improving a students' performance level. The quality of the student-teacher relationship has predicted many academic outcomes (Hamre & Pianta, 2001). The rapport between teacher and student is especially strong due to the various roles teachers have in terms of nurturing, discipline, teaching, and evaluating (Johnson, 2009). To improve a student's chance for success in performance, educators must strive to form meaningful relationships with students (Pianta, 1999).

Background Information

Academic success is directly linked to the successful outcomes and values for youth in society (Brockman & Russell, 2012). People with higher levels of education are more likely to be employed and to earn higher salaries (National Center for Education Statistics, 2001). President Barack Obama directly connects the value of education to the economy and ensures it to be one of his highest priorities (U.S. Department of Education, 2013). Research has found that people who are academically successful are:

- More stable in their employment;
- More likely to have health insurance;
- Less dependent on public assistance;

- Less likely to engage in criminal activity;
- More active as citizens and charitable volunteers; and
- More healthy

(National Alliance of Business, Inc. 1998).

Academic success was found to be connected with academic discipline, self-motivation, and engagement (Schaps, 2005). Motivation and engagement are greatly influenced by the student's learning environment, which is highly controlled by the student's teacher (Brockman & Russell, 2012). The student becomes more motivated and engaged with a challenging atmosphere that is socially supportive (Pajares, 2002). The student who is recognized for demonstrating his or her strengths, and given choices and opportunities is favored to have a higher academic history than one who is not because he or she internally fosters the motivation and engagement needed to succeed (Pajares, 2002).

There has been a change in American families over the past 30 years. Children enter into schools or childcare centers at an earlier age because of the increase of maternal employment, which is a reflection of the various roles women play in society (Hamre & Pianta, 2001). In these cases, the children are forced to create relationships with childcare workers. This is the beginning of the child's history of forming relationships with teachers, which could be positive or negative. The effects of the quality of student-teacher relationship on achievement, created in kindergarten, are found up to eight years later (Hamre & Pianta, 2001).

The relationships that are formed are fundamental in forming an individual's personality. Every relationship is important as it changes and develops. Children learn to flourish and mature through each relationship they encounter. A positive relationship aids in the student remaining

curious and open to new experiences as well as aiding in his or her capacity to discover connections and new meanings (Jupiter Infomedia, 2008).

Research supports that the quality of relationships that children form with teachers is influenced by the early environment (Ladd, Birch, & Buhs, 1999). Children display the identical patterns of interaction with teachers that are observed in parent-child relationships (Hamilton & Howes, 1992; Pianta & Steinberg, 1992). It is highly likely that the relationships children form with early caregivers are related to the quality of relationships they will have with future teachers (Pianta, 1997). Children who are unable to form a parental relationship may form a unique type of relationship with the teacher (Goossens & van IJzendoorn, 1990; Howes, 1998; van IJzendoorn, Sagi, & Lambermon, 1992). As the child matures, the relationship with his or her parents' changes; the child may not look for the same qualities in his or her parental relationships that would establish a positive relationship.

The government recognizes the parent as a child's first and most important teacher (U.S. Department of Education, 2013). Once the student begins school, the parents are urged to be partners in education alongside the child's teacher. The relationships that are formed in school are very much like those relationships formed at home. The government has also joined in to encourage parents and school systems to continue the parent/student-teacher relationship by including proposals to double funding for parent engagement and enhancing school report cards about academic performance and school climate, and providing support for programs (U.S. Department of Education, 2013).

The student-teacher relationship has become a focus on school adjustment research, and has further become an important indicator of child outcomes (Howes, Hamilton, & Matheson, 1994; Howes, Hamilton, & Philipsen, 1998), academic success (Burchinal, Peisner-Feinberg,

Pianta, & Howes, 2002; Pianta, La Paro, Payne, Cox, & Bradley, 2002; Pianta, Nimetz, & Bennett, 1997), and adjustment to school (Pianta & Steinber, 1992). Author Paula Denton, stated, "In schools, relationships are treated as luxuries. Relationship is a necessity for learning. We can't afford not to do it" (Sears, 2014, p.1). The student-teacher relationship has been found to be meaningful as well as a predictor of later outcomes (Burchinal et al., 2002; Howes et al., 1994, 1998; Pianta, 1997, 2002).

In order for the relationship to become positive, both parties in the relationship, student and teacher must present certain attitudes. The student must have held the teacher in high esteem, where the level of trust is high (Gal Einai Institute, n.d.). However, before trust can even be brought up in the classroom, respect must already have a presence between both parties: the student and teacher (Handel, 2011). A student's trust is earned by demonstrating respect in the form of meaningful, challenging, and rewarding learning activities that are worthy of his or her time and best efforts (Johnson, 2008). Understanding is brought about when the student values the teacher's instruction (Gal Einai Institute, n.d.).

In addition to the level of esteem, the student must feel the teacher's genuine concern. This again shows proof of the level of trust. The building of relationships with others on a daily basis is directly connected with the happiness and success one feels (Handel, 2011). Finally after the student feels comfortable, he or she has to agree to follow the teacher's lead and to perform the expected tasks (Gal Einai Institute, n.d.)

The teacher must also take the aspects of trust and respect seriously. Teachers need to discover trust for their students and begin to explore student-centered learning (Johnson, 2008). First, the teacher must be genuine when dealing with the students, to display a positive rapport,

and the teacher must act with certainty and love when making decisions and giving instructions to students (Gal Einai Institute, n.d.).

Problem Statement

Studies have found the importance of student-teacher rapport; however, the effects on student achievement have not been effectively determined. Poor school student achievement is a concern for most school systems for behavioral reasons as well as a predictor of further school achievement (Schaps, 2005). The school community environment and specifically student-teacher rapport is a major factor in how the students and teachers perform (Pianta, 2010). Studies have shown that the quality of student-teacher relationships tend to decline after students enter junior high school and continue to do so (Freeman, Anderson, & Jensen, 2007). Research also indicates that teachers who develop relationships experience fewer classroom behavior problems and better academic performance (Decker, Dona, & Christenson, 2007; Marzano, Marzano, & Pickering, 2003).

Purpose Statement

The purpose of this correlation study was to determine the nature and strength of the relationship between student-teacher rapport and performance rate, controlling for academic levels for graduating seniors at a Henrico County, Virginia, Public High School. The predictor variable, student-teacher rapport, was generally defined as the relationship formed between student and teacher. The co-variable, performance rate, was generally defined as the students' cumulative grade point average. This study will research the students' feelings of rapport and the relationship between their feelings and the student's performance rate. The students' views were analyzed to determine what type of relationship the student would like with his or her teachers to achieve at a higher rate in the classroom. With this study, the researcher will discuss

in future chapters implications of the results in ways that will provide stakeholders with information that will assist in preventing student dropout rates and discontent with school.

Significance of the Study

Each school year students and counselors meet to gather information to place students in classes that will fulfill requirements for graduation. In most cases, there is more than one teacher that teaches a subject; the difference among the teachers can sometimes be substantial (Spiegel, 2012). Placing a student in a classroom with a teacher who does not mesh with him or her can result in extreme behaviors, as in failure to report to class or to complete the work at a sufficient level (Spiegel, 2012).

It is important that educators strive to create the best environment for the student to aid in enhancing his or her behavior and academia (Spiegel, 2012). Placing a student in a class with a teacher who has a low tolerance for misbehavior and has preconceived views of the student allows the student to behave in the realm of the teachers' preconceived view. Adversely, placing a student in a class with a teacher that has a higher performance expectation stimulates more effort from the student and leads to increased student achievement (Good & Weinstein, 1986). Positive student-teacher relationships enhance student learning and create an environment for continuous improvement (Spiegel, 2012).

Teachers are also directly connected with the effects of student-teacher rapport. Pianta (2010) worked under the assumption that teachers are also motivated by the student-teacher relationship. Pianta (2010) believed that teachers also desired to feel connected and wished to influence the lives of children; further, when the relationships decreased, the teacher's mental connection to his or her work could be harmed.

There have been numerous studies performed in the past that research the effects of student-teacher relationships; however, the instruments are all taken by the teacher, thus the research is based on the sentiments of the teacher and not the student. This study was taken from the students' viewpoint and researched the relationship between the students' feelings of rapport with their teacher and their performance rate. In previous studies, the teachers have rated their relationship with their students without the opinion of the student; in this case, however, the student's opinion was at the forefront of the study and its results. Earlier studies show that teachers control the relationship between teacher and student, and teachers are looked upon as the leaders who extend their knowledge and nurture their students (Danielson, 2007). Contrary to previous studies, this research will aim at discovering what the student desires from a relationship to achieve at a higher rate.

During the secondary school levels, students were found to need more support and positive relationships; however, it has also been found that the relationships are few (Hamre, Jerome & Pianta, 2009). The importance of relationships will be brought to the forefront to be included in staff development as an enhancement for student achievement. In high school, students change teachers for each subject and thus eventually form some type of relationship with each teacher. Studies have found the importance of the student-teacher relationships, but have not successfully determined the effect of forming numerous relationships (Hamre, Jerome & Pianta, 2009).

Research Questions

Three research questions were developed by the researcher, based on current literature, student-teacher rapport, and performance rate. It has been found that educators believe students will work harder to succeed academically if they believe the school cares about them (Noddings,

1996). Those students who experience a lack of motivation also experience a lack of progress in terms of skills (Webb, 2009). In terms of male and female students, a relationship has been found between gender and displays of conflictual behaviors that also leads to poorer relationships with teachers (Hamre & Pianta, 2009). Lastly, many schools challenge the teachers to assist the students and expose them to options after high school, to include work, college, and various military options.

The research questions were designed to answer by testing the related hypotheses and analyzing the results of the Student Teacher Relationship Scale.

They are as follows:

RQ1: What is the nature and strength of the relationship between student-teacher rapport and performance rate?

RQ2: What is the nature and strength of the relationship between a student's gender and student-teacher rapport level?

RQ3: What is the nature and strength of the relationship between a student's post-secondary goals/plans and student-teacher rapport level?

Hypotheses

The following are hypotheses and null hypotheses:

H1: There is a statistically significant positive relationship between student-teacher rapport and performance rate as measured by the Student Teacher Relationship Scale and the student's grade point average.

H_{o1}: There is no statistically significant relationship between student-teacher rapport and performance rate.

H2: There is a statically significant positive relationship between a student's gender and student-teacher rapport level as measured by the Student Teacher Relationship Scale.

H_{o2}: There is no statistically significant relationship between a students' gender and student-teacher rapport level.

H3: There is a statistically significant positive relationship between a student's post-secondary goals/plans and student-teacher rapport level as measured by the Student Teacher Relationship Scale.

H_{03}: There is no statistically significant relationship between a students' post-secondary goals/plans and student-teacher rapport level.

Identification of Variables

Predictor Variable: Those variables observed by the experimenter (Howell, 2008). In the current research the predictor variables are the students' rapport scale results.

Co-Variable: The variables being measured; the data or score (Howell, 2008). In the current research the co-variables are the students' gender and post-secondary goals/plans as well as the students' grade point average.

Definitions

Student Teacher Rapport is a fundamental characteristic of well-functioning human relationships between a student and his or her teacher (Reis & Sprecher, 2009).

Student Teacher Relationship Scale is a teacher-report instrument designed for teachers of children between the ages of three and 12 which measures a teacher's perception of conflict, closeness, and dependency with a specific child (Pianta, 2007).

Grade Point Average represents the average number of grade points a student earns for each graded high school course. Dividing a student's total grade points earned by the total course credits attempted determines a student's GPA (“Glossary of education,” 2013).

Post-secondary Goals/plans are all options provided for persons who have completed secondary education or have discontinued secondary education and are beyond the age of compulsory school attendance (Putnam, 1981).

School Report Card provides school divisions and the Commonwealth with information about student achievement, accountability ratings, attendance, program completion, school safety, teacher quality, and other topics (Virginia Department of Education, 2013).

CHAPTER TWO: REVIEW OF LITERATURE

Introduction

This chapter focuses on the current literature written on student-teacher rapport. The literature encompasses not only the meaning and formation of the rapport; but also additional factors that might be attributed to the levels of rapport between student and teacher. The external factors include gender and post-secondary goals/plans. The theoretical framework of the student-teacher rapport is focused on the sociocultural theory discovered by Vygotsky, also within the theories of behaviorism, constructivism, and epistemology.

The No Child Left Behind Legislation (2001) was set in place that all students should be afforded an opportunity to achieve academic success. The focus of the No Child Left Behind Act was to improve education for all students (2001). The Act focused on various aspects of the education process. All sections of the curriculum affect the experiences a student has during the school day. This study researched the relationship between student-teacher rapport and the students' performance rate. Research shows that a higher expectation from the teacher can lead to an increase in IQ scores of students (Rosenthal & Jacobson, 1968). Worley, Titsworth, Worley, and Cornett-Divito (2007) agree that an interpersonal relationship is essential in student learning. Schaps (2005) found in his studies that positive educator relationships with students have the strongest correlation with attitudes toward school, academic expectations, and academic motivation and engagement.

Striving to form a meaningful relationship with students should be a focus in all levels of education and also an expectation of teachers (that should increase performance levels).

Theoretical Framework

Social Cultural Theory

The relationship between student and teacher has been a topic of research for over 2000 years (Haertel & Wang, 1994). According to Haertel and Wang (1994) Plato, Socrates, and Confucius created most of the philosophical outline for teaching, which was theoretically based on the compression of knowledge through dialogue and the student-teacher relationship.

Lev Vygotsky, founder of the sociocultural theory, combines social environment and cognition where children will acquire a way of thinking and behaving by interacting with a more knowledgeable person ("Constructivism as a," 2004). Vygotsky believes that a child's development is the result of his or her interaction with a social environment which includes people and their culture. According to this theory, culture would be the only variation in children's learning habits as they learn from other knowledgeable people ("Constructivism as a," 2004). The role the student's participation in social interactions and culturally organized activities plays in influencing psychological development is the main focus of the sociocultural theory (Scott & Palincsar, 2013).

The four principles of Vygotsky's theory are as follows:

1. Children construct their knowledge
2. Development cannot be separated from its social context
3. Learning can lead development
4. Language plays a central role in mental development ("Constructivism as a," 2004)

According to Vygotsky (2004), children construct their knowledge; however an adult, or more knowledgeable person, enhances the learning process and aides in the comprehension. In reference to sociocultural aspect, learning is believed to occur through interaction, negotiation,

and collaboration; this interaction also pays close attention to the discourse, norms, and practices associated with the communities (Scott & Palincsar, 2013). The goal of instruction is to support students to engage in the activities and tools in a manner that is consistent with the practices of the community to which students are being introduced (e.g., scientists, mathematicians, historians).

Adult supervision given to students is needed in and outside of the classroom to assist with the students' motivation needs (Osterman, 2000). Students desire the adult relationship to feel accepted and to equate the need for knowledge as a sense of belonging to the school community. Even though the teacher and student desire a relationship, the various interference in and out of the classroom hinder the growth of the relationship; however, a study conducted at Hofstra University produced results that educators do have a growing concern about the importance of the relationship, although many school practices may undermine it (Osterman, 2000).

This study was based on two forms of the theoretical framework, epistemology and behaviorism. Epistemology is the study of knowledge (Heylighen, 1993). It focuses on what is adequate or inadequate information, and how one knows this (Landauer & Rowlands, 2001). The information taught and comprehended in school directly connects with this theory. Furthermore, the students' grade point averages are the basis of the performance rates of the students, where the grade point average is the calculated average number of the student's grades during high school. Epistemology is in direct connection with student performance levels as well as their achievement rate.

Behaviorism involves identifying various behaviors and their effects on students. Burrhus Frederic Skinner was a proponent of stimulus-response learning theory, where teachers

are the transmitters of knowledge and the students are the recipients (Haertel & Wang, 1994). However, B.F. Skinner furthered the study of behaviorism to include operant conditioning (Media, 2011). Operant conditioning involves a person operating in his or her environment, performing actions that change the environment around him or her for good or for bad purposes (Media, 2011). Skinner's furthered theory of behaviorism focused on the action taken by the person that has a consequence that naturally occurs (Media, 2011). Behaviorism was developed into constructivism where students and teachers constructed knowledge together to produce common understanding; the teachers shifted to facilitators and the students were co-contributors (Haertel & Wang, 1994). The behaviorist theory can be beneficial to teacher and student, due to the repeated effort and work given by the student who will work for things that bring him or her positive feelings and approval from people he or she admires (Parkay & Hass, 2000). In this manner, if the behavior can be learned, it also can be unlearned and relearned (Standridge, 2002). The student-teacher rapport level directly connects with the theory of behaviorism, as students tend to respond and comprehend at a level that links directly with their classroom relationships.

Related Literature

Education is comprised of the knowledge of basic skills, academics, technical disciplines, and citizenship, in addition to the processing of information (Webb, 2009). In the classroom, the teacher is focused on all of the aforementioned and achievement in all areas. The testing of natural skills and the application process are two aspects that have proven difficult to assess; however, they are both essential parts of education. Webb (2009) believes education's goal should be to develop a love to learn that remains with students throughout a lifetime; further, it should be a lifetime experience. Testing and school assessments are also focused on the

collection and comprehension of knowledge. A typical student is academically challenged; however, the child is not supplied with the motivation. Lack of motivation can create a lack of processing skills (Webb, 2009).

Over the decades, the goals of education have been: to prepare children for citizenship, to cultivate a skilled workforce, to teach cultural literacy, to help students become critical thinkers, and to help students compete in a global marketplace (Jacobsen & Rothstein, 2006). While these are related goals, they demonstrate the diversity of expectations and prioritization that society and its educators must manage. Recognizing the changes in American education, President Obama has created the High School Redesign Initiative that will challenge high schools and their partners to rethink teaching and learning to prepare students for a global economy (U.S. Department of Education, 2013). Education serves multiple objectives as a result of the diverse economic, social, spiritual, cultural, and political realities of individual lives (Webb, 2009).

America is striving to ensure that every student receives a high-quality education and is directly linking it to success. While America's international peers are enhancing the rigor and experiences offered to students in the secondary educational years (U.S. Department of Education, 2013). President Obama has linked this initiative to four key objectives:

- Higher standards and better assessments that will prepare students to succeed in college and the workplace
- Ambitious efforts to recruit, prepare, develop, and advance effective teachers and principals, especially in the classrooms where they are most needed
- Smarter data systems to measure student growth and success and help educators improve instruction
- New attention and a national effort to turn around our lowest-achieving schools

(U.S. Department of Education, 2013)

The High School Redesign Initiative will promote a rethinking of the high school learning experience and will challenge schools to:

- Redesign academic content and instructional practices
- Personalize learning opportunities
- Provide academic and wrap-around support services
- Provide high-quality career and college exploration and counseling
- Offer opportunities to earn post-secondary credit
- Provide career related experiences
- Strategically use learning time in a more meaningful way
- Provide evidence-based professional development

(U.S. Department of Education, 2013)

The performance rate of students displays their academic success. Academic success is strongly linked to positive outcomes educators have for children (Brockman & Russell, 2012). Successful students learn to balance the social and academic aspects of school, expect to succeed, and are socially proficient, goal oriented, and intrinsically motivated (Ellis & Worthington, 1994; Scheuermann, 2000). Adults with higher levels of education are more likely to be employed and earn higher salaries (National Center for Education Statistics, 2001; U.S. Department of Commerce, Bureau of the Census, 1999). Additionally the number of jobs that will require a college education is expected to grow over the next 10 to 20 years (Fleetwood & Shelley, 2000; Rentner & Kober, 2001). Research shows that people who are academically successful are more stable in their environment, more likely to have health insurance, less

dependent on public assistance, less likely to engage in criminal activity, more active as citizens and charitable volunteers, and lastly, healthier people (National Alliance of Business, Inc., 1998).

The optimistic sentiment of a student towards a teacher has been conceptualized along a continuum of rational development (DeVito, 1986) which asserts that: (a) teaching can be described as a relational process from initial contact, intimacy or closeness, and dissolution; (b) student-teacher interaction that assists teaching and learning depends in part on the development of an interpersonal relationship; (c) the development of a relationship between student and teacher will lead to greater satisfaction and effective learning; and (d) a failure in teaching can be attributed to the ineffectiveness of the relational development process (Docan-Morgan, 2009).

Rapport is defined as "a close or sympathetic relationship; agreement; harmony" (Webster's New World Dictionary, 1982, p. 1177). Pianta (1999) defines student-teacher rapport as being characterized by open communication and emotional and academic support that exists between students and teachers. Lastly, a positive rapport or relationship is "characterized by mutual acceptance, understanding, warmth, closeness, trust, respect, care and cooperation (Leitão & Waugh, 2007, p. 3).

A study was conducted at Auburn University to discover feelings concerning building rapport. The following tips were found as a result:

1. Calling students by their names
2. Learning something personal about the students
3. Explain course policies
4. Post and keep office hours
5. Increase accessibility to your students
6. Interact more with the class

7. Be enthusiastic about teaching

(Buskist & Saville, 2001)

Students reported that the rapport not only increased their desire to learn the subject, it motivated them to come to class more often and pay attention (Buskist & Saville, 2001). The relationship importance is carried between both parties; it is a mutually respectful and supportive relationship (Pendergast & Bast, 2000).

Studies were completed on the influence of effective student-teacher rapport and its support to various facets of academia. Drs. Bridget Hamre and Jennifer Locasale Crouch have found that many pre-school children experience little quality interaction while at school (as cited in Education Northwest, 2012). The quality interaction, relationships, can be used in addition to current curriculum practices to increase student growth. These relationships have been designated to be with empathy, warmth, and genuineness (Motishinig-Pitrik & Cornelius-White, 2004). The Regional Educational Laboratory (REL) of Northwest at Education Northwest (2012) and the Institute of Education Sciences (2012) focused a forum on effective student-teacher interactions: emotional support, classroom organization, and instructional support. The study conducted found that out of 700 preschool classrooms in 11 states, only 15% displayed moderately to high in all three areas (Education Northwest, 2012).

In the study conducted by Rosenthal and Jacobson (1968), teachers who expected their students to "bloom" displayed greater increases in their performances than their peers. In terms of educators, adults have the ability to encourage a student and to allow him or her to developmentally make choices. A teacher has the ability to push students towards certain agendas and to override their previous decisions (Gurland & Grolick, 2003).

The positive student-teacher relationship has the following qualities:

- Teachers show their pleasure and enjoyment of students
- Teachers interact in a responsive and respectful manner
- Teachers offer students help
- Teachers help students reflect on their thinking and learning skills
- Teachers know and demonstrate knowledge about individual students' backgrounds, interests, emotional strengths, and academic levels
- Teachers seldom show irritability or aggravation toward students (Rimm-Kaufman, 2013)

Benefits of Positive Student-Teacher Rapport

A positive student-teacher rapport has a number of benefits that far supersede the classroom ("Teacher and support," 2005). Progressive educators believe that students will care about schools that care about them as well; they will work harder to succeed academically in a context of safety, connection, and shared purpose (Noddings, 1996). The benefits of a positive – student-teacher rapport are also just as important to older students as it is to those just entering school (Rimm-Kaufman, 2013). It has been found that the quality of children's relationships with their teachers has important implications for children's concurrent and future academic and behavioral adjustment (Howes, Hamilton, & Matheson, 1994; Hughes, Cavell, & Jackson, 1999; Meehan, Hughes, & Cavell, 2003; Pianta, Steinberg, & Rollins, 1995).

The positive relationship gives the student the support during tough times, teaches how to work together, creates feelings of pleasure and joy, and adds meaning to the individual's life (Handel, 2011). A positive emotion is a pleasant feeling that does not harbor any negativity, thus assisting in the outcome of the relationship (Handel, 2011). Teachers who give appropriate

feedback to their students communicate effectively and build relationships with their students daily to continue throughout the school year.

Positive relationships help to foster a sense of meaning to a student's life. All students have tough times and need the provision of a teacher who can be of some support (Hamre & Pianta, 2001). The acknowledgement of positive relationships is a way to push forward and continue to get help when needed (Handel, 2011). The classroom climate relies heavily on the relationship between students and teachers (Maslowski, 2003). Positive rapport allows for a positive climate in the classroom, which allows the student the opportunity to link concepts and skills to what they are learning and experiencing (Rimm-Kauffman, 2013). The Collaborative for Academic, Social, and Emotion Learning (2002) professes that satisfying the social and emotional needs of students does more than prepare them to learn; it actually increases their capacity to learn. The support enables the student to collaborate and to work well with others (Handel, 2011).

Students come to school with three basic psychological needs – competence, autonomy, and relatedness – which are all met within the learning environment. These needs can be met within the student-teacher relationship (Deci & Ryan, 2000). Students who feel valued and cared for are more willing to comply with a teacher's wishes. A classroom teacher has the ability to be a major influence on his or her students for up to six and a half hours each day, five days a week (Boynton & Boynton, 2005). Competence is met with teacher feedback, while autonomy is met when the teacher acknowledges the students' interest. Lastly, relatedness is met when the teacher creates the social connection and positive interaction (Rimm- Kaufman, 2013).

Positive student-teacher rapport creates an emotional and intellectual investment for students (Phelan et.al, 1992). An educator that is seen by his or her students as beholding

autonomy support more than having control, possesses in that child's mind the ability to have more unselfish motivation and encourages them to self-regulate (Gurland & Grolick, 2003). Teachers have the benefit of an increase in students' performance level and a decrease in classroom disruptions when they are seen positively by their students (Phelan et.al, 1992). The academic and emotional behavior of the students will improve as the rapport between the teacher and students develops (LePla, 2009). Marzano, Marzano, and Pickering (2003), reported teachers who held high-quality relationships with students had 31% fewer discipline problems, over a year's time than teachers who did not. Students who experience a school with a caring environment become more motivated, ambitious, and engaged in learning (Schaps, 2005). A positive student-teacher rapport can assist in an increase in student effort along with improvements in academics and behavior. Stipek (2006) reported that adolescents "work harder for teachers who treat them as individuals and express interest in their personal lives outside school" (p. 46). The personal connection a student has with an adult shows the support that the advocate understands the student's interests, struggles, and ambitions ("Improving high schools", 2014). Schaps (2005) also found student's positive connection with their teachers along with the perception that their teachers care about them stimulates effort and engagement.

Instructors that form meaningful relationships with their students help students meet academic and social high standards ("Improving high schools", 2014). According to Handel (2011), positive or negative relationships are the basis of a person's happiness and success. He furthered discussed how the positive relationships that are built also help form other positive relationships and the process continues. The motivation created during a positive relationship encourages others to create more positive relationships (Handel, 2011).

A student picks up instantaneously and knows by his or her intuition if a teacher is putting on a show or if his or her concerns come straight from the heart and passion for the profession (Brooks, 2005). Those students who view characteristics of caring and support in their teachers tend to attempt to make corrections in their behavior without an issue (Brooks, 2005). The negative factors that could adversely impact a student's academic achievement are redirected through developing nurturing and positive relationships (Haertel & Wang, 1994). Those corrections come about from the mutual acceptance, understanding, warmth, closeness, trust, respect, care, and cooperation that are created and characterize positive rapport (Leitão & Waugh, 2007).

Tolkiengirl (2008) discovered that student performance is not only enhanced by the teacher's rapport, it sets the standards that directly aid the student performance and academic achievement. Further studies have found that positive rapport between students and teachers affect achievement and further create an enjoyable learning environment, having a positive effect on the entire school curriculum (Cabellero, 2011). Even though it takes two to form a relationship, the initiative most often begins with the teacher, mainly due to the apprehension most students feel. Teachers are most often the driving force for these relationships and therefore must recognize the need for a rapport with specific students to enhance their learning experience (Tolkiengirl, 2008).

Improving Student-teacher Relationships

Teachers can create a positive rapport with all students, including negative or disconcerted students, which can change the student's opinion of school. Rombokas (1995) found that students who are involved in extra-curricular activities increase in their intellectual and social development, which aids in their positive growth. Not only coaches, advisors and

sponsors, but teachers who ensure fairness, encouraging students to take responsibility, and creating experiences with a guarantee of success, promote development and a sense of inclusion and help the alienated student(s) join the group (Hyman & Perone, 1998). There is a connection created with the teacher when he or she is involved in students' lives, by learning about things they are interested in and involved in ("Forming positive student", 2004). Once that teacher displays concern, acceptance, and inclusion it aids in the creation of a good relationship and positive rapport (Hyman & Perone, 1998). Teachers must learn and understand the unique qualities of students, which are a critical component of developing relationships (Rimm-Kaufman, 2013). Learning as much as possible about a student's personal interests and background aids in the personalizing of class topics and effective classroom activities ("Forming positive student", 2004). Therefore the more a teacher knows his or her students the more improved, customized examples and activities can be created for the class (Babcock, 2001).

Improving the relationship amongst his or her students can be as simple as the teacher showing the students he or she cares about them as a person (Sears, 2014). Creating a connection between the teacher and the students will open the door for a more learning-friendly environment which also will aid in the strengthening of the relationship (Sears, 2014). Classroom management, setting clear expectations, and positively enforcing classroom rules are all expectations of successful classroom teacher (Sears, 2014). More often in the relationship a student has with a teacher is more important for him or her to follow the rules than the rules themselves (Boynton & Boynton, 2005). Literature on building relationships to enhance classroom management includes creating subtle interventions, bonding time, avoiding punishments, and activities for all students that ensure success (Hall & Hall, 2003).

Author Sears (2014) interviewed a retired teacher who noted, "It is the teacher's responsibility to get to know the students at different levels, not only academically, but personally and socially" (p. 2). Teachers are challenged with showing empathy for their students, making the students feel understood. Relationships that contain empathy are critical for adolescents going through difficult times (Bernstein, 1996; Mordock, 1991). Sears (2014) also noted three specific tips to assist a teacher in bonding with his or her students:

1. Individualize
2. Watch what you say
3. Keep trying to reach your students.

When a teacher takes the time to learn the behaviors and make-up of each student, it allows the teacher to understand how the child operates. Once this happens, the understanding of how the child operates allows the teacher to individualize the curriculum and create ways to aid in the students' comprehension of the material (Sears, 2014).

Teachers also have varied personalities; some teachers prefer a disciplined environment, and others create an atmosphere where students feel safe to take risks and be creative (Petegem, Creemer, Rossel, & Aelterman, 2005). However, a teacher should be mindful of the language and words used in the classroom to create the environment where a student can feel comfortable and he or she can maintain order (Sears, 2014). Teachers as well as students have challenging moments and days, however, it is the responsibility of the teacher to press on, be the example for the students, and continue to reach for the connection. Often an apology can turn an entire situation around, as well as become a learning experience for the students as to how to handle tough situations (Sears, 2014).

A large percentage of a teacher's discipline plan should be the development of a positive student-teacher relationship (Boynton & Boynton, 2005). Students admit to trying harder and putting more effort for teachers who they feel put forth the additional effort and genuinely care for them (Stipek, 2006). According to previous research, the following strategies are successful in creating positive student-teacher relationships.

1. Communicating positive expectations
2. Correcting students in a constructive way
3. Developing positive classroom pride
4. Demonstrating caring
5. Preventing and reducing your own frustration and stress (Boynton & Boynton, 2005).

Research has found that teacher expectations and student achievement have a concentrated impact on student academic performance (Kerman, Kimball, & Martin, 1980).

At-Risk Students

Whelage and Rutter (1986) suggest from their studies that students who eventually drop out of school have some of the poorest student-teacher rapport. Teachers most often connect and favor relationships with students who are high achievers and overlook those who are at-risk (Stipek, 2006). Students, who are in need of a supportive school environment may be placed at a further disadvantage by the quality of their school experience (Tharp, 1989). The relationship between the student and teacher sometimes takes the place of the disconnecting relationship between the student and the parent and/or guardian (Kessner, 2000). Children with lower school readiness competencies are less likely to receive the teacher support that could enhance their adaptive classroom engagement and learning (Hughes & Kwok, 2007). An at-risk student is

centered more on an adult relationship that helps him or her refocus energy on long-term goals such as a high school graduation (Phelan et.al, 1992). These types of students are aided with a student-teacher rapport because it mostly serves as a protective shield (Baker, Grant & Morlock, 2008). Teachers should make an earnest effort to form a positive relationship with the students they find most difficult to teach – taking the time to compliment and focus on good behavior (Stipek, 2006).

It is common for students who are failing most of their courses to earn above-average grades in classes where they have a positive student-teacher rapport (Phelan et.al, 1992). In an independent school study, it was found that all students could be taught; it is merely the approach that should be varied, to ultimately continue to increase the student's self-esteem and to encourage positive behavior (Zhou, 2007). Furthermore, Testerman (1996) stated, "When those who eventually became dropouts were asked to rate teacher interest in students on a 4.0 scale, marks of fair to poor were given by 56% of the Hispanics, 50% of the Blacks and 59% of the Whites" (p. 364).

Zhou (2007) found that the expectation of the teacher has a direct connection with how students perform. The research showed that teachers' high expectations for students' academic achievements are a key factor of efficient at-risk programs (Schaps, 2005). The behavior of students is also dependent largely on the expectations of significant adults in the students' lives (Boynton & Boynton, 2005). A close, yet limited relationship between the student and teacher is helpful for students who are shy, because they conquer many of the fears they have by creating a positive relationship (Robinson, 2014).

The expectations teachers have for students become self-fulfilling prophesies to the students. Positive reinforcement is critical in aiding in a student's ability to learn and grow

(Pajares, 2009). Zhou's (2007) independent research found that one of the major causes of the decrease in academic ability was the negative environment that was fostered by teachers who blamed the students for their misfortunes and who could not handle disciplinary problems, which merely reinforced the student's low self-esteem. It has been found the some teachers appear less friendly and supportive with children who misbehave, at some points even more dominating which causes the student to become more passive (Pedersen, 2012).

Giving an opportunity for decision-making helps the student understand his or her own worth. The prospects afforded by teachers give the student autonomy by "allowing them choices in assignments, engaging them in developing classroom rules, and encouraging them to express their opinions in class discussions" (Stipek, 2006, p.47). Many teachers find class time spent in informative discussions normally becomes a very successful class period (Merlot, 1997). Discussion time allows students to think on a greater cognitive level, affording them the opportunity to ask questions and to develop an understanding for the topic, further enabling students to voice concerns and to allow teachers to address those concerns (Merlot, 1997).

Zhou (2007) found that case-teaching, where students are given the opportunity to give opinions and ideas on topics taught is the most specific to the student-teacher rapport significance. The teacher creates a problem that needs to be dealt with and the students devise a plan; this form of interaction creates a sense of interdependence, responsibility and citizenship, which are all important at the middle school learning age (Zhou, 2007). This process can also be used to assist students with discovering issues within themselves by using the dialoguing aspect to help the students understand their behavior and to problem solve alternatives (Dwiary, 2005).

When students are given ownership in school based decision making, it has been shown to help re-engage them in the school community, thus increasing value on school relationships

(Spilt & Koomen, 2009). Psychological research has connected autonomy and motivation which should increase the acceptance of the teacher for the students. The learner-centered approach helps to reinforce the importance of learning for students and to increase the motivation of students (Weimer, 2002).

From a student's standpoint, forming the sincere bond of respect with a teacher will maximize the classroom experience and will further itself into life thereafter (Babcock, 2001). Classroom connectedness, the connection the students feel with the subject, peers and teacher, tends to be the guiding force for their feelings of positive rapport (Frisby & Martin, 2010). People will try harder and put forth more effort with things they like (Amabile & Kramer, 2011). Supervisors and others in charge who are pleasant and keep a positive attitude can motivate others to work harder and make greater efforts (Amabile & Kramer, 2011). Student participation and affective learning has been found to be increased by student-teacher rapport and class connectedness (Frisby & Martin, 2010). Positive reinforcements communicate high expectations and a belief in students' capabilities and their ability to learn and grow (Pajares, 2002). The College Board performed a study that showed if a student's counselor believed the student should go to a four-year college, the likelihood of the student attending a four-year college increased substantially (as cited in King, 1996).

Students who drop out of school are more likely to find companionship with low-achieving, antisocial peers (Battin-Pearson et al., 2000; Hymel, Comfort, Schonert-Reichl, & McDougall, 1996). Developing a student's self-esteem begins with building relationships and a positive learning environment (Rodriguez, 2005). Once a students' self-esteem and teacher's positive attitude are enhanced, the academic ability also is enhanced (Zhou, 2007). At-risk students reported they did not excel because they were not given the opportunity, had already

failed once, or they were already labeled and did not have a chance (Zhou, 2007). Students who have experienced negative student-teacher relationships, said their teacher did not care about them was not interested in whether they succeeded or failed, and was not willing to provide additional help (Lee & Burkam, 2001). Students at risk for academic failure are unlikely to identify with their school or to see themselves as an important part of the school community. These students do not participate in extracurricular activities and are apt to express dissatisfaction with school in general (Christenson & Thurlow, 2004; Hymel et al., 1996; Rumberger, 1995). It is important to foster a student's self-esteem by listening and showing him or her how to value ideas, opinions, and interests. These skills can be accomplished by involving him or her in the decision-making process, thus allowing a student to make choices (Bucalos & Lingo, 2005; Strout, 2005).

A simple greeting by name, showing belief and trust, and displaying that the student's safety and well-being is of concern will strengthen the rapport between the teacher and student (Hyman & Perone, 1998). When comfort is offered, choices are given, and expectations are stated prior to consequences given, students feel accepted and are more likely to let down their guard and to join in with the class (Hyman & Perone, 1998). Students will resist rules and procedures along with the discipline to follow if the good relationship is lacking (Marzano, 2003). According to Zehm and Kottler (1993), students will never trust teachers or allow themselves to hear the teacher's opinion unless they can sense that the value and respect. When praise is offered, the teacher must know whether the student is comfortable with it in front of the class; the mere aspect of this can change the mood of an intended positive gesture (Hyman & Perone, 1998). Teachers should clearly set high expectations and clearly communicate belief in the students (Breakthrough, 2009).

A study conducted by McDill and Natriello (1986) confirmed how teachers' standards have a direct effect on students' performance and will. It was also found that the teacher's aspirations have a small effect on the student achievement. Research has also found that teachers have more influence on students than just the subject matter being taught. Teachers need to be cognizant that they must try and form a relationship with all students, not just the ones they choose to befriend (McDill & Natriello, 1986).

Surrounding the student with supportive adults aids in academic excellence because those adults will model the correct and expected behavior for the student (Breakthrough, 2009). A teacher should always model appropriate behavior, which will become contagious to the students. Modeling has proven effective when the person being observed and the observer share attributes mainly because the students can sense the reflection of their own potential (Pajares, 2002). Teacher's actions in the classrooms have twice as much impact on student achievement as assessment policies, and community involvement (Marzano, 2003; Marzano & Marzano, 2003). Negative behavior that teachers reflect to the students can cause behavior issues simply because the student senses the negative feelings and mimics them. If the attitude displayed is negative, it will also reflect negative attitudes from those around. Negative responses to student behavior can intensify misbehaviors; additionally, it limits the relationships between the student and teacher (Mesa, Lewis-Palmer, & Reinke, 2005; Mitchem, 2005). To combat misbehavior, researchers recommend the teacher to focus on the positive aspects of all student behaviors (Mesa, Lewis-Palmer, & Reinke, 2005; Mitchem, 2005).

When dealing with a complex attitude, teachers can often engage in the mistreatment of students. This is common with at-risk students, where teachers submit to name calling, sarcastic comments, and/or ridiculing (Hyman & Perone, 1998). This mistreatment can be normally

caused by the lack of skill in dealing with misbehaving children. High-achieving students that suffer the same behavior tend to distance themselves from the teacher and from their coursework (Phelan et. al, 1992).

Those students that commonly have feelings of anger and helplessness normally have negative relationships in school and are labeled as being disruptive. High levels of conflict and disorder can hamper a child's development (Spilt & Koomen, 2009). Children who are disruptive or have social issues are most sensitive to student-teacher relationships. Those children are normally quiet or cause trouble, and it becomes difficult to foster a relationship. These are the children that teachers should reach out to and focus on to discover what the problem is. Children who are most at risk for school failure are most affected by the quality of their relationships with teachers (Hamre & Pianta, 2001; Silver et al., 2005).

Positive relationships will lead to possible improvements in social skills of the child and an improvement in performance levels. Demonstrating the open and warm student-teacher relationship has accumulated evidence that agrees with the academic functioning and social emotional aspect (Spilt & Koomen, 2009). Students will put forth the additional effort and go all out for a teacher who demonstrates he or she cares for the student (Stipek, 2006).

Adverse Reactions

Those criticizing positive student-teacher rapport do recognize the importance of the relationship; however, the relationship is thought of as a compliment to the student-parent and student-friend relationship (Kessner, 2000). Traditional educators question whether a social endeavor will distract from academic achievement. Educators will compromise academic standards to preserve good relationships with poorer-performing students (Schaps, 2005). Shouse (1996) believed that low-socio-economic status students will likely be exposed to

socially therapeutic values and activities that will divert the attention from academic goals. Many educators are more concerned with other school issues including over crowdedness and school budget. Student-teacher relationships are regarded as a menial requirement when compared to Standardized Testing and other aspects of education. Some teachers believe in the traditional style of learning, where school should not be fun. Teachers who focus on the traditional curriculum should focus on interacting with their students and finding interesting topics to explore (Rose, 2000).

From the teacher's perspective, a negative student-teacher relationship can be directly related to low levels of competency and job satisfaction, which can increase the level of teaching stress (Spilt & Koomen, 2009). This attitude is then displayed in the classroom and subjects students to disadvantages. The turnover rate of teachers is found to increase when schools do not focus on relationships with the students. The lack of student-teacher rapport causes an increase of teachers being dissatisfied and choosing other career fields. A teacher is a human first; what he or she feels is usually displayed in his or her actions. Therefore, if a teacher feels negatively, then both the child and co-worker can observe the public displays. A teacher and student relationship can easily fall into the "negative reinforcement trap" as the student misbehaves and the teacher sends the student to the principal. In this process, the teacher is reinforced by removing the student and the student is reinforced by escaping the situation and being removed from the room (Maag, 2001, p. 176).

Adversely, when teachers' expressions of positivity are displayed, they can also be seen in both student and teacher. When combated with negative behavior, the behavior is opposed by the positive feeling and most often subdued. When teachers become focused on the students and their learning style, the greater the students' interests occur (Daniel, 2001). Teacher's that have

good student relationships are most commonly known to be good people; adversely, those who have negative or poor relationships are attributed to the characteristics of the teacher (Spilt & Koomen, 2009). Previous research has also found that students gauge the class environment also by the students in the class and not specifically the teacher (Cheng, Marsh, & Martin, 2008).

Due to the increase of student-teacher inappropriate relationships, schools are apprehensive of focusing on this subject. Administrators are more apt to suggestions to increase student-teacher relationships with students who are at-risk; however to focus on the importance of a student-teacher relationship amongst all students would be a hazard. Kaplow (2014), from the University of Alabama, Birmingham, stated students develop feelings for their teachers, similar to patients and doctors and therapists, and clients and lawyers (p.1). Students feel a sense of intimacy and closeness that is inappropriate and categorized as love (Robinson, 2014). The inappropriate student-teacher relationship has increased over the years especially with female teachers, where approximately 1/3 of the accused are females (Robinson, 2014). Various school districts have created laws to prevent inappropriate relationships in the schools, specifically to forbid the relationship between a teacher and student under the age of 19 (Robinson, 2014). Often the boundaries of the relationship are complicated, specifically when considering the closeness of the age of the teacher and student that ranges from four to six years.

Many school officials attribute the cause of inappropriate behavior with technology and social media (Robinson, 2014). Most school systems and districts have added social media disclosures to many teacher contracts and school handbooks; to enforce the zero-policy of student-teacher friendships online. Technology has created a thin line between appropriate and inappropriate student-teacher relationships. According to Kaplow (2014), “Social media

messages can fuel the relationship, perpetuate miscommunication and foster misinterpretation" (p. 1).

Gender

Gender and ethnicity studies were conducted previously and there have only been general outcomes found involving cases of Black and White (Chen & Weseley, 2011). In terms of gender, a direct link has been connected to student-teacher relationships (Bracken & Craine, 1994; Hamre & Pianta, 2001; Ladd et al., 1999; Saft & Pianta, 2001). The relationship between gender and conflict influence the display of conflict behaviors displayed by students, which then relate to poorer relationships with teachers (Hamre & Pianta, 2009). Research suggests that differences in teachers' perceptions of student abilities and characteristics are also related to teacher gender (Parker-Price & Claxton, 1996). Male and female teachers tend to perceive students according to their gender, even before the student has demonstrated any type of behavior or skill (Kreig, 2005). Kreig (2005) found in his research, that male teachers are more likely to believe that boys are superior visual learners while girls are more helpful. In addition, female teachers are likely to think that boys are better with quantitative skills. According to previous research, teachers do treat and perceive boys and girls differently (Kreig, 2005).

Females were generally found easier and faster to motivate than males, across subject, age, and male or female teachers (Cheng, Marsh & Martin, 2008). In addition, a study conducted by Hamre and Pianta (2009) suggests that female students experience more positive relationships with teachers through their secondary schooling years.

Scafidi and Bui (2010) conducted a study of middle and high school students to test the similarities of male and female performance rates in mathematics. In their research they found that the female students performed at the same rate as their male peers in the mathematics

courses that were offered. Additionally it was found that a student's race did not affect the performance of the student (Bui & Scafidi, 2010).

According to the National Center for Educational Statistics (2011), male graduates have narrowed the gap with female graduates in credits earned in mathematics and science. Even though it was previously found that there was not a gap between female and male students according to mathematics, national statistics found in 2009, male graduates commonly had higher mathematics and science scores than female students finishing at an equivalent level (US Department of Education, 2011).

One educational resource asks if boys in the United States are at risk of being in a crisis because of the research epidemic that has found females to be more successful (Sadowski, 2010). Sadowski (2010) found that girls have not only been found to succeed higher in mathematics and science, but to do so in all subjects, thus becoming valedictorians more often than their male counterparts. Also, the standards set forth by teachers have been found to have more of an effect on female students (McDill & Natriello, 1986). In all, the National Assessment of Educational Progress (2011) found that although all students had increased in graduate level studies, more female students completed a midlevel curriculum than did males. Also, the grade point average of female students is still higher than the male student, averaging at 3.10 and the male student graduate averages at 2.90 (National Assessment of Educational Progress, 2011).

Research has found that many educational curriculums are not boy-friendly (Sadowski, 2010). Educators are tasked with creating a well-rounded curriculum that adheres to both genders and all racial and ethnic groups. If male students were privy to more books that they were interested in, the tendency to connect with the story will be greater and the interest in the subject should increase (Sadowski, 2010). The teacher is the orchestrator of the class that holds

the responsibility to ensure the diversity in the lesson as well as the totality of rapport between all students.

The National Assessment of Educational Progress (2006) found that girls excel more in academics than boys across all racial/ethnic groups. Research has also found that boys acquire skills in reading and writing 12 to 24 months after girls (Sadowski, 2010). These statistics not only help the education system in creating curriculum, but they also help teachers when trying to create a diverse curriculum.

Post-Secondary Goals/Plans

To advance in many occupations, most employers require more than just a high-school diploma, which causes students to plan further than high school. Students who plan for the transition must include:

- Thinking about strengths as an individual
- Knowing specific interests
- Considering different types of work and jobs

  (Kallio & Owens, 2012)

During the secondary years of education, students begin to discover personal interest and skills they would like to pursue after high school. In processing, students must identify and figure out how to acquire the knowledge and skills for their future goals (Kallio & Owens, 2012).

Most of the fastest growing jobs that pay well require at least some postsecondary education (Carnevale & Desrochers, 2003). Students who enter into the workforce need the same level of skills and knowledge as students entering college (Kline & Williams, 2007). Whatever path a student pursues, the skills needed for work often mirror those required for admission to and success in postsecondary education (ACT, 2006; Carnevale & Desrochers,

2003). President Obama's High School Redesign Initiative recognizes that today's global economy requires new approaches to teaching and learning that will foster problem solving, collaboration, and a direct connection of student learning to the real world (U.S. Department of Education, 2013).

Instructors are dissatisfied with the job public schools are doing in preparing students for college when it comes specifically to writing quality and their ability to read and comprehend complex materials ("Rising to the," 2005). This lack in preparation causes instructors to spend a significant amount of class time reviewing material and addressing skills ("Rising to the," 2005). Research has found that students are not fully prepared and the President's initiative is now challenging high schools to put in place learning models that are rigorous, relevant and better focused on real-world experiences. These reforms will incorporate personalized learning and college exploration and ensure that all students graduate with college-level coursework or college credits (U.S. Department of Education, 2013).

There are various programs created to promote successful transition to a student's postsecondary plans such as dual enrollment, technical schools, and career and technical education. These programs are available to support students' preparation for the educational and workplace demands of the economy (Bangser, 2008). Dual enrollment programs are courses taken in high school that are equivalent to postsecondary institution classes (Bangser, 2008). There are some high school programs where students can earn up to an associate's degree or two years' credit toward a bachelor's degree. Technical programs combine an academic, vocational, and technical instruction and use work-based instruction. Career and technical education programs add an increased focus on career preparatory classes within the school curriculum.

There are various programs implemented in public school systems to enhance the opportunity for students after high school graduation. Career and technical education equips students with the chance to develop academic and technical skills that not only prepare them for post-secondary education but for work and/or the military ("Henrico county public", 2014). The courses apply academic concepts to technical skills, while the students grasp an understanding of work-readiness skills (Henrico, 2014). These courses allow students to prepare for licensure and/or industry certifications. The following courses are including in career and technical education: business and information technology, agriculture, family and consumer science, health and medical sciences, JROTC, marketing, technology education, and trade and industrial education.

Attending college or furthering one's education has become a necessity over the years. The United States has become an economy based on knowledge, which makes the importance of a college degree equivalent to the importance of high school diploma forty years prior (Hobsons, 2014). Students are afforded the opportunity to not only learn from professors who have real world experiences, they are given the chance to probe a professional who has worked in the field. This inevitability places a college graduate a step ahead of the employee who has never experienced or spoken to anyone in the field. Most often the classroom lecture is fairly different from the real-job experience.

When considering post-secondary education, it includes various kinds of training programs, technical colleges, certification programs, apprenticeships, two and four year colleges, and university and trade school (Kallio & Owens, 2012). College cost, in the United States, is increasing each year. Students are faced with the challenges of being able to afford the cost of

college. As the cost of tuition rises, so do the options for financial aid (Hobsons, 2014). It is a common belief that discovering a way to fund college will pay off in the future (Hobsons, 2014).

As for joining the military, it is thought this is the most financially appropriate option; furthermore, opportunities increase when attending college first and then joining (Military and Veteran Benefits, n.d). Joining directly after high school, a student must start at the bottom of the salary scale; however the student will have the opportunity for many years of on-the-job training. If the student decides to attend college first, the grade and ranking of the solider quickly changes and increases (Military and Veteran Benefits, n.d.). For those students who decide to attend college first, the military will pay for the costs of one's education.

Those students who decide to work directly after high school without going to college, decrease their ability to earn a higher pay. The more education and experience a student has, the more marketable the student is when compared to his or her peers. Some students are forced into the option of working immediately after high school because of previous life choices. In this manner, the student does not disqualify him or herself from achieving other options when he or she makes further decisions to progress in the future.

Students should be provided with opportunities to become aware of their options to begin the goal setting process (Bangser, 2008). Teachers need to be prepared to encourage students to continue to have goals after high school graduation, and assist with the decision-making process. Schools that serve disadvantaged populations have less experienced and less knowledgeable teachers than are in more affluent communities (Jerald, 2002). Teachers are challenged with assisting students and exposing them to various options after high school, along with embodying student-focused planning that enables them to participate actively in the process. Students look to teachers and school officials to expose them to further possibilities after high school.

Exposure to the work force is important because high school students lack information on the education requirements for particular jobs (Schneider, 2006).

A positive relationship with a caring adult helps to support a student making post-secondary decisions. Beginning in the ninth grade, school officials should instill a college-going culture (McDonough, 2004). Students should begin planning for after graduation in middle school; more importantly, students should explore classes in various subjects that they find interests in (Kallio & Owens, 2012). In addition, students who faced high expectations in high school are much more likely to feel well prepared for the expectations of college and/or the workforce than their peers who faced moderate or low expectations, and are nearly twice as likely to receive 'A's in college ("Rising to the," 2005).

Summary

Forming a positive student-teacher relationship should be an integral part of education. A positive relationship aligns with the Sociocultural theory founded by Vygotsky, which confirms the importance of the student-teacher interaction with a child's development. America strives to ensure all students receive a sufficient education; nevertheless President Obama has created the High School Redesign Initiative to increase the academic success of American students. A student's academic success is shown through his or her achievement or performance rate, which in high school is portrayed using the student's grade point average. The quality of the student-teacher relationship can aid in the encouragement and motivation of students, which will increase the student's desire to achieve.

National data has confirmed gender and ethnicity differences in academics; however, there is little to no information giving the reasoning for the issues. Female and male students have been found to succeed at various levels in different subjects as they mature through school;

although the achievement gap between genders is constantly narrowing. Studies have also been performed to discover the variations of relationships with elementary students; however, the direct connection between secondary school age students and their relationships has not been found. Secondary school age students frequent more classroom teachers and have a shorter amount of time with their teachers when compared to the elementary school students. Furthermore, it has been found that the secondary student experiences a decline in student-teacher relationships in comparison to an elementary student (Hamre, Jerome, & Pianta, 2009).

This study will seek to discover if there is a relationship between student-teacher rapport and a high school student's achievement. Using the student's self-reported final cumulative Grade Point Average as of their last year in high school will test the achievement. This study will also focus on the influence in the various factors of gender and post-secondary goals/plans.

CHAPTER THREE: METHODOLGY

Rapport between teachers and students, when positive, can predict the ease of school adjustment and can serve as a defensive factor for children at high-risk (Green, 2010). This type of positive relationship, for some children, may only happen at school, which is a major factor that enables them to succeed. The purpose of this study was to determine if there is a significant statistical relationship between student-teacher rapport and students' performance level in class.

Design

The research design used for this study is a descriptive correlation design study. This study design attempts to determine the reason for particular conditions (Gall, 2007). The study sought to discover if there is a relationship between the increase and/or decrease in student achievement in relation to the student-teacher rapport. According to previous research, "Correlational research is an example of what is sometimes called associational research. Associational research is the relationships among two or more variables are studied without any attempt to influence them" (Fraenkel & Wallen, 2000, p. 359). In a descriptive study the information is collected without tampering with the environment to provide information about a particular group's behavior (Coulehan & Wells, 2006).

In a correlation study, the variables are not experimentally controlled or treated (Gall, 2007). The predictor variable in the study is the student-teacher rapport, and the co-variable is the performance achievement rate. Correlations are stated as positive or negative (Bradley, 2000). A positive correlation designates a variable value going up or down and the other variable value doing the same. A negative correlation designates as one value of a variable goes up, the other goes down (Bradley, 2000).

Research Questions and Hypotheses

Three research questions were designed, they are as follows:

RQ1: What is the nature and strength of the relationship between student-teacher rapport and performance rate?

RQ2: What is the nature and strength of the relationship between a student's gender and student-teacher rapport level?

RQ3: What is the nature and strength of the relationship between a student's post-secondary goals/plans and student-teacher rapport level?

Hypotheses

The following are hypotheses and null hypotheses:

H1 : There is a statistically significant positive relationship between student-teacher and student performance rate as measured by the Student Teacher Relationship Scale and the student's grade point average.

H_{o1} : There is no statistically significant relationship between student-teacher rapport and performance rate.

H2 : There is a statically significant positive relationship between a student's gender and student-teacher rapport level as measured by the Student Teacher Relationship Scale.

H_{o2}: There is no statistically significant relationship between a student's gender and student-teacher rapport level.

H3: There is a statistically significant positive relationship between a student's post-secondary goals/plans and student-teacher rapport level as measured by the Student Teacher Relationship Scale.

H_{03}: There is no statistically significant relationship between a student's post-secondary goals/plans and student-teacher rapport level.

Participants

Graduating seniors were the primary participants in this study at a high school in the Richmond Metropolitan area. There is a diverse population in this particular county and high school that includes, 46% Caucasian, 37% African American, 7% Asian, 6% Hispanic, and 3% Multi-racial. Students who participated have the option to take vocational classes in the county's two technical centers and also classes in the two specialty centers—the Center for the Arts, which offers instruction in dance, theatre, visual arts, and vocal musical theatre; and The International Baccalaureate Program (IB), which provides an internationally accepted qualification for entry into higher education (Henrico High School Student Handbook, 2012).

The response rate, the percentage of people who respond to a survey, is essential in a research study (IAR, 2007). The target sample size depends on three main factors: the resources available, the aim of the study, and the statistical quality needed for the survey (Kelly, Clark, Brown, & Sitzia, 2003). The higher the results from the survey, the closer the results are a representative of the entire population (IAR, 2007).

According to the Instructional Assessment Resource (IAR) (2003), the response rate is found by dividing the number of people who submitted a completed survey (80% or more of questions answered) by the attempted number of contacted people. The IAR also suggests for a population sample of 100 the appropriate response rate is 80. The allowed total number of tested students was 97. The response rate for the completed surveys is below:

$$\frac{\text{\# of completed surveys} - 73}{\text{\# of people contacted - 97}} = 75\%$$

A paper copy of the survey was administered, and the acceptable rate of paper copies is 50% (IAR, 2007). According to this calculation the acceptable minimum number of surveys for this research study is approximately 50.

The sampling strategy used was a convenience sampling, which is most often used when the population is large and the researcher is unable to test every individual due to various circumstances. The sample for this proposed study was taken from the school's population of graduating seniors, and then specific classes were randomly chosen from the sample. A convenience sample is a matter of taking what is available, and the selection may be unguided. While with a random sample, each participant has an equal chance of being chosen (Sampling, 2007). Students were designated as graduating seniors by completing all verified credits and classes required as in the student handbook. In order to graduate, students must have passed and completed 22 credits and obtained six verified credits, which are achieved by passing the courses Standards of Learning (SOLs) and standardized testing (Henrico High School Student Handbook, 2012).

Students ranged in gender and race, as well as academic levels. The school has a comprehensive section as well as the International Baccalaureate program. The comprehensive section of the high school offers classes that range from advanced placement to special education courses. The International Baccalaureate students take all International Baccalaureate classes, including physical education. The International Baccalaureate Diploma Program students begin in the 11^{th} grade and will graduate in the 12^{th}. Students are most often awarded advanced placement status at many higher education institutions upon graduation ("Henrico high school," 2012).

The 12th grade students have various options after graduation; however most of the curriculum prepares the student for specific goals and plans for after high school. The post-secondary plans for the class of 2014 are below ("Henrico high school", 2014):

Four Year College or University:	49.3 %
Two year College or Community College:	28.5 %
Technical School/Apprenticeship:	4.0 %
Military:	5.0 %
Work/Other:	13.3 %

The principal narrowed the sample population down to specific English classes. In order to gain a better sample of the entire graduating senior class, an English class of every academic level was chosen; 1- International Baccalaureate class, 1- Center of Fine Arts class, 1- Advanced Placement class, 1- Honors class, 1- College Prep class, and 1-Special Education class. The total number in the current population sample is 97 students. Table one, displays the recommended sample size for the given population.

Table 1

Recommended Sample Size

Population	Margin of Error			Confidence Interval		
	10%	5%	1%	90%	95%	99%
100	50	80	99	74	80	88
500	81	218	476	176	218	286
1,000	88	278	906	215	278	400
10,000	96	370	4,900	264	370	623
100,000	96	383	8,763	270	383	660
1,000,000+	97	384	9,513	271	384	664

(Survey Monkey, 2007)

Setting

This study took place at a high school in the Richmond Metropolitan area, with approximately 1700 students. The faculty consists of approximately 130 teachers. Students in the school are able to participate in vocational and specialty classes as well as the International Baccalaureate Program (IB). The students are offered various classes and courses at varying academic levels that include International Baccalaureate, Center for the Arts, advanced placement, honors, and regular education levels. Students also range from a variety of household dynamics including two parents, single parent, as well as students who are being raised by other family members or guardians. High school seniors range from ages 16 to 18 years of age (Henrico High School Profile, 2012). There are approximately 350 students in the graduating senior class (Henrico High School Profile, 2014).

Instrumentation

The instrument used during the study was the Student Teacher Relationship Scale (STRS; Appendix F). The Student Teacher Relationship Scale (STRS) was created by Dr. Robert C. Pianta (2010). The STRS is mostly used as a tool to prevent adjustment problems in schools and to identify student-teacher relationships that need support, in addition to being used as a research tool in the classroom (2010). However, the STRS was used to identify problem areas in a student-teacher relationship for the Students, Teachers, and Relationship Support (STARS) program. The Students, Teachers, and Relationship Support (STARS) program was designed to enhance and mend the quality of student-teacher relationships in elementary classrooms. The Student Teacher Relationship Scale (STRS) is sensitive to student-teacher interactions, to include teacher's decisions about their students' school careers. Overall, it is used as an intervention tool to assist with enhancing student-teacher relationships (2010).

The STRS scale is used as a tool for assessing student-teacher relationships in four specific categories: conflict, closeness, dependency, and total scale. It is a 28-item scale that uses a five-point Likert scale. The scale allows choices ranging from one (definitely does not apply) to five (definitely applies). In previous studies it has been used to assess relationships and to combat any early detection of adjustment issues (Pianta, 2010). Table 2 displays a description of the Student Teacher Relationship Scale.

Table 2

Description of the Student Teacher Relationship Scale (STRS) and Subscales

Scale/Subscales	No. of Items	Descriptions
Conflict	12	Measures the degree to which a teacher perceives his or her relationship with a particular student as negative and conflictual. High Conflict scores indicate that the teacher struggles with the student, perceives the student as angry or unpredictable, and consequently the teacher feels emotionally drained and believes he/she is ineffective.
Closeness	11	Measures the degree to which a teacher experiences affection, warmth, and open communication with a particular student. High Closeness scores indicate that the relationship is characterized by warmth, and the teacher believes he or she is effective because the student uses the teacher as a source of support. High Closeness scores also reflect a greater sense of knowing on behalf of the teacher that the student is well and the student can effectively use the teacher as a resource.
Dependency	5	Measures a teacher's overall view of his or her relationship with a particular student as overly dependent on him/her. High Dependency scores suggest that the student reacts strongly to separation from the teacher, requests help when not needed, and consequently the teacher is concerned about the student's overreliance.
Total	28	Measures a teacher's overall view of his or her relationship with a particular student. High Total scores suggest higher relationship quality. Specifically higher Total scores reflect a relative lack of conflict, lower dependency, and higher closeness.

The Student Teacher Relationship Scale was developed to measure a teacher's opinion of his or her relationship with a student; however in this study the roles will be reversed, and the students perception will be measured (Pianta, 2010). Approval was given by Dr. Robert C. Pianta to use this survey (Appendix A) and to modify the pronouns used in the survey to satisfy the needs of this study. In this study, the students will take the survey to assess their opinions on how the student-teacher relationship affects their performance rate in various classes.

Additionally, the STRS has only been used with students up to the 6th grade, which is considered secondary education by the department of education. In this study, it will be used with older students, which was also verified and approved by Dr. Pianta (Appendix A). The students that will take the survey will be in the 12th grade, which is also considered secondary education. Table 3 displays the STRS scale and subscale means, standard deviations, and results from a series of one-way analyses of variance comparing younger and older students on STRS Total scale and subscales.

Table 3

STRS Scale and Subscale Score Comparisons Between Younger and Older Students

	Younger Students (< age 5 years)[a]		Older Students (> age 5 years)[b]			
Scale/subscale	M	SD	M	SD	t	d[c]
Conflict	21.65	9.34	22.87	10.55	-2.36	.12
Closeness	45.71	6.53	43.56	7.61	-5.86*	.30
Dependency	10.52	3.64	10.99	3.46	-2.58*	.13
Total	115.57	14.38	111.72	16.24	4.78*	.25

[a]*n*=783. [b]*n*=752. [c]Cohen's *d* effect size.
P* < .0125 (two-tailed).

When testing the validity, teachers did report more conflict and dependency with older students, more closeness with younger students, and an overall positive relationship with younger students (Pianta, 2010). However, the results suggest little substantial or significant age-related differences on the STRS scale (Pianta, 2010).

In order for a test's results to be accurately applied and interpreted the tests must be proven valid (Cherry, 2014). The validity test shows how well a test measures what it claims to

measure (Phelan & Wrenn, 2005). The validation process is an ongoing method where the information is gathered over time to strengthen the test score used.

Dr. Robert C. Pianta (2010) used exploratory factor analysis to test the Student Teacher Relationship Scale. Table 4 presents the rotated factor matrix of the complete survey. Survey question number 28, was the only question which was found to load on two factors (Pianta, 2010). In terms of predictions, the Student Teacher Relationship Survey correlates in predictable ways with concurrent and future measures of academic skills (Hamre & Pianta, 2001) , behavior problems (Pianta, 1994), and peer relations (Birch & Ladd, 1998).

Table 4

Rotated Factor Matrix for the STRS

Item	Subscale Conflict	Closeness	Dependency
1. I share an affectionate, warm relationship with this child.		.65	
2. This child and I always seem to be struggling with each other	.80		
3. If upset, this child will seek comfort from me.		.64	
4. This child is uncomfortable with physical affection or touch from me.		-.52	
5. This child values his/her relationship with me.		.61	
6. This child appears hurt or embarrassed when I correct him/her.			.43
7. When I praise this child, he/she beams with pride.		.58	
8. This child reacts strongly to separation from me.			.66
9. This child spontaneously shares information about himself/herself.		.76	
10. This child is overly dependent on me.			.75
11. This child easily becomes angry with me.	.77		
12. This child tries to please me.		.45	
13. This child feels that I treat him/her unfairly.	.65		
14. This child asks for my help when he/she really does not need help.			.50
15. It is easy to be in tune with what this child is feeling.		.70	
16. This child sees me as a source of punishment and criticism.	.63		
17. This child expresses hurt or jealously when I spend time with other children.			.59
18. This child remains angry or is resistant after being disciplined.	.72		
19. When this child is misbehaving, he/she responds well to my look or tone of voice.	-.51		
20. Dealing with this child drains my energy.	.82		
21. I've noticed this child copying my behavior or ways of doing things.		.40	
22. When this child is in a bad mood, I know we're in for a long and difficult day.	.80		
23. This child's feelings toward me can be unpredictable or a change suddenly.	.76		
24. Despite my best efforts, I'm uncomfortable with how this child and I get along.	.59		
25. This child whines or cries when he/she wants something from me.	.54		
26. This child is sneaky or manipulative with me.	.73		
27. This child openly shares his/her feelings and experiences with me.		.79	
28. My interactions with this child make me feel effective and confident.	-.46	.57	
Eigenvalue	8.63	3.73	1.79
Variance (%)	29.8	12.9	6.2
Cumulative Variance (%)	29.8	42.6	48.8

Note. N=1,535. Only factor loadings > |.40| are listed.

The degree to which an assessment tool produces stable and consistent results is called the test's reliability (Phelan & Wrenn, 2005). The Student Teacher Relationship Scale (STRS) was tested twice over a 4-week period which yielded test-retests correlations that were all significant at $p<.05$ (Pianta, 2010). Due to the dependency scale items being few in number, 5, Pianta recommends its scores not be interpreted alone without the additional subscales (2010). Table 5 displays the question level statistics for each of the 28 questions on the survey.

Table 5

Item Means, Standard Deviations, and Item-Total Correlations for the Total Normative Sample

Item	M	SD	Item-total correlations
1. I share an affectionate, warm relationship with this child.	4.34	0.87	.60
2. This child and I always seem to be struggling with each other	1.83	1.17	.70
3. If upset, this child will seek comfort from me.	4.20	0.96	.43
4. This child is uncomfortable with physical affection or touch from me.	1.72	1.08	.39
5. This child values his/her relationship with me.	4.24	0.87	.52
6. This child appears hurt or embarrassed when I correct him/her.	2.91	1.31	.13
7. When I praise this child, he/she beams with pride.	4.58	0.75	.31
8. This child reacts strongly to separation from me.	1.97	1.02	.34
9. This child spontaneously shares information about himself/herself.	4.19	0.75	.31
10. This child is overly dependent on me.	1.79	0.96	.39
11. This child easily becomes angry with me.	1.83	1.09	.59
12. This child tries to please me.	3.86	1.05	.34
13. This child feels that I treat him/her unfairly.	1.74	0.99	.50
14. This child asks for my help when he/she really does not need help.	2.20	1.23	.27
15. It is easy to be in tune with what this child is feeling.	3.85	1.11	.41
16. This child sees me as a source of punishment and criticism.	1.65	0.92	.49
17. This child expresses hurt or jealously when I spend time with other children.	1.86	1.07	.36
18. This child remains angry or is resistant after being disciplined.	2.09	1.28	.54
19. When this child is misbehaving, he/she responds well to my look or tone of voice.	4.04	1.13	.35
20. Dealing with this child drains my energy.	1.88	1.25	.71
21. I've noticed this child copying my behavior or ways of doing things.	2.81	1.29	.23
22. When this child is in a bad mood, I know we're in for a long and difficult day.	2.03	1.28	.63
23. This child's feelings toward me can be unpredictable or a change suddenly.	1.87	1.17	.60
24. Despite my best efforts, I'm uncomfortable with how this child and I get along.	1.64	1.08	.47
25. This child whines or cries when he/she wants something from me.	1.90	1.23	.34
26. This child is sneaky or manipulative with me.	1.89	1.22	.47
27. This child openly shares his/her feelings and experiences with me.	4.03	1.10	.59
28. My interactions with this child make me feel effective and confident.	4.18	1.00	.52

Note. N=1,535. .

The Student Teacher Relationship Scale (STRS) measures four aspects of a teacher's perception of his or her relationship with a particular student; conflict, closeness, dependency and total scale (Pianta, 2010). With Dr. Pianta's approval, this study measured the total score of the student's perception of his or her relationship with his or her teachers with respect to the conflict, closeness and dependency scores.

Conflict with regards to the STRS survey, is the degree to which a student perceives his or her relationship with a particular teacher as negative and of conflict. It is measured by 12 items on the survey, which are presented in Table 6. Closeness is measured to the degree to which a student experiences affection, warmth, and open communication with a particular teacher. Closeness is measured by 11 items on the survey which are presented in Table 7.

Lastly, dependency is a measurement of the degree to which a student perceives him or herself as being overly dependent (Pianta, 2010). Dependency is measured by 5 items in the survey, which are presented in Table 8. The total scale measures the degree to which each student perceives his or her relationship with teachers overall as positive or effective (Pianta, 2010).

Table 6

The STRS Conflict Subscale Items

ITEMS
2. This child and I always seem to be struggling with each other
11. This child easily becomes angry with me.
13. This child feels that I treat him/her unfairly
16. This child sees me a source of punishment and criticism.
18. This child remains angry or is resistant after being disciplined.
19. When this child is misbehaving, he/she responds well to my look or tone of voice.[a]
20. Dealing with this child drains my energy.
22. When this child is in a bad mood, I know we're in for a long and difficult day.
23. This child's feelings toward me can be unpredictable or can change suddenly.
24. Despite my best efforts, I'm uncomfortable with how this child and I get along
25. This child whines or cries when he/she wants something from me.
26. This child is sneaky or manipulative with me.

[a]Reverse-scored item

Table 7

The STRS Closeness Subscale Items

ITEMS
1. I share an affectionate, warm relationship with this child.
3. If upset, this child will seek comfort from me.
4. This child is uncomfortable with physical affection or touch from me.[a]
5. This child values his/her relationship with me.
7. When I praise this child, he/she beams with pride.
9. This child spontaneously shares information about himself/herself.
12. This child tries to please me.
15. It is easy to be in tune with what this child is feeling.
21. I've noticed this child copying my behavior or ways of doing things.
27. This child openly shares his/her feelings and experiences with me.
28. My interactions with this child make me feel effective and confident.

[a]Reverse-scored item.

Table 8

The STRS Dependency Subscale Items

ITEMS
6. This child appears hurt or embarrassed when I correct him/her.
8. This child reacts strongly to separation from me.
10. This child is overly dependent on me.
14. This child asks for my help when he/she really does not need help.
17. This child expresses hurt or jealously when I spend time with other children.

Procedures

The researcher first sought approval from Liberty University's Institutional Review Board (Appendix C) following the approval from the local school district and the dissertation committee. The district requested various changes to the research study, including the exclusion of race as a variable. After revisions were made, the school district and head principal granted their approval of the research study (Appendix B). Also, letters were sent home to parents (Appendix D) notifying them of the study and requesting the participation of their child. Parents were given the option to request that their child not be a study participant or the student could opt out of the study if he/she did not wish to participate by completing an opt-out consent form (Appendix E).

After the principal granted approval, he suggested using a particular sample of the graduating seniors. In this manner, the study would take a portion of the graduating senior students to represent the entire class. With the assistance of the senior class principal, six English classes were randomly selected; 1- International Baccalaureate class, 1- Center of Fine Arts class, 1- advanced placement class, 1- honors class, 1- college prep class, and 1-special education class. All senior students are required to take an English 12 course; in this manner, all academic levels were represented in the study.

English teachers of the randomly selected 12th grade students were sent letters and the paper survey (Appendix F and H) for students to complete, as well as the directions of the study. Students were notified of the research topic, not of the procedures. The underlying purpose of the study will not be revealed until after the study completion to avoid the "John Henry" effect, where the students would perform better than usual, eliminating the experimental manipulation (Salkind, 2010). The "John Henry" effect is expressed when the subjects being tested work harder or in an uncommon manner to fit the demeanor they feel should fit the test because of their prior knowledge of their role in the experiment (Salkind, 2010). In this manner, students will not be aware of how their academic performance will be measured to ensure results of the tests or survey cannot be altered.

As the students returned the consent letters, the teacher kept a roster of the participating students. The principal designated two school days to administer the study. On that day, each approved student received a paper copy of the Student Teacher Relationship Scale to complete. The student was instructed to complete the entire survey (front and back) with honest answers. The teachers were instructed to only give instructions and to not have any further discussions concerning the survey topic or give advice to the student completing the survey. Students who

completed a survey self-reported their grade point average using an average grade point average of A-4.0, B-3.0, C-2.0, D-1.0 and F-0.0. The students were also instructed to report their post-secondary plans, with options being work, trade, military, or college.

After students completed the surveys, the teachers were instructed to gather the surveys and take them to the school's secretary. The school's secretary gathered all forms including the consent forms and surveys. The school's secretary and principal contacted the researcher when all survey and forms were collected and turned in.

Data Analysis

Data was collected using the Student Teacher Relationship Scale (STRS), created by Dr. Pianta (1991). STRS is a 28 question self-report survey that uses a 5-point Likert-type rating scale that assesses the perception of the teacher's relationship with his or her students. The scale allows choices ranging from one (Definitely does not apply) to five (Definitely applies). Dr. Pianta granted permission to use the survey with students and to change the pronouns to correctly portray the situation or event in question.

English teachers were given consent letters a month before the administration of the survey. The school's principal designated two days to administer the test due to the schools block scheduling; students only go to a class every other day. Once teachers had administered and received all of the consent letters and administered the survey, the teachers forwarded the forms to the school's secretary. The school secretary contacted the researcher to come collect the consent letters and surveys. All surveys were grouped together anonymously, not grouped by classes.

After consent forms were returned, the researcher gave the survey to 84 graduating seniors; however only 73 students completed the survey in its entirety. Students were required to

answer the 28 question survey, circling the appropriate number using the ratings 1 through 5 (1 = Definitely does not apply, 2 = Does not really apply, 3 = Neutral, not sure, 4 = Applies Somewhat, 5 = Definitely applies). All survey scores were calculated individually by using the original scoring guide created by Dr. Pianta. The Student Teacher Relationship Scale was scored by summing the items in groups according to the subscales; closeness, conflict, dependency, and the total scale including a percentile rank.

The researcher added each survey's response in each subscale column and then entered in the Scoring Profile Sheets to obtain the Student Teacher Relationship Scale, (STRS; Appendix G) total raw score.

The Statistical Package for Social Science – (SPSS) 22 Statistical package for Windows was used for data entry and to analyze the data. The survey scores and grade point averages were calculated to find the Pearson's r coefficient along with calculating the central tendencies. The correlation coefficient was used to determine if there was a significant relationship that exists between the student-teacher rapport and performance rate. A confidence level of 95% was chosen because of the selected number of students who were available to test and able to choose each class level that existed at the school. Choosing a 95% confidence level infers that 95% of the population would include the true population parameters ("Statistics and Probability Dictionary", 2014). The confidence level is the percentage of the sample that refers to the percentage of all possible samples that can be expected to include the true population parameter ("Statistics and Probability Dictionary", 2014). In analyzing the questions, descriptive statistics were calculated to find the mean and standard deviation of the student's grade point averages (performance rate) as well as the Student Teacher Relationship Scale total scores. To measure the degree or strength of a relationship between two variables a researcher would find a

correlation coefficient, and in this study the researcher will use the most common correlation coefficient – the Pearson product-moment correlation coefficient (Howell, 2008). A correlation coefficient is a point on the scale between -1.00 and +1.00; the closer the number is to either limit, determines the predictive strength of the relationship between the two variables with a coefficient of 0 meaning there is no relationship between the variables and a coefficient of +1 and -1 meaning the stronger the association of the two variables, depending on whether the relationship is positive or negative, respectively (Howell, 2008).

The student's gender and post-secondary goals/plans are considered nominal data. Nominal data is considered data that has values that a code can be assigned in the form of numbers (Easton & McCall, 1997). Gender was coded as Male = 1, and Female = 2; and the student's post-secondary goals/plans was calculated as College = 1, Trade = 2, Work = 3, and Military = 4. Frequencies and percentages were calculated for all data including the nominal data. The frequency numbers supplied information, as in mean and standard deviations, about the participants who are in specific categories. The percentage calculations provided the percent information about the entire sample. The Pearson product-moment correlation was used to find a distinct correlation between genders and post-secondary goals/plans. In using the Pearson product-moment correlation, the variables passed the test for statistical assumptions required for the Pearson product-moment correlation. They are as follows:

1. Variables were measured at the interval level, for example performance rates measured in GPAs and the survey results.
2. A linear relationship exists between the two variables, which were found by creating a scatterplot using SPSS to plot the dependent variable against the independent variables.

3. There were no significant outliers that would deviate the mean score because of large variation, and lastly
4. The variables were approximately normally distributed, which was tested using SPSS. (Lundt Research, 2013)

CHAPTER FOUR: FINDINGS

The purpose of this correlation study is to determine the nature and strength of the relationship between student-teacher rapport and performance rate. The purpose of this chapter is to complete a factual analysis. The SPSS 22 Statistical package for Windows was used to analyze the data. The student-teacher rapport was evaluated by using the Student Teacher Relationship Scale written by Dr. Robert C. Pianta, which has been normed on more than 1500 students and 275 teachers and has been shown to be psychometrically reliable and viable (Pianta, 2007). The performance rate will be reported by the students' current grade point average. The validity of the Student Teacher Relationship Scale is included in Chapter Three. Chapter Four will also provide the results of the analyses for the three research questions and the corresponding hypotheses.

Descriptive Statistics

Sample Population Statistics

The mean of a sample set of data is used to find the average of a set of data and is used to find the representative of the whole number (Easton & McCall, 1997). Most commonly used along with the mean is a measure of the spread of scores within a set of data, the standard deviation (Lund Research, 2013). The results in this research study show that the pooled group of participants' mean score on the Student Teacher Relationship Scale was 101.83 (SD = 9.19). The measures of central tendency also showed a median score of 103.00. The mean and standard deviation were also calculated for the subscale categories of the Student Teacher Relationship Scale. The pooled group of participants' mean score for the conflict subscale was 21.99 (SD = 6.31). The pooled group of participants scored a mean of 30.59 (SD = 6.79) for the subscale closeness. The dependency subscale mean score for the pooled group is 8.58 (SD = 2.54).

Table 9 shows the descriptive statistics of the pooled group. The sample involved consisted of 84 students of which 73 students (n = 73) provided complete surveys. Of these students 32.9% (n = 24) of them were males, and 67.1 % (n = 49) were females.

Table 9

Student Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	24	32.9	32.9	32.9
	female	49	67.1	67.1	100.0
	Total	73	100.0	100.0	

The students self-reported their cumulative grade point averages and post-secondary plans as displayed in Table 10. Students reported that 2.7% (n = 2) obtained a grade point average of approximately 1.0, 30.1% (n = 22) obtained a grade point average of approximately 2.0, 43.8% (n = 32) obtained a grade point average of approximately 3.0, and 23.3% (n = 17) reported an approximate grade point average of 4.0.

Table 10

GPA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	2.0	2.0	2.0
	2.00	9	18.4	18.4	20.4
	3.00	23	46.9	46.9	67.3
	4.00	16	32.7	32.7	100.0
	Total	49	100.0	100.0	

Table 11 displays out of the students sampled 93.2 % (n = 68) reported they plan to attend college after high school, 1.4 % (n = 1) reported he or she planned to join the military after high school, 1.4% (n = 1) reported he or she planned to enroll and work at a trade school after high school, and 4.1% (n = 3) reported they planned to work full-time after high school.

Table 11

Postsecondary

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	college	68	93.2	93.2	93.2
	military	1	1.4	1.4	94.5
	trade	1	1.4	1.4	95.9
	work	3	4.1	4.1	100.0
	Total	73	100.0	100.0	

Gender Statistics

As stated previously, the mean STRS score of the pooled group was 101.83 (SD = 9.19). Table 12 displays the overall statistical data for gender in terms of the Student Teacher Relationship Scale. The mean STRS score of the males was 102.79 (SD = 10.83). The mean STRS score of the females was 101.35 (SD = 8.36).

Table 12

STRS

Gender	Mean	N	Std. Deviation
female	101.3469	49	8.36299
male	102.7917	24	10.82661
Total	101.8219	73	9.19442

The mean subscale conflict score of the females was 22.16 (SD = 6.14) and for the males 21.63 (SD = 6.79). The mean subscale closeness score of the females surveyed was 30.02 (SD = 7.17) and for the males surveyed was 31.75 (SD = 5.90). The mean dependency score of the females surveyed was 8.24 (SD = 2.38) and for the males the score 9.25 (SD = 2.77). The mean grade point average of the entire pooled group was 2.88 (SD = .80). The mean grade point

average for the males was 2.42 (SD = .12) and the mean grade point average for the females was 2.43 (SD = .09).

Out of the females who were surveyed, 2.04% (*n* = 1) reported a grade point average of 1.0, 18.37% (*n* = 9) reported a grade point average of 2.0, 46.94% (*n* = 23) reported a grade point average of 3.0, 32.65% (*n* = 16) reported a grade point average of 4.0. Out of the males who were surveyed, 4.17% (*n* = 1) reported a grade point average of 1.0, 54.17% (*n* = 13) reported a grade point average of 2.0, 37.5% (*n* = 9) reported a grade point average of 3.0, and 4.17% (*n* = 1) reported a grade point average of 4.0.

In terms of post-secondary plans, out of the females surveyed 97.96% (*n* = 48) reported the plan to attend college after high school, and 2.04% (*n* = 1) reported she planned to go to work after high school. Males reported that 83.33% (*n* = 20) planned to attend college after high school, 4.17% (*n* = 1) reported he planned to join the military, 4.17% (*n* = 1) planned to pursue a trade after high school, and 8.33% (*n* = 2) planned to work right after high school.

Research Question One:

Research question one investigated if there was a significant statistical relationship between student-teacher rapport and performance rate.

Table 13 presents means descriptive statistics for the correlation between the survey scores and grade point averages (performance rate). The mean survey score for the students who reported a 1.0 grade point average is 96.5 (SD = 19.09). The mean score for the students who reported a 2.0 grade point average is 100.86 (SD = 9.95). The mean score for the students who reported a 3.0 grade point average is 100.50 (SD = 8.63). The mean score for the students who reported a 4.0 grade point average is 106.18 (SD = 7.42).

Table 13

STRS

GPA	Mean	N	Std. Deviation
1.00	96.5000	2	19.09188
2.00	100.8636	22	9.94890
3.00	100.5000	32	8.62853
4.00	106.1765	17	7.41818
Total	101.8219	73	9.19442

The Pearson Correlation Coefficient between the student-teacher rapport and the student's grade point average is .22; which determines the relationship was not statistically significant; therefore, the researcher failed to reject the null hypothesis. Table 14 displays the calculated correlation.

The first research question tested the relationship between student-teacher rapport and the student's performance rate. This was tested by using the students' Student Teacher Relationship Scale total score and the students' cumulative grade point average. The correlation coefficient calculated between the Student Teacher Relationship Scale total score and the student's cumulative grade point average was .22 and was not statistically significant using the Pearson Product correlation; to be significant using a two-tailed test the p value needed to be less than .05 and for this calculation it totaled .061. The researcher failed to reject the null hypothesis that there is no significant relationship between the student-teacher relationship and the student's performance rate.

Table 14

Correlations

		GPA	STRS
GPA	Pearson Correlation	1	.220
	Sig. (2-tailed)		.061
	N	73	73
STRS	Pearson Correlation	.220	1
	Sig. (2-tailed)	.061	
	N	73	73

Research Question Two:

Research question two investigated if there was a statistically significant relationship between a students' gender and student-teacher rapport level.

Table 15 displays the descriptive statistics for the correlation between survey scores and genders. The mean Student Teacher Relationship Survey score of males is 102.79 (SD = 10.83). The mean Student Teacher Relationship Survey of females is 101.35 (SD = 8.36). The Pearson correlation between the Student Teacher Relationship Survey and the student's gender is -.074; the correlation would be significant at a p value of less than .05; however the p value totaled .53 using a two-tailed test. These results determine that there is not a statistically significant relationship between a student's gender and his or her student-teacher rapport; therefore, the researcher failed to reject the null hypothesis.

The second research question tested to see if there was a relationship between a student's gender and his or her student-teacher rapport. This was tested by relating the student's gender to his or her score on the Student Teacher Relationship Scale. The correlation coefficient

between the student's gender and the Student Teacher Relationship Scale total score was calculated and found to be -.074, and the relationship was found not statistically significant using the Pearson r Correlation, 2-tailed test where the p value must be less than .05 to consider the relationship statistically significant and it totaled .532. The researcher failed to reject the null hypothesis that there is no significant relationship between a student's gender and his or her student teacher rapport score.

Table 15

Correlations

		student gender	survey score
student gender	Pearson Correlation	1	-.074
	Sig. (2-tailed)		.532
	N	73	73
survey score	Pearson Correlation	-.074	1
	Sig. (2-tailed)	.532	
	N	73	73

Research Question Three:

Research question three investigated if there was a statistically significant relationship between a student's post-secondary goals/plans and student-teacher rapport level.

Table 16 displays the correlation table for Student Teacher Relationship Survey and the student's post-secondary goals/plans. The STRS mean score for a student who plans to go to college is 101.85 (SD = 9.18). The STRS mean score for a student who plans to work after school is 99. The STRS mean score for a student who plans to join the military after school is 110. The STRS mean score for a student who plans to attend a trade school is 100. The Pearson r Correlation between a student's post-secondary goals/plans and the student-teacher rapport

level is.-023, which determines there is not a statistical significance in the relationship; therefore, the researcher failed to reject the null hypothesis.

The third research question tested if a student's post-secondary goals/plans had a relationship with the student-teacher rapport. This was tested by relating the student's post-secondary goals/plans with the students' Student Teacher Relationship Scale total score to calculate the correlation score, which was determined to be -.023. To find the correlation significant using the two-tailed test, the calculated p value must be less than .05 and the p value for this test equaled .846. The researcher failed to reject the null hypothesis that there is no significant relationship between student's post-secondary plans and their student teacher rapport score.

Table 16

Correlations

		survey score	Post Plans
survey score	Pearson Correlation	1	-.023
	Sig. (2-tailed)		.846
	N	73	73
Post Plans	Pearson Correlation	-.023	1
	Sig. (2-tailed)	.846	
	N	73	73

Summary

The Student Teacher Relationship Scale was given to 84 graduating seniors. Out of the 84 surveys, 73 were completed accurately. Out of the 73 students, 24 were males and 49 were females. Students were asked to self-report their grade point average, using the scale 1.0 – D, 2.0 – C, 3.0 – B, and 4.0 – A. Students were also asked to report their post-secondary goals/plans which included, work, trade, military, or college.

All surveys were calculated and plotted using the scoring sheet created by Dr. Pianta. After calculating raw total score and subscale scores, each survey was inputted into the SPSS 22 systems pack for analysis. Descriptive statistics was calculated for each variable and then correlational analysis to prove or disprove the studies hypothesis.

Three research questions and hypotheses were created for this research study. Research question one, was tested by using the Student Teacher Relationship Scale total score and the student's cumulative grade point average. This test provided statistical evidence that the student-teacher relationship does not have an effect on the student's performance rate; the researcher failed to reject the null hypothesis. Research question two, related the student's gender to his or her score on the Student Teacher Relationship Scale. Statistical evidence was also provided that a student's gender does not have an effect on the student-teacher rapport level; therefore, the researcher failed to reject the null hypothesis. Research question three correlated the student's post-secondary goals/plans with the Student Teacher Relationship Scale total score to calculate the correlation coefficient. The researcher failed to reject the null hypothesis finding that the correlation was found not statistically significant, which provided evidence that a student's post-secondary goals/plans does not have an effect on the student-teacher rapport.

CHAPTER FIVE: DISCUSSION

Student-teacher relationships can assist in the prevention of student adjustment problems in school (Pianta, 2010). The student-teacher relationship plays a large role in the students' development in academic, social, and emotional competencies in their school years (Birch & Ladd, 1997; Pianta, 1999; Pianta & Walsh, 1996; Wentzel, 1996). Assessing student-teacher relationships is a useful measure for determining how to improve the student's success in school (Pianta, 2010). Handel (2011) discovered that positive or negative relationships are the basis of a person's happiness and success (p. 2). Studies have also found that positive rapport between students and teachers affects achievement and further creates an enjoyable learning environment, having a positive effect on the entire school curriculum (Cabellero, 2011). The purpose of this study is to determine if there is a significant statistical relationship between student-teacher rapport and student's performance level in class.

Focusing on the importance of the student-teacher relationship and the results of the current research, Chapter Five is organized into five subheadings of (a) a summary of the findings, (b) a discussion of the findings, (c) study limitations, (d) an implications section, and (e) recommendations for future research.

Summary of Findings

The first research question explored the relationship between the student-teacher rapport and a student's performance rate. Research question one asks, is there a significant statistical relationship between student-teacher rapport and performance rate? The subsequent hypothesis states, there is a statistically significant positive relationship between student-teacher and student performance rate as measured by the Student Teacher Relationship Scale (STRS) and the

student's grade point average. The null hypothesis stated there is no statistically significant relationship between student-teacher rapport and performance rate.

The total scores of the 73 completed surveys and the self-reported grade point averages were correlated to calculate the correlation coefficient. The total score measures the degree to which the student perceives his or her relationship with his or her teachers overall as positive and effective (Pianta, 2010). The total raw score can range from 28 to 140. The higher the score tends to reflect lower levels of conflict and dependency as well higher levels of closeness which generally exhibits a more positive relationship (Pianta, 2010). In turn, the lower the total raw scores, the lower the level of student-teacher rapport. The Student Teacher Relationship Scale mean total raw score from the sample population was 101.83 (SD = 9.19). Correlation tests were performed to test the relationships stated in research question one. The correlation coefficient calculated was .220, however in order for a designation of significant using a two-tailed test, the p value calculation was required to equal less than .05; however it was .061. The correlation results provided data that resulted in clarifying the relationship between student-teacher rapport and the student's performance rate was not statistically significant. The null hypothesis was accepted. It has been found that the student-teacher relationship is an important factor in a student's behavior; however the correlation tests do not prove the relationship of the two variables statistically significant.

The second research question explored the relationship between the student-teacher rapport and a student's gender. Research question two questions if there is a statistically significant relationship between a students' gender and student-teacher rapport level. The subsequent hypothesis states there is a statically significant positive relationship between a student's gender and student-teacher rapport level as measured by the Student Teacher

Relationship Scale. Furthermore, the null hypothesis claims there is no statistically significant relationship between a student's gender and student-teacher rapport level.

Correlation tests were performed to discover if there is a relationship between the level of student-teacher rapport and a student's gender. The Pearson correlation test was performed to test the significance of the relationship. The Student Teacher Relationship Scale total score mean for the female population in the sample was calculated at 101.35 (SD = 8.36) and for the male population in the sample, 102.79 (SD = 10.83).

The correlation coefficient was calculated to equal -.074; however in order to designate the relationship as significant the p value calculation should be less than .05, however it equaled .532. As the results in the first research question, the relationship found was not statistically significant. The researcher failed to reject the null hypothesis.

The third research question explored the relationship between student-teacher rapport and the student's post-secondary goals/plans and examined if there is a statistically significant relationship between a student's post-secondary goals/plans and student-teacher rapport level. The hypothesis claimed there is a statistically significant positive relationship between a student's post-secondary goals/plans and student-teacher rapport level as measured by the Student Teacher Relationship Scale. In connection, the null hypothesis states there is not a statistically significant relationship between a student's post- secondary goals/plans and student-teacher rapport level.

The researcher requested students to self-report their post-secondary goals/plans. The mean or average choice of plan for the sample population was college. Correlation and descriptive tests were performed on the data received. The mean Student Teacher Relationship Scale for those students who plan to attend college was 101.85 (SD = 9.18), for those who

wanted to join the military, 110, for those who want to pursue a trade, 100, and lastly those who plan to work after graduation, 99. The correlation coefficient found between a student's post-secondary goals/plans and student-teacher rapport was -.023; however for the relationship to be found significant the p value should have been less than .05, however it totaled .846. The results found that there was not a significant relationship amongst a student's post-secondary plans/goal and his or her student-teacher rapport. The researcher failed to reject the null hypothesis.

Discussion

The results of this study provide the framework for discussion and further research. The contents of the study support the correlation between the student-teacher relationship and the student's performance rate; however the results were not found to be statistically significant.

The first research question investigated the relationship between the student-teacher relationship and the student's performance rate. It has been found in various studies that the student-teacher relationship has an impact on students and their behavior in and out of the classroom. In previous research, students reported that the rapport with their teacher, increased their desire to learn and motivated them to come to class more often and pay attention (Buskist & Saville, 2001). This study sought to prove the significance of the student-teacher relationship in correlation to the student's performance rate; even though, the existence of a student-teacher relationship was found, it was found to not correlate significantly with the student's performance rate.

The three subscales studied in the research were closeness--how affectionate and warming the relationship is, conflict--how negative and confrontational the relationship is, and lastly dependency, which measures how dependent on the teacher the student is. The total mean scores ranked low in conflict and dependency and high in closeness. The three focus points,

closeness, conflict, and dependency, assist in the formation of the relationship between student and teacher. The establishment of a relationship between a teacher and student will continue to nurture the student's academic level throughout his or her educational years. Students desire the connection with their teachers because of the various roles a teacher performs, in forms of a mentor, care-taker, and teacher (Johnson, 2009). The relationship whether negative or positive is a reflection on the student and his or her daily activities and further reflected in his or her behavior.

According to Stipek (2006), students admit to trying harder and exhibiting more effort for teachers who they feel put forth the additional effort and genuinely cares for them (p.46). The teacher's high expectations for student success and the positive student-teacher rapport were found to increase the student's engagement (Levin, 2010). The student becomes more motivated and engaged with a challenging atmosphere that is socially supportive (Pajares, 2002). The support is drawn from the relationships with educators in the school. With the results of this study, the relationship may not have been proven to be statistically significant, however the relationship was not found to be a deterrent to the student's performance. These results demonstrate why a teacher should continue to strive to create a positive relationship with students while teaching (Haberman, 1995).

In previous studies that were concerned with the importance of the student-teacher relationship, the data was received from the teacher or other adults in the school system, and the study was not concerned with the opinion of the students. The perception of child and adult can often vary specifically on the effects or facets of education. Due to the population and perspective of the current study, it would be more of a motivating aspect to view the relationship from the student's thoughts and beliefs as well as to determine the importance of student teacher

relationships from the student's perception. Many researchers have found the connection to be imperative when surveying teachers' perceptions, however the correlation for the students was not found in this study (Zhou, 2007; Pianta, 2007). This could be attributed to the numerous teachers in a secondary school setting, where students can have as many as six teachers on a daily basis, compared to one classroom teacher in an elementary setting. The data collected in the current study was collected from the graduating seniors at a metropolitan high school. In this manner, the researcher gathered the student's opinion of the student-teacher relationship and compared the scores with the student's grade point averages to whether it was a motivation in regards to his or her performance rate. Dr. Pianta (2007) received his data from teachers in his original study. In gathering information from the teacher, the survey asks the teacher to answer questions based on his or her perception of the student's actions and his or her feelings towards the student's behavior. Dr. Pianta found the student-teacher relationship was a significant part of both the students' and teachers' academic lives and careers, respectively.

Research states that the secondary student experiences a decline in student-teacher relationships in comparison to an elementary student (Hamre, Jerome, & Pianta, 2009). The psychological aspect of teaching should be a continued focus with secondary students because teachers have less contact with them and fewer resources are available to promote the development of the student-teacher relationship (Haertel & Wang, 1994).

This study was taken from the perspective of the secondary student, whereas the original study surveyed the teachers' perception of their elementary students. The results found that the surveyed students at the high school valued the importance of the relationship. Furthermore, if the school district would place emphasis on the student-teacher relationship the sense of belongingness along with other aspects of the school day are more prone to occur. When the

student has acquired a sense of belongingness, the student's desire to perform and achieve personal and school goals gain importance (Schaps, 2005).

Research question two investigated if there was a relationship between a student's gender and his or her student-teacher relationship. Both genders scored at the higher end of the STRS total score, scoring approximately a point difference apart; however the relationship was not found to be statistically significant.

A study conducted by Hamre and Pianta (2009) suggests that female students experience a higher rate of positive relationships with teachers through their secondary schooling years. It was found in the current study, that there was closeness in beliefs between female and male students, as each group's mean STRS total scores was approximately a one point difference. The differences found were attributed to the desires of a male and female student, and the beliefs of a male or female teacher (Kreig, 2005). It has been an expectation of the teacher to be the conductor of the class, making certain the curriculum and lesson will adhere to the senses of both the females and males in class. Even though the findings of research question two indicated a student's gender does not impact student teacher relationship, it did discover closeness in male and female student perception of the overall relationship with their teachers.

The third research question determined whether the student's post-secondary goals/plans had an effect on his or her student-teacher relationship. The relationship was not found to be statistically significant, yet from the results there is a relationship between the types of options students are exposed to during the school years and what they choose to do after graduation. Exposure to careers basics is important because students lack information on various occupations and the education requirements for particular jobs (Schneider, 2006). The majority (93.2%) of students in this study planned to attend college. Students who have the option to take Career and

Technical Education courses or Fine Arts courses have the chance to discover a passion for a certain career. Both these options and instructors help to nurture and build the work force of tomorrow.

The results of this study were both intriguing and expected. Research has connected academic success with academic discipline, self-motivation, and engagement; however schools have not accepted the importance of the student-teacher relationship (Schaps, 2005). Also, the expectations of the teacher have a large effect on the student's performance (Chen & Wesley, 2011).

Established in previous research, teachers' find a direct association with the student-teacher relationship and student success; however many studies have not reflected on the opinions of the students. This study discovered that students also found the importance of a positive student-teacher relationship that can be measured by the Student Teacher Relationship Scale survey scores. Research in gender differences has found girls are easier to motivate than boys in schools, as well as girls have better relationships with teachers; however, this study discovered both genders seem to have an equal value of the relationship (Cheng, Marsh, & Martin, 2008). Past experiences in the classroom have proven there was not much of a difference in the relationships between both genders, so the results were not unexpected. Although, it was surprising to perceive the results of the correlation of the student's post-secondary goals/plans when considering the relationship between the teacher and student within the specific subject taught. One would expect the connection to be greater with students who are exposed to new careers and opportunities by their teachers. However, the study did not find the correlation between the student-teacher relationship and the student's post-secondary goals/plans.

Study Limitations

There were several limitations to consider during this study. The population of senior students was from a high school in the Richmond metropolitan statistical area. Due to the administration concerns, classes were randomly selected from a convenience sample of the population of approximately 350 graduating seniors using English classes. In order to ensure a sample most conducive to the student body the researcher randomly selected English classes at each academic level. The study's population was concurrent to the entire population of the student body by encompassing all academic levels. The possible population sample was lessened greatly by the administrative mandated change, leaving the population to be cut by more than two-thirds. Out of the approximate 350 students in the graduating senior class; the six classes totaled 97 students.

Another concern was the required self-reporting of the student's grade point average. This resulted in using whole numbers for GPAs linked to a letter grade to ensure students would choose the appropriate average. If the researcher was able to collect accurate grade point averages to compare with the survey scores the specific data would have been beneficial to calculate the results.

Lastly, though there was a variation in class levels given the survey, the number of surveys included from each level was not tracked. With this fact, the majority of the surveys may have been from a specific academic level, even though measures were taken to include all academic levels.

The results of this study may not be relevant to other high schools in a specific demographic area. The relevancy factors can be directly attributed to the number of students

who completed the survey from each academic level. The researcher attempted to have an accurate sample population that would closely mirror the school's population; however the number of students who responded may not represent each academic level justifiably. High schools are composed of various students with varying genders, races, ages, and academic levels. A school that is more prevalent in one of the varying factors may not find the same results because of the variation of students and teachers.

Implications

The results of this study show that the students, in this specific Henrico County high school, do feel an importance or connection with their teacher. The higher STRS scores for the student population demonstrate the positive relationship the students felt with their teacher.

Research question one investigated the relationship between the student-teacher relationship and the student's performance. The study did not find the relationship statistically significant in regards to the student's performance; however both scores were ranked high on the scales. The data displays the results stating a positive student-teacher relationship and should be used to gage how students feel. The majority of the population had a high GPA and reported they had positive relationships.

Research question two investigated if the student's gender had a reflection on the student-teacher relationship. Based on the results of the STRS survey scores and the correlation tests done, the relationship was found to not be statistically significant. The genders scores were only approximately a one point difference. It can be implied, since both scores were on the higher end of the scale, that it is equally important to both male and female students to acquire the student-teacher relationship. The study did not take in to account the gender of the teacher, nor the relationship with the students, which may have had an effect on the scores.

Research question three investigated if the student's post-secondary goals/plans had a relationship with the student-teacher relationship. It was found that the relationship was not statistically significant. These results imply the student's post-secondary goals/plans do not have an effect on the student-teacher relationship. However, the student-teacher relationship is what the student depends on to become exposed to and learn about various occupations and options after high school. A teacher has the ability to push students towards certain plans and to supersede their previous decisions (Gurland & Grolick, 2003). A high school student needs the exposure to the work force because he or she with a secondary school education, lacks the information for requirements for any particular job (Schneider, 2006). At that point, the student's goals after high school do deflect upon the types of relationships the student will have with his or her teacher and the subjects the student is exposed to. Students who faced high expectations in high school are much more likely to feel well prepared for the expectations of college and/or the workforce than their peers who faced moderate or low expectations, and are nearly twice as likely to receive 'A's in college ("Rising to the," 2005).

Recommendations for Further Research

To further this study, the addition of open-ended questions would assist in the required information needed to connect the relationship. With the support of open-ended questions, the students would be given the opportunity to explain their feelings or beliefs in a more concise manner.

In future studies, it would be beneficial to add a race disclosure. This will add to the results and will aid in discovering if there is or is not a need for a variation of relationship, in terms of the subscales, closeness, conflict, and dependency. Due to cultural differences, there may be some students who require a variation of the typical student-teacher relationship. The

student-teacher relationship is an important piece of the student's achievement in all cultures. All children have their own personalities and require different relationships to encourage success.

The variation of the student scheduling can also have an effect on the student's relationship with their teachers. Some districts have block scheduling, where students see their teacher for approximately 90 minutes every other day, while others have a traditional schedule, where they see their teachers for approximately 45 minutes a day. The time spent with a teacher can have a great effect on the type of relationship he or she may have with his teacher. Thus, as a further recommendation, the school's scheduling options should be added as a variable in the study.

Next, the survey should be administered to an entire class of graduating seniors; in this manner the results would have a higher representation of the total population. In a situation where the entire class cannot be surveyed, it is a further recommendation to test specific groups of students; for example, at-risk, single-parent homes, or low economic households, not only academic levels. The importance of preparing for standardized testing was a factor in the distribution and completion of the survey; therefore the entire graduating senior class was not available as a population sample.

Further, it is a recommendation to change the format of the study where it is made available online for students to access and take at their leisure. With this additional online component, students are able to complete the survey on their own time within the specified hours designated by the researcher. By doing this, the student should not be influenced by other students or teachers, and further would have had more time to take the survey. Most schools have an online program for students where assignments are posted, extra work is made available,

and reminders are placed. The consent rate should be higher when administering the tests online should also include an electronic signature.

While calculating the results and correlation of the research findings, there was a correlation between a student's gender and a student's grade point average, as well as between a student's gender and his or her post-secondary goals/plans. Also while investigating the relationship, the teacher's gender was not taking into consideration. The teacher's gender might also influence the relationship and correlation. It is the last recommendation to further look into the effects of gender, whether teacher or student, on a student's performance rate as well as his or her post-secondary goals/plans.

Conclusion

The purpose of this correlational study was to determine the nature and strength of the relationship between student-teacher rapport and the student's performance rate, controlling for academic levels for graduating seniors. The instrument used to test the level of the student-teacher rapport was the Student Teacher Relationship Scale created by Dr. Robert C. Pianta. Dr. Pianta granted his permission to change the pronouns in the survey in order to be appropriate for the student to complete. In order to attest for the student's performance rate, the students self-reported their grade point averages. Other information gathered was the students' gender and post-secondary goals/plans.

The researcher analyzed completed surveys. Individual survey scores were calculated and plotted on the STRS scoring sheet. The data (survey scores) were entered into the SPSS 22 Package for Windows to calculate descriptive statistics and correlation results. After all data was analyzed, the researcher was unable to reject the null hypotheses were accepted. Each relationship was not found statistically significant.

While the statistical results did not prove a significant relationship between student-teacher rapport and a student's performance rate, it is the belief that a positive student-teacher rapport can enhance the academic life of a student (Pianta, 2007). Also, students who are at-risk to graduate or have personal issues are most affected by the quality of their relationships with teachers (Hamre & Pianta, 2001; Silver et al., 2005). Some students have a positive influence at home, but those that do not seek the relationship through other means, primarily school. Previous studies have found children who are most at risk for school failure are most affected by the quality of their relationships with teachers (Hamre & Pianta, 2001; Silver et al., 2005).

As educators, teachers are employed to teach all students, including those who would rather not be taught. The relationship between teacher and student is extremely important when discussing an at-risk student (Hamre & Pianta, 2001; Silver et al., 2005). It is the mission of the teacher to help a student discover the abilities he or she could not see on his or her own. A student spends at least eight hours a day at school with his or her teacher and maybe additional hours at practice or meetings with a coach or an advisor. This is a significant amount of time to spend with adults other than the student's parents; which validates the importance of the meaningful, positive relationship.

Consequently if student-teacher relationships are indeed important then teachers need to be deliberate about establishing healthy relationships with students. One way to embrace relationships with students is to recognize that today's classroom is geared to diverse learning and students who require various types of teaching styles. In order to efficiently teach, an educator needs to decipher the students' learning styles in his or her classroom. Educators who strive to discover a student's learning style can accomplish this by simply getting to know the student. An educator allows him or herself to understand how a child operates when he or she

takes the time to learn the individuals' behavior; this ultimately aids the teacher in creating varied personalized instruction and ways to assist with individual comprehension (Sears, 2014). Learning the personalities of the students is a critical component of developing the relationship (Rimm-Kaufman, 2013).

Strategies to create a successful student-teacher relationship include demonstrating a caring atmosphere, communicating positive expectations, and correcting in a constructive way (Boynton & Boynton, 2005). The teacher who takes the time to ask how the student is doing and notices when the student is down or acting out of character demonstrates a genuine concern for the student. The display of kindness and caring to a student is most often met with a sense of appreciation and willingness to abide; opposition is usually nullified. A positive classroom environment requires positive expectations. The teacher is the orchestrator of the class, and needs to set the positive tone, not only by his or her speech but also with actions. Student will pick up on the mood of the atmosphere and will follow suit. Classroom opposition must be met in a constructive manner. No child wants to feel ridiculed; however when the teacher constructively corrects and then commends for good behavior, the acceptance of the reprimand is much smoother and received well.

The positive relationship and interaction held between student and teacher help to increase the student's growth and maturity. The student-teacher relationship is carried equally by both parties and should be mutually respected by both parties (Penn & Bast, 2000). In order for the survey results to determine the relationship was positive, it will take the work of both student and teacher to successfully acquire that type of relationship. The benefits of a positive relationship reach far beyond the classroom, as the student holds on to the motivation and continues to strive for to become better in and out the classroom ("Teacher and Support", 2005).

One of President Obama's objectives for the United States educational initiatives involves ambitious efforts to recruit, prepare, develop, and advance effective teachers and principals (U.S. Department of Education, 2013). Administration and school officials should add the aspect of student-teacher rapport into teacher professional development days. Teachers are the driving force for the classroom relationship and must recognize the need for the relationship with specific students to enhance their learning experience (Tolkiengirl, 2008). The professional development days would allow the administration of the school to provide teachers with the resources to enhance their classroom relationships. Administration can also use these development days to teach the importance of the classroom relationship while demonstrating proof of the effects on the student's performance rates. Students' academic performance is a remarkable return for the extra hours and work teachers exude. Positive relationships in education have the strongest correlation with attitudes toward school, academic expectations, academic motivation, and engagement (Schaps, 2005).

In conducting this study, the most prevalent result came from identifying and verifying that the relationship between teacher and student is important. The results of the surveyed students displayed that the students believed there was a connection between the two that was not based on a dependency but a positive connection. Both males and females had a connection, with survey results ranking at the higher end of the scale. The importance of the student-teacher relationship may not have been found statistically, yet the researcher discovered the importance within the surveyed students. Most results have found the teacher believes in the importance of the student-teacher relationship; however, in this study, the students agree a student-teacher relationship is important in being a successful student.

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APPENDICES

APPENDIX A. APPROVAL FOR USE OF THE STRS SCALE

Re: STRS survey

Mon 11/12/2012 11:08 AM
To: Clark, Robyn Arlisha;

This message was sent with High importance.
You forwarded this message on 11/12/2012 8:09 PM.

Yes, you have my permission for this use of the STRS

Robert C. Pianta, Ph.D.

Hello,

I am currently a doctoral candidate at Liberty University. I am in the beginning stages of writing my dissertation and would like to use the Student Teacher Rapport Survey as a basis for the research. I would like to use the survey; however in regards to the students; meaning the students will take the survey, thus changing the pronouns in order to fit the student aspect. I am writing to formally ask your permission to use your survey; however to have the students complete the survey. The title of my dissertation is The relationship between student teacher rapport and student achievement. At this stage, I am trying to secure an instrument that will thoroughly test the student teacher rapport. I am also using the student's Grade Point Average as a reference to the student's achievement. In this manner I plan to test if the student teacher rapport has a direct statistical effect on student achievement.
I look forward to hearing from you and I thank you in advance for your consideration.

Robyn Clark,
Liberty University
Doctoral Candidate

Re: STRS Permission

Tue 10/7/2014 7:57 AM

To: Clark, Robyn Arlisha;

This message was sent with high importance.

Yes it is fine to go ahead as described below

Sent from my iPad

Hello and thank you again Dr. Pianta,

I have successfully completed the defense of my dissertation, "Correlation Study: The Effect of Student-Teacher Rapport on High School Student Performance Rate". I am now at the point of releasing the study to our school library at Liberty University that can be accessed on the internet, and need your permission to continue.

I am going to be reproducing the tables below:

- STRS Scale and Subscale Score Comparisons Between Younger and Older Students
- Description of the Student Teacher Relationship Scale (STRS) and Subscales
- Rotated Factor Matrix for the STRS
- Item Means, Standard Deviations, and Item-Total Correlations for the Total Normative Sample
- The STRS Conflict Subscale Items

I will also include the revised STRS scale, with the change in pronouns to adhere to the students, along with the scoring sheet.
I am requesting your permission to include the tables, scale, and scoring sheet in the final paper that will accessed on the internet?

Thank you in advance and I look forward to hearing from you.

Dr. Robyn A. Clark,

Liberty University

APPENDIX B. HCPS IRB APPROVAL LETTER

Department of Research & Planning

October 15, 2013

Robyn Clark

Dear Ms. Clark:

The Department of Research and Planning has reviewed and approved your research study entitled "The effect of student-teacher ra0pport and student performance rate". Your study was approved by the review committee with the following revisions and/or conditions:

- Revise the consent form to remove any compensation.
- Revise the student/parent letter to mention participation is voluntary and that the survey will be taken during homeroom block.
- Add other to the survey under post-secondary goals/plans.

Although your study has been approved, participation by individuals and schools is completely voluntary. Reports and publications generated from this study should not identify the individuals, schools, or the division and all research materials should accurately represent the party conducting the study. If there are changes to the methods or materials that you plan to use, you must submit the changes to our office for review prior to proceeding. If you are affiliated with an organization with an Institutional Review Board (IRB), an IRB approval letter must be on file in our office prior to beginning the study. It is our expectation that you will submit a final report upon completion of the study to the Department of Research and Planning.

Once your IRB letter is on file, you will contact Dr. Herb Monroe, Principal Henrico HS who will assist you in the process of beginning your research studies in the school that you have requested.

Thank you for your interest in Henrico County Public Schools.

Sincerely,

Tiffany Hinton, Ph.D.
Director of Research and Planning
Henrico County Public Schools

Helen Whitehurst, Ph.D.
Educational Specialist - Research
Henrico County Public Schools

APPENDIX C. LIBERTY IRB APPROVAL LETTER

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD

October 30, 2013

Robyn Arlisha Clark
IRB Approval 1633.103013: The Effect of Student-Teacher Rapport on Student Performance Rate

Dear Robyn,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Please retain this letter for your records. Also, if you are conducting research as part of the requirements for a master's thesis or doctoral dissertation, this approval letter should be included as an appendix to your completed thesis or dissertation.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

Fernando Garzon, Psy.D.
Professor, IRB Chair
Counseling

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APPENDIX D. LETTER TO PARENTS AND STUDENTS

Date: November 11, 2013

12th Grade Students and Parents/Guardians

Dear Parents/Guardians or Student (if you are 18 years old or older):

As a graduate student in the Education department at Liberty University, I am conducting research as part of the requirements for a Doctoral Degree in Educational Leadership, and I am writing to invite your child to participate in my study.

If you choose to participate, your child will be asked to complete the Student Teacher Relationship Scale which will be returned to the Principal Investigator. It should take approximately 5 to 10 minutes for you to complete the Student Teacher Relationship Scale during your homeroom period. Your child's estimated grade point average, gender and post-secondary goals/plans will be requested as part of your participation.

To participate, your teacher will direct you to go to the webpage and click on the link provided.

An informed consent document will be given to you one week before the survey. The informed consent document contains additional information about my research. If your child is 17 years of age or younger, you and your child will need to sign and return the consent form, to participate in this study. Those students who are 18 years of age or older, will not need to sign the consent form; however, they may keep the form for their records. Participation in this study is voluntary.

Sincerely,
Ms. Robyn A. Clark
Doctoral Candidate, Liberty University

APPENDIX E

CONSENT FORM

The Effect of Student-Teacher Rapport and Student Performance Rate

Robyn Arlisha Clark
Liberty University
Education Department

Your child is or you are (if you are 18 years or older) invited to be in a research study of the relationship between student-teacher relationships and student performance. You/Your child were selected as a possible participant because I am surveying graduating seniors. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Robyn Clark, Education Department of Liberty University for the purpose of a Doctoral Dissertation.

Background Information:

The purpose of this study is to test if there is a relationship between student-teacher rapport and the performance rate of students.

Procedures:

If you agree to be in this study, I would ask you to do the following things, during your English class:

1. Read carefully the instructions of the Student Teacher Relationship Scale
2. Complete the Student Teacher Relationship Scale that will take approximately 5 to 10 minutes.

Risks and Benefits of being in the Study:

The risks of this study are minimal and they are no more than the risk a participant would encounter in everyday life.

The benefits to participation are not direct benefits; however, as the relationship is researched and found prevalent, educational programs will be able to focus more on student achievement from all aspects of the curriculum, thus adding the effect of student-teacher rapport.

Compensation:

There will be no compensation for participating in this study.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records. The information gathered will be stored on a password secured flash drive.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Henrico County Public Schools. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Robyn Clark. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her, or the chair of her dissertation committee Dr. Tracey Pritchard.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board,

You will be given a copy of this information to keep for your records.

Consent Statement:

I have read and understood the above information. I have asked questions and have received answers. I do consent to participate in the study.
Students that are 18 years of age or older, do not need to sign or have their parents sign the consent form; however, you may keep the consent form for your records.

Signature: _____ Date: _____

Signature of parent or guardian: _____ Date: _____
(If minors are involved)

Signature of Investigator:_____ Date: _____

IRB Code Numbers: 1633.103013

IRB Expiration Date: 10/30/2014

APPENDIX F.STUDENT TEACHER RELATIONSHIP SCALE

STRS Student-Teacher Relationship Scale™ Response Form

Author: Robert C. Pianta, Ph.D.

Please circle the appropriate response:

Your Cumulative Grade Point Average:

A - 4.0 B - 3.0 C - 2.0 D – 1.0 F – 0.0

Post-Secondary Plans/Goals:

College Work/Job Trade Military Other

Gender:

Male Female

Definitely does not apply 1	Not really 2	Neutral, not sure 3	Applies somewhat 4	Definitely applies 5

Please reflect on the degree to which each of the following statements currently applies to your relationship with your teachers during your high school years. Using the scale above, circle the appropriate number for each item.

1.	I share an affectionate warm relationship with my teachers.	1	2	3	4	5
2.	I seem to always struggle with my teachers.	1	2	3	4	5
3.	If I'm upset, I can seek comfort from my teachers.	1	2	3	4	5
4.	I am uncomfortable with physical affection or touch from my teachers.	1	2	3	4	5
5.	I value the relationship with my teachers.	1	2	3	4	5
6.	I feel hurt or embarrassed	1	2	3	4	5

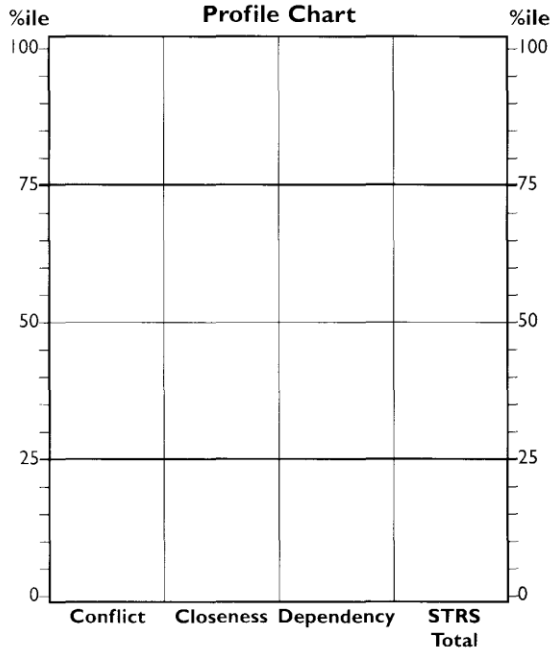
when a teacher corrects me.					
7. When a teacher praises me I beam with pride.	1	2	3	4	5
8. I react strongly when separated from my teachers.	1	2	3	4	5
9. I spontaneously share information about myself to my teachers.	1	2	3	4	5
10. I am overly dependent on my teachers.	1	2	3	4	5
11. I easily become angry with my teachers.	1	2	3	4	5
12. I try to please my teachers.	1	2	3	4	5
13. I feel that my teachers treat me unfairly.	1	2	3	4	5
14. I ask for help from my teacher when I really don't need help.	1	2	3	4	5
15. It's easy for my teachers to be in tune with my feelings.	1	2	3	4	5
16. I see my teachers as a source of punishment and criticism.	1	2	3	4	5
17. I express hurt or jealousy when my teachers spend time with other students.	1	2	3	4	5
18. I remain angry and/or resistant after being disciplined by my teacher.	1	2	3	4	5
19. If I am	1	2	3	4	5

misbehaving, I respond to the look or tone of voice of the teacher.					
20. Dealing with me can be draining for a teacher.	1	2	3	4	5
21. I sometimes copy my teacher's behavior and his/her way of doing things.	1	2	3	4	5
22. When I'm in a bad mood, it is usually a very long day for the teacher and me.	1	2	3	4	5
23. My feelings toward my teachers can be predictable or can change suddenly.	1	2	3	4	5
24. Despite my best efforts, I'm uncomfortable with my teachers.	1	2	3	4	5
25. I whine when I want something from my teachers.	1	2	3	4	5
26. I am sneaky or manipulative.	1	2	3	4	5
27. I openly share my experiences with my teachers.	1	2	3	4	5
28. My interactions with my teachers make me feel effective and confident.	1	2	3	4	5

APPENDIX G. STUDENT TEACHER RELATIONSHIP SCALE SCORING SHEET

STRS Student-Teacher Relationship Scale™ Scoring and Profile Sheet

Scoring: For all items, transfer the circled item scores to the white box adjacent to the item. Sum the scores in each column and enter the sum in the box at the bottom of the column. In cases where there is no response, **a score of 0 should not be given**. Instructions for prorating subscale raw scores are provided in chapter 2 of the STRS Professional Manual. Use the STRS Total score formula at the bottom left to compute the STRS Total raw score. Transfer the Total and subscale raw scores to the spaces provided below the Profile Chart. Use the appropriate Appendix table in the STRS Professional Manual to obtain the corresponding percentile value for each raw score. **Profiling**: Plot the percentiles on the profile chart. Shaded areas indicate critical levels.



	Conflict	Closeness	Dependency	STRS Total
Raw score				
%ile				

STRS Total score formula

(72 – _____) + _____ + (30 – _____) = _____

Conflict raw score | Closeness raw score | Dependency raw score | Total raw score

Normative Comparison Group

(Appendix tables for each normative group are indicated in parentheses).

- ☐ Total Sample (A1)
- ☐ Boys (B1)
- ☐ Girls (B2)
- ☐ Caucasians (C1)
- ☐ African Americans (C2)
- ☐ Hispanic Americans (C3)

Conflict	Closeness	Dependency
		1. 1 2 3 4 5
		2. 1 2 3 4 5
		3. 1 2 3 4 5
		4. 5 4 3 2 1
		5. 1 2 3 4 5
		6. 1 2 3 4 5
		7. 1 2 3 4 5
		8. 1 2 3 4 5
		9. 1 2 3 4 5
		10. 1 2 3 4 5
		11. 1 2 3 4 5
		12. 1 2 3 4 5
		13. 1 2 3 4 5
		14. 1 2 3 4 5
		15. 1 2 3 4 5
		16. 1 2 3 4 5
		17. 1 2 3 4 5
		18. 1 2 3 4 5
		19. 5 4 3 2 1
		20. 1 2 3 4 5
		21. 1 2 3 4 5
		22. 1 2 3 4 5
		23. 1 2 3 4 5
		24. 1 2 3 4 5
		25. 1 2 3 4 5
		26. 1 2 3 4 5
		27. 1 2 3 4 5
		28. 1 2 3 4 5
		Subscale raw scores
Conflict	Closeness	Dependency

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APPENDIX H. LETTER TO TEACHERS

November 11, 2013

12th grade English Teachers

Dear Teachers:

As a graduate student in the Education Department at Liberty University, I am conducting research as part of the requirements for a Doctoral Degree in Educational Leadership. The title of my research project is The Effect of Student-Teacher Rapport on Student Performance Rate and the purpose of my research is to test the relationship of student-teacher rapport and performance rate, controlling for academic levels for graduating seniors at a Henrico County Public High School. .

I am writing to request for your assistance in administering the survey to your 12th grade students. You will be asked to direct the students to complete the paper independent survey. The survey will only take approximately 10 to 15 minutes of your class time and it will be greatly appreciated.

The data will be used to calculate his/her relationship scale score and it will be compared with their current self-reported grade point average to discover if there is a correlation between student-teacher rapport and performance rate. Participants will be presented with information prior to participating and will receive a consent form to return if they choose to participate. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you in advance for your assistance.

Sincerely,

Robyn Clark

Ms. Robyn A. Clark
Doctoral Candidate, Liberty University