AT-RISK STUDENTS AND ACADEMIC ACHIEVEMENT: THE RELATIONSHIP
BETWEEN CERTAIN SELECTED FACTORS AND ACADEMIC SUCCESS.

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ABSTRACT

This research study examines the relationship between academic achievement and at-risk students. Many issues today affect the achievement gap and the ability for at-risk students to succeed. Most data, as revealed in the studies included in this review, conclude the factors identifying at-risk students do have significant impact on the academic achievement of individual students and schools. Most often, these students are not successful and eventually drop out of school or pursue a GED. Data indicate that teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence can affect success for at- risk students. Twelfth grade students from two high schools in an urban school district were given the opportunity to participate in a survey. This study investigates correlations between the dependent variable grade point average (GPA), and the independent variables teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence. Five regressions were run to determine if any of the independent variables predict GPA. Data from this study indicate that the variance between the dependent variable of GPA and each of the five independent variables is significant; however the practicality of these results' having a significant influence on the GPA of the study participants is minimal. The strongest variance found was between GPA and motivation and between GPA and peer influence. Other findings include a relationship between GPA and participation in sports or activities. As GPA increases, the percentage of students participating in sports and activities increased. The students in this study do have positive relationships with their teachers; have a parent or caregiver encouraging them to do well in school; and plan to attend college.

Dedication & Acknowledgments

First, this endeavor is dedicated to my loving parents, John and Jane Worley, who have been an inspiration in my life. Without you, I would never have accomplished this goal. You have been a support and resource for me, and I love you both very much. Secondly, this is in honor of the memory of my beloved grandmother, Edith P. Worley. She was a cornerstone in my life. I love you very much grandma.

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Most importantly, Thanks be to God. This accomplishment is testimony to the verse, "I can do all things through Christ who strengthens me." Phillipians 4:13

TABLE OF CONTENTS

LIST OF TABLES

List of Figures

CHAPTER 1: THE PROBLEM

The work force of America continues to establish high standards for employees. Jobs are competitive; applicants not meeting certain criteria, including the possession of a high school diploma, are not hired for certain positions. The national dropout rate is a continual issue and limits the application pool for many careers. As the pool of dropouts expands, employment is limited because the labor force today requires increased literacy, technology skills, and the ability to be a lifelong learner (Woods, 1995). According to the United States Department of Education (USDOE), this nation had a 6.8% dropout rate for the year 2004 (USDOE, 2005). There are many social, economic, and political costs related to dropouts (Nayer, 1987). Many dropouts consume tax dollars through welfare and other social programs throughout their lifetime (Nayer, 1987; Woods, 1995). The number of tax dollars spent on welfare increases each year, with an annual amount of $20 billion being spent in 1985. Additionally, school dropouts face a severe decrease in possible lifetime earnings. This loss is estimated at $122,000 for females and $187,000 for males (Nayer, 1987). Studies on this issue note correlations between dropouts and socioeconomic status, family structure, race, language, and gender (Nayer, 1987).

The Context and Background of the Problem

The term at-risk identifies a variety of students, the majority of whom come from either a low socioeconomic situation or a minority group or both. For the purpose of this study, the term at-risk refers to students at risk of not graduating from high school. Education today is focused on accountability. The pressure to ensure success and higher

test scores for all students forces educators to continue developing strategies to help

every student progress and master essential skills. My experiences as a teacher and

administrator have allowed me to witness the inequity of prior skills and knowledge

among students. There is little equity in support systems for children as they develop in a

society with many obstacles. Access to resources, such as technology and the Internet,

parental supervision, and financial resources become barriers for students as they work to

excel in school. The achievement gap grows even as educators work to find solutions

and develop a plan to promote elevated academic standards for every student, regardless

of background and resources. Consistent evidence of this gap is seen in test results across

the nation. According to the National Center for Education Statistics (NCES), a sample

of students was tracked from 1971 to 1999 with regard to reading ability. Reading ability

was assessed at ages 9, 13, and 17. The results of this study showed Caucasian students

continually scored higher than Hispanic and African American students (USDOE, 2004).

Katie Haycock, president of the Washington-based Education Trust is an advocate

for disadvantaged students. One primary goal of her work is minimizing the achievement

gap for American students. The largest gap is evident between White and minority

students. Despite huge efforts on the part of educators, students who are not from higher

income brackets do not achieve at the same level during school or in their post high

school experiences as their counterparts. Thousands of students head toward their first

school experience already behind their peers (The Journal News, 2005). Haycock has

contended that, despite their efforts to improve and place blame on distant lawmakers

who make guidelines and choose funding, educators also must bear some blame for poor

choices. Every year, rather than reorganizing the educational system, leaders continue to

allow teachers with poor credentials to work with the students that struggle most; they continue to refuse the complete funding of prekindergarten and kindergarten that would allow students to enter school with similar resources and skills (The Journal News, 2005).

During her testimony before the House Appropriations Committee, Subcommittee on Labor, HHS, and Education, Haycock addressed achievement and demographic patterns in elementary and secondary education. The National Assessment of Educational Progress (NAEP), or the "Nation's Report Card," has shown improvements in America's elementary schools. with bigger gains in math than reading. Nevertheless, progress in secondary schools has stagnated in some areas while declining in others (The Education Trust, 2007). Along with the academic decline, our nation is seeing a major demographic shift, with the majority becoming the minority. The percentage of Caucasian students enrolled in American schools declined from 66% to 59% between 1993 and 2003. The enrollment of Latino and African American students has increased. The percentage of students enrolled in the free and reduced lunch program has also grown from 30% to 37% between 2000 and 2004. If we do not increase the academic performance of the minority and low-income groups, our performance as a country will continue to decline. The estimated national population will grow from 50 to 54 million by the year 2020, with almost two thirds being African American or Hispanic (The Education Trust, 2007).

Can this academic decline be turned around? Haycock has suggested that work be done to eliminate the obstacles that poverty creates for children before they enter school. This work should include the implementation of intensive programs for minority and low-income families. Much research shows that the implementation of high quality

prekindergarten programs has enormous power in closing the gap with young students

(The Education Trust, 2007).

Schools also need to be restructured. Instead of expecting more of the average

and gifted student, while pushing for the minimal expectation with underachievers, our

schools should provide these students with more and expose them to rigorous and

innovative instruction to increase achievement. The nation spends, on average, about

$825 less per pupil each year in school districts with the poorest children. This fact

highlights the need to assess our equity in school funding (The Education Trust, 2007).

Although many districts face the challenge of educating students living in

poverty, it is evident that schools with focused instruction and dedication to the repetition

of knowledge and skills can enable the poorest students to achieve well in school. Highly

effective teachers, extra time to learn, and support for struggling schools is key in the

process to turn around the achievement of our nation (The Education Trust, 2007).

The term at-risk is used throughout public schools systems across America.

Many characteristics can be used to identify a student as at-risk. The following traits

justify this label for students: minority status, low socioeconomic status, potential

dropout, reading below grade level, not meeting the requirements of promotion or

graduation, and having English as a second language. Additionally, students attending

unstable school districts, living in single-family homes, living with parents who are not

high school graduates, and being home alone more than 3 hours a day are also considered

at risk (Chesebro, et al., 1992). Most often, students labeled at-risk will not meet minimal

standards on state-simulated assessments and will probably drop out of high school

(Chesebro et al). "At-risk students show persistent patterns of under-achievement and of

social maladjustment in school, leading to their failure to finish high school" (McMillan & Reed, 1994, p. 137). The Virginia Department of Education reported a drop-out statistic of 1.87% or 10,204 students for the 2004-2005 school year (VDOE, 2006). Efforts to lower the dropout rate represent a constant struggle for administrators, as they press to implement plans to engage students and encourage them to persevere and reach their full academic potential.

As a public school administrator, I have the opportunity to interact with numerous students on a daily basis. Most of my experience has been in schools with high at-risk populations. Unfortunately, students from these situations come to school with a great deal of baggage that inhibits the learning process. Children come to school from a variety of situations, yet they all attend school for the same purpose, to learn. The variety of backgrounds and resources make the playing field uneven. Previous skills and prior knowledge vary from student to student. Ninth graders enter high school at a variety of math levels, from Algebra I to Geometry or Algebra II. Many students come to high school with a math ability level below that of Algebra I; however, Virginia state law requires all freshmen to take high school Algebra.

A large percentage of students read at least two years below grade level. This pattern is consistent and is seen in the transition from elementary to middle and from middle to high school. We also see the variance in knowledge among students entering kindergarten. Many come with preschool experience and support for learning at home, whereas others come with no prior preschool experience or assistance at home with numbers, the alphabet, or reading.

The achievement gap between minorities and non-minorities and between the wealthy and children of poverty continues to hamper academic progress for at-risk students. Family incomes have become reliable predictors of student achievement. Students entering school from poverty situations will most likely achieve at lower levels than students from middle and upper-class home environments. Likewise, they are in danger of not completing school (Taylor, 2005).

The basic physiological needs of food, water, and safety must be met before students can engage in the learning process in public schools. Many students come to school and run to the breakfast line to feed an aching stomach. This problem was acknowledged by President Harry Truman in 1946, as he signed the National School Lunch Act to add federal assistance to this problem (Taylor). This act was signed into legislation three years after the "hierarchy of human needs theory" was published by Abraham Maslow (1973).

Along with the basic need of food, students must have the security of warmth and shelter. During my tenure in middle school, the school security personnel took it upon themselves to hold a coat drive each year, as many students came to school cold, without winter coats. The entire staff, teachers, administrators, security, and custodians, were continually in tune with the needs of the students. Many times we were called upon to be parent, provider, and teacher. The spirit of the school, as well as the dedication of the staff to the well-being of each student, was an inspiration.

The need to provide support for every student and the idea that all students can learn are critical for the future of our society. Unfortunately, because students do not

enter the school house at the same level, public schools must work to develop tools to diminish the achievement gap, identify students who are at-risk of academic failure, and provide interventions. Researchers continue to investigate several indicators affecting academic achievement. Gender, race, teacher-student relationships, parent or caregiver-student relationships, motivation, socioeconomic status (SES), and peer influence all seem to contribute to the success, or lack of success with academic progress in students. Evidence is displayed in standardized test scores where minority students, including African American and Hispanic, score significantly lower on tests (Wilhelm, Hillocks, & Smith, 2005). Additionally, poverty and gender contribute to the achievement gap with minority students (Wilhelm et al.). James Coleman (1966) brought many of these factors to our attention in 1966 with the publication of his landmark study, "The Equality of Educational Opportunity" (1966). This study was initiated in response to the Civil Rights Act of 1964. It is a solid example of data from a national survey utilized as an instrument for setting policy. The survey collected data on age, gender, race, socioeconomic background, attitudes toward learning, education and career goals, and racial attitudes (Coleman). As time progresses, we continue to collect data on the influence of these factors on academic achievement. The numerous contributors make it difficult to isolate these factors and determine exactly which is more influential.

A common attribute of at-risk students is living in poverty or situations of low SES. SES is a contentious topic. The most prevalent attribute of children growing up in poverty is limited access to resources. Resources exist in the form of finances, parental guidance, books, preschool, tutoring, food, clothing, and more. Often times, poverty-stricken children's first worries are about their next meal or having heat in the home.

Thoughts of high academic performance are not a priority. Many children in these

situations live in single-parent homes. Often the one parent spends the majority of his or

her time working and does not have the optimal opportunities to spend time going over

homework and providing parental guidance for important decisions. Many "latchkey"

homes require older siblings to take care of younger siblings, cook meals, and assist with

household chores as the parental figure works long hours for minimal pay. This situation

leaves little time for homework or school activities and athletics.

Ruby Payne addressed the issues for children living in poverty throughout her

research. She defined poverty as "the extent to which an individual does without

resources" (Payne, 2001, p. 16). Resources are financial, emotional, mental, spiritual,

and physical; they also include access to support systems, positive relationships with role

models, and knowledge of the "hidden rules." Individuals function under the rules in

which they were raised (Payne). Bandura (1977) described his Social Learning Theory as

a means of learning through observing others, asserting that most human behavior is

learned by observing others in one's surrounding environment. Individuals bring these

rules to every situation faced in life, as a direct reflection of the social class in which they

were raised. Schools and businesses often function under the hidden rules derived from

middle-class norms. We cannot penalize children for not knowing the rules of a new

setting (Payne).

The disparity in resources for technology, school supplies, Internet access, and

clothing is great among students from different socioeconomic backgrounds. Also, many

students from low SES backgrounds never receive access to preschool as many middle-

and upper-class families do. Therefore, students from low SES home situations start

school with limited skills compared to many peers with preschool background. Often, academic achievement is disregarded within the culture of low-SES communities, and frequently poverty-stricken students who achieve are ridiculed or their efforts are minimized. For example, if a student is invited to an academic awards ceremony for recognition and the family cannot afford to buy an appropriate outfit, such as a dress or shirt and tie, which is often required in formal ceremonies, the child is discouraged from attending in order to avoid embarrassment. This in turn sends a message that such success in school is not important.

As we face the reality of the negative life experiences that affect at-risk students, we continue to see growth in the achievement gap. The achievement gap refers to the differences in academic performance among ethnic groups. Gene. R. Carter commented on the achievement gap in June of 2004. He stated, "The achievement gap is a simple term for a complex set of problems" (Carter, 2004, p. 1). He suggested these problems include disparities in graduation rates, focus on higher education, and achievement in school. The given set of challenges must not interfere with the confidence of educators to help all children excel as individuals and in the classroom. Finally, Carter believed the top priority of schools today is to ensure that every student develops to his or her full potential.

Problem Statement

At-risk students are not functioning or achieving at the level of their counterparts. The concern for educators is how to facilitate the development of resiliency in all at-risk

students. Resilient students find support to adapt, find success, are tap their inner strength to press forward no matter what challenge or lack of resources they must face. The overall guiding research question for this study is the following: What factors influence academic achievement in at-risk students? At-risk, for the purposes of this study, refers to students at risk of not graduating from high school. This research focuses on studies that address the relationship between at-risk students and academic achievement. The research addresses engagement in learning, resiliency, teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence. Included are data on the attributes of resiliency in at-risk children. The term at-risk, it's definition, and characteristics of at-risk students are addressed in detail in this study.

Significance of the Study

As large numbers of at-risk students continue to fail academically, the future of our society will be challenged to find a means of survival in a world that is continuing to change. It is critical for the survival of schools that educators cultivate learning environments that nurture the development of academic skills for all students. Many obstacles hinder the academic growth of at-risk students before they ever reach the point where their minds are focused on learning. Therefore, it is crucial that educators focus on factors contributing to success for this population, as well as issues that hinder this process. Public schools are faced with the challenge of educating each student under the theory that every child can learn. Schools face the fear of not making accreditation, or not achieving Adequate Yearly Progress (AYP) as mandated by the federal government

in the No Child Left Behind (NCLB) Act. Depending on the geographical location, many schools or school systems have populations that contain a majority of at-risk students, thus making it more difficult to meet federal standards.

Purpose or Rationale for the Study

The purpose of this study is to identify factors, including characteristics that can be utilized by at-risk students to enable them to engage in learning and achieve at high academic levels. Also, factors distracting students and negatively affecting their ability to develop resiliency are identified. This information will provide valuable data for educators as they strive to close the achievement gap and encourage the development of these skills in the at-risk population of public schools today. The Federal Legislation of NCLB, mandates that every child be successful and perform at a certain level of academic excellence. NCLB requires that students from the four challenging subgroups of low-socioeconomic status, English as a second language, minorities, and students with disabilities—succeed on standardized tests. Three of the four subgroups encompass student groups considered to be at-risk. The NCLB mandate only increases the necessity of immediate research and intervention to ensure academic success for every student in the at-risk population. This study will address issues and obstacles faced by at-risk students; study the relationship between certain selected factors and academic success; and research the notion of resiliency, and why some at-risk students are more resilient than others.

Thesis

A current topic in research about assistance for at-risk students toward success is the notion of resilience, and why some students exhibit resilience while others do not. With regard to education, there is no single definition of resilience (Reis, Colbert, & Thomas, 2005). Definitions include (a) a quality held by invulnerable individuals, (b) protective mechanisms that help individuals respond to risk situations, (c) individual adjustment despite challenging life events, and (d) a person's positive response to adversity (Reis et al.). A great deal of research in education is focused on how teachers and staff can foster the development of resilience in students from at-risk backgrounds to facilitate their developing skills to overcome adverse situations. Attributes of resilient students include high intrinsic motivation, positive temperament, positive use of time, involvement in school and community activities, bonding with at least one supportive caregiver, caring relationships, experiencing positive teacher relationships, and having high and positive expectations set by teachers and students (McMillan & Reed, 1994).

Research has shown that at-risk students most often have other factors contributing to their success. Positive teacher-student relations have a significant impact on the education of students as exhibited by their positive conduct in school, classroom preparation, increased academic achievement, and enhanced standardized test scores and grade point averages (Sanders & Jordan, 2000). Many at-risk students believe some of their success is attributed to teachers' taking a personal interest in each student

(McMillan & Reed, 1994). Additionally, most resilient at-risk students establish close relationships with at least one family member, caregiver, or parent (McMillan & Reed).

Based upon this review of literature, the thesis of this study is the following: The development of resiliency in at-risk students will increase academic engagement and improve academic success. This study focuses on the behaviors and practices of successful at-risk students, including the development of resiliency. Resiliency is established through access to protective factors in the lives of at-risk students. Protective factors include support of adults; opportunities to enroll in advanced classes; association with high achieving peers; participation in numerous after-school activities; the development of a strong belief in self and increased self-esteem; and the development of a coping mechanism for facing the challenging situations in their lives, including family and socioeconomic situations (Reis, Colbert, & Thomas, 2005).

Research Questions

The overall guiding question for this study is "What factors influence academic achievement in at-risk students?" Correlations with GPA (grade point average), teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence are examined. Regression analysis is used to determine if any of the independent variables of teacher-student relationships, parent or caregiver-student relationships, motivation, SES, or peer influence predict GPA. This study is conducted with twelfth-grade students who have successfully arrived at their senior year of high school without dropping out of school.

Conceptual Framework

This research study explores the factors contributing to and or inhibiting the development of resiliency in at-risk students (See Figure 1). The independent variables for the purpose of this study are teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence. The dependent variable is GPA; academic success is measured through GPA. Students are identified as at-risk according to the demographic variables of race, provided by the Hokie School District, and self-reported socioeconomic status. Students also self-report their living situation. Students living in a single-parent home are considered to be at-risk.
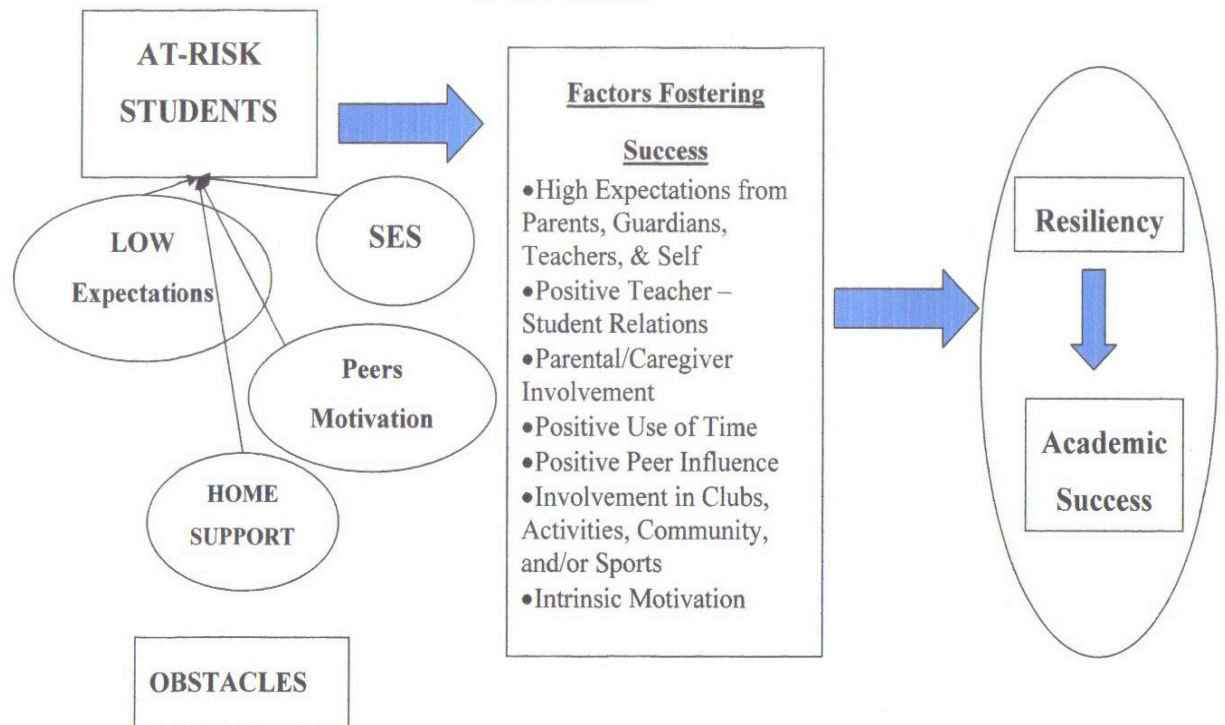
Figure 1. Conceptual Framework

CHAPTER 2: REVIEW OF LITERATURE

The review of literature includes analysis of studies regarding at-risk students and their academic engagement and achievement. The literature provided direction for the investigation of research questions and the collection of data about factors contributing to, as well as factors hindering, the academic achievement of at-risk students.

Historical Trends

Historically, the need for intervention on the behalf of children living in poverty has continued to grow. The United States Constitution plays a silent role regarding the direction of education in localities (Mitchell, 2000): "As a result of this silence, education is recognized as a de facto responsibility of the states" (p. 17). Educational hardship is most likely to fall upon children growing up in poverty. Nevertheless, as the United States has acknowledged the critical relationship between children and poverty, America has seen the implementation of several pieces of federal legislation designed to be means of intervention (Mitchell). The Elementary and Secondary Education Act (ESEA) of 1965 emerged during the administration of President Lyndon Johnson. This Act was part of his *Great Society* initiative, which was designed to eliminate poverty. Through this act, the federal government played a part in education through the disbursement of funds to elementary and secondary schools. The funds were distributed through a formula involving the number of students living in poverty in each state (Mitchell).

During the 1960s, there was little change regarding the government's involvement in education under President Jimmy Carter; however, education was impacted under President Ronald Reagan. President Reagan worked under a policy of "new federalism," as he believed the federal government had too much power in state issues (Mitchell, 2000). This policy translated to a reduced role of the federal government in education, as well as a cut in funding from the federal government as most power was given to the states. In 1983 America experienced the publication of "A Nation at Risk" and the realization that America was not keeping up with the educational gains of other countries. In 1988, ESEA was reauthorized, and there was a shift in the federal involvement in education. With an increase in Title 1 funds, the government moved from mere compliance with financial assistance and programs to a focus on the academic success of economically disadvantaged students (Mitchell). President Clinton initiated the Goals 2000: Educate America Act, in which the emphasis was on quality, outcomes, and accountability (Mitchell).

Today, America continues to function in an era of school reform. A systemic change has developed in schools since the release of "A Nation at Risk," and the federal legislation of No Child Left Behind (NCLB). Both initiatives have served to improve the status of education in America. School reformers in the early 1980s were hopeful in their belief that U.S schools in the 21st century would dramatically improve over the schools of the 1970s (Schlechty, 2001). Ironically, Schlechty (1997) pointed out that schools were doing much more than they were originally designed to do and were actually better than they had ever been in the past. The production of functionally literate citizens had been the goal of original schools; however, America, by the 1990s was placing much greater

demands on the educational system. Now every student is pushed to learn and aspire to high levels of academia (Schlechty, 1997).

What is the threat of being at-risk? We would not consider someone at-risk of winning the lottery. "This is because being 'at-risk' is taken to indicate a possible confrontation with something undesirable and we would find it hard to believe that someone would think of winning a lottery as undesirable" (Rozycki, 2004, p. 174). During the first 70 years or so of the 20th century, high academic success was not a mandate for every child. It was politically correct to aspire to enter a trade, raise a family, and make a substantial living (Rozycki). Many pursued military careers, and selecting the route of a GED was considered "okay." As a critic of the movement to high academic achievement for all students, Rozycki wrote, "To pretend that life is over if high achievement has not happened before age eighteen is to approach hysteria" (p. 176). Several seismic shifts in the structure of our society over the past 50 years have challenged the original basis for public schools (Schlechty, 2001). Many of these shifts are a direct reflection of the stigma associated with at-risk students. First, we shift to a society with the belief that every child must be an academic success or every child can learn. This is a change from a society in which the gifted and elite were the only ones assumed to be able to reach high academic success (Schlechty). We also see a dramatic move from two-parent families to many single-parent households and schools moving from community-based to government schools (Schlechty). Schools have lost a sense of community, and educators are faced with many new competitors from a society pushing powerful commercial interests that distract students from homework, school, and educational activities (Schlechty). We have created a new America that fights against

everything we want schools to promote. We want schools to advance to the next level

and promote success for everyone, yet our society continues to offer distractions and

roadblocks, thus making this goal more of a challenge. The expectation is that students

from every challenging situation can learn and are expected to perform at competitive

levels with classroom peers.

<div align="center">Characteristics of At Risk</div>

The National Center of Educational Statistics released a report in 1992 on the

characteristics of at-risk students; this report was based on the National Education

Longitudinal Study of 1988. The report analyzed students from the eighth-grade cohort

of 1988 who were considered to be at risk of school failure. Characteristics of these at-

risk students are outlined in the report. The variables examined were student behavior,

demographics, teacher perceptions of the student, school characteristics, family

background, personal background, parental involvement, and the academic history of the

student (U.S. Department of Education, 1992). School failure was measured through

reading and mathematic standardized testing, as well as the dropout rate. Demographic

data analyzed included sex, race, and SES. Data revealed that Black, Hispanic, and

Native American students with a low-SES background were more likely to lack basic

math and reading skills than were other students. When SES and gender were controlled,

Hispanic and African American students were more likely to perform below Caucasian

students on basic math and reading assessments (U.S. Department of Education). This

study identified factors most likely to predict at-risk status in students; these factors were

independent of student race, SES, and gender, and included the following: (a) students

from single parent families; (b) students who were overage; (c) students who frequently

changed schools; (d) students from urban schools or schools with large minority

populations; (e) students who came to class unprepared or were frequently tardy or absent

from class; (f) students with a history of poor academic achievement or students who had

previously repeated a grade; (g) students whose parents had little involvement in the

educational process, including their not discussing school matters and having low

expectations for the educational future of their children; and (h) teachers with negative

perceptions of students, including their viewing students as disruptive, passive, or as

underachievers (U.S. Department of Education).

Resiliency in Students

Some children develop the ability to survive despite many adverse situations in

their lives. Many not only survive but also thrive academically and socially (Condly,

2006). Not only do children survive personal adversity, but they must also endure the

challenges of an ever-changing and increasingly toxic society. Today's youth function in

a world where children face increased poverty, exposure to and increased drug use, a

demise in social behavior for youths, lack of discipline among the youth, and increased

violence and abuse. Nevertheless, many students manage to survive in adverse

environments, and some actually excel (Condly). The ability to survive difficult

situations defines the notion of resilience. The theory of resilience attempts to explain

why some students academically achieve even though they encounter many negative

environmental or psychological situations (Reis, Colbert, & Thomas, 2005). There seems

to be no single definition for resilience; however, it is often described as the access to

protective mechanisms that alter an individual's responses to situations that encompass

risk (Reis et al.). Rutter (1987) described resilience as the ability to adjust one's

circumstances while facing negative life events and to exhibit a positive role in stress and

adversity.

Many educational researchers seek to examine the concept of resiliency and to

determine why some students exhibit this trait, excelling academically, while others do

not. One 3-year study, entitled "Understanding Resilience in Diverse, Talented Students

in an Urban High School," analyzed the achievement or lack of achievement among 35

disadvantaged and ethnically diverse high school students. The method of analysis was

qualitative in nature; it included a case study and ethnographic method for evaluating

resiliency in students. Ethnographers observed the students in their natural settings (Reis

et al., 2005). Guiding research questions included the following:

1. "What factors do high achieving students in an urban high school identify as

contributing to their resilience?" and

2. "What factors may contribute to the inability to display resilience in

underachieving students placed at risk in an urban high school?" (p. 112).

Results based upon the data collection indicated that the implementation of the following

protective factors were associated with the success of certain at-risk students: support

from adults; opportunities to enroll in advanced classes; association with high-achieving

peers; participation in numerous after-school activities; development of a strong belief in

self and increased self-esteem; and development of a coping mechanism for facing the

challenging situations in their lives, including family and socioeconomic situations (Reis

et al., 2005). Several risk factors were noted for students who did not achieve as well as their counterparts. Many of those students had siblings who dropped out of school. Some had family members involved with drugs, and the underachieving at-risk students seemed to have access to fewer or no protective factors (Reis et al.).

The successful students in this study gained progress through a combination of personal, environmental, and social issues. Resilience in this case was the ability to tap into protective factors and thrive in the presence of stress and challenging circumstances (Reis et al., 2005). Personal characteristics "included the belief in self, determination, motivation, constructive use of time, and the ability to work hard in honors classes, extra-curricular activities, and sports" (p. 117). Another common denominator among successful at-risk students was the involvement of at least one supportive and caring adult in their lives. Peer support and relations also played a part in the success of students (Reis et al.).

Johnson addressed the ideal of inner city resiliency in her study entitled, "Resilient At-Risk Students in the Inner-City." This qualitative approach incorporated the experiences of 37 principals and teachers who were asked to reflect on their personal experiences with students demonstrating resiliency. The educators were asked to describe in writing their interpretations of successful at-risk students (Johnson, 1997). They identified several compensatory factors allowing for the success of certain students. Relationships, student characteristics, family factors, community factors, and school factors all proved to be important; however, the top three factors were relationships, student characteristics, and family dynamics. The most prevalent factor was the involvement of human relationships, such as supportive relationships with school

personnel, positive role models and peer relations, and encouragement and concern from surrounding adults. Secondly, the development of personal student characteristics, such as self-esteem, motivation, and the ability to set goals and accept responsibility, served as skills in facilitating success. Finally, the involvement of a caring parent was crucial to success; this factor included high parental expectations and the presence of discipline, as well as parental concern and involvement in school activities (Johnson).

Gayles (2005) approached the topic of educational resiliency through his study entitled "Playing the Game and Paying the Price: Academic Resilience among Three High-Achieving African American Males." He examined themes of academic resilience using a qualitative, ethnographic approach to data collection. He conducted several interviews with three identified African American males from non-affluent homes, all of whom had attended the least affluent high school in their city. The three boys were the only African American males to graduate with honors from their high school, and the first to graduate with honors and attend college from their individual families. All three boys worked many hours at part-time jobs (Gayles).

The data indicated that these boys thrived due to the presence of *distant and diminished achievement*, and *utilitarian achievement* as a source of resiliency. Distant and diminished achievement was the ability of each of the boys to downplay their academic success; it allowed their school identification to come from other sources, instead of being based on their high academic achievement. This phenomenon stemmed from the belief that success in socially cultivated and high academics does not delineate success in certain cultures, but rather the opposite, successful failure. Often times, students of high ability choose to succeed at being a failure as a result of their culture and

social standards. The three boys in this study chose to diminish their accomplishments in order to survive within the expectations of their environment (Gayles, 2005).

Although these boys downplayed academics, they all understood and were grounded in the utilitarian value of achievement. Life situations for all three boys allowed them to see the prospect of a successful future in the presence of education. They did not believe they were successful despite their situation; they knew they were successful because education was what they needed to provide the lifestyle they anticipated in the future (Gayles, 2005). One boy described achievement as "how bad you want a new life" (p. 257).

One final study on resilience, "Fostering Resilience in High School Classrooms: A Study of the PASS Program," evaluated the implementation of the PASS (Promoting Achievement in School through Sport) Program as a tool to facilitate resiliency. PASS is an elective class that emphasizes the utilization of sport skills in the classroom and the arena of academics. Such skills include sustained concentration and focus; the ability to be physically balanced, as well as academically balanced, with the proper use of time in and out of school; relaxation during physical activity and during mental work such as test taking; the ability to maintain rhythm and flexibility; the establishment of trust; and the development of a patient attitude and perseverance. "An implicit goal of the program is to engage students, teachers, coaches, families, and communities in building protective environments for youth" (McClendon, Nettles, & Wigfield, 2000). This study replicated a 4-year study on PASS from 1991 to 1995. Nine hundred high school students across five school districts participated in the PASS elective class. This experimental study evaluated the students in PASS, as well as a control group of students not participating in

the elective. Forms of measurement included grade point average and classroom observations (McClendon et al.).

Based on the results, the researchers concluded that PASS students were able to stabilize and to improve their grades over the course of a year, whereas students not involved in the program exhibited the tendency to fall behind with their grades. Nevertheless, the gains were not statistically significant, a finding in direct conflict with the previous, 1991-1995 study (McClendon et al., 2000).

The research on resiliency among students revealed common themes. Several studies concurred that one ingredient essential to success is the relationships with a parent, caregiver, or adult who shows concern for the success of the student (Reis et al., 2005; McGill, 1997; McClendon et al., 2000; Crosnoe & Elder, 2004; Condly, 2006). Support and acceptance from peers and friends also increase academic resiliency. Often times, friends, siblings, or teachers provide comfort for students who may be in problematic relations with parental figures (Crosnoe & Elder).

These data are significant to the study at hand, in which I investigated and analyzed data that explained why at-risk students in a given school division exhibit resiliency and excel academically. Additionally, I analyzed factors contributing to the academic demise of at-risk students in the division. The results rendered powerful data to assist educators with plans to intervene on the behalf of at-risk students.

Student-Teacher Relations

The relationship between student and teacher has a powerful influence on the academic outcomes of a student. Plato contended that educational quality is a predictor of future experiences for students (as cited in Parsley & Corcoran, 2003). The foundations for school failure or school success often stem from experiences at the beginning of elementary school (Parsley & Corcoran). Primary school teachers exert a tremendous influence on the academic achievement of their students throughout their experiences in kindergarten through the twelfth grade. Primary teachers significantly impact school adjustment (Parsley & Corcoran).

There is no single factor that dooms a child's educational experience, nor is there one solution for the problem of academic failure (Parsley & Corcoran, 2003). Nevertheless, focus on the classroom teacher is one viable solution for promoting academic success with at-risk students. The development of a positive relationship that includes respect, courtesy, and shared responsibility is essential in convincing students that everyone is important in the classroom (Parsley & Corcoran).

Four actions contribute to a positive student-teacher relationship. First, trust must be established between the teacher and the student. Second, students must know that teachers care and are concerned about each student as an individual. Third, teachers must create a learning environment where students feel comfortable taking risks. Finally, teachers need to create a classroom environment that supports and enables each student to feel that he or she belongs in the classroom (Parsley & Corcoran, 2003). One effective

way of creating a supportive environment is through the daily use of positive reinforcement. When positive relationships are developed and maintained in the classroom, at-risk students find the support they need to sustain and improve achievement (Parsley & Corcoran).

One study addressed the student-teacher relationship by assessing student perceptions of teacher effectiveness. From a pool of participants in an earlier study of early childhood education, 47 African American adults were invited to take part in this study. The participants ranged from high school dropouts to college graduates. Each participant provided his or her life story in a narrative form, with specific information regarding perceptions of teacher effectiveness; data, including interview responses, were analyzed as a part of this study (Peart & Campbell, 1999).

Results have indicated several common traits among teachers considered to be effective. With the establishment of a caring student-teacher relationship, teachers with good interpersonal skills affect the academic success of students. A positive relationship enhances the learning experience as well as the climate of the classroom. Good student-teacher relations have a positive and significant influence on achievement and classroom preparation (Peart & Campbell, 1999; Sanders & Jordan, 2000). Effective teachers must address students' feelings, values, and attitudes as well as their cognitive ability. Students indicated that their perceptions of teachers typically were influenced by the teachers' ability to foster positive relationships with students, including concern for the academic and emotional well being of each individual (Peart & Campbell). Peart and Campbell wrote, "Some students identified such a teacher as the most important person in their lives" (p. 274).

Additionally, a teacher's ability to motivate students proved to be effective in developing positive student perceptions. Students looked to teachers to set an example by demonstrating characteristics of a motivational leader (Peart & Campbell, 1999). Racial impartiality was another pertinent characteristic in teachers' playing a positive role in the life of at-risk students. Many participants in this study indicated that racism on the part of a teacher inhibits students from academic growth (Peart & Campbell).

Analysis of data from the National Educational Longitudinal Study of 1988 also addressed student-teacher relations. This study disclosed a wealth of information with regard to school behaviors, attitudes, and achievement of students (Sanders & Jordan, 2000). Sanders and Jordan explored the extent to which student-teacher relations affected student behaviors, specifically focusing on the students' "educational investments and academic achievement" (p. 65). For the purpose of Sanders and Jordan's study, educational investments referred to the students' positive contributions to school conduct and classroom preparation. Educational investments also referred to the students' "avoidance of maladaptive behaviors" (p. 65). Regression analysis was used to assess the student-teacher relationship as a predictor of investment behaviors and to assess the impact of student investments and teacher relations on academic achievement. The results revealed that the student-teacher relationship does have a significant positive influence on the student's ability to make wise educational investments. This ability directly impacts the academic success of students, including augmented performance on standardized tests (Sanders & Jordan).

Muller (2001) also examined data from the National Longitudinal Study of 1988, with specific attention to the function of caring for at-risk students in student-teacher

relations. There is a potential for development of social capital in student-teacher relationships; teachers and students tend to invest in the relationship if they expect success (Muller). Social capital refers to a social trust between participants. Muller defined social capital in this study as "a relationship that facilitates action" (p. 241). The researcher wrote, "Little is more tragic in American education than a student with hopes taught by a teacher who does not expect success and therefore does not teach curricula necessary for progress" (p. 241).

Attitudes and personality traits of teachers with at-risk populations are associated with student outcomes (Calabrese, Goodvin, & Niles, 2005). Calabrese et al. employed a qualitative approach for their study, using focused interviews as well as a focus group with teachers, administrators, and counselors from various ethnicities. Participants worked in an urban school setting with many at-risk students and a high dropout rate (Calabrese et al.). The results of this study did show a weak relationship between student-teacher relations and achievement on math tests for *most* students; however, there was a correlation between student-teacher relations and achievement for students at risk of dropping out of high school. This finding suggests that social capital was pertinent in the student-teacher relationship for at-risk students. Specifically, effective teachers encouraged students, established meaningful relationships, and showed concern while applauding success in small steps. Nonsupportive teacher attitudes reflected frustration, racism, blame of others, and lack of flexibility (Calabrese et al.).

The instructional environment in the classroom exerts a significant influence on the self-motivation skills developed in students. Customarily, instruction in at-risk classrooms is teacher controlled, with low-level tasks and watered-down curriculum

(Dicintio & Gee, 1999; *Critical Issue*, n. d.) Dicintio and Gee addressed the relationship between instruction and student motivation for students in at-risk situations. The participants in the study were six at-risk students in alternative education programs. The students completed 54 motivational surveys after engagement in a variety of learning activities. A multiple regression analysis was used to assess motivational variables with regard to the students' perception of challenge and student control. The motivational variables were boredom, confusion, competence, and desire to be doing something else (Dicintio & Gee).

Results indicated student motivation is significantly associated with the ability to exhibit control in the learning environment. The researchers wrote, "Students who felt they had control over decisions and choice reported more competence" (Dicintio & Gee, 1999, p. 234). The challenge variable was significant but not related to intrinsic motivation, as expected. Dicintio and Gee presented several implications based upon their research: (a) When challenged, students tend to feel confused and less competent; (b) multidimensional instructional activities as a part of daily instruction are key to the development of self-motivation in students; and (c) teachers need to realize the power they have over student motivation and accept responsibility for providing quality tasks during instruction.

Understanding the impact of the relationship between teacher and student is critical for the purposes of this study. It was assumed that investigation of the factors facilitating success for at-risk students would likely expose the influential role of the teacher on student success. Teacher influence and power with regard to student achievement are critical to the success of at-risk students. As I conducted my study, data

on student-teacher relations provided significant information with regard to factors that promote academic excellence in at-risk students.

Parent or Caregiver Involvement

Parent involvement in education traditionally is manifested through attendance at Parent Teacher Association (PTA) meetings, as well as participation in conferences with counselors, administrators, and teachers. Recent federal initiatives, such as Goals 2000 and NCLB, call for more parental involvement in support of attempts to ensure success for all students during the implementation of accelerated academic standards (Skiba & Strassell, n.d.). Increased parent participation enriches the school experience while enabling students to meet academic standards. Parent involvement also fosters increased satisfaction on the part of the educator and the parent, while facilitating the development of a positive school climate (Skiba & Strassell).

Research has indicated that parental involvement supports growth in student achievement (LaBahn, 1995). Unfortunately, the level of parental involvement tends to decrease as students enter secondary school. Often times, this lessened involvement is due to an increase in nontraditional family situations, in which one parent is working to provide support for the children. In such instances, resources and time are limited; often there are financial restraints, as well (LaBahn). These factors contribute to the obstacles facing at-risk students.

There are contradictions in the research regarding parental involvement. Some investigators have concluded there are some positive effects of parental involvement,

whereas others have surmised a negative association or a neutral role (McNeal, 2001).

McNeal took a theoretical approach to parental involvement, suggesting that the effects

vary across cognitive and behavioral domains. This theory is based upon the concepts of

social and cultural capital as defined by Coleman and Lareau (McNeal). Cultural capital

with regard to the educational process refers to the ability of a parent to network,

understand school terminology and jargon, and feel comfortable communicating with

school employees (Lareau, 1989; McNeal). Lareau contended that cultural capital

enhances school performance and is a predictor of student success. On the other hand,

social capital refers to the involvement of a parent in the school process, including

parent-student discussions about school, involvement in school activities, and forming

relationships with other parents (Coleman, 1987; McNeal). This avenue of involvement

provides opportunities for the parent to exert a direct influence on student behaviors,

which in turn affect academic behaviors (McNeal).

McNeal (2001) proposed that the controversy regarding parental involvement

stems from one of the following: (a) the use of teacher perceptions versus actual factual

reports from parents or students; (b) failure to examine the total makeup of parental

involvement, including parent-child, parent-parent, and parent-school relations; (c) the

lack of a full assessment of the varied effects of parent involvement on achievement by

social class; and (d) parental involvement as an activity that affects only behavioral

outcomes rather than the cognitive domain of achievement (McNeal). Several

dimensions of parental involvement include parent-child discussion (cultural and social

capital), parental involvement in school organizations such as the PTA (social capital),

parental monitoring of student behavior (social), and direct involvement in the educational process (cultural) (McNeal).

McNeal (2001) utilized data from the National Educational Longitudinal Study of 1988 to examine parental involvement. Students included in that study were enrolled in public school and took achievement tests to provide baseline data. Parent data were also available. The researcher used two samples to address behavioral outcomes and the dropout rate. Results indicated that parent-student discussion does positively affect student achievement and reduce problem behavior in students; however, for the most part, parent involvement provides the greatest influence on behavior rather than cognitive outcomes. This finding provides support for the beliefs of social capital theorists, but not as much for the ideas of cultural capital theorists (McNeal).

Parent enabling is another factor influencing the progress of students in school; however, enabling impedes the development of a sense of responsibility for one's own actions. Therefore, children do not learn to be accountable for their own behaviors (Lynch, Hurford, & Cole, 2002). Enablers tend to overprotect their children and shield them from difficult situations. They also tend to intervene before children have the opportunity to make mistakes and, thereby, learn from the experience. One critical concern for school students in this regard is that, most often, the child has not learned there are consequences for inappropriate actions. Additionally, students with enabling parents do not learn independence and self-control (Lynch et al.).

One study utilized surveys with two experiments to assess enabling behaviors in parents as well as the differences between 9th-grade, at-risk students and honors students

and their parents. The Lynch Enabling Survey for Parents (LESP) is a 40-item

questionnaire assessing the enabling behaviors of parents. In the first experiment, in

which 416 parents completed the LESP, a factor analysis was used to study the four

factors in the behavior of parents: direct enabling, indirect nonenabling, direct

nonenabling, and indirect enabling (Lynch, Hurford, & Cole, 2002). The second

experiment utilized the LESP and the Nowicki-Strickland Locus of Control Scale.

Participants included 296 students—140 honors students and 156 at-risk students—and

their parents. Each participant completed a survey. LESP survey responses of parents of

at-risk students indicated a much stronger tendency for enabling behaviors than did the

responses of parents of honors students. Further, there was a significant difference in

locus of control between honors and at-risk students. Finally, there was a significant

correlation between the parents' enabling scores on the LESP and their children's locus

of control (Lynch et al.).

At-risk students suffer in school for a variety of reasons related to behaviors and

academics. The role of parental involvement is another vital element affecting the

development of success for students in at-risk situations. As I sought answers regarding

the factors that influence the success of at-risk students, parental involvement was an

essential ingredient in the evaluation process.

Socioeconomic Status

Our nation expects students from low-SES backgrounds to meet certain criteria

with regard to academic standards. Therefore, there is an enormous need to continue

research on the relationship between SES and academic achievement, particularly with regard to whether or not there is a direct correlation between SES and student performance. Many studies have addressed this specific relationship. One qualitative study entitled "Effect of School Population Socioeconomic Status on Individual Academic Achievement" specifically analyzed the relationship between a student's academic achievement and the SES of the school population. Many studies have addressed the effect of individual SES on academic achievement. This study, however, investigated the extent to which the SES of the peers' population affected the academic achievement of individual students, regardless of the individual student's SES (Caldas & Bankston, 1997).

The study took place in Louisiana high schools; data were collected between 1989 and 1990 (Caldas & Bankston, 1997). The authors conducted an extensive review of literature and developed several hypotheses based upon their findings. The hypotheses were stated as follows:

a. an individual's poverty status, as indicated by participation in the federal free and reduced lunch program, will be negatively related to individual academic achievement; b. an individual's family social status, as indicated by his or her parents' educational and occupational levels, will be positively related to academic achievement;

c. the poverty status of the peer population, as indicated by percentage of schoolmates participating in the federal free and reduced price lunch program, will be negatively related to academic achievement, controlling for the individual's own poverty status; and d. the family social status of the peer

population, as indicated by the mean parental education and occupation levels for

the school, will be positively related to individual academic achievement,

controlling for individual family social status. (p. 271)

Student population data in the form of standardized test results on the Louisiana

Graduation Exit Examination (GEE) was the tool used to track individual achievement.

The GEE has five components addressing math, English, writing, science, and social

studies. The first three areas are tested in the 10th grade, and the latter two are tested in

the 11th grade. Test scores from 42,041 10th and 11th graders on the GEE were used to

compile the data. The completion of the GEE, along with passing marks, is a

requirement for earning a high school diploma in Louisiana. The Louisiana Department

of Education provided the data set for the study (Caldas & Bankston, 1997).

The dependent variable (DV) was the measure of student achievement on the

GEE. Independent variables (IV) included both individual-level and school-level

measures of SES. Several control variables were incorporated in the study. On the

individual level, the researchers controlled for race and the effects of a student's interests

and activities. Students provided a self-report of hours engaged in television, reading,

and homework. Students also reported the number of hours they spent working or

participating in organized activities, such as sports, clubs, dances, or church (Caldas &

Bankston, 1997). Researchers conducted regression analyses in four steps to analyze the

data, thereby allowing them to compare the mean of one variable to a series of other

variables. The step procedure demonstrates the cumulative effect of adding variables

from the school level. The first regression compared academic achievement to all

individual level variables. The second step included the variable of school-level poverty

status. The third level added the school-level family social status, and the final step

included the school-level variable of race (Caldas & Bankston).

Correlational data were analyzed to determine findings. Results of the study

support the following conclusions:

1. Characteristics of school populations have significant influences on

independent academic achievement.

2. Individual family poverty status does have a small, independent negative

effect on academic achievement.

3. Individual family social status, including attending and socializing with

families and students of a higher SES group, has a positive effect on academic

achievement.

4. School attendance with classmates who of a higher SES background does tend

to positively affect individual academic achievement.

5. A student's family SES status significantly affects academic achievement.

6. There is a fairly strong correlation between individual family poverty and

minority status ($r = .529$). (Caldas & Bankston, 1997).

A careful analysis of this study uncovered strengths and weaknesses. The study

highlights the critical need to investigate a means of improving academic achievement for

all students, regardless of background, race, ability level, or socioeconomic status. Many

significant correlations noted in this study support the idea that one's social groups and

financial resources can negatively or positively influence one's academic choices.

Although correlations were high, a few of the findings are not necessarily significant for the purpose of educational research. For example, the highest correlation between school and an individual-level variable was evident with percentage of minority students in the schools. The researchers concluded, "This indicates a strong tendency for students to attend schools with large numbers of peers of the same race" (Caldas & Bankston, 1997, p. 272). This conclusion represents a weak analysis for educational purposes. The statement can be misleading, as the majority of public school systems assign students to schools based upon residence; students do not have the opportunity to choose schools or specific classmates. School zones are often a hot topic with parents at school board meetings because the vast majority of students in public education do not choose their schools; they simply attend the school in their attendance zone. Exceptions occur when students apply to magnet schools, utilize vouchers, or attend charter or private schools.

In the investigation of factors affecting SES, my study makes a strong statement for the need to continue research in this area. Data from this study conclude that SES, as well as other factors, does have a significant impact upon academic achievement, thus reinforcing the need for investigating the relationship between SES and academic achievement.

"The Influence of District Size, School Size, and Socioeconomic Status on Student Achievement in Washington: A Replication Study Using Hierarchical Linear Modeling" also addresses the influence of SES on academic achievement (Abbott, Joireman, & Stroh, 2002). This research is a replication of a study conducted by Bickel and Howley in 2000 and entitled "The Influence of Scale on Student Performance"

(Abbott et al.). The study was conducted through the Washington School Research

Center (WSRC), a research and data analysis center within Seattle Pacific University,

which is funded through a gift from the Bill and Melinda Gates Foundation (Abbott et

al.).

All data for the study were provided by the Office of the Superintendent of Public

Instruction in Washington State. The data consisted of scale scores of 3,903 fourth-grade

students and 3,924 seventh-grade students on the Washington Assessment of Student

Learning (WASL), which was used to assess math and reading for all students. The

original study had utilized results from the Iowa Tests of Basic Skills. The Hierarchical

Linear Modeling allows for researchers to assess cross level interactions between size and

socioeconomic status (Abbott, Joireman, & Stroh, 2002). Researchers were specifically

interested in the outcome of the Washington data in terms of replicating the previous

patterns from the Georgia study, in which the findings indicated that "(1) larger schools

are beneficial within affluent communities, whereas smaller schools are more beneficial

within less affluent districts (we see higher achievement levels); and (2) the 'achievement

cost' associated with less affluent schools is greater in large districts" (Abbott et al., p. 6;

Bickel & Howley, 2000).

Based on the data, researchers concluded that large school districts negatively

affect achievement in fourth and seventh grades. Larger district size tends to strengthen

the negative relationship between poverty and student achievement; nevertheless,

"district affluence did not have a significant impact over the school size/student

achievement relationship" (Abbott et al., 2002, p. 16). The researchers noted further ,"the

tendency for larger schools to be somewhat more beneficial in more affluent districts (and,

equivalently, for smaller schools to be more beneficial in less affluent districts) is shown in the analyses, but was not found to be statistically significant" (Abbott, et al., p. 16).   Most practitioners and policy makers have expressed the belief that school size is a primary influence on academic achievement; however, the study results lean toward size's being a much more complex matter. The researchers indicated that size should "be viewed in the context of other influences in order to determine its contribution to school-level achievement" (Abbott et al., p. 16). They noted further: "The multi-level findings of this study argue against the simplistic conclusion that reducing school and/or district size will automatically improve student achievement, or be more equitable" (p. 16). Although data indicated one conclusion, the examiners believed further research with respect to size was necessary before educational decisions should be founded on these findings (Abbott et al.).

Although the study was relatively recent, current research favors smaller class sizes and schools. "Smaller Learning Communities" are currently established throughout public schools as a means of improving academic achievement and facilitating smooth transitions from middle school to high school. Although this study did indicate a significant correlation between district size and student achievement, there is a need to conduct further research to secure corroborating data before recommending educational decisions that directly impact school-age children.

The study did find that large district size seems to strengthen the negative relationship between poverty and academic achievement. This finding again presents the need for further research; we may see the need for smaller learning communities as a critical element for less affluent school communities.

The study did show relationships between district size, school size, and SES and academic achievement; however, some of the relationships were not statistically significant. Further research should be conducted to determine the extent of the interactions between SES and school size with academic achievement. Also, since this information was collected in Washington State, it is imperative that we extensively research the effect of these variables in a variety of demographic situations. Data collected in the State of Washington may vary significantly from data collected in Virginia or New York City.

"Socioeconomic Status and Academic Achievement: A Meta-Analytic Review of Research" also addressed the relationships between SES and achievement (Sirin, 2005). This meta-analysis reviewed research in journal articles from 1990 until the year 2000. The sample included 101,157 students from 6,871 schools. These students represented 128 school districts. Each study included detailed quantitative data, thereby allowing for a compilation of all studies in reporting statistical results (Sirin).

Siren established certain required criteria for a study to be eligible for the review:

1. The study applied a measure of SES and academic achievement.

2. Statistically detailed quantitative reports of data were used to calculate correlations   between SES and academic achievement.

3. Students in the sample were in kindergarten through the twelfth grade.

4. The study was published in a professional journal between 1990 and 2000.

5. The sample included students from the United States (Sirin, 2005).

For each study, Siren provided informative data in table form that included authors' names, age of sample, ethnicity, school location, SES measure, achievement

measure, number of students or schools, and Pearson's correlation coefficient r (Sirin, 2005). Siren's study was a replica of a previous study conducted in 1982; however, research from the current study incorporated advancements in methodology and specifically used studies that were empirically valid using valuable statistics (Sirin).

Research from this study revealed that SES has a significant impact on academic achievement. This impact is greater when emphasis is placed upon schools versus the individual student. Three factors appear to contribute to the SES-achievement relationship: school level, minority status, and school location (Sirin, 2005). The fact that school location or school level affects academic achievement should not be a surprise to educators and policymakers. Although schools receive funding from the Federal, State and Local governments, most school funding is derived from property taxes within a school district. Most districts with limited funds receive some compensation from the state; however, the funding is not always equitable: "The current school financing policies create a situation where students who come from lower-family-SES background are likely to be in school districts that are at best financially inferior to schools in more wealthy districts, and at worst, in financial crisis" (Sirin, p. 445).

This meta-analytic review of research was current and comprehensive. All studies included were valuable and met specific criteria to ensure validity. The review encompassed more than 74 different samples within 6,871 schools (Sirin, 2005). A strength of the meta-analysis was that the samples represented a wide variety of demographic populations in different types of settings; therefore, results are applicable to most situations. The wide range of resources provided similar data with regard to SES and other contributors. The research continued to show that outside factors, including

SES, do contribute to the academic achievement of students. On the other hand, the meta-analysis represented a large number of studies dating back to 1990. Although the results were reported in 2005, students of 1990 were quite different in actions, responses, and culture from today's students of 2006. The outside influences, including peer pressure, dress, media, and television, changed dramatically over those 16 years. The influences that shape the young mind must be carefully considered when applying the results of this study to the educational situation today.

The findings have provided practical information to assist educational researchers as they continue to assess the relationship between SES and academic achievement. This research certainly provided substantive information to behoove educators to continue the investigation of the influences of SES on achievement; however, the focus can move toward implementing tools of intervention to derail the negative impact of SES on student accomplishment.

One final study, entitled "Effects of Socioeconomic Factors on Public High School Outcomes and Rankings," also addressed the SES factor and how it impacts the ranking of public high schools based upon standardized test scores (Toutkoushian & Curtis, 2005). The authors noted the pressure public schools face for accountability from legislators, parents, community, and other stakeholders. Many states in our nation today tie school funding to the success of schools based upon standardized test scores. One example is Maryland, where schools with most improved test scores receive additional money, while lower-achieving schools face the risk of management from the state. Likewise, Texas gives monetary rewards to high-achieving schools, while schools with less success face the risk of state management. California gives employee bonuses if

they meet certain growth goals, whereas staff members who fail to reach targets may face a transfer to another position (Toutkoushian & Curtis).

Data for this study came from public schools in New Hampshire; data for three academic school years—1998-1999, 1999-2000, and 2000-2001—were gathered from all 73 public high schools in the state. The study focused on five dependent variables: mean math and English scores from standardized testing for 10th-grade students, proportion of graduating seniors attending a 4-year college, average number of graduates enrolling in a postsecondary institution, and the average number of students taking the Scholastic Aptitude Test (SAT) (Toutkoushian & Curtis, 2005). Three independent variables relating to SES included "(a) unemployment rate for the school district, (b) percentage of adults in the district in 1999 with at least a bachelor degree, and (c) percentage of district students who were eligible for free or reduced-price meals in 1999- 2000" (Toutkoushian & Curtis, p. 262).

Data collected from the 73 high schools included detailed information on SES status, as well as high school outcomes and rankings. Five dependent variables served as a basis for the measurement of high school achievement. The first two variables were the mean scores of 10th graders in math and English on a standardized test. The last three dependent variables focused on attendance and postsecondary aspirations, including the average proportion of graduating seniors attending a four year college, the average proportion of seniors enrolling in any postsecondary institution, and the average proportion of students taking the SAT (Toutkoushian & Curtis, 2005).

Three independent variables addressed the SES of the sample population. These

included the percentage of the school population on free or reduced lunch, the

unemployment rate for the school district, and the percentage of adults in the district with

at least a bachelor's degree. Correlational studies, including Pearson's correlation and

descriptive statistics, provided detailed information on the quantitative data

(Toutkoushian & Curtis, 2005).

Careful data analysis and review by the authors indicated that SES did have a

significant impact on the ranking of public high schools based upon standardized test

scores. They wrote, "Results demonstrate that SES factors account for a larger portion of

the variations in school- level outcomes in New Hampshire and that the subsequent

rankings of schools can change dramatically after controlling for these factors

(Toutkoushian & Curtis, 2005, p. 259)." In indicating that SES factors do have a

significant impact on student academic success, the findings supported existing literature.

The three SES factors in the study accounted for approximately half of the variations

regarding school and student performance on standardized tests, as well as the students'

decisions to pursue college careers (Toutkoushian & Curtis).

This recent study is commendable; it contributed valuable points with regard to

standardized criteria for determining school success. The authors recognized the pressure

states face to improve underachieving schools as required by No Child Left Behind

legislation. The authors stated, "Policymakers need to recognize that it will be more

difficult, although not impossible, for public schools located in relatively low-SES

districts to achieve the same level of academic performance as schools located in higher

SES districts" (Toutkoushian & Curtis, 2005, p. 269). They also pointed out other factors

beyond the control of a school or district, such as students with English as a second

language; the language barrier contributes to a significant gap in achievement. The findings of this study highlighted the importance of SES factors, as well as inequity among school districts for meeting accreditation and AYP criteria.

The study's results point to three socioeconomic factors as accounting for over half of the variations in student performance on standardized tests; this finding should scream to educational policymakers and researchers. This study is statistically significant research that reinforces the critical need for intervention with students from low-SES backgrounds.

Careful review of these studies has indicated that the impact of SES on student achievement and school progress is significant. Poverty-stricken districts are plagued with a lack of resources and support systems for individual students. This literature review has revealed the following findings:

1. SES backgrounds influence student achievement.

2. SES status is a strong predictor of college choice, or the lack thereof.

3. Large school districts are detrimental to students with low SES; they strengthen the negative relationship between poverty and student achievement.

4. SES dramatically affects public high school outcomes and rankings based upon standardized criteria.

Although data have uncovered major areas of concern with regard to SES and other variables, more research is crucial to the isolation of the specific variables and the ability to control for those variables. This ability enables the researcher to determine the

direct impact of SES without the influence of other influences such as race or gender.

One common thread among these studies was the focus of research on high school populations. If SES is such a critical influence on academic achievement, it seems that policymakers should strive to provide strategic intervention at an earlier age. It seems likely that elementary and middle school students could benefit from early intervention.

Motivation

Infants are born with the innate desire to explore and act on curiosity (Lumsden, 1994); babies and young children have the need to explore and understand their environment. Unfortunately, as children grow they adapt to the influences and beliefs of their surrounding environments at home, school and in society. These environments shape students' beliefs about their ability to learn (*Student Motivation*, 2005; Lumsden). Most often, students lose their passion and drive for learning (Lumsden).

The term student motivation refers to a desire to engage in the learning process. Students are motivated in two ways: extrinsically and intrinsically. Intrinsic motivation comes from the desire to learn within each individual. This motivation may be due to the pure enjoyment of the process or the desire for learning and a sense of accomplishment. External motivation comes from rewards or the desire to avoid a negative consequence (Lumsden, 1994).

Initial attitudes toward learning are instilled in children in their home environment. Parents who nurture their children's curiosity about the world, welcome the many questions, and encourage exploration give their children the message that learning is a significant and important process: "When children are raised in a home that

nurtures a sense of self-worth, competence, autonomy, and self-efficacy, they will be

more apt to accept the risks inherent in learning" (Lumsden, 1994, p. 1). Children who

do not view themselves as confident are less likely to feel free to take chances and engage

in academic challenges for the fear of failure (Lumsden). As children start school they

begin to develop their own belief systems about success and failure. Teachers also have a

powerful influence on the success of students through the expectations they set for

student success. Each student comes to the classroom with his or her own motivational

histories; however, teachers have the ability to foster a warm classroom culture that

encourages students to take risks in a safe and rewarding environment (Lumsden).

Struggling learners tend to become unmotivated in school. These students often

resist academics because of a developed belief system that they do not have the ability to

succeed even if they put forth much effort. These students have low feelings of self-

efficacy or belief in self (Margolis & McCabe, 2004). Self-efficacy influences

motivation. Enthusiastic teachers create classes that promote an emotionally safe and

secure environment, which, in turn, promotes self-efficacy. This type of environment

includes an emphasis on motivational principles that encourage learning and achievement

(Margolis & McCabe).

Peer Influence

Making decisions is difficult for children and teenagers to accomplish alone. The

task becomes more difficult when other people, specifically peers, try to get involved in

other's choices (Took, 2004). Peer pressure is the one commonality all teens face, no

matter how popular they are in school (Hardcastle, 2006). Peer pressure comes in many forms, including pressures to engage in sex or drugs, conform to a group or gang, dress a certain way, or alienate a certain individual in school. Certain personality traits place students at a higher risk for surrendering to peer pressure: low self-esteem, lack of confidence, tendency toward eating disorders, feelings of isolation, depression, forging bonds with bullies, poor academic performance or ability, and lack of close friendships (Hardcastle).

Teens also feel pressure to perform well academically; this type of "elitist" peer pressure forms within groups of academically accelerated students. The students feel pressure from parents, teachers, and peers to always perform with academic excellence (Taylor, Pogrebin, & Dodge, 2002). Taylor, Pogrebin, and Dodge (2002) found in their study of advanced-placement students that the stress compelled them to engage in deceitful behaviors, such as cheating, to remain competitive in scholastic programs.

The pressure to drop out of school is also prevalent among high school students. Success in school is ultimately the best option, as it provides for greater career choice and higher earning potential following high school (Ellenbogen & Chamberland, 1997). One study addressing peer relations among dropouts surveyed 191 at-risk and non-at-risk students from a middle class area at the beginning and the end of the school year. Results indicated that at-risk students associate more often with dropout friends and friends that work full time. At-risk students also tended to have fewer school friends and fewer same-sex friendships (Ellenbogen & Chamberland).

Students naturally want to be liked and to fit in with classmates. This desire represents a burden that often inhibits success in school. Pressure can come in positive as well as negative ways (Took, 2004). Students often admire friends who help them with academics or give good advice on the athletic field. This phenomenon has crucial implications for my study, as at-risk achievement is assessed, with specific focus on determining factors that foster the development of success.

CHAPTER 3: METHODOLOGY

This chapter presents the research design for the study. The chapter includes

sections that address the following topics: methodology, research questions, population

and sample, content validation for survey instrument, instrumentation and data collection

procedures, variables, data analysis, and limitations. A quantitative method supported by

a student survey was used to collect appropriate data for this study.

The purpose of this study was to determine whether or not there is a relationship

between specific independent variables and the academic achievement of at-risk students

as determined by student grade point average (GPA). The independent variables are

teacher-student relationships, parent or caregiver-student relationships, motivation, SES,

and peer influence. These factors were identified in chapter 2 as key factors that predict

student success.

Research Questions and Design

The quantitative approach is a nonexperimental design. Descriptive data were

collected and relationships among variables were explored.

The research questions for this study are the following:

1. Do teacher-student relationships predict GPA?

2. Do parent or caregiver-student relationships predict GPA?

3. Does motivation predict GPA?

4. Does SES predict GPA?

5. Does peer influence predict GPA?

The data produced as a result of these questions will provide valuable

information for public schools as they continue to develop initiatives to promote

academic excellence among all students, with specific focus on at-risk learners.

Knowledge of factors that directly impact the achievement of at-risk learners will allow

educators to initiate more effective programs for these students.

Population and Sample

The population for this study consisted of 12th-grade high school students in the

Hokie School District in an urban school setting in Southeastern Virginia; all (639)

seniors from two high schools in the district were given the opportunity to participate in a

survey addressing variables contributing to, or limiting, the academic success of at-risk

students. The response rate of the population was noted as data were collected.

Preslugged identification labels, provided by the school district, provided the

demographic information for each student, including gender, race, age, class rank, and

current GPA. SES was self-reported on the survey by each individual as indicated by

participation in the free or reduced lunch program. Students also self-reported whether

their parents owned or rented their home, and whether or not they lived in a single-parent

household. All collected surveys were separated into two groups: at-risk students or non-

at-risk students. The identification of at-risk students was based upon race, single-parent

status, and self-reported free or reduced lunch status. Surveys returned from students

determined not to be at-risk were not included in the analysis.

Content Validation for Survey Instrument

The survey was validated with a group of educators, including current principals and members of a Virginia Tech Ph.D. cohort. The validation instrument (Appendix A) was used with permission from Dale Margheim, who first implemented the survey validation instrument in 2001 during the development of his research study (Margheim, 2001). Each question was evaluated and rated for clarity and association with the given domain. Questions chosen for use reflected an 80% agreement with the desired domain. Questions not receiving an 80% response rate were eliminated or revised, and the validation process was repeated with those questions.

Instrumentation and Data Collection Procedures

A survey was created for this study. After identification of the population and collection of permission from parents and guardians, the surveys were distributed in two high schools in the Hokie School District. Students received permission slips through their English classes; the permission slips were returned to the main office of each school. Students with returned permission slips completed the surveys in their English classes at one school. At the other school, students were called out of class to complete the survey in a group setting in the school theater. Students absent on the day of the group survey were called to the main office the following week. The survey contained questions related to five domains: teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence. A four-point Likert scale was

used for data analysis. The points on the scale were the following: 4 = *SA* (*Strongly*

Agree), 3 = *A* (*Agree*), 2 = *D* (*Disagree*), and 1 = *SD* (*Strongly Disagree*). Following

collection of the surveys, the data were entered into the Statistical Package for the Social

Sciences (SPSS).

Variables

The dependent variable was GPA. Independent composite variables—peer

influence, socioeconomic status, parent or caregiver influence, teacher-student relations,

and motivation—were also included in survey questions.

Data Analysis

Descriptive statistics were used to analyze the means of all variables.

Correlational research analyzes the relationship between two variables. Although a direct

relationship may exist between variables, the relationship does not necessarily predict

cause (Glatthorn & Joyner, 2005). The Pearson product-moment statistic, *r*, was used to

analyze correlations among the relationships of the variables. The variables GPA,

teacher-student relationships, parent or caregiver-student relationships, motivation, SES,

and peer influence. Multiple regression analysis was used to determine whether or not

the composite independent variables—teacher-student relationships, parent or caregiver-

student relationships, motivation, SES, or peer influence—predicted GPA.   All data are

discussed in narrative form and detailed in charts for each research question.

Limitations

Small sample size and the use of data from only one school district were limitations of this study. In addition, most of the information was self-reported through student responses on a survey. Students also self-reported participation in the free or reduced lunch program, which served as one indicator for a student's being at risk.

Conclusion

This research study was designed to determine the relationship between academic achievement, as signified by GPA, and several independent variables—student-teacher relations, parent-student relations, SES, motivation, and peer influence—in two high schools in the Hokie School District. All data were retrieved either from the school system's data base or from 12th-grade students through their survey responses.

CHAPTER 4: RESULTS

This chapter reports the results of the study, with a complete overview of demographic information and data retrieved through the student survey. All data were entered into the Statistical Package for the Social Sciences (SPSS). The statistical analysis included examination of all demographic information, as well as a written summary of the data gathered for each research question, including presentation of the data in tabular form.

Purpose

The purpose of this study was to examine the relationship between academic achievement and at-risk students, and, specifically, to evaluate factors that facilitate success for at-risk students. The following question guided the research: What factors influence the academic achievement of at-risk students? The research questions were:

1. Do teacher-student relationships predict GPA?

2. Do parent or caregiver-student relationships predict GPA?

3. Does motivation predict GPA?

4. Does SES predict GPA?

5. Does peer influence predict GPA?

The dependent variable of GPA was used. Finally, the five domains of student-teacher relations, parent or caregiver-student relations, motivation, SES, and peer influence were

dependent variables; a regression analysis was completed for each domain.

Correlations were also analyzed regarding the effects of teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence on academic achievement as manifested through GPA. Data from 11th Grade Reading SOL scores were available; therefore, this variable was incorporated into the data for future analysis.

<div align="center">Survey Validation and Implementation</div>

Survey questions were validated with a group of educators and members of a Virginia Tech Ph.D. cohort. The validation instrument (Appendix A) was used with permission from Dale Margheim, who first implemented the survey validation instrument in 2001 during the development of his research study (Margheim, 2001). Each question was evaluated for clarity and association with the given domain. Questions chosen for use reflected an 80% agreement with the desired domain. Questions not receiving an 80% response rate were eliminated or revised, and the validation process was repeated with those questions until an 80% level of agreement was reached.

The first validation process included 43 questions; 35 questions were validated with an 80% or higher rate of agreement. Questions 16 and 23 were identical, so number 23 was eliminated (Appendix B). Eight questions were revised based upon feedback from participants in the first validation process and prospectus committee members. One additional question, "I work hard to make good grades," was added during the second validation, resulting in a total of nine questions. As a result of the second round of validation (Appendix C), eight questions were validated at 80% or higher, and one

question, with a domain validation of 71%, was dropped. This process resulted in a total

of 42 questions for the survey.

Permission for Study

Permission to conduct the study was granted by the Hokie School District on

September 6, 2006 (Appendix D). Virginia Tech granted permission for the study

through the Institutional Review Board (IRB) on February 7, 2007. This IRB approval

remains in effect through February 8, 2008 (Appendix E).

Population Data

Six hundred and thirty nine students were invited to participate in the study; 287

students completed the survey. Of the 287 returned surveys, 242 surveys were eligible

for consideration in assessing the academic progress of at-risk students. Forty-three

student responses were determined to be from non-at-risk students, and two were from

students without an accessible cumulative GPA; therefore, those 45 surveys were

eliminated. At-risk status, for the purpose of this study, was determined by one or more

of the following: minority status, participation in the free or reduced lunch program, or

living in a single-parent home. To be considered at risk, a student was required to meet

at least one of these criteria. The minority demographic was provided by the school

division; however, free or reduced-price lunch status and living in a single-parent home

were self-reported on the student surveys. This sample size was considered to be

adequate based upon Krajcie and Morgan's (1970) table for determining sample size for a

given population. To achieve adequate representation of a population of 650, 234

responses must be collected (Krajcie, 1970). Table 1 outlines the demographic data that

determined at-risk status for participants. Many students had two or more risk factors

identifying them as at-risk. Eighty-three students had one risk factor; 85 students had

two risk factors; and 74 students had three risk factors. Table 2 outlines this information.

Table 1. *At-risk Demographics*

Single-parent Home	Free or Reduced-price Lunch	Minority Status
Yes 125	Yes 139	Yes 203
No 117	No 103	No 39

Table 2. *At-risk Demographics – Number of risk factors*

1 indicator of at-risk status	2 indicators of at-risk status	3 indicators of at-risk status
83	85	74

Data Collection and Coding Procedures

All data were entered into SPSS for analysis. The data included race, gender,

11th-Grade English SOL scores, and GPA, as provided by the Hokie School District, as

well as the information collected through student surveys. The survey included three

questions with *yes* or *no* responses that identified (a) participation in the free or reduced

lunch program, (b) whether a student lived in a single-parent or two-parent home, and (c)

whether the student lived with someone other than a biological parent. One question

addressed whether the parent owned or rented a home. Questions addressing home

ownership or living with a biological parent were not used for the purposes of this study, but will serve as data for further analysis. Forty-two questions on the survey addressed five domains: teacher-student relationships, parent-student relationships, motivation, SES, and peer influence. The 42 questions included the following response options: 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree* (Appendix F). Question 42 was omitted from data analysis, as it did not address the targeted issues for the parent-student domain; the remaining 41 questions were utilized for data analysis. Table 3 presents a summary of the coding and value names used in the SPSS data file.

Table 3. *Coding of Variables for Entry into Statistical Package for the Social Sciences (SPSS)*

Variable Name	Label	Value Name	Code
Sex	Gender	Female	1
		Male	2
Race	Race	Alaskan/American	1
		Indian	2
		Asian	3
		Black	4
		Hispanic	5
		White	
GPA	Grade Point Average	Numeric	n/a
Eng	11th Grade English SOL Score	Numeric	n/a
SES	Free or Reduced Lunch	Yes	1
		No	2
Home	Own or Rent	Don't Know	1
		Rent	2
		Own	3
Single Parent	Single Parent Home	Yes	1
		No	2

Composite and Recoded Variables

Five composite variables were created for the purpose of data analysis. The 41
questions addressed five research domains: teacher-student relationships, parent-student
relationships, motivation, SES, and peer influence. The five composite variables
combined questions addressing each specific domain. Table 4 depicts the composite
variables.

The survey was created with the majority of the questions stated in a positive
manner, where Strongly Agree and Agree reflected a positive answer; however Questions
5, 12, 13, 21, 25, 26, 29, and 38 were each recoded to reflect a positive response.

Table 4. *Composite Variables*

Domain	Composite Variable	Questions
Teacher-Student Relationships	TeacherStudRelations	3, 7, 10, 15, 18, 27, 36, & 41
Parent-Student Relationships	ParentStudentRelations	2, 6, 12, 16, 20, 33, & 34
Motivation	Motivation	8, 9, 19, 23, 26, 30, 31, 35, 37, & 40
SES	Socioeconomics	1, 11, 14, 17, 24, 29, & 39
Peer Influence	Peers	4, 5, 13, 21, 22, 25, 28, 32, & 38

Findings

Research Question 1

Do teacher-student relationships predict GPA?

The composite variable for teacher-student relationships included eight survey questions addressing such relationships. There were no recoded questions for this composite variable. Five questions elicited responses from all 242 survey participants; however, Questions 27, 36, and 41 received 238 responses. Appendix G illustrates each question and the frequency distribution for each answer (1 = *strongly disagree (SD)*, 2 = *disagree (D)*, 3 = *agree (A)*, or 4 = *strongly agree (SA)*).

The teacher-student relations composite elicited a majority of positive responses, with seven of the eight questions reflecting 70% or higher. The lowest response reflected 67% for the statement, "I receive feedback from my teachers regarding my progress in school."

A simple linear regression was calculated to assess teacher-student relationships as the independent variable with the ability to predict the dependent variable, GPA. The research hypothesis was stated as follows: Teacher-student relationships will have a significant impact on predicting GPA. The null hypothesis was stated as follows: There is no relationship between teacher-student relationships and GPA. The data showed a correlation with $r = .129$, thereby indicating a weak correlation or no relationship at all. The mean for the composite was 23.59 with a standard deviation of 4.22. The mean was calculated by multiplying the number of questions by the assigned value on the rating scale. The total range of scores for this composite variable was 8 – 32. The r^2 value was

.017, thereby accounting for 1.7% of the variance in GPA as a result of teacher-student relationships. The significance level of .047 was statistically significant; therefore, the null hypothesis was rejected. However, the 1.7% variance in GPA due to teacher-student relationships was minimal and not meaningful in the area of educational research. Table 5 illustrates the data analysis from this linear regression. The table includes the composite mean, Standard Deviation, the R value, the R^2 value, and the significance level.

The mean composite was also analyzed in GPA groups. Table 6 illustrates the distribution of the mean across GPA. The mean across GPA groups showed little variance.

Table 5. *Teacher-Student Relationships Linear Regression*

Teacher-Student Relations	Composite Mean	Standard Deviation	R	R^2	Significance
	23.59	4.22	.129	.017	.047

Table 6. *Teacher-Student Relationships Mean distribution across GPA*

Teacher-Student Relations	Mean > 3.5	Mean > 2.5 & ≤ 3.5	*Mean > 1.5 & ≤ 2.5*	*Mean ≤ 1.5*
	24.38	24.02	22.96	22.91

Data regarding teacher-student relationships were also studied by selecting cases in the data set. Frequencies were calculated for each question in the teacher-student domain with the total population separated by GPA. The cases were selected by GPA according to the following categories: GPA > 3.5, GPA > 2.5 & GPA ≤ 3.5, GPA > 1.5

& GPA $\leq$ 2.5, and GPA $\leq$ 1.5. There were 29 cases with a GPA greater than 3.5; 105

cases with a GPA greater than 2.5 and less than or equal to 3.5; 96 cases with a GPA

greater than 1.5 and less than or equal to 2.5; and 12 cases less than or equal to 1.5.

The majority of the responses in the teacher-student domain were positive. For

the most part, there was a trend of positive percentages declining with GPA; however,

this trend was not evident for every question. The highest scores are associated with the

question, "My teachers care about me." Every group reflected a percentage over 77%,

with the lowest GPA ($\leq$ 1.5) group's having the highest response of 83.3%. The highest

GPA group (> 3.5) had a positive response of 83.1%. Lower responses were reflected in

the following questions: "My teachers make class enjoyable" and "I receive feedback

from my teachers regarding my progress in school." This finding was consistent with the

low responses for the entire group.

Research Question 2

Do parent or caregiver-student relationships predict GPA?

The composite variable for parent or caregiver-student relationships included

seven survey questions addressing such relationships. Question 12 was recoded for this

composite variable. Five questions received responses from all 242 survey participants;

however, Questions 33 and 34 had only 238 responses. Appendix H illustrates each

question and the frequency distribution for each answer: 1 = *strongly disagree* (*SD*), 2 =

disagree (*D*), 3 = *agree* (*A*), and 4 = *strongly agree* (*SA*). The appendix also displays the

percentage of positive and negative responses for each question.

A simple linear regression was calculated to assess parent-student relationships as

the independent variable with the ability to predict the dependent variable, GPA. The

research hypothesis was stated as follows: Parent-student relationships will have a significant impact on predicting GPA. The null hypothesis was stated as follows: There is no relationship between teacher-student relationships and GPA. A total of seven questions in this domain created a range of 4 to 28. The mean score was 18.55 with a standard deviation of 3.35. The mean was calculated by multiplying the number of questions by the assigned value on the rating scale. The total range of scores for this composite was 5 – 20. The two variables reflected a correlation of $R = .203$, thereby indicating a weak relationship. The r^2 value was .041, which accounted for 4.1% of the variance in GPA as a result of parent-student relationships. The significance level of .002 was statistically significant; therefore, the null hypothesis was rejected. Although the significance was < .05, the r^2 value of .041 accounts for a minimal effect on GPA; such a finding does not reflect a great deal of educational value. Table 7 illustrates the data analysis from this linear regression, including the composite mean for the teacher-student relationships domain, the standard deviation, the R value, the R^2 value, and the significance level.

The mean composite was also analyzed in GPA groups. Table 8 illustrates the distribution of the mean across GPA. The mean did rise with GPA, however the change or variance was minimal.

Table 7. *Parent-Student Relationships Linear Regression*

Parent-Student Relations	Composite Mean	Standard Deviation	R	R^2	Significance
	18.85	3.35	.203	.041	.002

Table 8. *Parent or Caregiver-Student Relationships Mean distribution across GPA*

Parent or Caregiver-Student Relations	Mean > 3.5	Mean > 2.5 & ≤ 3.5	Mean > 1.5 & ≤ 2.5	Mean ≤ 1.5
	20.52	18.86	18.54	17.09

Data regarding parent-student relationships were also studied by selecting cases in the data set. Frequencies were calculated for each question in the parent-student domain with the total population separated by GPA. The cases were selected by GPA according to the following categories: GPA > 3.5, GPA > 2.5 & GPA ≤ 3.5, GPA > 1.5 & GPA ≤ 2.5, and GPA ≤ 1.5. There were 29 cases with a GPA greater than 3.5; 105 cases with a GPA greater than 2.5 and less than or equal to 3.5; 96 cases with a GPA greater than 1.5 and less than or equal to 2.5; and 12 cases less than or equal to 1.5.

Reviewing the data by GPA revealed that response trends closely reflected the response of the total group: The student responses exemplified a true at-risk group, with the majority of the students' living with only one biological parent and most families having one parent working two jobs. Most parents were not involved in the PTSA and did not attend school activities. The highest response was reflected in the question, "My parents/caregivers want me to attend college." The groups with a GPA of 1.5 or higher all reflected responses over 95%. The group categorized with a GPA of less than 1.5 had a response of 83%.

Research Question 3

Does motivation predict GPA?

The composite variable for motivation included 10 survey questions addressing motivation. Question 26 was recoded for this composite variable. Four questions elicited responses from all 242 survey participants; however, Questions 26, 30, 31, 35, and 37 each received 238 responses. Appendix I illustrates each question and the frequency distribution for each answer: 1 = *strongly disagree* (*SD*), 2 = *disagree* (*D*), 3 = *agree* (*A*), and 4 = *strongly agree* (*SA*). The appendix also displays the percentage of positive and negative responses for each question.

There was a wide range of positive and negative responses for this composite variable, ranging from 29.4% to 97.3%. Over 90% of the responses indicated that students worked hard in school and wanted to go to college. The lowest positive score was 29.4% for students' wanting to attend a vocational school; however, that was not necessarily a negative response since students did show an interest in college or vocational school as a postsecondary experience. Almost 47% admitted to being tardy to class, and 59.6% stated they had participated in AP or Honors classes.

A simple linear regression was calculated to assess motivation as the independent variable with the ability to predict the dependent variable of GPA. The research hypothesis was stated as follows: Student motivation will have a significant impact on predicting GPA. The null hypothesis was stated as follows: There is no relationship between motivation and GPA. The 10 questions allowed for a range of scores from 10 to 40. The mean score was 29.28 with a standard deviation of 4.2. The mean was

calculated by multiplying the number of questions by the assigned value on the rating

scale. The *r* value was .401 which indicated a moderate relationship between the two

variables. The r^2 value was .161, which accounted for 16.1% of the variance in GPA as a

result of motivation. The significance level of .002 was statistically significant;

therefore, the null hypothesis was rejected. Although the significance level was < .05, the

16.1% accounts for a small amount of variance in GPA due to motivation. Nevertheless,

the motivation domain served as the strongest predictor of the five domains in this study.

Table 9 illustrates the results of this linear regression.

The mean composite was also analyzed in GPA groups. Table 10 illustrates the

distribution of the mean across GPA. The highest GPA group had a mean significantly

higher than other groups.

Table 9. *Motivation Linear Regression*

Motivation	Composite Mean	Standard Deviation	*R*	R^2	Significance
	29.28	4.2	.401	.161	.000

Table 10. *Motivation Mean distribution across GPA*

Motivation	Mean > 3.5	Mean > 2.5 & ≤ 3.5	*Mean > 1.5 & ≤ 2.5*	*Mean ≤ 1.5*
	32.86	29.83	27.74	27.82

Data regarding motivation were also studied by selecting cases in the data set.

Frequencies were calculated for each question in the motivation domain with the total

population, separated by GPA. The cases were selected by GPA according to the

following categories: GPA > 3.5, GPA > 2.5 & GPA ≤ 3.5, GPA > 1.5 & GPA ≤ 2.5, and

GPA ≤ 1.5. There were 29 cases with a GPA greater than 3.5; 105 cases with a GPA

greater than 2.5 and less than or equal to 3.5; 96 cases with a GPA greater than 1.5 and

less than or equal to 2.5; and 12 cases less than or equal to 1.5.

The majority of the students across each GPA group believed they challenged

themselves, were self-motivated, and worked hard in school. In one subgroup, students

with a GPA < 1.5, a slight majority (58.4%) did not feel they challenged themselves in

school. Most students admitted having been tardy to class. Also, each selected group

reflected a high response rate for the item, "I want to attend college," with 81.8% of the

students with a GPA < 1.5 wanting to attend college.

Positive responses to the item, "I am involved in a sport or activity," declined

significantly with GPA. Of those students earning a GPA over 3.5, 82.8% indicated they

were involved in an activity or sport. The response rate for the next subgroup (GPA >

2.5 and ≤ 3.5) dropped to 49%. In the lowest GPA group (≤ 1.5), only 27.3% indicated

involvement in a sport or activity.

Research Question 4

Does SES predict GPA?

The composite variable for SES included seven survey questions addressing

socioeconomic status; Question 29 was recoded for this composite variable. Five

questions received responses from all 242 survey participants; however, Questions 33 and

34 received only 238 responses. Appendix J illustrates each question and the frequency

distribution for each answer: 1 = *strongly disagree* (*SD*), 2 = *disagree* (*D*), 3 = *agree* (*A*),

and 4 = *strongly agree* (*SA*). The appendix also displays the percentage of positive and

negative responses for each question.

The two questions receiving a positive score of more than 70% addressed access

to a computer and the Internet at home. The remaining questions ranged from 27.3% to

64.9%. Almost 50% of the survey participants held a part-time job to support household

needs. Less than 50% indicated a father with a college degree, and less than 30% a

mother with a college degree.

A simple linear regression was calculated to assess motivation as the independent

variable with the ability to predict the dependent variable of GPA. The research

hypothesis was stated as follows: SES will have a significant impact on predicting GPA.

The null hypothesis was stated as follows: There is no relationship between SES and

GPA. The possible range of scores was 7 to 28. The mean score was 18.42, with a

standard deviation of 3.98. The mean was calculated by multiplying the number of

questions by the assigned value on the rating scale. The two variables reflected a

correlation of $R = .200$, thereby indicating a weak relationship between the two variables.

The r^2 value was .040, which accounted for 4% of the variance in GPA as a result of SES.

The significance level of .002 was statistically significant; therefore, the null hypothesis

was rejected. Although the results validate a statistically significant variance of 4% for

SES as a predictor of GPA, the finding is of minimal importance for educational

purposes. Table 11 illustrates the statistical analysis of the linear regression.

The mean composite was also analyzed in GPA groups. Table 12 illustrates the

distribution of the mean across GPA. There was minimal variance in GPA across groups.

Table 11. *SES Linear Regression*

SES	Composite Mean	Standard Deviation	R	R^2	Significance
	18.42	3.98	.200	.040	.002

Table 12. *SES Mean distribution across GPA*

SES	Mean > 3.5	Mean > 2.5 & ≤ 3.5	*Mean > 1.5 & ≤ 2.5*	*Mean ≤ 1.5*
	20.66	18.18	18.09	17.64

Data regarding SES were also studied by selecting cases in the data set. Frequencies were calculated for each question in the SES domain with the total population separated by GPA. The cases were selected by GPA according to the following categories: GPA > 3.5, GPA > 2.5 & GPA ≤ 3.5, GPA > 1.5 & GPA ≤ 2.5, and GPA ≤ 1.5. There were 29 cases with a GPA greater than 3.5; 105 cases with a GPA greater than 2.5 and less than or equal to 3.5; 96 cases with a GPA greater than 1.5 and less than or equal to 2.5; and 12 cases with a GPA less than or equal to 1.5.

The majority of the responses closely reflected the responses of the total group; however, there is a big drop in the percentage of parents' holding a college degree between the highest GPA category of < 3.5 and the next GPA category of > 2.5 and ≤ 3.5. The response percentage for the item "My father has a college degree" dropped from 41.3% to 25.7%; for the item "My mother has a college degree," the percentage dropped from 55.1% to 38.1%.

Research Question 5

Does peer influence predict GPA?

The composite variable for peer influence included nine survey questions. Questions 5, 13, 21, 25, and 38 were recoded for this composite variable. Six questions generated responses from all 242 survey participants; however, Questions 28, 32, and 38 received only 238 responses. Appendix K illustrates each question and the frequency distribution for each answer: 1 = *strongly disagree (SD)*, 2 = *disagree (D)*, 3 = *agree (A)*, and 4 = *strongly agree (SA)*. The appendix also displays the percentage of positive and negative responses for each question.

The highest response indicated that virtually all (97.9%) believed it was okay with their peers for them to do well in school. The lowest response was reflected in the question "I have friends who participate in gang activities," with only 27.7% agreeing to that statement. Association with friends who skipped school was noted by 41.4% and with friends who had dropped out by 55%. Nearly three fourths (71%) said they had friends who were tardy to class.

A simple linear regression was calculated to assess peer influence as the independent variable with the ability to predict the dependent variable of GPA.   The research hypothesis was stated as follows: Peer influence will have a significant impact on predicting GPA. The null hypothesis was stated as follows: There is no relationship between peer influence and GPA. The mean score on this composite was 26.07 with a standard deviation of 3.74. The mean was calculated by multiplying the number of questions by the assigned value on the rating scale. Nine questions allowed for a range of 9 to 36. The $r = .354$, thereby indicating a moderate relationship between the two

variables. The r^2 value was .126, which accounts for 12.6% of the variance in GPA as a result of peer influence. The significance level of .003 was statistically significant; therefore, the null hypothesis was rejected. Although the results validate a significant variance, a 12.6% impact of peer influence on GPA is not significant. Table 9 illustrates the statistical analysis of the linear regression.

The mean composite was also analyzed in GPA groups. Table 14 illustrates the distribution of the mean across GPA. As GPA goes up, the significance of peer influence increases as seen in the

Table 13. *Peer Influence Linear Regression*

Peer Influence	Composite Mean	Standard Deviation	R	R^2	Significance
	26.07	3.74	.354	.126	.000

Table 14. *Peer Influence distribution across GPA*

	Mean > 3.5	Mean > 2.5 & ≤ 3.5	*Mean > 1.5 & ≤ 2.5*	*Mean ≤ 1.5*
Peer Influence				
	28.83	26.54	25	17.64

Data regarding peer influence were also studied by selecting cases in the data set. Frequencies were run for each question in the peer influence domain with the total population, and separated by GPA. The cases were selected by GPA according to the following categories: GPA > 3.5, GPA > 2.5 & GPA ≤ 3.5, GPA > 1.5 & GPA ≤ 2.5, and GPA ≤ 1.5. There were 29 cases with a GPA greater than 3.5; 105 cases with a GPA greater than 2.5 and less than or equal to 3.5; 96 cases with a GPA greater than 1.5 and

less than or equal to 2.5; and 12 cases less than or equal to 1.5.

As with the motivation domain, data regarding participation of friends in sports or activities declined in percentage points by GPA. Nearly all (96.6%) of students with a GPA > 3.5 reported that their friends were involved in sports or activities. Less than two thirds (63.7%) of students with a GPA ≤ 1.5 reported that their friends were involved in sports or activities.

Summary

All five research questions rendered the decision to reject the null hypothesis, as the results were statistically significant; however, the amount of variance accounted for in each case did not represent an amount that is meaningful in education. The strongest domain was motivation, followed by peer influence. Table 15 summarizes the composite correlations, and Table 16 summarizes the results related to each research question.

Table 15. *Composite Correlations*

	GPA	Motivation	Teacher-Student	Parent-Student	Peer Influence	SES
GPA	1	.401**	.129*	.203**	.354**	.200**
Motivation	.401**	1	.322**	.293**	.361**	.116
Teacher-Student	.129*	.322**	1	.266**	.136*	.108
Parent-Student	.203**	.293**	.266**	1	.159*	.404
Peer Influence	.354**	.361**	.136*	.159	1	.086
SES	.200**	.116	.108	.404**	.086	1

*Correlation is significant at the .01 level.   **Correlation is significant at the .05 level.

Table 16. Summary of Research Question Data

Question	R^2	F	df numerator	df denominator	p	r	H_o
1. Do teacher-student relationships predict GPA?	.017	3.995	1	236	.047	.129	Reject
2. Do parent or caregiver relationships predict GPA?	.041	10/104	1	236	.002	.203	Reject
3. Does motivation predict GPA?	.161	44.29	1	236	.001	.401	Reject
4. Does SES predict GPA?	.040	9.884	1	236	.002	.200	Reject
5. Does peer influence predict GPA?	.126	33.896	1	236	.003	.354	Reject

CHAPTER 5: CONCLUSIONS

Statement of Problem

At-risk students are not functioning at the academic level of their counterparts. There is a grave need to intervene and provide support for at-risk students to ensure that every student demonstrates academic success. Current research shows that the five domains of teacher-student relationships, parent-student relationships, motivation, socioeconomic status, and peer influence all impact academic achievement, either in a positive or negative manner.   This study addressed the correlations and affect of the five domains on 242 students in an urban public school setting.

Summary of Findings

Data from the teacher student domain brought forth a wealth of information regarding teacher-student relationships and their relationship with GPA. Frequencies were run for every question; frequencies for each question were analyzed by GPA; and a regression was run to see if teacher-student relationships predict GPA.

- Finding 1: Students participating in this study have positive relationships with their teachers.

Each student taking the survey is at-risk, and each one has made it to his/her senior year without dropping out of school. Of the 242 students participating in the survey, 83.1% believe their teachers care about them; 71.5% look forward to interacting with their teachers in class; 82% feel comfortable asking questions; 76.1% believe it is important to most of their teachers that they do well in school; and 80.1% state their teachers provide after school assistance. The weakest areas addressed were feedback from teachers and participating in classes that are enjoyable. Seventy point six percent believe teachers make classes enjoyable. Additionally, 67% of the students stated they receive feedback from their teachers regarding progress in school.

The data were also analyzed by selecting cases based upon GPA. Eighty-three point three percent of the students, with a GPA $\leq$ 1.5, believe their teachers care. This is slightly higher than the 83.1% of the students with a GPA > 3.5. Additionally, 90.9% of the students with a GPA $\leq$ 1.5%feel comfortable asking questions in class. This speaks to the comfortable classroom environment in which teachers make students feel comfortable taking risks. As GPA goes down, the percentage of students feeling comfortable asking questions goes up.

Parsley & Corcoran (2003) contend that if positive relationships are maintained in the classroom, at-risk students will find the support they need to sustain and improve achievement. Calabrese, Goodvin, & Niles (2005) found a correlation between teacher-student relations and achievement for students at-risk of dropping out of high school. Specifically, stating effective teachers establish meaningful relationships, encourage students, and show concern. This supports the current study, as every student is at-risk, yet each one is in his/her senior year of high school. The majority believe their teachers care.

- Finding 2: Teacher –student relationships are not a strong predictor of GPA with the participants in this study.

Data from this study show 1.7% of the variance in GPA is due to teacher-student relationships. Although the results were statistically significant, they did not support teacher-students relationships as a strong predictor of GPA. The range of GPA across this group of students, with the majority of the students falling in the upper end of the GPA scale, limits the ability to assess this as a predictor. As every student in this study has made it to his or her senior year, and we cannot analyze responses of students that are failing or students who have already dropped out of school.

The parent or caregiver-student domain was also analyzed with descriptive frequencies on each question. The frequencies were also broken down by GPA, and a regression to assess predictability with regards to parent-student relations as a predictor of GPA.

- Finding 3: Students participating in this study have a parent or caregiver encouraging them to do well in school.

- Finding 4: Students participating in this study have a parent or caregiver that wants their children to attend college.

Data show 93.3% of the students participating in this survey state they have a parent or caregiver encouraging them to do well in school. A total of 58.4% have received help with homework and this percentage increases as GPA decreases. Additionally, 95.8% have parents or caregivers that want their children to attend college. McMillian and Reed (1994) found that resilient at-risk students have a close, positive relationship with at least one family member, caregiver, or parent. This supports data from the current study.

- Finding 5: Parent or Caregiver-student relationships are not a strong predictor of GPA for participants in this study.

Data from this study show 4.1% of the variance in GPA is due to parent/caregiver-student relationships. The results were statistically significant; however the findings provide a minimal impact on GPA. This population is not a typical representation, as every student in the study has made it to his or her senior year, and has experienced some success with plans for graduation. There was a wide range of GPA scores, however, the lower end of the scale had minimal representation, with only 11 students with a GPA $\leq$ 1.5.

Data from the parent or caregiver-student relations domain also show a small representation (40.9%) of parents attending school activities. This percentage decreases with GPA. Fewer than 17.2% across all GPA categories participate in the PTSA.

The motivation domain was also analyzed with descriptive frequencies on each question. Frequencies were also broken down by GPA and a regression to assess predictability with regards to motivation as a predictor of GPA.

- Finding 6: Motivation has a significant influence on achievement.

- Finding 7: Motivation is a moderate predictor of GPA.

- Finding 8: Students feel that if they work hard they can earn good grades.

The composite variable of motivation, containing ten questions on the survey, showed the strongest correlation to achievement.   Data show that 68.6% of the students like school; 75.2% challenge themselves in school; 97.3% feel they work hard to make good grades in school; 59.6% are involved in sports or activities; 93.3% want to attend college; 29.4% want to attend a vocational school; 87% complete their homework most of the time; 59.6% have enrolled in honors or AP classes; and 89.7% feel they are self-motivated to do well in school. All of these survey questions address positive behaviors which are factors contributing to motivation in school.

The only negative behavior in the motivation category related to tardies. Almost half of the students, specifically 46.7% state they are tardy to class.

The composite domain of motivation served as the strongest domain with the ability to predict GPA. Motivation accounts for 16.1% of the variance in GPA.   Lumsden (1994) believes intrinsic motivation comes from the desire to learn within each individual. Babies are born as curious individuals with the desire to learn, yet are shaped by their environment.   He ties the motivation factor in to the influences of one's environment, to include parents and teachers. One attribute of resilience is the character attribute of high intrinsic motivation (McMillan & Reed, 1994). This correlates well with the 89.7% who feel they are self-motivated to do well in school, and the 97.3% who work hard to make good grades.

The data in the motivation domain were also analyzed by selected cases based upon GPA. One alarming piece of data is the number of students with a GPA ≤ 1.5 stating they wanted to attend college. This disconnect from reality was displayed by 81.8% of the students in the lowest GPA category. Also, there is a trend with GPA and participation in sports or activities. The decrease in the percentage of students participating in extra-curricular activities correlates with a decrease in GPA. Students who are involved in school activities and organize time in a positive manner exhibit resilience to adverse situations (McMillan & Reed, 1994)

- Finding 9: Students want to attend college or a vocational school for a post-secondary experience.

Data show 93.3% of the participants in this study want to attend college. This is consistent across the range of GPA, with 81.8% students with GPA ≤ 1.5 wanting to attend college as well. Also, 29.4% state they wanted to attend a vocational school. The majority of the participants in this study are motivated to plan for life after graduation.

- Finding 10: SES has a minimal impact on the GPA of students participating in this study.

The SES domain was also analyzed through frequencies on each of the seven questions in this composite. Frequencies were also analyzed by GPA, and a liner regression to analyze the ability of SES to predict GPA in at-risk students. Careful analysis of each individual question showed the majority of the students do have access to a computer and the Internet. Specifically, 83% responded they have access to a computer, and 78.9% have access to the Internet. These two questions marked the highest positive response for this composite. The remaining six questions ranged from 27.3% to 64.9%. Results showed: 27.3% have fathers with a college degree; 40.4% had opportunities to attend theater performances with their families; 41.3% have mothers with a college degree; 50.4% have part-time jobs to supplement the household income; and 64.9% had opportunities to take vacations with their families. Although data show these

participants come from environments with limited resources, most exhibit resilience and excel

academically in order to graduate from high school.

- Finding 11: SES serves as a weak predictor for GPA with the participants in this study.

Data show that SES accounts for 4% of the variance in GPA with the participants in this

study. The results are statistically significant. However, the 4% variance is not enough for a

substantial impact.

Siren (2005) found through a meta-analytic review of research that SES has a significant

impact on achievement. Research reviewed the affect of individual SES as well as the SES of a

school or school district. However, the current study did not prove to show a significant

relationship between SES and GPA. Out of the 242 participants in the study, 139 participate in

the free and reduced lunch program; and, 50.4% of the participants work a part-time job to

supplement the household income. Although many are from households with fewer financial

resources, most have excelled academically. This data set does not represent a typical population.

It does not reflect a cross representation in the population sample, as more students from this

sample are considered at-risk and come from poverty situations than the norm.

Although the data set does not reflect the norm, as many participants come from

households with minimal financial resources, students tend to succeed in spite of their situations.

Reis, Colbert, & Thomas (2005) state resilient students have the ability to rise above life's

challenges and show a positive response to adversity.

The peer influence domain was carefully analyzed to assess the relationship between peer

influence and GPA. Nine questions were incorporated in the survey that related to peer influence

composite. Frequencies were run to analyze each specific question. Frequencies were also

analyzed by GPA, and a regression was run to determine if peer influence is a predictor of GPA.

- Finding 12: Peer Influence significantly impacts achievement.
- Finding 13: Peer Influence is a moderate predictor of GPA.

The range of scores for strongly agree and agree was from 27.7% to 97.9%. Some of the data on the individual questions show the following with regards to the 242 students participating in the survey: 84.7% state friends make good grades in school; 41.4% state their friends skip school; 27.7% state they have friends that participate in gang activities; 36.8% state their friends influence their school choices; 97.9% state it is ok with their friends to make good grades in school; and 80.7% state they have friends that participate in sports or activities.   The above statements indicate association with friends that exhibit positive behaviors. Ellenbogen & Chamberland (1997) stated at-risk students tend to associate with more dropouts and friends working full time jobs. However, the majority of students in this data set associate with friends who make good grades, friends who participate in sports or activities, and friends that say it is ok to make good grades in school. Less than half exhibit the negative behaviors of skipping school and participating in gang activities.

Data was also studied by GPA. The most compelling observation was the correlation between GPA and my friends participate in sports or activities. As with the motivation domain, GPA decreases as the participation in sports or activities decreases.

Peer Influence proved to be the second strongest predictor of GPA in this study. The results of the regression were statistically significant. The 12.6% variance is a moderate predictor of GPA.

Hardcastle (2006) contends students with certain personality traits, such as low self-esteem or poor academic ability, are at a higher risk of surrendering to negative peer pressure. Data from this study indicate that the majority of the students are making positive peer choices.

The students from this study are successful; therefore they are showing increased achievement, and therefore not subjecting themselves to negative peer pressure.

Overall, there are small correlations between GPA and the five domains of teacher-student relations, parent-student relations, motivation, SES, and peer influence. However the relationship is moderate to weak for each of the domains. The minimal impact of each domain could be attributed to the range of GPA and/or the age of the students in the study. For example, all survey participants were in 12th grade and had made it to his or her senior year in high school; hence most were already successful. The data did not reflect the impact of the domains on students prior to dropping out of school, or early on when the group of low GPAs was larger.

Additionally, the notion of resilience is supported through the success of most of these students, in spite of obstacles that inhibit progress. Although each student exhibited one or more risk factors, with 74 having all three risk factors, most were successful in spite of their lack of resources or support. Students who demonstrate resilience, and achieve academically, have the ability to persevere even though they encounter negative environmental or psychological situations (Reis, Colbert, & Thomas, 2005). These students often have access to protective mechanisms that foster the development of success in spite of challenges along the way (Reis et al.)

Implications for Practice

Many practical tools can be implemented to support academic achievement for at-risk students. Based on the findings of this study, the following practical implications are suggested:

- Provide opportunities within your district to foster the development of positive student-teacher relationships. Workshops sharing data of the impact this has on instruction, and sharing literature throughout the school year will facilitate growth in this area.

- Provide workshops and information to parents with regards to the importance of positive relationships and involvement in the learning process. Schools should extend a partnership with parents and encourage involvement in school activities and decision making.

- College attendance is a priority with parents and students in this survey. Workshops for career choice, college options, financial aide, scholarship opportunities, and SAT information provide support for parents. These programs should be initiated early and often in order to help students set realistic expectations for post-secondary life experiences. Often times, reality hits in the 10th or 11th grade, and students are not able to realistically attend the college of their choice.

- Promote accurate and timely communication with parents with regards to everything that goes on in your building. The utilization of websites, mailings, newsletters, voicemail messages, newspaper articles, and the school marquee provide excellent opportunities to communicate with parents.

- Establish Community Partnerships in order to develop relationships with all stakeholders. Partnerships can provide support to the school and our families.

- Implement transition programs for students that include opportunities for the exploration of the different clubs, activities, and athletics. Emphasize the importance of becoming involved in something, and educate parents as to the importance of this involvement. Data show there is a correlation between higher GPA and involvement in school activities and athletics.

- Promote awareness of the influence of environment on individual motivation. This should be shared with parents/caregivers, teachers, and the community. All

stakeholders should work to promote a positive environment for students as they

grow during the critical years of school.

- Promote positive peer relations through activities with the Guidance Department.

  Support group talks with students that are easily influenced by peers that result in

  negative behaviors.   Educate parents as to the importance of positive peer

  relations as this is a moderate predictor of GPA.

- Provide students with academic support in the form of after school tutoring, and

  study groups. Provide workshops to show students how to study and organize

  their time. This will allow students to learn how to maintain excellent

  achievement by working smarter and not harder.

Limitations

The following factors serve as limitations for this study:

- There were three components identifying students as at-risk. They are free

  and reduced lunch participation; living in a single parent home; and

  minority status. Race was provided by the school division. However, free

  and reduced lunch participation, and living in a single parent home were

  self-reported. This does not allow for 100% accuracy on all at-risk

  identifying factors. Many students are often embarrassed to report their

  involvement in the free and reduced lunch program; so, there is no

  guarantee there is an accurate estimate of students participating in the free

  and reduced lunch program.

- Most study participants represented members of the at-risk population that were scheduled to graduate.   Involving participants from a lower grade level, (9 – 11) would provide information on factors affecting at-risk students that end up dropping out of school.

- The survey was completed by high school students that may or may not have answered the questions truthfully.

- The majority of the students in School 1 took the survey in a group setting with me giving the same directions for survey completion.

- The students in school 2 took the survey in English class with directions from their individual teachers.

- There is much attrition in the student population. We cannot account for students who have dropped out or students who have moved to the GED program.

- Analysis of questions by GPA incorporated some very small groups. GPA ≤ 1.5 only had 11 participants.

- How long students have been at-risk may impact the outcome of this study. Many students may truly be at-risk, and have been at-risk throughout their lives. However, it is possible that some became at-risk during their senior year due to a divorce or a parent losing a job.

Recommendations for Further Study

Although the findings from this study did not reflect a strong revelation of the five domains as predictors or a significant influence on academic achievement, future studies could provide more substantial evidence to support the effect of the five domains of teacher-student relationships, parent pr caregiver-student relationships, motivation, socioeconomic status, and peer influence on academic achievement.   The following recommendations are suggested for future research:

- The population in this study represented a majority of at-risk students who were already successful, and scheduled to graduate. A study of students in the ninth graders would represent a wider range of participants, with students who may not graduate from high school. This information could provide evidence as to why these students were not successful, with specific emphasis on the five domains of teacher-student relationships, parent-student relationships, motivation, socioeconomic status, and peer influence. This would allow for a wider range of scores. The results of the current study reflected many positive outcomes because these students are successful.

- The addition of a qualitative perspective is recommended to bring a deeper approach to evaluating data that affects achievement. The quantitative survey gives pertinent information, but the qualitative approach would allow for a personal interaction with participants, and would provide essential information on the affects of teacher-student relationships, parent-student relationships, motivation, socioeconomic status, and peer influence on academic achievement.

- The addition of data from students who have dropped out of school would provide additional information with regards to what factors negatively impact achievement.

- A longitudinal study could incorporate the reflections of a cohort of students through their high school experience, from 9th – 12th grade. Students could take the survey at the beginning and end of their high school experience in order to compare data. The addition of qualitative information along the way would add depth, to include interviews with students who drop out or pursue a GED along the way.

- Research addressing why students with a GPA of 1.5 in their senior year believe they can attend college.

- A follow up study collecting data on these survey participants, four years later. This will assess who was successful in college and or secured employment through a vocational school.

Conclusions

The concern for increased academic achievement among all students, in addition to the elimination of the achievement gap is a concern for educators today. It is critical that support systems are in place to facilitate success, and to assist teachers as they work to ensure that "no child is left behind." The pressure is endless for educators from the superintendent to the classroom teacher, as teams strive to engage all students, regardless of race, SES, or resources, in meaningful instruction that facilitates high academic achievement for all students. The at-risk population factors a challenging wrench in the equation of helping every student accomplish educational goals.

The results of this study show that most students do have positive relationships with their teachers. Even students with the lowest grade point averages are a credit to teachers as a positive influence. This could speak to the reason those struggling students are still hanging on in their senior year of high school. Of the five research questions, the null hypotheses were rejected in each case. The data did prove to be statistically significant. However, the amount of variance indicated in each regression with the five domains of teacher-student relationships, parent or caregiver-student relationships, motivation, SES, and peer influence was minimal, rendering little significance in the realm of education. The biggest impact was evident in the domains of motivation and peer influence.

As research continues, educators should continue to develop strategies to engage all students in a meaningful learning process that develops young minds into successful and accomplished citizens. To quote the words of Phillip Schlechty, we must continue to "work on the work", or implement the WOW framework in education (Schlechty, 2002, pg. xiii). For so long, educators have worked on teachers and students. However, the key to school success should focus on the work which must be engaging and provide purposeful activities within instruction (Schlechty, 2002).

Research indicates the five domains in this study do impact the educational success, or render roadblocks for students as they attend school. Continued investigation will provide imperative data to build upon strategies to promote achievement for at-risk students.

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APPENDIX A

CONTENT VALIDATION INSTRUMENT

Directions: Circle the number of the appropriate response.   (Validation Tool adapted with permission from Dale Margheim.)

Domains

Factors affecting the academic achievement in at-risk students are:

1. teacher-student relationships   2. parent/caregiver relationships   3. self-motivation
4. socioeconomic status   5. peer influence

Association Ratings: 1 = very weak, 2 = weak, 3 = strong, 4 = very strong

Clarity Ratings: 1 = very unclear, delete; 2 = somewhat clear, revise; and 3 = clear, leave as written

(For any items you rate 1 or 2 for clarity or association, please write your suggestions for improvement directly on this page.)

Questionnaire Statements	Domain	Association	Clarity
1. I have access to a computer at home.	1 2 3 4 5	1 2 3 4	1 2 3
2. I have a parent or caregiver encouraging me to do well in school.	1 2 3 4 5	1 2 3 4	1 2 3
3. My teacher cares about me.	1 2 3 4 5	1 2 3 4	1 2 3
4. My friends make good grades in school.	1 2 3 4 5	1 2 3 4	1 2 3
5. My friends skip school.	1 2 3 4 5	1 2 3 4	1 2 3
6. I live with my mother and my father.	1 2 3 4 5	1 2 3 4	1 2 3
7. I look forward to my classes and interacting with my teachers.	1 2 3 4 5	1 2 3 4	1 2 3

Directions: Circle the number of the appropriate response.   **(**Validation Tool adapted with permission from Dale Margheim.)

Domains

Factors affecting the academic achievement in at-risk students are:

1. teacher-student relationships   2. parent/caregiver relationships   3. self-motivation
4. socioeconomic status   5. peer influence

Association Ratings: 1 = very weak, 2 = weak, 3 = strong, 4 = very strong

Clarity Ratings: 1 = very unclear, delete; 2 = somewhat clear, revise; and 3 = clear, leave as written

(For any items you rate 1 or 2 for clarity or association, please write your suggestions for improvement directly on this page.)

8. I like school.	1 2 3 4 5	1 2 3 4	1 2 3
9. I feel academically challenged in school.	1 2 3 4 5	1 2 3 4	1 2 3
10. I receive feedback from my teachers regarding my progress in school.	1 2 3 4 5	1 2 3 4	1 2 3
11. My father has a college degree.	1 2 3 4 5	1 2 3 4	1 2 3
12. One of my parents/caregivers has two jobs.	1 2 3 4 5	1 2 3 4	1 2 3
13. I have friends that participate in gang activities.	1 2 3 4 5	1 2 3 4	1 2 3
14. I take vacations with my family.	1 2 3 4 5	1 2 3 4	1 2 3
15. Teachers provide after school assistance to me.	1 2 3 4 5	1 2 3 4	1 2 3
16. My parents/caregivers want me to go to college.	1 2 3 4 5	1 2 3 4	1 2 3
17. I have Internet access at home.	1 2 3 4 5	1 2 3 4	1 2 3

Directions: Circle the number of the appropriate response.   **(**Validation Tool adapted with permission from Dale Margheim.)

Domains

Factors affecting the academic achievement in at-risk students are:

1. teacher-student relationships   2. parent/caregiver relationships   3. self-motivation
4. socioeconomic status   5. peer influence

Association Ratings: 1 = very weak, 2 = weak, 3 = strong, 4 = very strong

Clarity Ratings: 1 = very unclear, delete; 2 = somewhat clear, revise; and 3 = clear, leave as written

(For any items you rate 1 or 2 for clarity or association, please write your suggestions for improvement directly on this page.)

Questionnaire Statements	Domain	Association	Clarity
18. My teachers create a warm classroom environment.	1 2 3 4 5	1 2 3 4	1 2 3
19. I am home alone or with my siblings after school.	1 2 3 4 5	1 2 3 4	1 2 3
20. My parents/caregivers attend school activities.	1 2 3 4 5	1 2 3 4	1 2 3
21. My friends influence my school choices.	1 2 3 4 5	1 2 3 4	1 2 3
22. I have friends in the National Honor Society.	1 2 3 4 5	1 2 3 4	1 2 3
23. My parents/caregivers want me to attend college.	1 2 3 4 5	1 2 3 4	1 2 3
24. My mother has a college degree.	1 2 3 4 5	1 2 3 4	1 2 3
25. My friends are tardy to class.	1 2 3 4 5	1 2 3 4	1 2 3
26. I am tardy to class.	1 2 3 4 5	1 2 3 4	1 2 3
27. I feel comfortable asking questions in class.	1 2 3 4 5	1 2 3 4	1 2 3

Directions: Circle the number of the appropriate response.   **(**Validation Tool adapted with permission from Dale Margheim.)

Domains

Factors affecting the academic achievement in at-risk students are:

1. teacher-student relationships   2. parent/caregiver relationships   3. self-motivation 4. socioeconomic status   5. peer influence

Association Ratings: 1 = very weak, 2 = weak, 3 = strong, 4 = very strong

Clarity Ratings: 1 = very unclear, delete; 2 = somewhat clear, revise; and 3 = clear, leave as written

(For any items you rate 1 or 2 for clarity or association, please write your suggestions for improvement directly on this page.)

28. It is ok with my friends if I make good grades in school.	1 2 3 4 5	1 2 3 4	1 2 3
29. I have a part-time job to help support my household.	1 2 3 4 5	1 2 3 4	1 2 3
30. I have enrolled in Honors or AP classes.	1 2 3 4 5	1 2 3 4	1 2 3
31. I am involved in a school sport or activity.	1 2 3 4 5	1 2 3 4	1 2 3
32. My friends participate in sports or school activities.	1 2 3 4 5	1 2 3 4	1 2 3
33. My parent/caregiver is involved in the PTSA.	1 2 3 4 5	1 2 3 4	1 2 3
34. My parent or caregiver has helped me with homework.	1 2 3 4 5	1 2 3 4	1 2 3
35. I want to attend college.	1 2 3 4 5	1 2 3 4	1 2 3

36. My teachers make classes enjoyable.	1 2 3 4 5	1 2 3 4	1 2 3
37. I want to attend a vocational school.	1 2 3 4 5	1 2 3 4	1 2 3

Directions: Circle the number of the appropriate response.   **(**Validation Tool adapted with permission from Dale Margheim.)

Domains

Factors affecting the academic achievement in at-risk students are:

1. teacher-student relationships   2. parent/caregiver relationships   3. self-motivation
4. socioeconomic status   5. peer influence

Association Ratings: 1 = very weak, 2 = weak, 3 = strong, 4 = very strong

Clarity Ratings: 1 = very unclear, delete; 2 = somewhat clear, revise; and 3 = clear, leave as written

(For any items you rate 1 or 2 for clarity or association, please write your suggestions for improvement directly on this page.)

38. Some of my friends have dropped out of school.	1 2 3 4 5	1 2 3 4	1 2 3
39. I have opportunities to attend plays and theater performances with my family.	1 2 3 4 5	1 2 3 4	1 2 3
40. I complete my homework most of the time.	1 2 3 4 5	1 2 3 4	1 2 3
41. It is important to most of my teachers that I do well in school.	1 2 3 4 5	1 2 3 4	1 2 3

42. My main caregiver is not my mother or father.	1 2 3 4 5	1 2 3 4	1 2 3
43. I am self-motivated to do well in school.	1 2 3 4 5	1 2 3 4	1 2 3

APPENDIX B

SURVEY VALIDATION 1

Question	Domain Percentage	Result
1. I have access to a computer at home.	100%	Used in survey
2. I have a parent or caregiver encouraging me to do well in school.	100%	Used in survey
3. My teacher cares about me.	100%	Re-Validated – Re-worded per prospectus committee
4. My friends make good grades in school.	92%	Used in survey
5. My friends skip school.	92%	Used in survey
6. I live with my mother and my father.	71%	Re-worded/ Re-validated
7. I look forward to my classes and interacting with my teachers.	79%	Re-worded/Re-validated
8. I like school.	88%	Used in survey
9. I feel academically challenged in school.	71%	Re-worded/Re-validated
10. I receive feedback from my teachers regarding my progress in school.	92%	Used in survey
11. My father has a college degree.	85%	Used in survey
12. One of my parents/caregivers has two jobs.	92%	Used in survey
13. I have friends that participate in gang activities.	100%	Used in survey
14. I take vacations with my family.	71%	Re-worded/Re-validated

15. Teachers provide after school assistance to me.	92%	Used in survey
16. My parents/caregivers want me to go to college.	92%	Used in survey
17. I have Internet access at home.	100%	Used in survey
18. My teachers create a warm classroom environment.	100%	Used in survey
19. I am home alone or with my siblings after school.	42%	Re-worded/Re-validated
20. My parents/caregivers attend school activities.	85%	Used in survey
21. My friends influence my school choices.	100%	Used in survey
22. I have friends in the National Honor Society.	100%	Used in survey
23. My parents/caregivers want me to attend college	100%	Used in survey
24. My mother has a college degree.	85%	Used in survey
25. My friends are tardy to class.	100%	Used in survey
26. I am tardy to class.	92%	Used in survey
27. I feel comfortable asking questions in class.	64%	Re-worded/Re-validated
28. It is ok with my friends if I make good grades in school.	92%	Used in survey
29. I have a part-time job to help support my household.	92%	Used in survey
30. I have enrolled in Honors or AP classes.	92%	Used in survey

|		
31. I am involved in a school sport or activity.	92%	Used in survey
32. My friends participate in sports or school activities.	100%	Used in survey
33. My parent/caregiver is involved in the PTSA.	92%	Used in survey
34. My parent or caregiver has helped me with homework.	100%	Used in survey
35. I want to attend college.	100%	Used in survey
36. My teachers make classes enjoyable.	92%	Used in survey
37. I want to attend a vocational school.	85%	Used in survey
38. Some of my friends have dropped out of school.	100%	Used in survey
39. I have opportunities to attend plays and theater performances with my family.	71%	Re-worded/Re-validated
40. I complete my homework most of the time.	92%	Used in survey
41. It is important to most of my teachers that I do well in school.	100%	Used in survey
42. My main caregiver is not my mother or father.	85%	Used in survey
43. I am self-motivated to do well in school.	100%	Used in survey

APPENDIX C

SURVEY VALIDATION 2

Question	Domain Percentage	Result
1. My teachers care about me.	100%	Used in survey
2. I work hard to make good grades.	100%	Used in survey
3. I live with both of my biological parents.	92%	Used in survey
4. I look forward to interacting with my teachers in class.	100%	Used in survey
5. I challenge myself in school.	100%	Used in survey
6. I had opportunities to take vacations.	85%	Used in survey
7. I have to baby-sit siblings after school when my parents are at work.	71%	Omitted
8. My teachers create a classroom environment where I am comfortable asking questions.	100%	Used in survey
9. I was provided opportunities to attend theater performances with my family.	85%	Used in survey

APPENDIX D

HOKIE SCHOOL DISTRICT APPROVAL
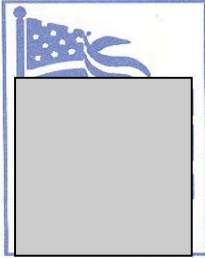
September 6, 2006

Ms. Catherine Worley
908 Willow Point
Newport News, VA 23602

Dear Cathy,

Thank you for your request to conduct research in [redacted] during the 2006-2007 school year. The Research Committee has approved your proposal "At-Risk Students Academic Achievement: What factors foster the development of high academic achievement for at-risk students."

It is our hope that you will share your findings with the committee. We wish you success in your research.

APPENDIX E

IRB APPROVAL

VirginiaTech

Office of Research Compliance
Institutional Review Board
1880 Pratt Drive (0497)
Blacksburg, Virginia 24061
540/231-4991 Fax: 540/231-0959
E-mail: moored@vt.edu
www.irb.vt.edu

FWA00000572(expires 7/20/07)
IRB # is IRB00000667.

DATE: February 13, 2007

MEMORANDUM

TO: Travis W. Twiford
               Catherine Worley

Approval date: 2/8/2007
Continuing Review Due Date:1/24/2008
Expiration Date: 2/7/2008

FROM: David M. Moore

SUBJECT: **IRB Expedited Approval:** "At-Risk Students and Academic Achievement? What
               Factors Influence Academic Success for At-Risk Students?" , IRB # 07-030

This memo is regarding the above-mentioned protocol. The proposed research is eligible for
expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110.
As Chair of the Virginia Tech Institutional Review Board, I have granted approval to the study for a
period of 12 months, effective February 8, 2007.

As an investigator of human subjects, your responsibilities include the following:

1.   Report promptly proposed changes in previously approved human subject research
      activities to the IRB, including changes to your study forms, procedures and
      investigators, regardless of how minor. The proposed changes must not be initiated
      without IRB review and approval, except where necessary to eliminate apparent
      immediate hazards to the subjects.
2.   Report promptly to the IRB any injuries or other unanticipated or adverse events
      involving risks or harms to human research subjects or others.
3.   Report promptly to the IRB of the study's closing (i.e., data collecting and data
      analysis complete at Virginia Tech). If the study is to continue past the expiration
      date (listed above), investigators must submit a request for continuing
      review prior to the continuing review due date (listed above). It is the researcher's
      responsibility to obtained re-approval from the IRB before the study's expiration date.
4.   If re-approval is not obtained (unless the study has been reported to the IRB as
      closed) prior to the expiration date, all activities involving human subjects and
      data analysis must cease immediately, except where necessary to eliminate
      apparent immediate hazards to the subjects.

Important:
If you are conducting **federally funded non-exempt research**, this approval letter must state that the
IRB has compared the OSP grant application and IRB application and found the documents to be
consistent. Otherwise, this approval letter is invalid for OSP to release funds. Visit our website at
http://www.irb.vt.edu/pages/newstudy.htm#OSP for further information.

cc: File

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APPENDIX F STUDENT SURVEY

Student Survey   **Student Name:**

February 2007   _____

Please answer the following questions:

1. Have you ever participated in the free and reduced lunch program? _____ Yes _____ No

2. Do your parents rent or own your home? _____ rent _____ own _____don't know

3. Do you live in a single parent home? ____ Yes _____ No

4. Do you live with someone other than your mother or father? _____Yes _____ No

Carefully read the statements below. Respond with the number that **best corresponds** with your high school experience.

> **1 =**   **Strongly Disagree**
>
> **2 =**   **Disagree**
>
> **3 =**   **Agree**
>
> **4 =**   **Strongly Agree**

1. I have access to a compuiter at home.	1 2 3 4
2. I have a parent or caregiver encouraging me to do well in school.	1 2 3 4
3. My teachers care about me.	1 2 3 4
4. My friends make good grades in school.	1 2 3 4
5. My friends skip school.	1 2 3 4
6. I live with both of my biological parents.	1 2 3 4

7. I look forward to interacting with my teachers in class.	1 2 3 4
8. I like school.	1 2 3 4
9. I challenge myself in school.	1 2 3 4
10. I receive feedback from my teachers regarding my progress in school.	1 2 3 4
11. My father has a college degree.	1 2 3 4
12. One of my parents/caregivers has two jobs.	1 2 3 4
13. I have friends that participate in gang activities.	1 2 3 4
14. I had opportunities to take vacations.	1 2 3 4
15. Teachers provide after school assistance to me.	1 2 3 4
16. My parents/caregivers want me to go to college.	1 2 3 4
17. I have Internet access at home.	1 2 3 4
18. My teachers create a warm classroom environment.	1 2 3 4
19. I work hard to make good grades.	1 2 3 4
20. My parents/caregivers attend school activities.	1 2 3 4
21. My friends influence my school choices.	1 2 3 4
22. I have friends in the National Honor Society.	1 2 3 4
23. I am self motivated to do well in school.	1 2 3 4
24. My mother has a college degree.	1 2 3 4
25. My friends are tardy to class.	1 2 3 4
26. I am tardy to class.	1 2 3 4
27. My teachers create a classroom environment where I am comfortable asking questions.	1 2 3 4
28. It is ok with my friends if I make good grades in school.	1 2 3 4
29. I have a part-time job to help support my household.	1 2 3 4
30. I have enrolled in Honors or AP classes.	1 2 3 4
31. I am involved in a school sport or activity.	1 2 3 4
32. My friends participate in sports or school activities.	1 2 3 4

33. My parent/caregiver is involved in the PTSA.	1 2 3 4
34. My parent or caregiver has helped me with homework.	1 2 3 4
35. I want to attend college.	1 2 3 4
36. My teachers make classes enjoyable.	1 2 3 4
37. I want to attend a vocational school.	1 2 3 4
38. Some of my friends have dropped out of school.	1 2 3 4
39. I was provided opportunities to attend theater performances with my family.	1 2 3 4
40. I complete my homework most of the time.	1 2 3 4
41. It is important to most of my teachers that I do well in school.	1 2 3 4
42. My main caregiver is not my mother or father.	1 2 3 4