THE IMPACT OF STUDENT ATTENDANCE, SOCIO-ECONOMIC STATUS AND

MOBILITY ON STUDENT ACHIEVEMENT OF THIRD GRADE STUDENTS IN

TITLE I SCHOOLS

By

Doris Jean Jones

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Travis W. Twiford, Chair

Rose Martin

James Rayfield

James Roberts

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Abstract

Today, regular school attendance is an important factor in school success (Rothman, 2001). Research has shown a direct correlation between good attendance and student achievement (Dekalb, 1999). Poor attendance has been linked to poor academic achievement (Ziegler, 1972). With the increase in accountability for school districts in Virginia surrounding the Standards of Learning (SOL) test and the No Child Left Behind (NCLB) legislation of 2001, educators are faced with a significant challenge to reduce the rate of absenteeism to increase students' achievement in school. "Students who are absent from school receive fewer hours of instruction; they often leave education early and are more likely to become long term unemployed, homeless, caught in the poverty trap, dependent on welfare and involved in the justice system" (House of Representatives, 1996 p. 3). Researchers have sought to find factors that contribute to student non-attendance (Odell, 1923; Reid, 1999; Mitchell, 1993). This study investigates the impact of student attendance, socio-economic status and mobility on student achievement of third grade students in two Title I schools in a Southeastern Virginia School District, with grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and math tests scores.

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DEDICATION

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LIST OF TABLES

LIST OF FIGURES

TABLE OF CONTENTS

CHAPTER 1

Education is, "something that a decently functioning society obliges people to get a certain amount of, even if they don't really want to" (Finn, 1999, p. 1).

INTRODUCTION

Educators, parents, and politicians are continuously searching for that magic solution that will reform our public education system and establish a flawless system of education for our youth, by providing them with a quality education (Edwards, 2002). "The success of the school in carrying out its primary charge of educating and socializing students is contingent on students attending school regularly" (Smith, 1998, p.1).

Smith (1998), in his study emphasizes that attendance is a priority for educators. This study investigates attendance in the primary grades. The goal is to identify early indicators of poor attendance at the primary level in order to provide interventions that could have an impact on middle and high school students' attendance. Research conducted in this area could provide school divisions with vital information about student attendance patterns at the primary level that could reveal or predict an influence on student attendance in the middle and high school level.

Students must be present in school in order to benefit from the academic program in its entirety (DeKalb, 1999; Rothman, 2001). Schools and law enforcement officials are getting tough by enforcing laws that mandate school attendance and by holding parents responsible for their student's attendance. Student non-attendance is a problem that extends beyond the school. It affects the student, their families, and the community (DeKalb, 1999; U. S. Department of Education, 2001). This study

investigates the impact of student attendance, socio-economic status and mobility on student achievement of third grade students in two Title I schools with grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and math tests scores.

Historical Perspective

Compulsory education in the United States is mandated by a complex system of state laws requiring attendance at either public schools or at some other acceptable learning environment (Pierce v. Society of Sisters, 1925). Compulsory education has its roots in English legislation of the 16th and 17th centuries (Aikman, W.F., & Kotin, L., 1940).

Individual states have primary authority over public education in the United States. The first compulsory education law in America was enacted in 1642 in the Colony of Massachusetts Bay. Since that time every state in the nation has established a system of free public education and laws governing attendance (Ensign, 1969). In addition, each state has developed a department of education and enacted laws regulating finance, the hiring of school personnel, student attendance and curriculum (Thattai, 2002). "Presently, all fifty states have laws that compel children between specified ages, usually six to sixteen, to be educated. "To accomplish this, compulsory school attendance laws have been enacted throughout the nation" (Alexander, K. & Alexander, M. D., 1998, p. 15). State law defines and enforces these requirements. "Compulsory attendance laws are enacted for the protection of children" (Alexander, K. & Alexander, M. D., 1998, p.17). Compulsory attendance embraced the political ideals of "liberty under law" that maintains that

there can be no real liberty, no true democracy without education, free, universal, and compulsory for every citizen (Ensign, 1969). School is perceived as the key to success for individuals and to the excellence of society (Mitchell, 1993).

Due to the increase of reported student absenteeism, the U.S. Department of Education, National Center for Education Statistics, conducted a Schools and Staffing Survey (1990-91). The statistical results from the teacher questionnaire show that absenteeism and tardiness is a serious problem.

The Virginia General Assembly, in 1999, enacted legislation that amended the Code of Virginia 22.1-254, related to compulsory school attendance. The law stipulates that every child who has reached the age of 5 by September 30th and who has not passed his or her eighteenth birthday must attend a public school or attend the same number of days and hours at a private, denominational or parochial school or taught by a tutor or teacher qualified by the Board of Education and approved by the division superintendent or provide home instruction under the same requirements. The legislation also requires each school board to send to the parents or guardian of each student enrolled in the division a copy of the compulsory school attendance law and the enforcement procedures and policies established by the school board (Duke & Canady, 1991).

The Educational Research Service (1996) summarizes research on absenteeism and provides policies, procedures, and programs that are being used by school systems to help eliminate excessive absenteeism in schools (U.S. Department of Education, 1996). Truancy has been labeled as one of the major problems in this country's schools, negatively affecting the future of our youth (DeKalb, 1999). When

students' miss school, it hinders their learning (U. S. Department of Education, 2002).

Statement of the Problem

School accountability for student achievement has become more rigorous since the implementation of the Virginia Standards of Learning (SOL) testing and the 2001 No Child Left Behind legislation (NCLB). Student attendance, mobility and socio-economic status in schools are a focus for educators in order to improve student achievement at all levels (Applegate, 2003). It is believed that regular school attendance can help ensure student academic success (Rothman, 2001).

Significance of the Study

This study investigates the relationship of attendance on student achievement. The focus of this educational research is directed toward determining the impact of attendance on academic achievement of third grade students in two Title I schools on the Virginia SOL English and math tests. This study also identifies other variables that influence student achievement and attendance (Applegate, 2003). Student mobility and socio-economic status are identified factors that impact student attendance and academic achievement that were used in this study (Ziegler, 1972; Mitchell, 1993; Rothman, 2001; Applegate, 2003).

Student absenteeism is listed as the number one problem in the daily administration of the schools in the early 1970s, according to a random sample of 500 members of the National Association of Secondary School Principals (Defours, 1983; Rothman, 2001). Wright (1978) found a significant difference in attendance to be associated with school location. Also, he reported that courses offered, youthfulness of the teaching staff and programs were factors associated with student

attendance. Attention to predictors within the family, society, individual circumstances, as well as academic surroundings and materials are important factors to consider when addressing school attendance. Excessive absenteeism affects student achievement and performance, teacher instruction and effectiveness, principal discipline, administration, and funding (U.S. Department of Justice, 2001).

As students progress from the primary grades excessive absenteeism drains community resources impacting human services such as truancy officers, social workers, probation officers, school counselors, the courts and retail merchants who are vulnerable to loitering and shoplifting (U.S. Department of Justice, 2001). It is critical to identify strategies early in a child's school career that will intervene effectively with youth who are chronically truant and interrupt their progress to delinquency and other negative behaviors by addressing the underlying reasons behind their absence from school (U.S. Department of Justice, 2001).

Excessive absenteeism in the primary age child is usually a result of childhood illnesses or parental educational neglect (Kozinetz, 1995). Bandura's (1977), Social Learning Theory, refers to observational learning, which takes place through modeling the behaviors of others, which could account for some students' non-attendance. In addition, parental apathy or recollection of his or her negative past school experience could hinder promoting the importance of education and school attendance (Ndaayezwi, 2003).

Society and schools can not afford to allow a single child to leave school early, or have excessive absenteeism. Schools and states continue to attempt to eliminate absenteeism by establishing programs to keep students in school starting at the

primary level. Non-attendance is an early warning sign for future problems that negatively affect student achievement (U. S. Department of Justice, 2001).

The No Child Left Behind (NCLB) Act of 2001 proposes to close the achievement gap using accountability measures. One of the requirements of the NCLB legislation is school attendance. Each sub-group must maintain at least a 94 percent attendance rate as a part of the requirements of Adequate Yearly Progress (AYP). The NCLB Act is relying on states to develop dropout prevention strategies to increase student attendance and academic achievement by implementing strategies at all school levels that will help the school achieve the intent of the NCLB Act of 2001, which states that all students will be proficient in reading and math by 2014. (Dynarski & Gleason, 1998; NCLB, 2001; Popham, 2004; Reid, 2004).

President Bush announced a two-part effort to support schools and communities in preventing truancy (U.S. Department of Education, 1996). The U.S. Department of Education (1996b) provided a Manual to Combat Truancy to every school district in the United States. This manual reported that truancy is the first indicator that a young person is giving up and losing motivation to attend school. When young people start skipping school, they are telling their parents, school officials and the community at large that they are in trouble and need help if they are to keep moving forward in their education. Frequent absences affect student academic performance (Kersting, 1967; U. S. Department of Justice, 2001). Students with excessive absences lag behind peers in the classroom, which in turn increases the probability that at-risk students will drop out of school (DeKalb, 1999).

Students with higher truancy rates have the lowest academic achievement rates, and are more likely to drop out of school which indicates that there is a relationship between student attendance and student achievement (U.S. Department of Justice and Delinquency Prevention, 2001). Students with low attendance often end up dropping out of school and put themselves at a long-term disadvantage in becoming productive citizens. They are more likely to be welfare recipients, earn much lower salaries and lead less productive lives (U.S. Department of Education, 1996). A number of studies have established that poor student attendance is an important predictor of school failure. Barrington and Hendricks (1989) conducted a longitudinal study on student behaviors with fifth grade at–risk students. They found that these students attended school significantly less than students who succeeded in school. In addition, a report from the United States Department of Education (1992) revealed that attendance rates differed considerably between students considered at-risk and non-at-risk students; at-risk students' attendance rates averaged 80 percent, while non at-risk students' attendance rates averaged 92 percent. The problem of student non-attendance will never disappear entirely (DeKalb, 1999). Some students willingly attend, but others do not, often because of negative factors or influences in their lives. These students require intervention, for the benefits of regular attendance may be the difference between a lifetime of burdens and a lifetime of accomplishments (Garry, 1996).

Roderick (1993) found that there are variables that distinguish high school dropouts from low achieving students who complete their schooling. One of these variables was a significant drop in attendance during the middle school years (10+

days annual increase over elementary attendance). Wehlage and Rutter (1986) according to data they collected from their study "High School and Beyond", on student dropout predictors concluded that low expectations, low grades combined with discipline issues and truancy were the most common reasons for students exiting schools early. They also added that students' socio-economic factors, that are related to being at-risk were factors that the school could not control, however the determinants low expectations, low grades, combined with discipline and absenteeism, were factors considered to be under the control of the school (Pallister, 1969).

Absenteeism is detrimental to students' achievement, promotion, self-esteem, and employment potential (Boloz, 1983; DeKalb, 1999). Students who miss school fall behind peers in the classroom, which in turn increases the likelihood that that they will become at-risk students and will drop out of school (DeKalb, 1999). In a study conducted by Rothman (2001), high student absenteeism rates were found to affect the achievement of students' that attend regularly by disrupting the existing learning groups (Zamudio, 2004). According to Schagen, Benton & Rutt (2004), contextual variables such as, school size and location, have a large influence on the extent of absence within schools. "The most important of the contextual variables is percentage of free or reduced price meals within a school, which is associated with increased levels of absence" (Schagen, Benton & Rutt, 2004, p. 66).

State laws have been enacted to ensure the states and localities have support in controlling and eventually eliminating excessive absences (Duke & Canady, 1991). Many attendance improvement programs are in place in schools throughout Virginia

to improve overall student attendance (U. S. Department of Education, 1996b).

The U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention evaluation reports from the Truancy Reduction Demonstration Programs determined that the correlates of excessive absenteeism or truancy fall into four broad categories.

- Family factors. These include lack of guidance or parental supervision, domestic violence, poverty, drug or alcohol abuse in the home, lack of awareness of attendance laws, and differing attitudes toward education (U.S. Department of Justice, 2001).

- School factors. These include school climate issues – such as school size and attitudes of teachers, other students, and administrators - and inflexibility in meeting the diverse cultural and learning styles of the students. Schools often have inconsistent procedures in place for dealing with chronic absenteeism and may not have meaningful consequences available for truant youth (e.g., out of school suspension) (U.S. Department of Justice, 2001).

- Economic influences. These include employed students, single-parent homes, high mobility rates, parents who hold multiple jobs, and a lack of affordable transportation and childcare (U.S. Department of Justice, 2001).

- Student variables. These include drug and alcohol abuse, lack of understanding of attendance laws, lack of social competence, mental health difficulties, and poor physical health (U.S. Department of Justice, 2001).

For the purpose of this study, student variables are less of a factor for primary age children, however family factors, school factors and economic factors were

identified as causes related to student absenteeism (Rothman, 2001; U.S. Department of Justice, 2001; Davidson, 2002; Applegate2003).

The amount of time actually spent in the classroom is in direct correlation to a student's access to education (Dekalb, 1999). Students who are tardy to school, those that do not attend or skip classes give up their opportunity for an education. They also interfere with other students' opportunity to learn by being late, absent or disruptive (Flanagan, & Murray, 2002). These negative practices of being consistently late or absent will not benefit students well with their potential future employment responsibilities (KDE Dropout Prevention Resource Guide, 2003).

Even though previous research has linked students' socio-economic factors that are associated with student absences that are beyond the control of the school, educators can improve attendance, by monitoring students' attendance, encouraging personal development and building relationships with parents setting high expectations (Rohrman, 1993). Schools and local law enforcement agencies need to establish ongoing truancy prevention programs (Reid, 1999). Positive factors can protect youth either by reducing the impact of risks or by changing the way, they respond to risk factors (Garry, 1996). Developing an effective attendance program is a way for schools to combat chronic absenteeism (U. S. Department of Education, 1996b).

There is still a need to address student attendance (Smith, 1998). Testing programs, accountability issues, and student achievement, remains the focus for educators today. The challenge is finding and implementing effective programs

designed to improve student attendance and academic achievement at all levels (U.S.Department of Education,1996).

Purpose of the Study

This study investigated the impact of student attendance, socio-economic status and mobility on student achievement of third grade students in two Title I schools with grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and math tests scores. The Pearson r and t-tests were used to show the effect between individual variables and the achievement of students, as well as the extent of the relationship between variables and the achievement of students using the variables of attendance, social economic status, and mobility.

Research Questions

1. Does attendance impact student achievement as measured by the third grade Virginia English and math SOL tests?

2. Does socio-economic status impact student achievement as measured by the third grade Virginia English and math SOL tests?

3. Does mobility impact student achievement as measured by the third grade Virginia English and math SOL tests?

4. Which of the identified factors, attendance, socio-economic status or mobility has the greatest impact on student achievement as measured by the third grade Virginia English and math SOL tests?

Figure 1 is the Conceptual Framework for this study. The model shows the identified factors and the relationship these factors have on student achievement as determined by the third grade Virginia SOL English and math tests.

Conceptual Framework
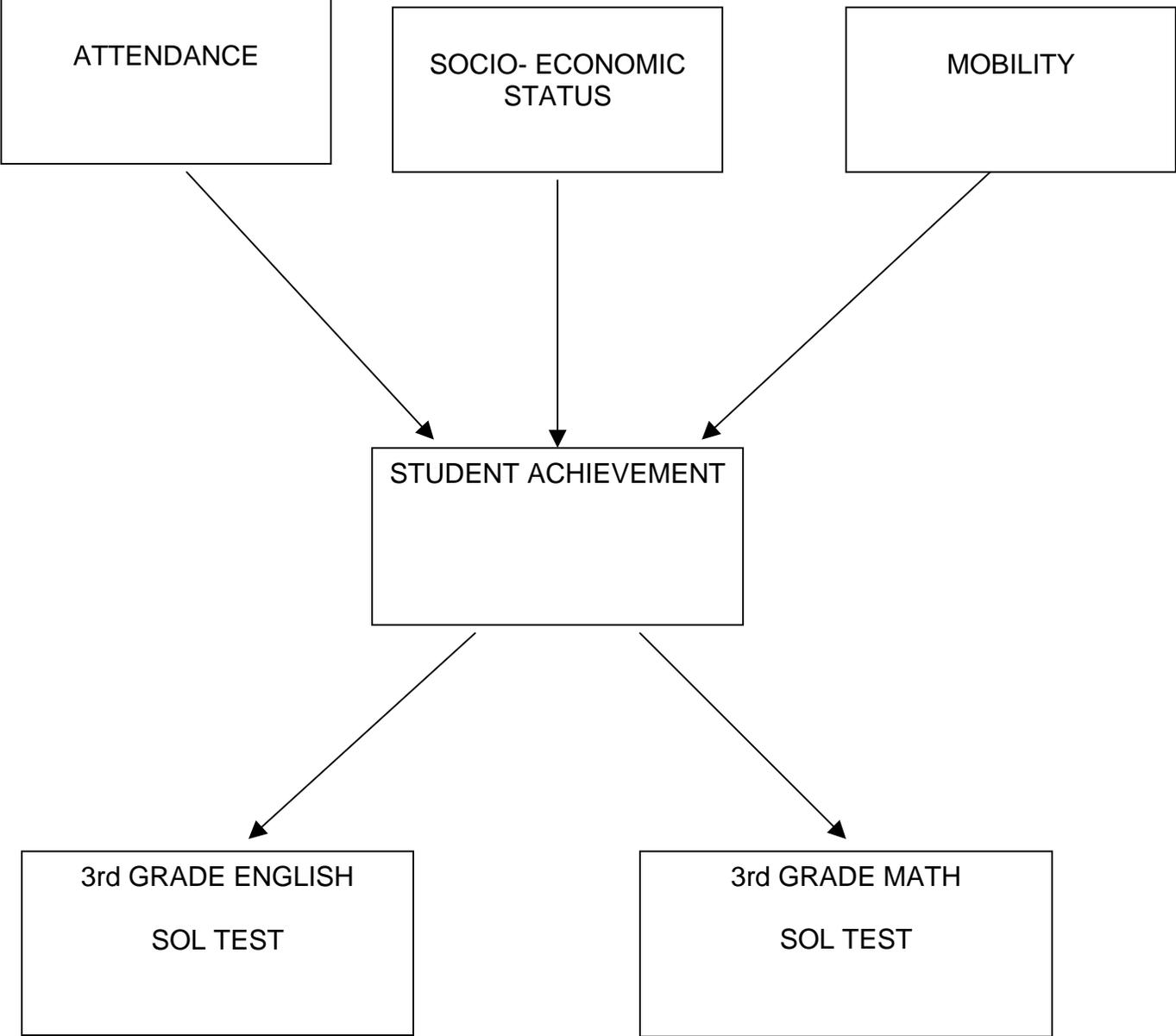
Figure 1. Conceptual Framework

Definition of Terms

For the purpose of this research study the following terms are defined:

1. Truancy - unexcused chronic absence from school (U.S. Department of *Justice (2001).*

2. Non-Attendance - The act of not being present (Virginia State Code, 22.1-254).

3. Attendance - The actual school attendance of a pupil during the school day. Defined by law and regulations of the state board of education (Virginia State Code, 22.1-254).

4. Attendance Percentage – The 94 percentage required for Adequate Yearly Progress (AYP) defined by the No Child Left Behind Act (NCLB) 2001. The 94 percent attendance requirement has been deemed as good, average attendance for public schools, while 93 – 85 percent was determined as needing improvement, and 84 percent and below as poor attendance (NCLB, 2001).

5. Race– Six Categories; American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White and Some Other Race (U.S. Census Bureau for the 2000 census).

6. Ethnicity – Two Categories; Hispanic or Latino and Not Hispanic or Latino. Hispanics and Latinos may be of any race (U.S. Census Bureau for the 2000 census).

7. Socio-economic status – Student participants in the federal free/reduce lunch program (Norris, 2000).

8. Mobility – Movement between or changes of school, either once or on repeated occasions (Strand, 2000).

9. Virginia Standard of Learning (SOL) test – Criterion reference test for the State of Virginia given to all students in grades 3, 5, 8, and end of course (State Department of Education, 2004). (other grades will be added in the 2005-2006 school year)

10. At-risk students **–** Students with excessive absences (Deschamps, 1992; DeKalb, 1999).

11. Sub-groups – Economically disadvantaged families, children with disabilities, children with limited English proficiency and children from each major racial or ethnic group (NCLB, 2001).

12. Contextual variables – Circumstances in which an event occurs; a setting (Schagen, Benton & Rutt (2004).

13. Dosage – "Participation in the 21st Century Community Learning Center's after-school program measured in days of attendance. Low dose is defined as participating 35 or fewer days. High dose is defined as participating 36 or more days (Chappel, 2004, p. 10).

14. Resilience – the process of coping with adversity, change, or opportunity in the wake of high-risk situations or after setbacks (Chappel, 2004).

15. Adequate Yearly Progress (AYP) - Specific targets set in gradual but equal increments of percentage points to reach 100 percent of students performing at the proficient level by the target year of 2014 (NCLB, 2001).

16. Title I Schools – Schools that use Title I funding with other Federal, state and

local funds, in order to upgrade the educational program of the school. A Title I

school serves an eligible school attendance area, in which at least 40 percent

of the children are enrolled in the free/or reduced lunch program (NCLB,

2001).

17. Transient – Children who change schools frequently (Lee, 2000).

Limitations of the Study

The sample used in this study was drawn from the student population of one

school system and only Title I schools within that division that house PK through

Third grade students. The results can only be generalized to those students and Title

I schools in that school district. The results may not be typical of other schools or

school districts in the state or country.

Delimitations of the Study

1. Virginia SOL data from 2005 Spring administration of the third grade test.

2. SOL third grade English scores of all students who were administered the

   test.

3. SOL third grade math scores of all students who were administered the test.

Assumptions of the Study

1. That all students in a third grade Title I school with high attendance will

   score higher on the SOL third grade English and math tests than students

   with low attendance.

2. Students in PK-3 grade in Title I schools in the Southeastern Virginia School

   District who remain in the same school for four school years score higher on

the Virginia SOL third grade English and math tests than students with

medium

or high mobility.

3. Students not enrolled in the free or reduced lunch program score

higher on the SOL third grade English and math tests than students enrolled in

the free or reduced lunch program.

Organization of the Study

This study is organized into five chapters. Chapter 1 of this study includes the

introduction, context. overview, historical perspective, statement of the problem,

significance, purpose, research questions, conceptual framework, definition of terms,

limitations, delimitations, major assumptions and organization of the study.

Presented in Chapter 2 is a review of related literature. The methodology of this study

is described in Chapter 3. Included in Chapter 4 of this study are the results and

findings after the manipulation of data. In conclusion, Chapter 5 of this study presents

a summary of the findings and conclusions, recommendations and implications for

future research studies.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

Former President William Jefferson Clinton, State of the Union Address, February 4,

1997 challenged the nation:

> Every state should adopt high national standards, and by 1999, every state
>
> should test every 4th grader in reading and every 8th grader in math to make
>
> sure that high standards are met. These standards represented what all
>
> students must know to succeed in the knowledge economy of the 21st Century.
>
> Every state and school must shape the curriculum to reflect these standards,
>
> and train teachers to lift students up to them. To help schools meet the
>
> standards and measure their progress, we will lead an effort over the next two
>
> years to develop national tests of student achievement in reading and math.
>
> Raising standards will not be easy, and some of our children will not be
>
> able to meet them at first. The point is not to put our children down, but to lift
>
> them up. Good tests will show us, who needs help, what changes in teaching to
>
> make, and which schools need to improve.
>
> More must be done to help all children read. Given that, 40% of
>
> the eight year olds cannot read on their own. Clinton (1997) further stated that
>
> we should make sure every child can read independently by the end of third
>
> grade. (Excerpt taken from the 1997 State Address, United States Capitol, 105th
>
> Congress: President William Clinton).

Today, "The No Child Left Behind (NCLB) Act has become the catalyst toward improved student achievement" (Zamudio p.10, 2004). The NCLB Act requires schools to educate all students with emphasis on subgroups, despite barriers that have an impact on student attendance (NCLB, 2001). Researchers have attempted to define student attendance and have investigated the importance of student attendance and its relationship to academic achievement (Ziegler, 1972; Norris, 2000; Applegate, 2003).

Research supports that students who attend school regularly have higher grades than those students with high absences (Redick & Nicoll, 1990). Fleming and Zafirau (1982) found that over three-fourths of school failure rates were explained through student attendance percentages. Many state departments of education and school boards have redesigned existing school attendance policies, provided programs to improve attendance issues, and installed a more rigorous monitoring system for schools, as well as applied academic constraints for student non-attendance (Redick & Nicoll, 1990).

About one-third of the school divisions within Virginia had between 32 and 53 percent of their students miss more than 10 days of school (Office of Accountability Project (Department of Education, 1996). During the years 1996-1998, the General Assembly approved appropriations to fund Education Department grants for reducing truancy and supporting safety in elementary and middle schools. Eligibility was based on the number of elementary and middle schools in a school division that had the poorest attendance records. The indicator of excessive absenteeism was the percentage of students absent more than ten days in a school year (Wheat, 1998).

"The connection between attendance and achievement is grounded in common sense" (Wheat, 1998, p2). Unless a student attends, he or she will have difficulty learning

what is taught in school (Wheat, 1998; Rothman, 2001). In the commonwealth's public schools it was estimated that by reducing excessive absenteeism by 25% it would enable 22,000 more young students to score above the national average on standardized tests (Wheat, 1998).). In addition, research indicates that regardless of social and economic factors the schools with higher attendance rates achieved higher test scores (Wheat, 1998; Greene, 1990; Applegate, 2004). Based on data gathered from Virginia's public schools annual reporting of student absenteeism to the Virginia Department of Education, in 1996, one-third of the school divisions had between 32 and 53 percent of the students missing more than 10 days of school. "Unless a student is productively engaged in off-campus research, he will find it difficult to learn what is taught at school in his absence" (Wheat, 1998, p.2). According to the research, by improving student attendance student achievement would rise (Redick & Nicoll, 1990; Virginia Department of Education, 1997; Rothman, 2001;).

This review of literature focuses on the importance of student attendance and its impact on student achievement. Student attendance variables, which include; school attendance policy, socio-economic status, and mobility, that affect student achievement and influence student attendance were examined (Zamudio, 2004). The following sections are included: (a) after-school program, (b) related studies on student variables, such as; socio-economic status, and mobility, and (c) chapter summary. The proxy web server at Virginia Polytechnic University and State University was the used to obtain relevant research for this topic. This search of the literature was conducted using references from research studies, books, dissertations, journals and databases (ERIC, INGENTA, PROQUEST & ILLIAD). The descriptors used to locate studies for this literature review

were "student attendance", "non-attendance", truancy", "at-risk students", "school district's attendance policies", and "student achievement". Research studies that were not relevant to the topic were eliminated after conducting the searches.

Student Attendance

"One crucial element of a child's success in school is school attendance (Atkinson, 1998, p.12). When student non-attendance increases, research has shown a corresponding decrease in student achievement (Herberling & Shaffer, 1995). Using a causal comparative quantitative method Smith (1998) conducted a study to determine the effects of the attendance policy and its affects on high school attendance and the effectiveness of Saturday Redemptive School (SRS) after a one-year implementation of the attendance program in Newport News Public Schools.

Newport News Public Schools during the time of Smith's study had a total student population of 32,000 students. The school district student population consisted of 55% Black or African American, 43% White or Caucasian, and 2% other. Newport News Public Schools had four early childhood centers, 28 elementary schools, nine middle schools, five high schools, and three alternative schools (Smith, 1998).

The population used for Smith's study was 4,236 high school students from three schools in grades 9, 10, and 11. A stratified random sample was chosen to participate in a survey that described their perceptions of the school division's attendance policy and attendance program (SRS) (Smith, 1998). A stratified random sample was selected to ensure that identified sub-groups in the population were represented in the sample. The sample consisted of 20% of the male and female student population. Parents of the identified student sample participated in the survey and 20% of all high school teachers

participated in the survey to determine their perceptions of the new attendance policy and attendance program. The SRS population was 549 high school students for the 1996-1997 school year. The total SRS population was used as the sample to determine if the participants' pass rate was affected by attendance (Smith, 1998). Attendance data were collected from the attendance records of the high school students. The data were arranged from the school year 1996 and the school year 1997 and categorized by high school (Smith, 1998).

Surveys developed by Woog, (1992), for students, parents and administrators were revised to meet the needs of this study by Smith. The revised version of the survey was altered to provide data from teachers who described their perceptions of the attendance policy and the Saturday Redemptive School program in the Newport News Schools. The student survey questionnaire consisted of sixteen questions. The questionnaire answer document used a Likert scale ranging from strongly agrees to strongly disagree. The parent survey and teacher survey were the same as the student survey except on the student survey, the students were asked to identify male or female by selecting the appropriate box (Smith, 1998).

A two-way analysis of covariance (ANCOVA) was used to determine the relationship among students in grades 9, 10, 11 and between gender (male, female), to see if there was an interaction between the grade level and gender, during the year 1995-1996 school year. Identical groups of students were used during the 1996-1997 school year in grades 10, 11, 12 and between gender (male, female). To assess main effects and interaction, the two-way ANCOVA was also used to test for significant interaction of variables (Smith, 1998).

For the main effect, it was determined that (a) There is no statistically significant difference among grade level (9, 10, 11, for year 1995-1996) with respect to year 1996-1997 high school attendance after adjusting for initial differences on the 1995-1996 high school attendance. For the main effect, the data shows that (b) There is no statistically significant difference among gender (male, female) with respect to year 1996-1997 high school attendance after adjusting for initial differences on the 1995-1996 high school attendance. The results of the study show that (c) There is no statistically significant difference among grade level (9, 10, 11, for year 1995-1996) and gender (male, female) with respect to year 1996-1997 high school attendance after adjusting for initial differences on the 1995-1996 high school attendance (Smith, 1998).

The independent variables grade level and gender are on the nominal scale of measurement and the dependent variable (1996-1997 high school attendance) is on the interval scale of measurement. The researcher employed pre-determined alpha level of .05 in this 3 X 2 factorial design to determine the significance of each hypothesis in the study (Smith, 1998).

Smith used a Tukey post-hoc test to determine where among the three levels of the independent variables (i.e. grade levels) the differences could be found. There was a significant main effect for the hypothesis. The 1995-1996 high school attendance was selected as the covariant because the 1995-1996 twelfth grade students graduated from the school district thereby omitting their data from the study (Smith, 1998).

The findings of the study indicate that grade level and gender of high school students in combination do not affect high school students' attendance. The data revealed that ninth, tenth, and eleventh grade students had better attendance in the previous year,

however there was a significant difference in the attendance between ninth and eleventh (Smith, 1998).

A descriptive report of data identified the frequency distribution of each number and the percent of respondents selecting each point on the Likert scale. The descriptive report also gave an overall average rating for each survey question. Data from the student, parent, and teacher surveys were collected and organized on the descriptive report (Smith, 1998).

The perceptions of students, parents and teachers regarding the new attendance policy were examined along with a specially designed program, "Saturday Redemptive School". Findings showed that the new attendance policy was necessary and needed. However, they disagreed that the new policy resulted in the reduction of the number of days students were absent. There was an overall disagreement that the five day unexcused absence rule was keeping students in school. The respondents to the survey felt the Saturday Redemptive School did not meet the needs of high school students and is not an effective intervention for the attendance policy and should be revised (Smith 1998). The results of this study indicate a need to further study, review and analyze the attendance data to see if attendance improves in high schools (Smith, 1998).

The limitations of the study, relate to the length of time used to determine effectiveness of the attendance policy, the environmental variables that may have affected the study and the lack of an effective system of tracking individual attendance.

deJung and Duckworth, (1986), in an article, "Coping with Student Absenteeism"; they reported that some schools are using penalties for students that are in violation of the school attendance policy. They further states that the penalties were only effective if

students were concerned about their grades. "A basic problem with all penalties is that they use aversion to force students to participate in school. They do not build positive motivation. The coerced attendee becomes the classroom teacher's discipline problem" (Duckworth, 1988, p.3).

Kovas (1986) found that schools that use attendance policies with grade penalties have seen an increase in average daily attendance (ADA). The Texas school system uses a similar policy with administrator input on excused and unexcused absences as well as the Southeastern Virginia School District used for this study. Ligon (1990) in his evaluation of the Austin School District found that the beginning stages of the five-day absence attendance policy the attendance in high schools were high, however the number of excused absences has risen making the five-day absence policy ineffective.

"School attendance is an integral part of a child's success in school, the rate at which children are absent from school is relevant" (Atkinson, 1998, p.4). Chappel (2004) examined an after school program as a connection to regular school attendance and academic achievement. "Linkage between after-school programs and the school day may translate into transportable strategies for school leaders for improving student achievement and attendance" (Chappel, 2004, p. 10). Chappel (2004) also examined the dosage effects, which refers to the amount of student participation in a 21st Century Community Learning Center's after-school program. The program employed strategies to build resilience, which refers to the process of coping with adversity, change, or opportunity in the wake of high-risk situations or after setbacks (Deschamps, 1992), in children who qualified for free or reduced price lunch. The study specifically examined dosage effects of after-school programming on perceived competence, social acceptance, academic

achievement, and attendance in school for children in grades 3-5, the majority of whom qualified for free or reduced price lunch. The study compared the perceived competence, social acceptance, academic achievement, and attendance in school of students who participated in an after-school resilience-building program for 36 or more days in the school year to subjects who participated less than 35 days. This quantitative study examined self-concept, academic success, and attendance in school for participants in an after-school program. The population of the study consisted of 120 students, 8-10 years old, in grades 3-5 who registered for a 21st Century Community Learning Center after-school program in an urban elementary school in Durham, North Carolina. There were 37 third graders, 42 fourth graders, and 41 fifth graders in the sample. Seventy-two were girls and 48 were boys. Approximately 79% of the students participating in the study were African-American, 12% Latinos, 7.5% Whites, and 2% Multi-racial. The student participants in the after-school program represented the total school population (Chappel, 2004).

The research design used was quasi-experimental based upon Campbell and Stanley's (1963) classic notation system. The classic notation system does not involve random assignment of the subjects to the high dose and low dose groups. Dosage of after-school programming was measured for this study in days of attendance. Students were assigned to a group based upon the number of days they participated in the program during the 2002-2003 school year (Chappel, 2004).

Teachers and counselors assigned students to the high dose and low dose groups. Students were identified from grades 2-4 who needed support beyond the regular school day. The factors used to select students for the learning center program were prior year achievement scores, low school attendance, or need for after-school supervision. The

parents were contacted by the learning center manager and encouraged to register their children for the program that was planned for the 2002-2003 school year. After the initial registration, the program was advertised to the parents of all students in the school (Chappel, 2004).

For all students participating in the after-school learning center program, data were retrieved from the office of community education with pre-approval from the office of research, development, and accountability. Data for the research consisted of demographic data gathered from the school records identifying gender, ethnicity, grade, program referral source, residence of the child and free or reduced price lunch status. School attendance records and achievement levels from the prior year were also used. Student names were removed from the data. A Pictorial Scale of Perceived Competence and Social Acceptance for Young Children, PSPCSA (pretest) was administered to children in individual meetings by trained school personnel prior to beginning in the program and the PSPCSA (posttest) were administered again during the last two weeks of school by trained school personnel (Chappel, 2004).

Chappel (2004) investigated whether or not there was a difference in dosage effect on perceived competence and social acceptance, student achievement in reading and math and attendance between a high dose group of students in grades 3-5 who attended the after-school program of an urban elementary school for 36 or more days and a low dose group of students in grades 3-5 who attended the school's after-school program for 35 or fewer days.

Descriptive statistics were used to describe the students' similarities and differences in the study. The data were analyzed for all students by grade, gender,

ethnicity, residence (who the child lives with), and program referral source. The data were then disaggregated by group (high dose and low dose). The results demonstrated that the characteristics of the two groups were similar to each other prior to the after-school program's intervention. The independent variables grade, gender, ethnicity, and residence, did not demonstrate significant differences in the dependent variables. There were no significant differences prior to the intervention (after-school program) in the two groups for school attendance, reading and math achievement, and perceived competence and social acceptance (Chappel, 2004).

For the variables associated with perceived competence and social acceptance (subscales of cognitive competence, peer acceptance, physical competence, and maternal acceptance) students in the high dose group demonstrated significant differences in mean scores between the pre and posttest administrations. Student scores across all subscales showed gains. This indicated a positive impact on perceived competence and social acceptance for the students who received a high dosage of after-school programming by participating more frequently. Students in the low dose group were found to have a significant difference in mean scores in the subscale labeled cognitive competence but not in any other subscale (Chappel, 2004).

For reading and math achievement, students who received a higher dosage of after-school programming made significant gains over and above the gains experienced by all of the students in the program. All of the students made some improvement, but the increases in reading and math scores from pre to post for the high dose group were significantly larger than the change pre to post of the low dose group. The high dose group's average reading scores percentage points changed from

27

2.48% to 3.15% and math scores changed from 2.69% to 3.33%. The low dose

group's reading average scores changed from 2.68% to 2.81% and math scores

changed from 2.61% to 2.97%. There was a significant difference between the mean

scores on the end of grade test in both reading and math for the high dose group when

compared to the low dose group even after controlling for prior scores. The after-

school program may be a significant source of academic support for these students

(Chappel, 2004; Davis, 2004).

  School attendance also improved significantly for the students who received a

higher dosage of after-school programming but it did not improve significantly for the

students who received a lower dosage of after-school programming. Average school

attendance for the high dose group improved from 172.3 days to 176.7 days. Before

the program began, the data for the low dose group for 2001-2001 indicated that the

students attended school at a slightly higher rate than the high dose group.

  The analyses of the data for 2002-2003 found that the low dose group's

attendance in school improved slightly from an average of 174.2 to 174.9, but this

improvement was not significant (Chappel, 2004). Students in the after-school program

enrolled as a result of three referral methods. The group of students with the lowest school

attendance was the group referred by the counselor while students referred by the teacher

or from parent interest attended at a similar rate. Students referred by the counselor to the

program attended significantly less than the other students (Chappel, 2004).

  In summary, the significant outcomes for students in all areas studied suggested

that the program was successful in meeting the needs of the children it was designed to

support. The findings revealed that on average all of the children in the after-school

program made academic progress from one year to the next; however, the children who

received a higher dose of after-school programming by attending more frequently made

significantly more progress that those who participated 35 days or fewer in the school year.

Attendance in school was studied in this research primarily because of the interest of the

school's leaders in improving attendance. Students in the high dose group made

significant gains over time in attendance. The students in the low dose group did not

improve their school attendance significantly. The higher attendance rate for students may

be linked to the relationship built in the school with students. Overall, the findings for this

research indicated that children in the study who received a high dose of after-school

programming, by attending at least 36 or more days, experienced significant gains in

reading, math, and school attendance (Chappel, 2004).

The limitations of the study include the demographics (students who participated in

an urban elementary after-school program in Durham, NC.) and the use of a non-random

sample (students who participated in the program by parent or guardian registration, even

if they were recommended and the possible instrumentation effects of the pretest and

posttest. Further research could include additional tools such as student observations,

interviews, and focus groups to add more depth to the findings (Chappel, 2004).

Attendance Variables

Before determining the most effective means of controlling student non-

attendance to improve student achievement, it is important to investigate the factors of

non-attendance (U.S. Department of Education, 2001). Applegate (2003) conducted a

one-year study to determine the relationship of attendance, socio-economic status,

and mobility and the achievement of seventh grade students as determined by the

Missouri Assessment Program (MAP) achievement scores. By identifying certain factors or variables that relate to student achievement, Applegate felt that the information discovered would be a valuable asset to teachers, counselors, administrators, and members of the community (Applegate 2003).

The research design for this study was a non-experimental quantitative study, using archival data to study the relationship between attendance, socio-economic status, and mobility, and student achievement on the Missouri Assessment Program (MAP) in communication arts classes. Interval data were used to determine if there was a statistically significant relationship between student achievement and attendance, socio-economic status, and mobility (Applegate 2003). The population for this study consisted of 1,811 seventh grade students from a large mid-western school district. All seventh graders in the school district are required to take the MAP achievement test at the same time every year.

For Applegate's study, the variable attendance was divided into three categories. Category 1 represents (low) was determined as 84.9% and below, Category 2 represents (medium) was determined as 85% to 93.9% and Category 3 represents (high) was determined as 94% and above. Socio-economic status was divided into those students who qualify free or reduced lunch and those students who do not qualify free or reduced lunch. Mobility was divided into students attending the same school for two years, students attending two schools in that time period, and students attending three or more schools in a two-year period (Applegate, 2003).

The findings of the study indicate that high attendance and high socio-economic status is related to high achievement. The results further indicate that there is

significance in the relationship between the independent variable of attendance and the dependent variable of achievement on the MAP in the area of communication arts (Applegate, 2003).

These results also show that there are significant differences in how students performed on the test depending on student placement within the student mobility levels. The results indicated that low mobility is related to high achievement. The findings of this study conclude that there is a significant relationship between student achievement and variables such as attendance, socio-economic status, and mobility (Applegate, 2003).

The following limitations have been identified that may have an impact on the ability to generalize the results of this study to other school districts. A longer period (more than a year) of assessment might produce different results. A comprehensive report of achievement in all academic areas is not available, since the data used include the communication arts portion of the MAP test only.

Applegate suggests that educational leaders focus on areas or predictors within the family, society, or individual circumstances of the child, as well as on the academic surroundings and materials. Finding ways to determine the success of individual students by identifying certain variables early on could affect the teaching methods, placement, additional services, or a variety of other factors used by schools (Applegate, 2003).

Gamble (2004) conducted a quantitative research study to determine the effect of student mobility on achievement and gain-score test results in both reading and math. The population used for the study consisted of all students in the Knox

County School System in grades 3-5 at the time of the 2003 spring administration of TCAP. The population consisted of 12,138 regular and special education students. Data collected for each student included student ethnicity, gender, grade level, mobility, school and socio-economic status.

The scale scores for the 2002 and 2003 TCAP test were obtained from the web and subtracted from each other to obtain a gain-score test result. The results of the study indicate that student mobility negatively effects student achievement in reading and mathematics, which supports previous and current research (Rumberger and Larson, 1993). "Students who move frequently suffer academically from the discontinuity of instruction" (Horwitch, 2004, p.4).

Zamudio (2004) conducted a quantitative research study to determine the relationship between mobility and achievement in elementary schools controlling for student background characteristics (ethnicity, gender, and family income of the students) and school characteristics (attendance rate, school setting, teacher experience, teacher educational attainment, and per pupil expenditures of a school) and if a negative effect on achievement is larger for low socio-economic status students compared to high socio-economic status students.

The study sample consisted of 487 public elementary schools in Arizona that housed third and fifth grade students. The Stanford 9 standardized test results for the year 2001-2002 school year were utilized to measure academic achievement. For this study, school mobility was measured as the percentage of students who transfer in to a school or the percentage of students who transfer out of a school during a given school year. Regression analysis was utilized to find the relationship between

32

student achievement and school mobility controlling for ethnicity and gender of students, percentage of students who receive free or reduced lunch, attendance, school setting, teacher experience, teacher education level, and per pupil expenditures. Test scores derived from the Stanford 9 were analyzed for students in third and fifth grades and for math, reading and language subjects (Zamudio, 2004).

The study findings show that mobility is negatively related to academic achievement as measured by standardized test scores. The relationship remained significant even when controlling for student/family background and school characteristics (Zamudio, 2004). The results of this study highlight the negative relationship between ethnicity and socio-economic status and academic achievement; however, the negative relationship with mobility remained statistically significant while controlling for ethnicity and socio-economic status. For all regression analyses performed, Zamudio (2004) found that attendance had an effect on academic achievement for students in all subject areas for both third and fifth grade students. "Attendance appears to be positively correlated to academic achievement for high SES students" (Zamudio, 2004, p.100). Results also confirmed that a student's family background characteristics are a stronger predictor of student achievement as compared to school characteristics (Zamudio, 2004).

The study findings also revealed that the transfer out rate measurement of mobility matters more as compared to the transfer in rate measure. The transfer out rate remained significant in the regressions while the transfer in rate did not remain significant once controls were added. Zamudio (2004) concluded that these results could possibly be linked to the sample schools included in the study had higher

transfer out rates and /or that the transfer in rate only accounts for Arizona transfers, therefore diminishing the actual number of transfers.

Zamudio (2004) found the following:

A plausible explanation is that the results reflect the composition of the sample. He further stated that it is possible that the transfer-out rate is diminishing the climate for the stable students by negatively affecting achievement due to the disruption of existing learning groups. He determined that high performing students are possibly being pulled out of school for an alternative schooling option. (p. 108)

Lastly the study revealed that mobility was not a significant predictor of achievement for schools considered primarily made up of low SES students, however the results indicate a consistent negative effect on academic achievement for schools predominately of high SES composition (Zamudio, 2004). This finding was opposite of what was hypothesized. "Perhaps low performing students are moving into a high SES school therefore decreasing the average test scores and/ or low performing students adjust better to school when moving as compared to affluent students"(Zamudio, 2004, p.109)

Low SES students move frequently due to financial fluctuations therefore moving has less impact on the student, where as high SES students move due to family breakups or custody issues (Zamudio, 2004). The Kids Mobility Project (1998) suggests that a major reason for student mobility is related to poverty, abuse and divorce (Alexander, Entwisle, & Dauber, 1996).

The limitations noted in the study include the accuracy of the study results. The collection of data could have included individual student data along with school

data. Separating migrant and non-migrant students could have provided more exactness. There were some unmeasured factors such as parental structure, and cultural values that could have affected the study results differently.

Norris (2000) conducted a similar study for the Omaha Public School district (OPS) of predictors of student achievement as they relate to socio-economic status, race/ethnicity, attendance and student mobility, due to the district identifying a gap in the achievement levels of minority and non-minority students even though the district's test scores were above the national norm.

Norris (2000) found that the variables of socio-economic status, race/ethnicity, attendance, and mobility were significantly and substantively correlated with academic achievement. Socio-economic status was the strongest predictor of academic achievement as well as race separate from socio-economic status, which she interrupts as an indicator of a negative influential factor either external or internal in the educational and instructional processes of the school district.

Conclusions and Implications

Researchers have identified a number of factors associated with student achievement (Cotton, 2003). Based on the reviewed studies educational leaders will find it necessary due to school's student accountability requirements to focus on areas or predictors within the family, society, or individual circumstances of the child, as well as on the academic surroundings and materials in order to meet the diverse needs of the students (Zamudio, 2004). "The educational process of a child is a team effort, in which all members must do their part equally or suffer a significant loss" (Applegate, 2003).

Summary

The above studies indicate that further research should be conducted to study the effects of attendance, socio-economic status, mobility and the achievement of students in primary grades in order to detect early signs of attendance issues in order to provide intervention strategies. "Identification of the causes of student academic success or failure has long been a topic studied by educators intent on creating an environment that would more reliably bring about improvement in student achievement" (Norris, 2000). There are factors that have been determined to have an impact on student achievement over which schools have no control such as, socio-economic status, race and mother's education, however educators can investigate those factors that schools can control (Alexander, Entwisle, & Bedinger, 1994; Norris, 2000; Rothman, 2001; McCarthy, 2004).

There is a need for further research in the area of primary school student attendance and academic achievement (Atkinson, 1998). "It is no longer acceptable to educate just a portion of our citizens to high levels, while leaving large groups undereducated" (Bartman, 1997, p.7). The NCLB Act requires schools to educate all students with emphasis on subgroups, despite barriers that have an impact on student attendance (NCLB, 2001). Researchers have attempted to define student attendance and have investigated the importance of student attendance and its relationship to student achievement (Ziegler, 1972; Norris, 2000; Applegate, 2003).

Research supports that students who attend school regularly have higher grades than students with high absences (Redick & Nicoll, 1990). This review of literature has inspired me to focus on the need to investigate factors that influence

school attendance and the relationship those factors have on primary school student achievement. Several of the studies reviewed focused on middle and high school student achievement and attendance. Additional studies have shown that early intervention procedures should be used to reduce student absenteeism to improve student attendance (Smith, 1998). Another study focused on students in the intermediate grades and student mobility and the negative impact on student achievement (Zamudio, 2004; Rumberger & Larson,1998). The primary focus of each of the studies shows that student attendance had a direct relationship with student achievement. Even though the approach of the studies varied, the outcomes of all the studies justify the need to further address student academic attendance and student achievement in the primary schools. "All of our children deserve the best schools can provide" (Deal & Peterson, p. 142, 1999).

School accountability for student achievement has become more rigorous, since the implementation of high stakes testing; therefore, students need to be present to learn. A research study that focuses on primary schools could be the catalyst for additional studies to follow that address the needs in other school districts. The results of this study would provide focus and direction to school systems interested in improving the attendance and achievement of students from the start of a child's school career by providing early intervention strategies (Atkinson, 1998).

As a result of this literature review, more research on determining the impact of student attendance, socio-economic status and mobility on student achievement in the primary schools is necessary. This study will add to the body of knowledge by

determining the affect of student attendance, socio-economic status and mobility on academic achievement. More importantly, this study is among the very first to examine the impact of student attendance, socio-economic status and mobility on student achievement of third grade students in Title I schools.

By the time students reach the third grade, it is possible to accurately predict who will eventually drop out of school and who will earn a high school diploma based on their achievement in English (Lloyd, 1978). This study could possibly contribute to prior research studies that indicate student achievement is effected by student attendance. The results of this study could possibly prompt early development of intervention strategies in the area of improving student attendance and inadvertently affecting student achievement. The reviewed studies indicate that nonattendance is related to poor academic performance, and schools must take an active role in enforcing attendance as a means of improving the performance of students (Davidson, 2002).

CHAPTER 3

METHODOLOGY

"Tests have historically served as an important measurement function, helping

parents, students, teachers, and others to understand which students and schools

were succeeding in which areas, and to identify students or schools that might need

additional help" (Hamilton, Stecher, Klein, 2002 p. 3).

Introduction

This study investigates the impact of student attendance, socio-economic status

and mobility on student achievement of third grade students in two Title I schools with

grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and

math tests scores. Student attendance has been linked to student achievement

(Rumberger and Larson, 1998).

"Identifying certain variables that influence student achievement could affect the

teaching methods, placement, additional services, or a variety of other factors used

by schools" (Applegate, 2003, p.45). Research studies have shown that there are

identifiable variables that are predictors of student achievement (Caldas, 1993).

As educators make every effort to provide the best educational environment for

all students, it is imperative to identify the levels of student absences that are

associated with a wide range of factors that influence attendance (Schagen; Benton;

& Rutt, 2004). Individual student attendance data were collected by accessing the

Southeastern Virginia School Districts statistical system database. The 2001-2005

school year attendance, socio-economic status and mobility data for each third grade

student was used for this study. A combined student population of 233 third grade

students' English and math SOL tests scores were used for this study from two Title I schools in the Southeastern Virginia School District. The 2004-2005 English and math SOL test scores were obtained from the office of accountability and assessment for each third grade student. The following research questions were used to guide the study.

1. Does attendance impact student achievement as measured by the third grade Virginia English and math SOL tests?

2. Does socio-economic status impact student achievement as measured by the third grade Virginia English and math SOL tests?

3. Does mobility impact student achievement as measured by the third grade Virginia English and math SOL tests?

4. Which of the identified factors, attendance, socio-economic status and mobility has the greatest impact on student achievement as measured by the third grade Virginia English and math SOL tests?

Research Design

The research design that was used for this study was causal-comparative in an attempt to imply relationships among or between variables (Charles, 1995). The methodology used for this study was non-experimental quantitative, which was used to investigate traits and situations and produce statistical data (Charles, 1995). This study was conducted using archival and current data to study the relationship of student attendance, mobility, socio-economic status, on the academic achievement of 233 third grade students as determined by the 2004-2005 school year Standards of Learning (SOL) tests scores in English and math at two Title I PK-3 grade schools

in a selected Southeastern Virginia School District. The 2005 school year data were used to determine if there is was a statistically significant relationship between student achievement and attendance among third grade students. The 2005 school year data were used to determine if there was a statistically significant relationship between student achievement and socio-economic status among third grade students. The 2005 school year data were used to determine if there was a statistically significant relationship between student achievement and mobility among third grade students. The p, <05 degree of significance was found in every statistical analysis test confirming the relevance of the relationship between achievement and attendance, socio-economic status and mobility.

The Commonwealth of Virginia measures student achievement and school accreditation by the Standards of Learning (SOL) tests. The tests are scored on a scale of 0-600. Students in third grade are expected to score a minimum of 400 in the area of English and math to show proficiency. A score of 399 or below is considered not proficient and a score of 500 or more is considered passed advanced. Each category content score is averaged for the school and each school's score is combined to determine the school districts accreditation rating. The previous school year's test scores are used for the current school year's accreditation status (Virginia Department of Education,1996; U.S. Department of Education, 2002).

For the purpose of this study, socio-economic status was determined by a student's enrollment in the free or reduced lunch program which is reported to the Virginia Department of Education in October by the school district as required by the school nutrition program. Data collected during the 2001-2005 school years were

used in this study for mobility and the 2004 -2005 school year data were used for attendance and socio-economic status. Student attendance data were determined by the number of days a student is present based on 180 school days over a period of one year. The attendance percentage of 94 percent was used as good attendance for public schools, while 93-85 percent was used as needing improvement and 84 percent or below was used as poor attendance as defined by the No Child Left Behind Act (NCLB) 2001. The needing improvement and poor attendance groups were combined into one group. The number of schools a student has attended between 2001-2005 school years was used to determine mobility. This data were obtained from each school through the school statistical database system.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) software version 13.0 was used to process the data for this study. The statistical tests that was used is the t-tests and Pearson correlation, which analyzed data to determine if there is a relationship between student attendance, socio-economic status, mobility on student achievement. The t-tests and Pearson correlation determines if there is a relationship between individual variables of attendance, socio-economic status and mobility as related to the dependent variable academic achievement, as well as any significant relationship of the combined combination of variables to student performance on the 2005 school year Virginia SOL English and math tests. "The resultant f value was considered against a table of f distribution in order to determine the level of significance" (Charles, 1995, p. 86).

Analysis of the data established the basis for further study educators in this

school district continue to research indicators that impact student achievement in order to help all students succeed (Sparks, 2005).

Description of Population

This study was conducted in a Southeastern Virginia School District that has 28 elementary schools. There are seven schools that are PK-2, two schools PK-3, six schools that are 3-5, one school that is 4-5 and 11 schools that are K-5. Thirteen of these schools are Title I schools because the percentage of students receiving free or reduced lunch. Third grade students from two Title 1 PK-3 grade schools were the population selected for study because of their unique combination of grades as compared to other schools within this school district.

The population that was used for this study consisted of 233 third grade students from two PK-3 grade Title 1 schools. All third grade students in the school district are required to take the Virginia Standards of Learning (SOL) tests. These tests were used as the measure of student achievement in the areas of English and math. Third grade student achievement test scores from the SOL assessment instrument and attendance, socio-economic status and mobility variables were the focus for this study.

Sampling

Third grade students from two Title 1 PK-3 grade schools in a large Southeastern Virginia School District was the population used in this study because of their unique combination of grades as compared to other schools within this school district. The results of the 2004-2005 school year SOL English and math tests were used for this study. All third grade students who received a score on the SOL English

and math tests at the school were used as the population for this study. The Southeastern Virginia School District assessment and accountability office provided the data for the third grade student testing population. The data were distributed to the researcher without identifying characteristics to ensure anonymity. Using the entire third grade student population with the Virginia SOL tests scores of 233 students will guarantee a valid representation for this study. Student records from the school district's statistical database system were used to collect student attendance, free or reduced lunch status and the number of schools a student attended during the 2001-2005 school years.

Instrumentation

Assessment plays a vital role in today's education system. Assessment results are often the force that shapes the publics perception about the quality of a school (Applegate, 2003, p.48). Accurately compiling, analyzing, and reporting assessment data and using research to identify ways to help all students succeed is an important task for educators and stakeholders (Sparks, 2005).

The Virginia SOL tests are designed to mirror legislative reforms and assessment guidelines for Virginia's Standards of Accreditation (SOA) by measuring the academic progress of students. The SOL tests for third grade students include English, math, social science and science assessments. For the purpose of this study individual student English and math results were statistically analyzed. Assessments are not timed; the English portion has two parts; English and writing, which produces a combined score. All three assessments are administered on different days determined by the school district within specific guidelines from the Virginia

Department of Education.

Validity/Reliability

The Standards of Learning (SOL) assessment is designed in accordance with the Standards of Learning blueprint. The blueprint outlines the percentages and number of questions that will come from each content area. The Standards of Learning tests are in alignment with other criterion reference tests. The third grade Standards of Learning (SOL) English and math tests were determined to be a quality criterion for measuring students' achievement in this study (U.S.Department of Education,1996).

Data Collection Procedures

Data for this study were collected from the 2004-2005-school year Virginia SOL tests scores in English and math. Attendance percentages data were collected from the 2004-2005 school year, eligibility for free or reduced lunch (SES) as of February 1, 2005, and mobility data were collected from school year data. Data showing individual student SOL scores for English and math, attendance percentages, eligibility for free or reduce lunch (SES), and mobility rates were made available through the school's statistical database system and the assessment and accountability office within the Southeastern Virginia School District. The selected data used for this study are submitted by each public school division to the Virginia Department of Education (VDOE) that will serve as an additional database for this investigation. Permission for this study was obtained from the director of student services. A request form to conduct research was filed with the district office, which ensures confidentiality. The researcher also received IRB approval for this study from

the Research Compliance Office at Virginia Polytechnic Institute and State University, Blacksburg, Virginia, which regulates human subject research.

Attendance percentages that were used for this study were decided based on the 94 percent attendance requirement for Adequate Yearly Progress (AYP) that comes from the No Child Left Behind Act (NCLB) 2001. The 94 percent attendance requirement has been deemed as good, average attendance for public schools, while 93-85 percent was determined as needing improvement, and 84 percent and below as poor attendance (U.S. Department of Education, 2001).

Socio-economic status was divided into two groups those students who qualify or do not qualify for free or reduced lunch. Students who qualified for free or reduced lunch were determined to have low socio-economic status, while those who do not qualify were determined to have high socio-economic status.

Student mobility was determined by the number of schools the student attended during the 2001-2005 school years. A higher number of schools attended by a student would exhibit a higher degree of mobility; while a low number of schools attended would exhibit a lower degree of mobility. Therefore, a higher number of schools attended established that the student moved a various number of times during his/her primary school years.

Similar to Applegate (2003), mobility was divided into three categories for the purpose of this study. Students who attended only one school within the 2001-2005 school years were determined to have low mobility, those students attending two schools within the 2001-2005 school years were determined to have medium mobility, and those students attending three or more schools within the 2001-2005

school years were determined to have high mobility.

Variables

The dependent variable for this study was third grade individual student achievement on the Standards of Learning (SOL) English and math tests. The independent variables were student attendance, mobility and socio-economic status. For the purpose of the study, third grade student achievement tests scores from the Standards of Learning (SOL) assessment instrument and the effect of attendance, socio-economic status and mobility on student achievement were examined.

The data for the SOL tests were reported as the mean scaled score. The Virginia Department of Education targets the pass proficient category as the goal for all students to obtain. Statistical analysis was performed on the 2004-2005 SOL data to determine if attendance, socio-economic status and mobility are related to student achievement.

Methodology Summary

This study investigated the impact student attendance, socio-economic status and mobility had on achievement of third grade students in two Title I schools with grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and math tests scores. "Identifying certain variables that influence student achievement could affect the teaching methods, placement, additional services, or a variety of other factors used by schools" (Applegate, 2003, p.45). There are certain identified variables that are predictors of student achievement (Caldas, 1993).

The ANOVA was proposed but the data were not suitable to be analyzed with an ANOVA. After further examination, the t-tests were used instead of the ANOVA

statistical tests to show the relationship between student attendance, socio-economic

status, mobility and academic achievement of students. The significance level of .05

was used in every statistical analyses test to validate the significance of the

relationship between attendance, socio-economic status, and mobility on academic

achievement.

CHAPTER 4

REPORT OF FINDINGS

Introduction

The purpose of this study was to determine the impact of student attendance, socio-economic status and mobility on student achievement of third grade students in two Title I schools with grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and math test scores. The following research questions guided this study:

1. Does attendance impact student achievement as measured by the third grade Virginia English and math SOL tests?

2. Does socio-economic status impact student achievement as measured by the third grade Virginia English and math SOL tests?

3. Does mobility impact student achievement as measured by the third grade Virginia English and math SOL tests?

4. Which of the identified factors of attendance, socio-economic status and mobility has the greatest impact on student achievement as measured by the third grade Virginia English and math SOL tests?

The descriptive statistics data were analyzed using correlational comparisons, and t-tests. The ANOVA was proposed but the data was not suitable to be analyzed with an ANOVA. After further examination, the t-tests were used instead of the ANOVA statistical test. The significance level of .05 was used in every statistical analyses test to validate the significance of the relationship between attendance, socio-economic status, and mobility on academic achievement.

The analysis of data in this chapter presents the relationship of the independent variables of attendance, socio-economic status, and mobility to the dependent variable of achievement on the Virginia English and math SOL tests. In the area of attendance, 19 (8.2%) of students were excluded based on the fact the students were not enrolled in school all year. Attendance percentages were calculated based on days present out of the 180 possible school days. Nineteen students were excluded because they did not have a possible 180 days; therefore, the total group involved in this study was 214 students. In accordance with Adequate Yearly Progress (AYP) guidelines attendance percentages were decided based on the 94 percent attendance requirement that comes from the No Child Left Behind Act (NCLB) 2001.

Socio-economic status was divided into two groups including those students who qualified or did not qualify for free or reduced lunch. Students who qualified for free or reduced lunch were determined to have low socio-economic status, while those who did not qualify were determined to have high socio-economic status.

Student mobility was determined by the number of schools the student attended during the 2001-2005 school years. A higher number of schools attended by a student would exhibit a higher degree of mobility; while a low number of schools attended would exhibit a lower degree of mobility. Therefore, a higher number of schools attended established that the student moved a number of times during his/her primary school years. Similar to Applegate (2003), mobility was divided into three categories for the purpose of this study. Students who attended only one school within the 2001-2005 school years were determined to have low mobility,

those students attending two schools within the 2001-2005 school years were determined to have medium mobility, and those students attending three or more schools within the 2001-2005 school years were determined to have high mobility.

Presentation of Data

The Commonwealth of Virginia measures student achievement and school accreditation by the Standards of Learning (SOL) tests. The tests are scored on a scale of 0-600. Students in third grade are expected to score a minimum of 400 in the area of English and math to show proficiency. A score of 399 or below is considered failed or not proficient and a score of 500 or more is considered passed advanced. For this study, in the area of English 156 (74.6%) of the students were pass proficient, 29 (13.9%) failed /not proficient and 24 (11.5%) of the students were pass advanced. In the area of math 112 (52.3%) of the students were pass proficient, 35 (16.4%) failed/not proficient and 67 (31.3%) of the students were pass advanced.

Initially, 233 English and math SOL tests scores, were selected for analysis. However, some tests scores were not analyzed because of missing or incomplete achievement or attendance data. English and math SOL tests scores of 214 students who were enrolled throughout the 2004-2005 school year in the selected school district, were analyzed. However, some students did not have English test scores reported. Of the total group of students included in the analyses, 209 (97.7%) participated in the Virginia English SOL tests, while five (2.3%) students did not participate in the Virginia English SOL test. Since the independent variables, attendance, socio-economic status and mobility were analyzed separately to determine the relationship to the dependent variable, students' academic

achievement on the Virginia English and math SOL tests, 100% of the total

population in each group who participated in the tests was analyzed. In the area of

math, all 214 students participated in the Virginia math SOL test (see Table 1).

Table 1

Descriptive Statistics Overall Student Sample for English and math

Grade 3	N = Potential Participants	Missing Scores	N =Total Participants
English	214	5	209
Math	214	0	214

Note. N represents the number of students.

Research Question 1: Attendance and Achievement

The first research question focused on the impact of attendance on student

achievement as measured by the Virginia English and math SOL tests.

The attendance percentage of 94% was used as good average attendance for

public schools, while 93-85 percent was used as needing improvement and 84

percent or below was used as poor attendance as defined by the No Child Left

Behind Act (NCLB) 2001. Students in the good attendance group represented 176

(82.2%) of the students, 34 (15.9%) the students were in the needing improvement

attendance group and 4 (1.9%) of the students were in the poor attendance group.

Since the poor attendance group had too few students to keep as a separate group

the needing improvement and poor attendance group were combined into one group.

An Independent t-test was performed on the independent variable of

attendance and the dependent variable of the Virginia SOL English achievement.

Table 2 shows the mean score for students with good attendance (452.02) was

higher than the needing improvement/poor attendance group (440.03). The

difference was not statistically significant, t (207)= -11.208, p>.05 (see Table 3).

Table 2

Mean English SOL scores within the Attendance Grouping

Grade 3 Attendance	N	Mean	Std. Deviation
Good (94%or above)	174	452.02	53.212
Need Improvement/ Poor (Below 94%)	35	440.3	55.558

Note. N represents the number of students.

A second Independent t-test was performed on the independent variable of

attendance and the dependent variable of the Virginia SOL math achievement.

Table 3

Independent t-test for English scores within the Attendance Grouping

	t-test for Equality of Means		
	T	df	Sig. (2-tailed)
Grade 3 English	-1.208	207	.228

Note. Significance is a "2-tailed significance" less than .05, which is statistically
significant.

Table 4 shows the mean score for students with good attendance (499.83) was higher

than the needing improvement/poor attendance group (471.82) and the difference was

nearly significant t (212)= -1.935, p = .054 (see Table 5).

For further analysis, the Pearson correlation was conducted to examine the

relationship between attendance and achievement based on each student's actual

attendance rate and English and math scores. The correlation between attendance

percentage and English achievement was low and showed no significant relationship,

r =. 099, p = .155 (see Table 6). The correlation between attendance percentage and

math achievement showed a significant relationship, r = .136, p = .048 (see Table 7).

However, as shown by the correlation, the relationship was relatively weak.

Table 4

Mean Math SOL scores within the Attendance Grouping

Grade 3 Attendance	N	Mean	Std. Deviation
Good (94%or above)	176	499.83	80.317
Need Improvement/ Poor (Below 94%)	38	471.82	83.755

Note. N represents the number of students.

Table 5

Independent t-test for Math scores within the Attendance Grouping

	t-test for Equality of Means		
	T	df	Sig. (2-tailed)
Grade 3 English	-1.935	212	.054

Note. Significance is a "2-tailed significance" less than .05, which is statistically significant.

In summary, the results show there was a significant relationship between

attendance and students' academic achievement on the Virginia math SOL test, but

the relationship was relatively weak. However, there was no significant relationship

Table 6

Third Grade English and Attendance Percentage Correlation

	English	Pct. Attendance 180
English Pearson Correlation	1	.099
Sig. (2-tailed)		.155
N	209	209
PctAtt180	.099	1
Pearson Correlation	.155	
Sig. (2-tailed)		
N	209	214

Note. Correlation is not significant at the 0.05 level (2-tailed).

between attendance and students' academic achievement on the Virginia

English SOL test. In the area of English 209 students participated in the tests. The

174 students in the good attendance group scored 11.9 points higher than the 35

students did in the needing improvement/poor attendance group. In the area of math,

214 students participated in the tests. The 176 students in the good attendance

group scored 28.01 higher than the 38 students in the needing improvement/poor

group.

Question 2: Socio-Economic Status and Achievement

The second research question focused on the impact of socio-economic status on

student achievement as measured by the Virginia English and math SOL tests.

Schools in this study use Title I funding with other Federal, state and local funds,

in order to upgrade the educational program within the school. The two Title I schools

in this study implemented a Balanced Literacy Model reading program, hired additional

Table 7

Third Grade Math and Attendance Percentage Correlation

	Math	Pct. Attendance 180
Math Pearson Correlation	1	.136
Sig. (2-tailed)		.048
N	214	214
PctAtt180Pearson Correlation	.136	1
Sig. (2-tailed)	.048	
N	214	209

Note. Correlation is not significant at the 0.05 level (2-tailed).

reading support personnel and have reduced class size in order to accommodate the

needs of the students. These Title I schools serve an eligible school attendance area

in which at least 40 percent of the children are enrolled in the free/or reduced lunch

program (NCLB, 2001).

Socio-economic status was divided into two groups including those students

who qualified or did not qualify for free or reduced lunch. Students who qualified for

free or reduced lunch were determined to have low socio-economic status, while

those who do not qualify were determined to have high socio-economic status. Of the

overall group of 214 students, 110 (51.4%) received free or reduced lunch, while 104

(48.6%) did not.

An Independent t-test was performed on the independent variable of socio-

economic status and the dependent variable of the Virginia SOL English

achievement. Table 8 shows the mean score for students with higher socio-economic

status (459.31) was higher than the mean score for students with lower socio-

economic status (441.32), the difference was significant, t (207)=-2.450, p=. 015 (see

Table 9).

Table 8

Descriptive Statistics for Student (SES) F/R Lunch and Not F/R Lunch for English

Grade 3 (SES)	N = Potential Participants	Mean Scores	Std. deviation
Low SES F/R Lunch	108	441.32	52.223
Higher SES Not F/R Lunch	101	459.31	53.880

Note. N represents the number of students that took the English tests.
Five students did not take the English tests.

Table 9

Independent t-test for English and Socio-Economic Status

	t-test for Equality of Means		
	T	df	Sig. (2-tailed)
Grade 3 English	-2.450	207	.015

Note. Significance is a "2-tailed significance" less than .05, which is statistically significant.

A second Independent t-test was performed on the independent variable of

socio-economic status and the dependent variable of the Virginia SOL math

achievement. As shown in Table 10, the mean score for students with higher socio-

economic status (512.55) was higher than the mean score for students with lower

socio-economic status (478.13), the difference was significant, t (212) = -3.154, p=.

002 (see Table 11).

In summary, the results reveal a significant relationship exists between students' socio-economic status and academic achievement on the Virginia English SOL test and a significant relationship between students' socio-economic status and academic achievement on the Virginia math SOL test. Students in the higher socio-economic status scored 18 points higher than students in the low socio-economic status group in the area of English. In the area of math, students in the high socio-economic status group scored 34.42 points higher than students in the low socio-economic status group. Since the independent variable socio-economic status is a categorical variable the Pearson correlation was not used in the analysis.

Table 10

Descriptive Statistics for Student (SES) F/R Lunch and Not F/R Lunch for Math

Grade 3 (SES)	N = Potential Participants	Mean Scores	Std. deviation
Low SES F/R Lunch	110	478.13	79.221
Higher SES Not F/R Lunch	104	512.55	80.384

Note. N represents the number of students that took the Math tests.

Question 3: Mobility and Achievement

The third research question focused on the impact of mobility on student achievement as measured by the Virginia English and math SOL tests.

Initially, for the purpose of this study mobility was divided into three categories. However, after performing frequencies on the mobility groups, the group with high mobility only had four students and represented 1.9% of the sample (see Table 12). Therefore, it was necessary to collapse the high and medium mobility

58

groups into one group in order to make the analysis more meaningful. This resulted in 182 students in the low mobility group (85.0%) and 32 students (15.0%) in the medium/high mobility group (see Table 13).

Table 11

Independent t-test for Math and Socio-Economic Status

	t-test for Equality of Means		
	T	df	Sig. (2-tailed)
Grade 3 English	-3.154	212	.002.

Note. Significance is a "2-tailed significance" less than .05, which is statistically significant.

Students who attended only one school within the 2001-2005 school years were determined to have low mobility, those students attending two schools within the 2001-2005 school years were determined to have medium mobility, and those students attending three or more schools within the 2001-2005 school year were determined to have high mobility.

An Independent t-test was performed on the independent variable of mobility and the dependent variable of the Virginia SOL English achievement. Table 14 shows the mean score for students with medium/high mobility (449.57) was somewhat higher than the mean for the low mobility group (452.58, the difference was not significant, t (207)= -.288, p > .05 (see Table 15)

A second independent t-test was performed on the independent variable of mobility and the dependent variable of the Virginia SOL math achievement. Table 16

59

shows the mean score for students with low mobility (497.58) was higher than the

mean score for the medium/high mobility group (479.34). However, the difference

was not significant, t (212)= 1.169, p > .05 (see Table 17).

Table 12

Three Categories of Mobility Frequencies

Mobility	N	Percent
Low (1 school)	182	85.0
Medium (2 schools)	28	13.1
High (3 schools)	4	1.9
Total	214	100.0

Note. N represents the number of students.

Table 13

Combined Categories of Medium and High Mobility

Mobility	N	Percent
Low (1 school)	182	85.0
Medium/High (2 or more schools)	32	13.1
Total	214	100.0

Note. N represents the number of students.

Students in the low mobility group in the area of English scored 3 points lower than

students in the medium/high mobility group. Students in the low mobility group in the

area of math scored 18 points higher than the medium/high mobility group. The

Table 14

Mean English SOL scores for the Mobility Grouping

Grade 3 Mobility	N	Mean	Std. Deviation
Low (1 school)	178	449.47	52.290
Med/High (2 or more schools)	31	452.58	61.859

Note. N represents the number of students.

Table 15

Independent t-test for English and Mobility

	t-test for Equality of Means		
	T	d*f*	Sig. (2-tailed)
Grade 3 English	-.288	207	.774

Note. Significance is a "2-tailed significance" less than .05, which is statistically significant.

Table 16

Mean Math SOL scores for the Mobility Grouping

Grade 3 Mobility	N	Mean	Std. Deviation
Low (1 school)	182	497.58	80.742
Med/High (2 or more schools)	32	479.34	84.968

Note. N represents the number of students.

Table 17

Independent t-test for Math and Mobility

	t-test for Equality of Means		
	T	d*f*	Sig. (2-tailed)
Grade 3 English	1.169	212	.244

Note. Significance is a "2-tailed significance" less than .05, which is statistically significant.

difference in points could mean the difference between students passing proficient, passing advanced, or not passing/ not proficient.

For further analysis, the Pearson correlation was also conducted to examine the relationship between mobility and English and math scores. The results showed no significant relationship between mobility and English achievement, $r = -.013$, $p = .851$(see Table 18). The results also showed no significant relationship between mobility and math achievement, $r = -.100$, $p = .144$ (see Table 19).

Table 18

Third Grade English and Mobility Percentage Correlation

	English	Mobility
English Pearson Correlation	1	-.013
Sig. (2-tailed)		.851
N	214	209
Mobility Pearson Correlation	-.013	1
Sig. (2-tailed)	.851	
N	209	209

Note. Correlation is not significant at the 0.05 level (2-tailed).
N represents the number of students that took the English tests.
Five students did not take the English tests.

In summary, the results of the t-tests and Pearson correlation were consistent and showed there was no relationship between mobility and student achievement in English and math.

Table 19

Third Grade Math and Mobility Percentage Correlation

	Math	Mobility
Math Pearson Correlation	1	-.100
Sig. (2-tailed)		.144
N	214	214
Mobility Pearson Correlation	-.100	1
Sig. (2-tailed)	.144	
N	214	214

Note. Correlation is not significant at the 0.05 level (2-tailed).
N represents the number of students that took the math tests.

Question 4: Factors with the Greatest Relationship and Achievement

The fourth research question asked which of the identified factors had the greatest impact on student achievement as measured by the Virginia English and math SOL tests.

The data suggests that for the variable of attendance, student achievement was only significant in the area of math. In addition, the Pearson correlation test showed a relatively weak relationship between attendance and math achievement. The variable that had the greatest impact on student achievement was socio-economic status. There was a significant relationship between socio-economic status and the level of student achievement on both the Virginia SOL English and math tests. The results did not show significant relationships between mobility and student achievement.

Summary

In this study, descriptive statistics data were examined to determine if there was a relationship between student attendance, socio-economic status, mobility and academic achievement of third grade students in two Title I schools with grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and math test scores.

The correlations between the mean Virginia SOL English and math scores and the independent variables of attendance and mobility using a Pearson Correlation test with correlation significant at the .05 level are shown on Tables 6, 7, 17 and 18. The Pearson Correlation was not used for the independent variable of socio-economic status is a categorical variable the Pearson correlation test was not used. The standard deviation for each is shown as well as the level of significance. A positive correlation shows that as one variable goes up so does the other, such as when attendance increases so does math achievement. A negative correlation shows that as one variable increases the other variable decreases (Applegate, 2003). In addition, the tables described how each level of the independent variables is affected and to what extent. The main result of a correlation or "r" can range from −1.0 to +1.0. The closer r is to +1 or −1, the more closely the two variables are related (Hinkle, Wiersma and Jurs, 1998).

This chapter examined quantitative data received from a Southeastern Virginia School District on student attendance, socio-economic status, mobility and the student achievement levels of third grade students in two Title I schools on the Virginia SOL English and math tests. Findings conclude that there is a significant

relationship between the variable socio-economic status and student achievement and attendance and math achievement.

Chapter 5 will include the an overview, summary of the findings, discussion of the findings, limitations of the study, implications, recommendations for practice, implications for future research and conclusion.

CHAPTER 5

" Identifying certain variables that influence student achievement could affect the teaching methods, placement, additional services, or a variety of other factors used by schools" (Applegate, 2003, p.45).

OVERVIEW

The purpose of this study was to determine the relationship between student attendance, socio-economic status, mobility and the academic achievement of third grade students in two Title 1 schools with grades PK-3, as determined by the Virginia Standards of Learning (SOL) English and math test scores. This study focused on third grade achievement on the SOL tests in the area of English and math and the relationship with attendance, socio-economic status and mobility.

Research conducted regarding the relationship between student attendance, socio-economic status, mobility and students' academic achievement, with results that are inconsistent with this study (Smith, 1998; Norris, 2000; Applegate, 2003; Zamudio, 2004). "Predicting student achievement by identifying certain factors or variables that relate to student success can be a valuable asset to teachers, counselors, administrators, and members of the community. Student achievement and success are the ultimate goals of the educational intuitions of today" (Applegate, 2003, p.75).

Information gathered from the results of this study can assist the Southeastern Virginia School District exploring the findings and considering implications for future research in an effort to find ways to improve student attendance and academic achievement.

Summary of Findings

Analysis of the data produced the following findings:

1. There was a significant relationship found between the dependent variable of students' academic achievement on the Virginia math SOL test and the independent variable of student attendance (212) = -1.935, p = .054, however the correlation was relatively weak, r = .136, p= .048. There was no significant relationship found in this study between English achievement and attendance t (207) = -11.208, p> .05. For math, the good (94% or higher) attendance group mean score (499.83) was higher than the poor/needing improvement attendance group mean score (471.82). In the area of English, the good (94% or higher) attendance group mean scores (452.02) were higher than the poor/needing improvement attendance group mean scores (440.3), but not significantly higher.

2. There was a significant relationship between students' academic achievement on the Virginia English SOL test and student socio-economic status, t (207) = -2.450, p = .015 and a significant relationship between students' academic achievement on the Virginia math SOL test and student socio-economic status, t (212) = -3.154, p= .002. Students who were not enrolled in the free or reduced lunch program for English (459.31) and math (512.55) mean score was higher than English (441.32) and math (478.13) mean score for students enrolled in the free or reduced lunch program. The highest mean score for students not enrolled in the free or reduced lunch program was in the area of math (512.55)

3. There was no significant relationship found between the dependent variable of students' academic achievement on the Virginia SOL English (t (207) = -.288, p >.05) and math (t (212) = 1.169, p> .05). tests and the independent variable of student mobility. Opposite of what was expected, students with low mobility, the mean score (449.57) were somewhat lower than the mean score for students in the medium/high mobility group (452.58) in the area of English. For math, the mean score for students with low mobility (497.58) was higher than the mean score for students in the medium/high mobility group (479.34), which was in the expected direction.

4. There was a significant relationship between the independent variable of socio-economic status and the level of student achievement on the Virginia English and math SOL tests. Results have shown that the independent variable of attendance has a significant relationship with math, t (212) = -3.154, p= .002; however, the Pearson correlation test showed a relatively weak relationship. Therefore, students' socio-economic status had the greatest relationship with student achievement as measured by the Virginia English and math SOL tests.

Through statistical analysis and treatment of the data it can be concluded that the only independent variable that had a significant relationship to student achievement on both the Virginia SOL English and math tests is socio-economic status, however a significance was found between student attendance and student achievement in the area of math. The significance of the relationship was not relevant for both the dependent variables of student achievement unlike socio-economic status. Therefore, statistical treatment of the quantitative data using correlation and t-

test analyses confirmed that the strongest relationship was between socio-economic status and student achievement. These findings are significant for school districts and principals in a No Child Left Behind (NCLB) legislation environment, which separates students enrolled in the free or reduced lunch program into a subcategory. The No Child Left Behind (NCLB) Act has targeted this unique group of students and school systems are required to educate all students with emphasis on the subgroups, despite barriers that impact student achievement. Therefore, specific research linked to improving student achievement is vital for educators in order to reach the goals under NCLB.

Discussion of Findings

Analyses of data revealed that the independent variable of students' socio-economic status is directly related to the dependent variable of student achievement on the Virginia SOL tests in the area of English and math. Furthermore, a significant but weak relationship was found between attendance and the Virginia SOL math test. No statistically significant relationship was found between the independent variable of mobility and the dependent variable of student achievement on the Virginia SOL English or math tests. Likewise, the data did not reveal a statistically significant relationship between the independent variable of attendance and the Virginia SOL English test.

In the areas where no relationship was found between the independent and dependent variables, this may be explained through the limitations of the study. The findings of this study are limited to the sample used. The sample drawn from the student population of one school system and included only Title I schools that house

PK through Third grade students. The results can only be generalized to those students and Title I schools in that school district although there are possible implications beyond these schools. Additional limitations are listed in the limitation section of the research. However, the overall findings show that variables do exist in Title I schools that have a relationship to student achievement.

Literature suggests that a relationship exists between attendance, socio-economic status, mobility and student achievement (Applegate, 2003; Gamble, 2004; Zamudio, 2004). Ziegler (1972) attempted to define student attendance and investigated the importance of student attendance and its relationship to student achievement. He concluded that student attendance is related to student achievement in reading and math. In this study a relationship was found between student attendance and math, however English achievement was not found to be related to attendance. This could be a result of the reading program implemented in these two Title I schools, lower class sizes, additional reading support personnel, remediation programs or once the basic strategies of reading are taught students can read independently of the teacher (Clay, 2002). Redick and Nicoll (1990) concluded in their study that students who attend school regularly have higher grades than those students with high absences, which support earlier research.

Additional studies reviewed used mobility, and socio-economic status as the independent variables to determine the relationship between the dependent variable student achievement. Rumberger and Larson, (1998) found mobility had a negative impact on student achievement. "Students who move frequently suffer academically from the discontinuity of instruction" (Horwitch, 2004, p.4).

Gamble (2004) indicated that student mobility negatively effects student achievement in reading and mathematics, which supports previous research. The findings of (Rumberger and Larson, 1998; Gamble, 2004; Horwitch, 2004), do not support the findings of this study. In this current study there was no relationship found between mobility and student achievement on the Virginia English and math SOL tests. It is possible that mobility over the years does not affect achievement because there are opportunities to provide academic interventions where as mobility within a school year does, because it may be more difficult to effectively provide academic remediation. In addition, mobility in this study was collapsed into two categories because of the size of the population where as Applegate (2003) used three categories, which could lead to different findings.

Zamudio (2004) revealed that socio-economic status was related to student achievement for schools with a high socio-economic composition. The findings of this study also showed a significant relationship between socio-economic status and students' academic achievement on the Virginia English and math SOL tests. These findings substantiate previous study findings (Montano-Harmon, 1991; Zamudio, 2004; Applegate, 2003; Norris, 2000). Students in this study who were not enrolled in the free or reduced lunch program for English and math had mean scores that were higher than students enrolled in the free or reduced lunch program. The highest mean score was in the area of math.

In the review of literature, no studies were found that addressed the relationship between student attendance, socio-economic status, mobility and student achievement of third grade students in Title I school with grades PK-3, as

71

determined by the Virginia Standards of Learning (SOL) English and math test scores. There were studies that addressed the relationship between student attendance, socio-economic status, mobility as well as additional variables not included in this study and academic achievement of elementary, middle and high school students. Similar study findings and the findings of this study revealed a significant relationship between socio-economic status, attendance and students' academic achievement.

Limitations of the Study

1. The study is limited to the sample used that was drawn from the student population of one school system and two Title I schools that house PK through Third grade students.

2. The study results are limited because the schools may not be typical of other schools or school districts in the state or country.

4. The study results are limited because they were based on the 2005 third grade Virginia SOL English and math tests. Other academic areas that were tested were excluded from this study.

5. The study is limited because the Virginia SOL test is not a national testing instrument, so achievement levels could differ using another assessment tool.

6. The study is limited because the data were combined from both schools, therefore individual school variations were not apparent.

Implications

This study found that for this Southeastern Virginia School District's third grade students in two Title I schools there was a significant relationship between socio-

economic status and student achievement on the Virginia English and math SOL tests and a statistically significant but weak relationship between student attendance and student achievement on the Virginia math SOL test. The findings of this study indicate that there are variables outside the classroom setting that affect students and their academic achievement. Also, the findings of this study indicate a need for school districts to provide more educational interventions and resources to those schools with a high number of students who are enrolled in the free or reduced lunch program and struggle with regular school attendance.

Based on the reviewed studies and school district's accountability requirements, educational leaders will find it necessary to focus on areas or predictors within the family, society, or individual circumstances of the child, as well as on the academic surroundings and materials in order to meet the diverse needs of the students (Hickock, 2002; Zamudio, 2004).

Recommendations for Practice

Through analysis of the data and research conducted for this study, the following recommendations for the Southeastern Virginia School District's Title I program are suggested in order to maximize student achievement.

1. The academic achievement of students enrolled in the free or reduced lunch program should be monitored once they enter school. School districts should provide those students who are achieving at lower levels with additional educational support and educational resources in order to bridge the achievement gap.

2. The school district maintain or develop strict guidelines for student attendance and monitor factors that could hinder a student from attending school on a regular basis.

Implications for Future Research

Through analysis of the data and research conducted in this study the following implications for future research were revealed:

1. This study investigated the variables of attendance, socio-economic status, mobility and the impact those variables had on student achievement. Implications of the findings reveal the need to replicate this study using gender and ethnicity as independent variables to determine if those variables impact the dependent variable student achievement, in order to provide the best education for all students.

2. Since the size of the sample was small and the low/medium socio-economic status and medium/high mobility groups were collapsed into one group, it is suggested that this study be replicated using all Title I PK-3 schools in the Commonwealth of Virginia to determine if similar results are found to substantiate the findings of this study.

3. Due to the increase in school systems accountability to raise student achievement, replicating this study using primary non-Title I schools could determine if all students are impacted by these factors in the same manner.

4. It is recommended that this study be replicated using multiple assessment measures for analysis of students' academic achievement to determine if additional information is found that could enhance student achievement.

5. A longer period of assessment could produce different results and determine if achievement gaps increase or decrease as students continue their elementary, middle and high school years of schooling.

Reflections

This study identified the independent variable of socio-economic status to have the greatest impact on the dependent variable of student achievement. "Historically, poor children and minority children have been disproportionately at-risk in our schools, even through research provides a more complex picture of students at-risk " (Applegate, 2003, p.23).

Societal dilemmas are at the root of the variables discussed in this study. Educators need to focus on why and how school leaders can make improvements. Monitoring and evaluating the educational process for students in the primary level is essential in analyzing where and when the academic breakdown begins and what intervention strategies should be developed to help students continue to achieve is the first step to addressing specific issues associated with low socio-economic status students.

One of the National educational goals in 2000, states that all children would start school ready to learn (Bushweller, 1999). For students with low socio-economic status, who do not have an opportunity to attend a childcare center that focuses on school readiness, often lag behind their peers from the start of their school career (Applegate, 2003).

The goal of the No Child Left Behind (NCLB) Act is to educate disadvantaged children (NCLB, 2001). Children from lower socio-economic status have less learning

opportunities and fewer experiences to draw from when faced with learning situations (Sanders & Epstein, 2000). Therefore, educators put forth a great deal of effort trying to close the outside experience gaps using field trips, virtual tours and hands-on activities to provide students with a chance to experience success and raise self-esteem.

Attendance and mobility results were different than expected. Though the impact of attendance only occurred statistically significant for student math achievement, there were percentage point variations in math mean scores. Percentage points could be the difference between whether or not students pass proficient or fail. The data reveals that mobility and attendance are not a problem in itself; it is a symptom of socio-economic status (Stover, 2000).

Therefore, while the socio-economic status of students, in this study, had a statistically significant impact on student achievement in English and math, it also affects the variables of student attendance and student mobility. This is why, for the Southeastern Virginia School District, these findings warrant further investigation.

Conducting this study has given this researcher a great deal of understanding and appreciation of the process of quantitative research. Collecting the data and following the methodology to obtain the results was exciting. The proposed statistical test had changed due to missing or incomplete data, which resulted in the exclusion of students from the attendance group and students from the English group for non-participation in the English test. The three separate groups of attendance and the three separate groups of mobility were collapsed based on the sample size in the categories to make the findings more meaningful.

The findings of this study will alert the school district to the urgency of identifying students at the primary level for variables that negatively affect their academic performance on Virginia English and math Standards of Learning tests (SOL). Also the expectation for students under the No Child Left Behind (NCLB) legislation require all students to be proficient in the area of English and math and requirement goals established for Adequate Yearly Progress (AYP) (2001).

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APPENDIX A

Permission Letter to Conduct Research   Date

Supervisor of Student Services
School Administration Building
Southeastern Virginia School District

Dear:

I am currently enrolled in a doctoral program at Virginia Polytechnic and State University. The dissertation topic is the impact of student attendance, socio-economic status and mobility on academic achievement. The purpose of this research study is to learn how attendance, mobility and socio-economic status affect student achievement.

This research study will require access to the Southeastern Public School District's information technology director in order to access information from the school system's database for two Title I elementary schools third grade students from 2001-2005. The data will be distributed without identifying characteristics to ensure student anonymity. I am requesting permission from the Southeastern Virginia School District to conduct this research study. I have attached a copy of my prospectus for your review.

A written request was sent to the Institutional Review Board for Virginia Polytechnic and State University for approval to conduct research. A copy of that approval will be available at your request.

Thank you in advance for your consideration. I have worked closely with the Assistant Superintendent of Personnel for the Southeastern Virginia School District and plan to share my research with his department.

Sincerely,

D. Jean Jones

APPENDIX: B

Southeastern Virginia School District Approval

December 16, 2005

Mrs. D. Jean Jones
Deep Creek Elementary School
Chesapeake, VA 23323

Dear Mrs. Jones:

Your request to conduct research on the impact of student attendance, socio-economic status and mobility on academic achievement for your doctoral research at Virginia Polytechnic and State University has been approved. The approval is granted with the understanding that the following conditions will apply:

- Participation of principals, teachers, parents and students is strictly voluntary.
- Questions are limited to those detailed in your prospectus.
- Names of individuals, school names or the name of the school division cannot be used in the reporting of the results of your findings without prior permission from the Office of Student Services.

You may use this letter as a cover letter when contacting the Director of Information Technology to retrieve data. Best wishes for a successful completion of your study. Should you have further questions, please feel free to contact me at 547-0153, Ext. 170.

Sincerely,

Sabrina Richards
Supervisor of Student Services

APPENDIX C

University IRB Approval

WVirginiaTech

DATE: March 14, 2006

MEMORANDUM

TO: Travis W. Twiford
             Doris Ausberry

FROM: Carmen Green

SUBJECT: **IRB Exempt Approval:**   "The Impact of Student Attendance, Mobility and
             Socio-Economic Status on Student Achievement" , IRB # 06-070

I have reviewed your request to the IRB for exemption for the above referenced project. I concur that
the research falls within the exempt status.   Approval is granted effective as of March 14, 2006.

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.

cc: File

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APPENDIX D

University IRB Amendment Approval

VirginiaTech

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

DATE: April 18, 2006

MEMORANDUM

TO: Travis W. Twiford
          Doris Ausberry

FROM: Carmen Green

SUBJECT: **IRB Amendment 1 Approval:**   "The Impact of Student Attendance, Socio-Economic
          Status and Mobility on Student Achievement of Third Grade Students in Title I
          Schools" , IRB # 06-070

This memo is regarding the above referenced protocol which was previously granted approval by the
IRB on March 14, 2006. You subsequently requested permission to amend your IRB application.
Approval has been granted for requested protocol amendment, effective as of April 18, 2006.

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.

cc: File

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VIRGINIA POLYTECHNIC INSTITUTE UNIVERSITY AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

VITA

Doris Jean Jones
2513 Longdale Court
Chesapeake, VA 23320

Education

Ed. D in Educational Leadership and Policy Studies

Virginia Polytechnic Institute and State University, 2006

M. Ed in Urban Education and Policy Studies
Norfolk State University, 1994

BA in Elementary Education
James Madison University, 1982

Professional Experience

Principal, Deep Creek Elementary School, Chesapeake Public Schools, Chesapeake, Virginia. 7/05 – present.

Principal, Norfolk Highlands Primary School, Chesapeake Public Schools, Chesapeake, Virginia. 1/01 - 7/05.

Assistant Principal, Norfolk Highlands Primary School, Chesapeake Public Schools, Chesapeake, Virginia. 7/00 - 12/00.

Assistant Principal, Greenbrier Elementary School, Chesapeake Public Schools, Chesapeake, Virginia. 7/97 - 6/00.

Assistant Principal, Southeastern Elementary School, Chesapeake Public Schools,
Chesapeake, Virginia. 7/95 - 6/97.

Elementary Teacher, Western Branch Elementary School, Chesapeake, Virginia 8/91 - 6/95.

Elementary Teacher, John Kerr Elementary School, Winchester, Virginia, 6/90 - 6/91.

Elementary Teacher, Spotswood Elementary School, Harrisonburg, Virginia, 8/82 - 6/90.

Professional Memberships

Virginia State Reading Association

Chesapeake Association for Principal

Parent Teacher Association

The Delta Kappa Gamma Society International

National Association of Elementary School Principals

Professional Activities and Awards

Recipient, PTA Honorary Life Membership Award, Virginia State PTA, 2004

Recipient, Elementary Principal of the Year, 2003

Member, Board of Directors, James Madison University, 1982