THE IMPACT OF ATTENDANCE ON SEVENTH GRADE MATH ACHIEVEMENT SCORES IN THREE NORTHWEST GEORGIA MIDDLE SCHOOLS

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The Impact of Attendance on Seventh Grade Math Achievement Scores in Three Northwest Georgia Middle Schools

by Patrick Kent McCrary

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Abstract

Patrick Kent McCrary. THE IMPACT OF ATTENDANCE ON ACHIEVEMENT IN THREE NORTHWEST GEORGIA MIDDLE SCHOOLS. (Under the direction of Dr. Constance Pearson, School of Education, September 2010).

The purpose of this study was to examine the impact of attendance on achievement in three northwest Georgia middle schools. The seventh grade students were divided into two groups. One group was considered non-truant, missing fifteen or less days of school, according to the county attendance protocol, and the other group was considered truant, missing 16 or more days, according to the county attendance protocol. The purpose was to determine if there was a statistically significant disparity between the non-truant and truant students on the Criterion-Referenced Competency Test scores measured by a t-test. The null hypothesis was that there would be no difference between the scores of the two groups. The overall Criterion-Referenced Competency Test score, as well as those in the domains of Numbers and Operations and Algebra showed a significant difference in the results. Therefore, the null hypothesizes were rejected. The scores in the domains of Geometry and Data Analysis and Probability did not show a significant difference in the results. Therefore, the null hypothesizes were accepted.

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Dedication

I want to dedicate this work to my wife Carla, my best friend, and my wonderful kids, Cole and Kailey. I could not have done this without your love, prayers, and support. You have stood by me during the good times and the difficult times. You have been my inspiration and strength throughout this whole process. I appreciate the sacrifices that you made for me during the past two years. I love each of you more than anything.

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TABLE OF CONTENTS

Page

Abstract iii

Acknowledgements iv

Dedication v

Table of Contents vi

List of Tables ix

List of Figures x

Chapter One: Introduction to the Study 1

Statement of the Problem 1

Purpose of the Study 4

Need for the Study 5

Research Questions and Hypothesis 5

Definition of Key Terms 7

Preview of Subsequent Chapters 9

Chapter Two: Literature Review 11

Theoretical Framework 12

Attendance Overview 15

Reasons for Nonattendance 19

Strategies to Increase Attendance 22

Compulsory Attendance Laws 36

Georgia's Compulsory Attendance Law 37

Georgia Attendance Data 39
School System Protocol for the Studied School District 42
Conclusion 45
Chapter 3: Methodology 47
Research Design 47
Research Questions and Hypothesizes 48
Research Context 49
Instrument 51
Validity and Reliability 54
Population 57
Participants 59
Data Analysis 60
Chapter Four: Results 63
Analyzing the Data 70
Summary 74
Chapter Five: Summary and Conclusions 77
Statement of the Problem 77
Purpose of the Study 78
Review of Methodology 79
Participants 80
Summary of Results and Null Hypothesizes 80
Discussion of the Results 83

Related Research 84

Implications 88

Recommendations for Future Research 89

Limitations 92

Conclusion 93

References 94

Appendix 102

List of Tables

Page

Table 2.1 Summary of Interventions for Addressing Absenteeism 34

Table 4.1 Average Criterion-Referenced Competency Test Math Score 67

Table 4.2 Numbers and Operations Criterion-Referenced Competency Test Results 68

Table 4.3 Geometry Criterion-Referenced Competency Test Results 68

Table 4.4 Algebra Criterion-Referenced Competency Test Results 69

Table 4.5 Data Analysis and Probability Criterion-Referenced Competency Test Results 69

Table 4.6 Criterion-Referenced Competency Test Math Scale Score for Non-Truant and Truant Students 70

Table 4.7 Numbers and Operations Scale Score for Non-Truant and Truant Students 71

Table 4.8 Geometry Scale Score for Non-Truant and Truant Students 72

Table 4.9 Algebra Scale Score for Non-Truant and Truant Students 73

Table 4.10 Data Analysis and Probability Scale Score for Non-Truant and Truant students 74

List of Figures

Page

Figure 2.1 2007 Georgia School Attendance Rates 40

Figure 2.2 2006 Georgia School Attendance Rates 40

Figure 3.1 School A Ethnicity Report 58

Figure 3.2 School B Ethnicity Report 58

Figure 3.3 School C Ethnicity Report 59

Figure 4.1 Attendance Frequencies 64

Figure 4.2 2008-2009 Criterion-Referenced Competency Test Math Results for All Three Schools 65

Figure 4.3 Math Criterion-Referenced Competency Test Results for Non-Truant Students 66

Figure 4.4 Math Criterion-Referenced Competency Test Results for Truant Students 66

CHAPTER ONE: THE PROBLEM

Achievement has always been a top priority in schools; however, due to the federal mandated guidelines such as the No Child Left Behind (NCLB) Act of 2001, achievement has become the most important issue in schools today. All schools are struggling with ways to improve student achievement while dealing with many other factors that plague them that may have a negative effect on student achievement. Goldstein, Little, and Akin-Little (2003) found that truancy was one of the top ten problems in schools today, and Roby (2004) found that student absenteeism had a negative impact on achievement. According to the Colorado Foundation for Families and Children (2002), Philadelphia averages 20,000 students absent per day while Colorado experiences 70,000 student absences per day. One of the ways that states, counties and schools are trying to improve achievement is through the improvement of attendance.

Combating absenteeism is not an easy task. Schools have tried many different programs throughout the years to increase attendance which they hoped would also improve achievement. According to the Colorado Foundation for Families and Children (1999), students with the highest truancy rate have the lowest academic achievement and have a higher chance of dropping out of school. To combat this problem, many schools have offered rewards for students attending school while others have required parents to pay fines and even serve jail time if attendance contracts were broken. Schools have found that one solution does not fit all schools. Schools must work together with their communities to stress the importance of school attendance on achievement.

Statement of the Problem

There is an increased pressure for all schools to increase student achievement. Increasing student achievement is not easy because there are so many different factors (gender, socio-economic status, special education, and language) that play a part in student achievement. A focus on student absenteeism, also called truancy, may be one solution for improved achievement.

The No Child Left Behind (NCLB) Act, which became law in 2001, focuses on academic performance based on state standards. This legislation is a comprehensive educational reform that embodies four main principles (U.S. Congress, 2001). The first principle pressures school districts and administrators with a greater accountability to have students perform at a higher academic level and also to raise the bar of achievement each year. Secondly, states are given more flexibility and control over their own academic standards and assessment levels and the process of that implementation. Next, parents are given opportunities to select schools outside of their zoned district schools if their zoned schools are not meeting the Annual Yearly Progress (AYP) standards. Finally, an emphasis is placed on instruction and teaching methods. This principle also emphasizes teacher certification standards and the best classroom practices. According to McCarthy (2002), NCLB improves academic achievement of all American students and redefines the federal government's role in K-12 education.

Due to the demands of NCLB, schools are looking at ways to improve student achievement. One of the ways that this is being done is through a focus on attendance. Student attendance affects school achievement (Johnston, 2000; Roby, 2004). Nettles (2005) found that a student's daily attendance was critical to a student's success and educational progress. King (2000) determined that student absenteeism may be the most

important issue facing schools today. Studies have been conducted and replicated that indicate that the higher the percentage of absenteeism, the lower the student academic performance average. In Georgia, eighth and tenth grade math mean scale scores fall below the state proficiency level when students miss sixteen or more days of school (Georgia Department of Education, n.d.).

Epstein and Sheldon (2003)) showed that student truancy and dropout statistics were far worse than previously acknowledged. "Reducing the rates of student truancy and chronic absenteeism has been and continues to be the goal of many schools and school systems" (p.308). According to Murray (2002), the Minneapolis Public School System did a study and found that students who were in the classroom 95% of the time were twice as likely to pass the state performance exams as students with attendance rates of 85% or below.

What can states, districts, and schools do to combat the truancy problem? Many schools are leaving the solution up to teachers and staff because principals are so busy with other mandates and demands. However, it is a community problem and everyone must work together to combat the problem of student absences (Epstein & Sheldon, 2002).

Truancy is defined as being absent more than fifteen days of the academic school calendar. In a rural school system in northwest Georgia, when a student receives ten absences, parents are asked to attend a Middle School Attendance Review Team (MSART) meeting to meet with an administrator, a member of juvenile justice, and the school social worker. Each student is put on a contract, which is signed by the parent, student, and all committee members stating that the student will not be absent from

school without a doctor's note or an excuse by the school nurse (Catoosa County Attendance Protocol, 2009).

Purpose of the Study

Student attendance is an issue that administrators and teachers deal with on a daily basis. Student attendance is a top priority of administrators for many reasons, but mainly it is to make sure that the standards set forth in NCLB are met and that their schools achieve annual yearly progress (AYP). Teachers are concerned with attendance because of the stress of making sure students are learning the curriculum and can pass the federally mandated tests, such as the Criterion-Referenced Competency Test. Teachers must also find time to re-teach the material missed when students are absent. When students are absent, they do not receive the same instruction as those who were present. For those students who are absent, instruction is either skipped or modified for the sake of time and convenience.

This study examined student attendance as it related to the independent variable of student achievement. The purpose was to determine if a relationship existed between attendance and achievement of non-truant and truant seventh grade students at three middle schools in northwest Georgia. If found that there is a significant relationship between achievement and attendance, schools may want to review attendance policies to make adjustments that might create a maximum level of attendance.

To complete this study, data were collected and analyzed using the results of the seventh grade Georgia Mathematics Criterion-Referenced Competency Tests as well as attendance records. Data from each domain (Algebra, Geometry, Numbers and Operations, and Data Analysis and Probability) were collected, as well as the overall test

scores for all seventh grade students in a northwest Georgia school district during the 2008-2009 school year. By analyzing the overall Criterion-Referenced Competency Test scores, as well as scores for each domain, teachers, administrators, and county office personnel should be able to see what areas of instruction are most affected by absenteeism.

Need for the Study

Attendance is a problem that schools and teachers deal with on a daily basis. Schools are affected differently, depending on their location and student bodies. Previous research (Johnston, 2000; Roby, 2004; Nettles, 2005; & King, 2000) has been conducted on the impact of absenteeism on test scores. The research commonly found that there was a negative impact on test scores. According to Gullatt and Lemoine (1997), the best results are shown when schools, families, and students work together in a collaborative manner to solve the problem of truancy in schools.

Results of this study should be beneficial specifically to the State of Georgia Department of Education and the local school district in which the study was conducted but may have more encompassing value. The study determined if attendance had an effect on the overall seventh grade math scores of non-truant and truant students. The study also determined which seventh grade mathematical curriculum domain was most affected due to attendance issues for students in the given county. The data should be beneficial in determining if the current attendance protocol is effective in preventing unnecessary absences.

Research Questions

The study will attempt to answer the following research questions

1. Research Question: Is there a significant difference between the overall scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test?

   Null Hypothesis: There is no significant difference between the overall scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

2. Research Question: Is there a significant difference between the Number and Operations scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test?

   Null Hypothesis: There is no significant difference between the Number and Operations scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

3. Research Question: Is there a significant difference between the Geometry scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test?

   Null Hypothesis: There is no significant difference between the Geometry scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

4. Research Question: Is there a significant difference between the Algebra scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test?

Null Hypothesis: There is no significant difference between the Algebra scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

5. Research Question: Is there a significant difference between the Data Analysis and Probability scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test?

   Null Hypothesis: There is no significant difference between the Data Analysis and Probability scores of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

Definition of Key Terms

Academic Indicator: An additional indicator that states can use under the No Child Left Behind Act to meet the requirements of Annual Yearly Progress. The schools within this northwest Georgia school district use student attendance as their academic indicator.

Adequate Yearly Progress (AYP): The measurement used by the United States under the No Child Left Behind Act that allows the United States Department of Education to determine how students are academically performing in schools according to the results found on the state's standardized test.

At-Risk Students: Students who are not successful in the classroom and are in danger of dropping out of school. These students are usually low academic achievers and exhibit low self-esteem. These students usually do not meet academic standards on the state standardized test and also miss more than fifteen days in an academic school year. The Georgia Department of Education has a database that calculates the risk ratio of students and gives points depending on their risk ratio. The ratio is calculated using standardized

test scores, absences, and socio-economic status. The risk ratio is used by the Graduation Coach to compile a list of students that need to be seen by the coach for the upcoming year. There are nearly 100,000 at-risk students in Georgia schools today.

Average Daily Attendance (ADA): Total number of student attendance days divided by the total number of days in the school year. ADA determines the school district's revenue limit income.

Criterion-Referenced Competency Test (CRITERION-REFERENCED COMPETENCY TEST): A standardized test administered to Georgia students in the areas of reading, English/language arts, science, mathematics, and social studies. The test is used to measure how well students learn the skills and knowledge mandated by the Georgia Performance Standards (GPS).

Domain: A group of performance standards within a content area. The domains for the seventh grade mathematics test include numbers and operations, algebra, geometry, and data analysis and probability.

Georgia Alternate Assessment (GAA): A test given to students who for some reason are not able to participate in a statewide assessment. An Instructional Education Plan (IEP) team must decide that the student is unable to participate in regular testing to qualify for this test.

Georgia High School Graduation Test (GHSGT): A test that is required of all Georgia students who are seeking high school diplomas. The test consists of four content areas as well as the Georgia High School Writing Assessment and must be passed to graduate. Since 2004, the writing assessment and English/ language arts and mathematics are used to measure AYP under No Child Left Behind.

Graduation Coach: A school employee whose main responsibility is to not only identify at-risk students, but also track their progress throughout the school year. The graduation coach works with the students who are at higher risk of dropping out of school. The coach's main objective is to employ strategies that keep students from dropping out of school.

Infinite Campus: A student information system provider that collects and manages student data for school systems all across the United States.

Middle School Attendance Review Team (MSART): A term used by schools in the place of student attendance protocol committee.

Socio-economic status (SES): A family's status that is based on family income, parental education level, and social status within the community.

Student Attendance Protocol Committee: A team consisting of a school administrator, school social worker, school counselor, and a member of the local juvenile justice department. Parents and teachers of given students are also considered members of the team. The team's goal is to create a contract that students must abide by to increase their attendance. This team may also be referred to as a middle school attendance review team (MSART).

Preview of Subsequent Chapters

Chapter two of this study will provide an in-depth review of the literature concerning the importance of attendance on achievement. It will also outline the different programs that have been used by schools to motivate and increase school attendance. Chapter three will discuss the research methodology as well as the research questions for this study. Chapter four will report the findings based upon a two tail t-test

of non-truant and truant students in relation to their overall Criterion-Referenced Competency Test, Numbers and Operations, Geometry, Algebra, and Data Analysis and Probability. Finally, chapter five will examine the findings of this research as well as offer ideas for future studies.

CHAPTER TWO: LITERATURE REVIEW

On January 8, 2001, President George W. Bush signed a major piece of legislation that would have a major effect on education in the United States. The No Child Left Behind Act (NCLB) was aimed at improving student achievement. No Child Left Behind (NCLB) requires state departments of education to make sure every public school in the nation that wished to receive federal funding created new standards and models of accountability. States, districts, and schools now have a greater accountability for ensuring that students perform at a higher academic level. The mandate requires all schools a timetable for improvement in student achievement in various academic areas. Also, all students must reach an achievement level of proficiency by the year 2014 (NCLB, 2001). NCLB also requires states to provide "additional indicators" of school and district performance. Student attendance documentation is required for elementary and middle schools. According to NCLB requirements, schools must have a minimum of 93% average daily attendance (ADA) over a nine month academic year (NCLB, 2001).

The central theme of NCLB is Adequate Yearly Progress (AYP). Under NCLB, states are required to establish a definition of AYP to use each year to determine if school and school districts are meeting the goals for improving the academic performance of specific subgroups of students. Schools that do not meet their AYP are subject to various forms of sanctions. In the state of Georgia, Annual Yearly Progress is calculated based on the results of the Criterion-Referenced Competency Test, the Georgia High School Graduation Test (GHSGT), and the Georgia Alternative Assessment (GAA) in reading/English/language arts, and mathematics. Schools meet AYP if (a) all students

and each subgroup has 95% participation on the assessment, (b) all students and each subgroup, present for the entire academic year, meet or exceed the performance goals, and (c) progress must be shown on an additional academic indicator. The indicator must remain in place for at least 3 years. Many schools use student attendance as their additional academic indicator (Georgia School Council Institute, n.d.).

If the performance goals are not met, a school can meet AYP by using the confidence level, multi-year averaging, or safe harbor methods. The confidence interval method consists of a "statistical test that minimizes the chance that the group didn't make AYP due to chance" (Georgia Education Council Institute, n.d.). Multi-year averages take into account the present year as well as the previous two years of data. If the three year average is equal to or greater than the performance goal, the school makes AYP. If a school has a 10% reduction in the number of students in the "Does Not Meet" category of the Criterion-Referenced Competency Test and progress is shown in the additional academic indicator, then a school is in safe harbor (Georgia School Council Institute, n.d.).

If a school does not make AYP for one academic year, no sanctions are placed against it. However, if a school does not meet AYP for two years, it is placed on the Needs Improvement list and students must be offered the opportunity to transfer to a higher performing school within the district. If a school fails to make AYP for three or more consecutive years, it must offer tutoring or supplemental educational services to lower performing students (Georgia School Council Institute, n.d.).

Theoretical Framework

In John Locke's *Essay Concerning Human Understanding* (1689), he concluded that children were born with a "tabula rasa" or a blank slate. Because of this blank slate, parents and society could easily transfer their values and beliefs to their children. Jean Jacques Rousseau (1762) held that children were born "innately good" and it was the responsibility of parents and society to not only uphold the values manifested in children, but expand these values through further teaching. Educational and developmental psychologists of today are still trying to understand how values, goals, skills, and attitudes are transmitted to children.

One explanation is based on Bandura's (1976) social learning theory. Spera (2005) stated that "the process of socialization refers to the manner by which a child through education, training, observation, and experience, acquires skills, motives, attitudes and behaviors that are required for successful adaptation to a family and a culture (p.126)"

Bandura's (1976) social learning theory or social cognitive theory (1989) emphasized the importance of behavior modeling and observation of others' attitudes, behaviors, and emotional reactions. His social cognitive theory explains human behavior in terms of continuous reciprocal interactions among behavior, cognitive, and environmental influences. Bandura (1989) alleged that the interactions of cognitive, affective, and biological events, as well as environmental influences, dictate or influence one's social behavior. A person's behaviors are learned through modeling and observation. These behaviors are learned through an imposed environment, selected environment, or constructed environment (Bandura, 1997).

Through Bandura's social cognitive theory, one could conclude that a student learns from his environment. Students who are not at school are not learning. According to social learning theory, learning is done in the classroom through observation and modeling of the teacher and other students as well as the interaction with them. The school is part of the social environment of the student. A student needs to be in the social cognitive environment of the school in order to learn.

Because of the Georgia Performance Standards (GPS), the curriculum is learned through the process of observing and by being an active participant. When truant students are not in this environment, they have difficulty in producing the same results as those who are in this learning environment. However, the learner must play a role in whether or not learning occurs. Bandura calls this process the modeling process. He breaks the modeling process down into four areas: (a) attention, (b) retention, (c) reproduction, and (d) motivation.

First the learner must pay attention. Anything that pulls the attention of the learner away has a negative effect on learning. Secondly, the learner must be able to retain the information that is being learned. This is retention. Next, reproduction says that the learner must be able to perform what was learned. Lastly, there is motivation. Students must see a motivation for learning or a punishment for not learning. Both of these play an important role in motivation.

If students are not in class, they have fewer chances to learn the material that enables them to succeed later in school (Jacobson, 2008). Students with the best attendance score higher on achievement tests than their peers with attendance problems

(Jacobson, 2008). Therefore, students must be at school to learn through interaction among the teacher and their classmates.

Attendance Overview

Truancy can be defined as chronic absences from school for no apparent reason (Fantuzzo, Grim, & Hazan, 2005). Patterns of truancy usually begin in middle school. This is the time when students lose academic interest, fall behind in their classes, and then miss school to avoid school. Sheldon (2007) found several characteristics of schools where attendance was a problem. The characteristics included poor leadership, low drive for improvement, inexperienced persons in positions of responsibility, high staff turnover, inappropriate policies, and low levels of expectations amongst staff and students. Internal family issues that affect attendance are socio-economic status (SES), family attitudes toward education, parental situations, and child abuse and neglect (Teasley, 2004).

Clump, Bauer, and Whiteleather (2003) questioned whether attendance really had an effect on student performance. They wanted to see how attendance had an effect on unit tests. "They expected that those students who were in class on one of the three quiz days would have significant higher scores on the test that followed the quiz than those students who were not in class on the quiz day" (p. 221). Their expectations were confirmed and they concluded from their study that attending class significantly increased the number of correct answers on a unit test. "Their findings support the notion that attending class is very influential on a student's grade" (p. 223).

Between the years of 1990 and1999, 54% of all truant cases were males and 46% were females (Gonzales, R., Richards, K. & Seeley, K., 2002). According to Teasley

(2004), as school children age, absenteeism and truancy become bigger problems. Girls have a higher rate of absenteeism in high school and boys' chronic absenteeism increases as they advance in grade levels. However, truant cases brought before juvenile courts are nationally even between boys and girls with the average of 15 missed days.

The pattern of absenteeism usually begins at an early age. Eleven percent of kindergarteners are chronically absent. Nine percent of first graders are chronically absent (Jacobson, 2008). Students who are chronically absent in kindergarten have the lowest performance in reading, mathematics and general knowledge in first grade. Research shows that students with the most absences in kindergarten will have the lowest level of educational achievement at the end of fifth grade (Jacobson, 2008).

Chronic truancy can lead to academic failure, school dropout, substance abuse, and gang and criminal activity. The students who drop out of school are shown to be absent more often than other students beginning as early as first grade. More research has been done on student dropouts than student absenteeism (Jacobson, 2008).

Teasley (2004) found that family dynamics play a major role in absenteeism and truancy. Home dynamics such as crowded living conditions, frequency relocation, and weak parent/child relationships have a negative impact on attendance. These home dynamics are more commonly found in lower socio-economic status (SES) families. According to Teasley (2004), truant students are more likely to come from single parent homes rather than two parent homes. Teasley also found that two parents are more likely to keep track of what is going on because the responsibility is shared and not reliant upon one parent.

The socio-economic status of the student must also be taken into consideration. Research, conducted by Arcia (2006), focused on students who had lost more than 30 hours of classroom learning time. His research looked at methods used to improve both attendance and achievement. After examining attendance policies and procedures, his research found that students in lower socio-economic areas were affected more than any other category. As students continued to miss days and move up in grades, they gradually fell further and further behind in academics.

According to Jacobson (2008) absenteeism has a greater affect on children living in poverty, than those who do not live in poverty. The parental support and educational resources needed to help children with their schoolwork are not available. Children in mobile families are also more prone to miss school before and after moves (Jacobson, 2008). Chronic absenteeism affects Latino children in reading more than that of their non-Hispanic White and African American peers, even if they miss the same amount of school (Jacobson, 2008).

Chronic absenteeism will eventually result in other negative consequences for students and schools. High crime has been linked to truancy (U.S. Department of Education, 1996). There is a high rate of burglary and vandalism found in students who skip school. In Miami, 71% of 13 to 16 year olds who were prosecuted for criminal acts had been truant. In Minneapolis, day time crime dropped 68% after police began identifying truant students and citing them to court (U.S. Department of Education, 1996). According to a study by the Centers for Disease Control and Prevention (1992), students who were absent from school were more likely to be involved in physical violence and to be in possession of weapons. They also found that these students were

more likely to smoke, use alcohol, marijuana and cocaine as well as more likely to engage in sexual intercourse.

According to Weller (2000), a large amount of time and money is wasted by schools and school districts in re-teaching truant students. At 100% attendance, there is approximately one thousand, ninety-two instructional hours in a typical school year based on six hour days of instruction on a one hundred, eighty-two school day calendar. If the attendance drops to 95%, then fifty-five hours of instruction have been lost which equals 9.1 days of lost instruction. At 90% attendance, one hundred ten hours of instruction are lost which is equivalent to 18.3 days of lost instruction.

According to Weller (2000), there is a cost to schools and school systems based on instructional time that must be repeated due to absent students. His research found that re-teaching one student at an average of $12.73 per minute would cost the school and school system an average of $127.30. If there were two students that missed instruction, the average cost per minute accelerated to $24.12 a minute. This would be a loss of $361.80 to the school and school system. If re-teaching must be done for 4 students, then the average cost per minute accelerated to $42.88. This would create a loss of $857.60 for the school and school system.

Weller (2000) also found that students were absent more on Mondays, followed respectively by Fridays, Thursdays, Wednesdays and Tuesdays. He also found that students were absent more during the third quarter, January/February/March, and absent least during the first quarter, September/October/November.

You either need a heading here or a transition sentence. Up to this point you have not been talking about the relationship between attendance and achievement. In 1996,

Lamdin concluded that attendance did not impact the achievement of elementary students. He compared the attendance rates and grade level math and reading scores on California's Achievement Tests in elementary schools. In his study, he held the teacher/pupil ratio and socioeconomic status constant. He found that an individual's attendance rate did not impact that individual student's academic performance. Ladner (2005) found the same results when he examined the MCT language arts and mathematics scores as they related to attendance rates and gender for 144 second grade students from a southeastern state. He found no statistical relationship between test scores and attendance in this study.

Ding and Sherman (2006) found that student learning is an interactive process in which student characteristics do influence the outcome of their own learning. "If they are not attending school, the interaction needed for learning is absent, and the effectiveness of the teacher is greatly influenced" (p. 44).

Reasons for Nonattendance

Students are absent from school for a variety of reasons, some reasonable, and some not. Excused absences for most districts include illness, funerals, family emergencies, doctor visits, severe weather, and religious holidays. Risk factors for absenteeism have been grouped into three categories: (1) social background (race/ethnicity, gender, socioeconomic status, family structure, living conditions, and frequent home relocations); (2) academic background (poor academic achievement, test scores, and history of repeating grades); and (3) academically related behaviors (performance, frustration with school, truancy, and discipline). (Bourke et al., 2000; Dekalb et al., 1999; Lee & Burkam, 2003; Rothman, 2001; Volkmann & Bye, 2006).

Railsack (2004) found the following reasons for absences: students were suspended too often; students did not have a positive relationship with other students; students did not have a positive relationship with teachers; and classes were viewed as boring, irrelevant, and a waste of time.

According to Goldstein, Little, and Akin-Little (2003), the factors that have the most affect on absenteeism can be grouped into either the area of school environment, home environment, or individual characteristics. Some of the issues that affect school attendance based on the school environment include such areas as teacher/student conflict, student competition, teacher control of students, low teacher support and harsh grading rules. Parental divorce and separation, parental unemployment, alcohol and drug abuse, family controversies, frequent moving around, parental education level and low socio-economic status (SES) are areas that have a negative effect on school attendance based on the home environment. Individual issues such as low intelligence, poor academic performance, few friends, low self-worth, few friends, and high levels of anxiety also affect school attendance.

Epstein and Sheldon (2002) found that (a) location of the school; (b) percent of students on free/reduced lunch; (c) size of the school student population; (d) percent of homeless; (e) percent of students who walk to school; and (f) percent of English language learners had an effect on attendance in a school. Rohrman (1993) interviewed seventh grade students and they gave the following reasons for being absent:

- They are angry about something at school or home.
- Their friends are truant.
- They want attention, even if it’s negative attention.

- There are better things to do other than go to school.
- They felt bullied.
- They may have learning difficulties or disabilities and find it easier to skip school.
- They are bored with school (p. 45).

Brush and Jones (2002) interviewed approximately 100 students who were labeled as behavior and attendance problems and enrolled in seven alternative high schools in Oregon. They found that students, no matter their background or environment, wanted to be respected, wanted their teachers to challenge them to do their very best and wanted help to achieve success. The students also communicated that they did not feel welcome at school, school staff did not care enough about them to find out why they were absent, and they had not had a significant relationship with any teacher in any of their school years.

David Branham (2004) studied the effect a school system's infrastructure had on student achievement and attendance. His results indicated that a school's infrastructure had a significant effect on school attendance. Students were less likely to attend a school that was in need of repairs. Schools located in lower socio-economical areas were more likely to experience funding difficulties and maintenance and repair problems. Due to a decline in attendance, academic performance declined while behavior problems increased. He concluded that school districts who wanted to improve attendance should make sure school buildings were up to code and make the students feel welcome.

Rocca (2003) discovered factors affecting student attendance from the perspective of interest in classes. The study looked at the idea of providing extra credit to improve attendance. Through his study, he noted that students needed to find out for themselves

that attendance and participating in class made a difference in their grades and knowledge needed for class work and assessments. Rocca also noted that "mandatory attendance promotes the importance of the course and that compared student performance in courses where attendance is mandatory and those where it is not, performance is better when attendance is mandatory" (p. 103).

Strategies to Increase Attendance

Effective strategies for improving student attendance have not been clearly identified. Extensive research has found no specific strategy that works better or more effectively than another to increase attendance (Railsback, 2004). Different views lead to different strategies and how schools combat the problem of chronic absenteeism, unexcused absences, truancy, and drop-outs. Teasley (2004) found that usually only one approach to solving student absenteeism will not work. A comprehensive approach is needed to make a change in the negative behavior. However, the common thread found in literature is the perception that the student and/or the family unit is the dominating cause of absenteeism (Bourke, Rogby & Burden, 2000; Lee & Burkam, 2003).

The problem of absenteeism has been addressed in a variety of ways. Absenteeism interventions that have been used have either been community based, family based, or school based. Each intervention has been aimed at different possible causal factors. The strategies used have focused on truant students with behavior problems as well as those anxiety-based school refusers. The following strategies have both advantages and disadvantages. Some of the most notable disadvantages include cost, time restraints, and the complexity of the strategy which in turn drains time, energy, and

resources of school personnel. Programs are not always applicable to all schools due to size, resources, and personnel (Goldstein, Little, Akin-Little, 2003).

An early strategy that Copeland, Brown and Hall (1974) used was a school-based two-fold behavioral approach. The first approach included the principal calling parents of chronically absent students and thanking them for having their student at school. The second approach included the principal visiting these same students in their classrooms and praising them individually for being at school. This two-fold approach dramatically increased the attendance rate of these students. Of the three students that were included in this particular strategy, the changes in their attendance were as follows: 51% to 53%, 41% to 83% and 79% to 85%. This program has an advantage of being cost-effective, but required a large time constraint on the principal. This program would not be as effective in larger schools due to the time constraints of the principal (Goldstein, Little, Akin-Little, 2003).

A strategy introduced by Nooman and Thibeault (1974) was conducted in a school district in Kentucky. The school district had the highest drop-out rate in the state. A record 75% dropped out before completing high school. The study was conducted on students in grades three through seven. In the study, teachers nominated students with good behavior and grades. These students were paired with chronically absent students. The nominated students were asked to vocally praise their matched students for being at school. The selected students were also asked to call when their matched students were absent from school to check on them and ask them if they would be back the following day. This strategy increased attendance significantly (Goldstein, Little, Akin-Little, 2003).

Peer researchers (Gresham & Gresham, 1992; Skinner, Cashwell, & Dunn, 1996; Slavin, 1977) have reinforced the effectiveness of this strategy in increasing attendance in schools (Goldstein, Little, Akin-Little, 2003). This strategy was cost effective and easy to implement, but schools may be hesitant to implement this type of strategy due to the high responsibility put on the nominated students.

Another strategy introduced by Alexander, Corbett, and Smigel (1976) included using a Token Reinforcement Program. Awards were based on individual performance as well as whole group performance. In this program, students were given a $1 for lunch money based on a full day's attendance of the previous day. Attendance rose from 51% (baseline) to 80%. When the rewards were based upon the whole group performance, the attendance rate rose to 94%. This program was very effective; however, rewarding students with money is not feasible in most public schools (Goldstein, Little, Akin-Little, 2003).

Volkman (1996) introduced the strategy of involving parents by sending invitations to parents of chronically absent students and inviting them to spend one hour per month with their children at school. The parents would attend classes with their children and be active members of the class during that time. In this strategy, attendance improved significantly even though no specific data were available. This strategy was cost effective, but could be disruptive to students and teachers, especially if a large number of parents attended on the same day. (Goldstein, Little, Akin-Little, 2003).

Reid and Bailey-Dempsey (1995) introduced the PAY Program. This study included 112 at-risk girls from Vermont in grades 6 through 10. In this study, two monetary incentives were contrasted to test for effectiveness. The first incentive, All or

None (A-N), gave students the opportunity to earn $50 per month if attendance improved 15% or if there was a 15% improvement in the average grade of the student's weakest three classes. The second incentive, The Incremental (INC), made students eligible to receive $10 per class for each of their 4 classes by improving performance by half a grade or more per class. If the student showed improvement in all 4 classes, then they could earn a $10 bonus (Goldstein, Little, Akin-Little, 2003).

The PAY program yielded negative results. The grade point average for the students involved in the study dropped by .13% per school quarter. However, the grade point average of the control group that received no intervention dropped by .54% per school quarter. The mean number of absences of the girls involved in the program increased by 1.41 days per quarter. The mean number of days absent increased by 3.74 days per quarter for those not involved in the program. Reid and Bailey-Dempsey (Goldstein, Little, Akin-Little, 2003) suggested that even though the results were negative, there was still positive effect due to the performance of the control group in both grades and days absent.

McPartland and Nettles (1991) created a program called RAISE. RAISE was a community based program for at-risk students beginning in grade six. In this program, volunteers from the community were assigned to at-risk students. The volunteers helped in tutoring students as well as accompanying them to recreational activities. The volunteers were asked to contact students on a bi-weekly basis. To keep tract of progress, support staff met with volunteers on a regular basis and an occasional meeting with students. Attendance, grades and behavior were monitored by both volunteers and support staff (Goldstein, Little, Akin-Little, 2003).

This study indicated a significant improvement in both attendance and English grades. To better understand the results, attendance was compared to the attendance of a control group of at-risk non-RAISE students in the same middle school. There was a 3% increase in attendance which equaled an increase of one week (5.3 days) additional attendance. English grades improved, but were still below the district mean. Math grades, overall grade point averages and scores on the California Achievement test were unaffected by the study. Even though the program yielded some positive results, it cost 2 million dollars over a seven year period for 420 students. That cost to $680 per student per year (Goldstein, Little, Akin-Little, 2003).

According to Baker, Sigmond, Nugent (2001), the Abolish Chronic Truancy (ACT) Now program is a community based intervention that is used in Tuscan, Arizona. This program was created by 100 community stakeholders including law enforcement, courts, community organizations, agencies, and social services. This program consists of three key elements. The first element holds parents accountable for following the mandatory attendance laws. The second element creates programs that focus on the causes of truancy. The last element creates consequences for students and parents who fail to complete the programs designed by the stakeholders.

Under this program, if a student is truant three times, parents are notified, offered a program designed by the stakeholders, and assigned a court date. As part of the programs offered, parents are referred to parenting skills course. The results have been very successful due to the clear and consistent guidelines set forth by the stakeholders (Baker et al., 2001).

Epstein and Sheldon (2002) conducted a survey of schools that found that both attendance and achievement improved when schools focused on a holistic approach. Schools, working together with teachers, parents, students and the community, saw better results in curbing absenteeism in schools. Each of these schools was a participant in the National Network of Partnership at Johns Hopkins University. Their main goal was to increase attendance through a partnership among the schools, families, and the community. The researchers asked the participating school to provide average daily attendance rates for three consecutive school years and percentage of "chronically absent" students. To make sure all variables were represented in the study, the researchers also wanted the family involvement programs available by the schools as well as the success or effectiveness of these programs. Activities that were shown to give the best results included giving awards to students who had improved their attendance, communicating directly with families, offering workshops for parents to attend, having a family contact person such as a social worker, and offering an after-school program for students.

The research by Epstein and Sheldon (2002) showed that taking a comprehensive approach to attendance with activities that involve student, families, and community was the best approach for increasing attendance rates as well as reducing chronic absenteeism. They also found that using more positive involvement activities that reduced negative ideas about the school rather than negative activities such as monetary fines and jail time were more beneficial to getting more parents involved and creating a more positive working environment between the schools and parents. Other suggestions included “home visitation, school connections, communicating effectively, and contacting

homes/parents should assist the school's efforts to overcome the socio-economic issues of the students" (p. 311).

According to Teasley (2004), students coming from more affluent communities have a great support system where education is held at a higher standard and parents are actively involved in the education of their student. These communities also have the resources available to not only promote good attendance, but also have programs in place to decrease truancy.

Teasley (2004) found that when parents were actively involved in their child's education, achievement increased and truancy decreased. Parents can be active through helping with homework, reading with students, checking up on grades through either teacher communication or technology that is now being offered by school systems where parents can check their student's grades from home, and attending Parent/Teach Association (PTA) meetings.

Teasley (2004) also found several parental factors that helped increase achievement and decrease absenteeism. Parents who spend more time in activities with their students that help improve cognitive ability are more apt to increase achievement. Also, parents who share their values and aspirations while promoting responsible behavior help increase motivation in their student and inspire them to want to be in school and do well. Parents must also promote communication skills where important issues such as schooling are openly discussed. According to Teasley (2004), parents of higher SES are more likely display these parental characteristics than those of lower SES. Students living in higher SES have parents who are more involved with teachers and schools which in turn increased attendance and achievement.

Since the implementation of NCLB and the increased accountability measures related to achievement, strategies throughout the United States have increased the policing of states which have led to surveillance, punishment, and the application of legal sanctions when students or parents refuse to conform to established attendance policies. Police personnel and school district employees are working together to organize attendance sweeps to pick up students from their homes during school hours.

In 2006, the Minnetonka School District in Minnesota began linking unexcused absences and school tardies to grades. They found no significant change in their student absenteeism. They soon found out that the key was not doing away with all consequences, but finding the right one. When this didn't work, they began calling parents, and sending emails if possible, to let them know that their student was absent. Also, within 36 hours of a student's absence, someone from the school met with the student to discuss his absence. Students were also assigned an after school detention for every unexcused absence. Under the new policy, unexcused absences dropped 42%, disciplinary referrals dropped 64% and suspensions dropped 37%.

In England, attendance is a major focus because they see it as a way to improve academic achievement (Reid, 2007). To help the problem of truancy, they use learning mentors, home/school liaison officers, classroom assistants, and attendance officers and secretaries. The schools that have these resources available, have the best working relationship with truants, have faster than national average improvements in attendance and achievement, and better interactions with families outside of school. However, parents have complained that many of these initiatives have come too late. Many parents

believe that an alternative curriculum or vocational school should be available to disadvantaged learners such as truants and low achievers.

Many states have adopted attendance policies that are very stringent. In Indiana public schools, if a student misses eleven class periods then he will fail the class unless the absences have prior approval or written documentation of the illness (Nettles, 2005). Baltimore, Maryland has created a Truancy Assessment Center. This center is the combined effort of the school system, police department, mayor's office, juvenile justice office, and social services. In Philadelphia, parents are being trained as truant officers. They visit homes and talk with families. They have cut their truancy problem in half. In Jefferson County Kentucky, parents are charged and jailed for allowing their children to miss school. In one year, the number of truant students was reduced from 716 to 126. Partnering with the community has been the key to improving attendance in Los Angeles (Canter, 2004).

Omar Ramos, principal of Trimble Tech High School in Fort Worth, Texas, rallied his business partners to help with his attendance problems. Blockbuster gift certificates and calls home were not helping attendance problems. A local construction firm donated $10,000 toward the purchase of a used Ford Mustang. Students were given a varying number of "Bulldog Bucks" for a week of no tardy slips, honor roll (A's & B's), star roll (A's), and random bonus days. Four "Bulldog Bucks" gave the student one chance in the drawing. In the first year, 12 students earned five chances, 100 students earned four chances. One thousand, six hundred students earned 16,000 chances. The school saw a 1.8% boost in their attendance in the first year. In the second year of implementation, one-third of the student body had perfect attendance at the end of the

first six weeks of school. Due to the success of the program, the Fort Worth Independent School District's Community Partnership joined the program and was able to have two more cars donated the next school year (Sturgeon, 2004).

Sheldon (2007) challenged schools, families, and communities to create partnership activities for each of the following: (a) parenting – helping families create stable, safe home environments; (b) communicating – two way communication between schools and homes; (c) volunteering – creating opportunities for parents to help at school; (d) learning at home – giving families information on how to help their child with their class work and homework; (e) decision making – giving families opportunities to serve as representatives on school committees; and (f) collaborating with the community – identify and integrate resources and services from the community to strengthen school programs.

Baker, Signmond, and Nugent (2001) found that community level interventions that focused on collaboration and the sharing of resources got the best results for decreasing absenteeism. This was especially true in low income communities where there was a high level of unemployment.

According to Sheldon (2007), the first step in establishing a partnership is forming an action team made up of administrators, teachers, parents and community leaders. Sheldon believes that high school students are old enough to serve on this committee. The committee should be responsible for organizing and implementing the school's involvement activities. The committee is "encouraged to link family and community involvement into specific goals, consistent with and supportive of those set by the school improvement team or council" (p. 269). Schools that have successful

partnerships have shown a decrease in disciplinary actions for students and a higher percentage of students passing the standardized achievement test.

Reese (2005) studied the increase in student achievement in the St. Louis Public School System. His study looked at the success programs that addressed and increased student attendance and how they promoted students being open to a variety of academic programs and new ideas for learning. With less than 10 percent of the students meeting the proficient level in the Missouri Assessment Program, the school district needed to address their poor academic performance. The most pressing issue was to increase awareness among the educators of the school district before promoting the programs among the students. "Intensive professional development for teachers and administrators in promoting student attendance and community outreach allowed the district to assess improvements among their schools" (p. 21). Upon completion of the professional development, the implementation and awareness promotion among the students and parents could begin. The study reviewed schools that had success in implementing the programs with improved test scores.

Buckley & Wilkinson (2001) found that "students attending school regularly were able to complete their work on time" (p. 28). The study also found that the increased communication with parents created positive interactions with the teacher and students. The study identified the need for schools and teachers to improve communication and assistance with parents to increase student achievement.

Like Fulton County, Fannin and Gilmer counties have created a joint partnership to establish a successful truancy program. Under this program, students are flagged after three unexcused absences or five excused absences. At that time, parents receive a phone

call as well as a home visit. During the home visit, parents and students are asked to sign an attendance contract. If further absences occur, the students as well as parents, with legal representation, go before a juvenile judge. The students are usually given eight hours of community service for an unexcused absence, four hours for a tardy, and few hours of service for a disciplinary violation. The student and parents must go before the judge every 30 days. Students are dismissed from supervision when they have gone 45 days without truancy, tardiness, or disciplinary action. The partnership between these two school systems as well as the district juvenile court has been successful in encouraging the community to take truancy seriously. According to attendance records, students missing 10 or more days dropped 16% in a five year period (Georgia Department of Education, 2004).

Clark County school system hired a case manager to be in charge of student absenteeism. The case manager identified students with five or more unexcused absences. The case manager was also in charge of home visits and parent phone calls. The case manager became the facilitator between the school system and the families. As facilitator, the case manager was in charge of arranging and conducting parent/teacher conferences for these students. He also provided families direct services, as well as referrals to community based resources. For those students and parents who did not comply with the case manager, they were summoned to appear before an attendance committee.

The following Table (2.1) gives a synopsis of the different interventions to combat absenteeism in schools that have been identified in this paper. Strengths and weaknesses are listed because no one intervention is appropriate for all situations.

Table 2.1 Summary of Interventions for Addressing Absenteeism

Intervention	**Summary**	**Strengths/Weaknesses**
Copeland, Brown & Hall	Principal uses recognition via phone calls and class recognition.	Improved attendance with low cost, but principal time constraints.
Noonan &Thibeault	Students with high attendance are paired with students of low attendance.	Improved attendance with low cost, but burden put on high attending students.
Alexander, Corbett & Smigel	Token reinforcement program (for individuals and groups).	Improved attendance, but high cost.
Volkman	Parents attend school with chronically absent student.	Improved attendance and low cost, but could be disruptive to the classroom.
Pay Program (Reid & Bailey-Dempsey)	Monetary incentive contracts.	Modest effect on attendance, but high cost.
Project RAISE (McPartland & Nettles)	Community-based approach.	Improved attendance and grades, but high cost.
ACT Now (Baker, et. al)	Community-based approach.	Improved attendance due to the strict guidelines.
Epstein & Sheldon	Comprehensive school program.	Improved attendance, but high cost and time constraints.
Minnetonka School District	Unexcused absences and tardies are linked to grades.	Improved attendance. Parents are notified of absences and administrators meet with each absent student. Time constraints and extra personnel.
England Schools	Officers, classroom assistants, and attendance officers are used.	Improved attendance, but high cost due to extra personnel.
Baltimore, Maryland	A truancy assessment center was created to help the school systems combat absenteeism.	Improved attendance, but an agreement has to be made with the local officials.

Philadelphia	Parents are trained as truant officers.	Improved attendance and low cost.
Jefferson County, Kentucky	Parents fined and jailed for truant students.	Improved attendance, but agreement must be made between the school system and the local authorities.
Trimble Tech High School	Prizes are given for good attendance.	Improved attendance, but donors needed to provide monetary support for the prizes.
Sheldon	School, family, and community approach.	Improved attendance with a decrease in disciplinary actions. Improved achievement test scores.
Fannin and Gilmer School Systems	Joint effort between the school system and the local juvenile courts.	Improved attendance, as well as a community effort to increase attendance.
Clark County	A case manager was hired to oversee student absenteeism.	Improved attendance, but added personnel and cost.

Teasley (2004) found that having access to social workers was shown to have a positive impact on improving attendance. Social workers were able to work with families as well as the teachers to create a positive working environment. Social workers were able to gain information about students, such as any viable background information of which teachers would be unaware, but very beneficial.

The 800 graduation coaches spread throughout Georgia middle and high schools have also had a positive effect on monitoring attendance, increasing graduation rates, and decreasing dropout rates. Under the leadership of graduation coaches, the graduation rate has grown from 63.3% in 2003 to 75% in 2008, which is a state high. The dropout rate has also decreased in both middle and high schools. The dropout rate for middle school students has decreased by 1.2% and the high school dropout rate has dropped 1.8%.

The National Center for School Engagement (NCSE) was established by The Partnership for Families & Children to promote student engagement in school through the three A's: attendance, achievement, and attachment. Through their research, they found that the best programs to combat student absenteeism have several common themes within the program. First of all, there is family involvement. Parents must be involved to curb student absenteeism. This can be done through communication between schools and parents as well as opportunities for parents to be invited into the school. This can be accomplished through awards ceremonies and student programs. Secondly, an effective truancy program offers incentives as well as sanctions. Students are awarded for good attendance, but also sanctions are given to students and parents for days missed that are unexcused (National Center for School Engagement, 2007).

Good programs also offer support networks. Parents must be offered assistance to be shown the importance of attendance as well as be held accountable to make sure their student is in school. Support can come from social workers, counselors, or truant/court workers. Lastly, good programs are constantly evaluated and changed to receive the best results. Good programs must not be happy with status quo, but must always look for more recent research that will produce good results (National Center for School Engagement, 2007).

Compulsory Attendance Laws

State compulsory laws were enacted because there was a concern that children were working in factories and growing up without an education. The long days in the factories left children with little time for education (Kerschner, 2000). Due to the rise of the textile industry in many of the southern states, children as young as 6 and 7 years old

were working in factories 13 hours a day for small wages. There was some opposition to changing these conditions, but a few southern states enacted laws that limited the number of hours that children could work. This eventually led to more effective child labor laws and to compulsory school attendance laws (Kerschner, 2000).

All states have compulsory attendance laws that require students to be enrolled in either a public, private or home-school setting. States vary on the mandatory starting age and legal dropout age of students. Mandatory starting ages range from 5 to 8 years of age. The legal dropout age ranges from 16 to 18 years of age. Several states offer exemptions to these mandatory ages of dropout (National Center for School Engagement, 2003).

Georgia's Compulsory Attendance Law

Below is the Georgia compulsory school attendance law which was enacted in 1916 which requires all children between the ages of six and sixteen to be present in a school setting (Kerschner, 2000).

> Under Georgia's Compulsory Attendance Law (Georgia Code: 20-2-690.1)
>
> (a) "Mandatory attendance in a public school, private school, or home school program shall be required for children between sixth and sixteenth birthdays. Such mandatory attendance shall not be required where the child has successfully completed all requirements for a high school diploma.
>
> (b) Every parent, guardian, or other person residing within this state having control or charge of any child or children during the ages of mandatory attendance as required in subsection (a) of this Code section

shall enroll and send such child or children to a public school, a private school, or a home study program that meets the requirements for a public school, a private school or a home study program; and such child shall be responsible for enrolling in and attending a public school, a private school, or a home study program that meets the requirements for a public school, a private school, or a home study program under such penalty for noncompliance with this subsection as is provided in Chapter 11 of Title 15, unless the child's failure to enroll and attend is caused by the child's parent, guardian, or other person, in which case the parent, guardian, or other person alone shall be responsible; provided, however, that tests and physical exams for military service and the National Guard and such other approved absences shall be excused absences.

(c) Any parent, guardian, or other person residing in this state who has control or charge of a child or children and who shall violate this Code section shall be guilty of a misdemeanor and, upon conviction thereof, shall be subject to a fine not less than $25.00 and not greater than $100.00, imprisonment not to exceed 30 days, community service, or any combination of such penalties, at the discretion of the court having jurisdiction. Each day's absence from school in violation of this part after the child's school system notifies the parent, guardian, or other person who has control or charge of a child of five unexcused days of absence for a child shall constitute a separate offence. After two reasonable attempts to notify the parent, guardian, or other person who has control or charge of a

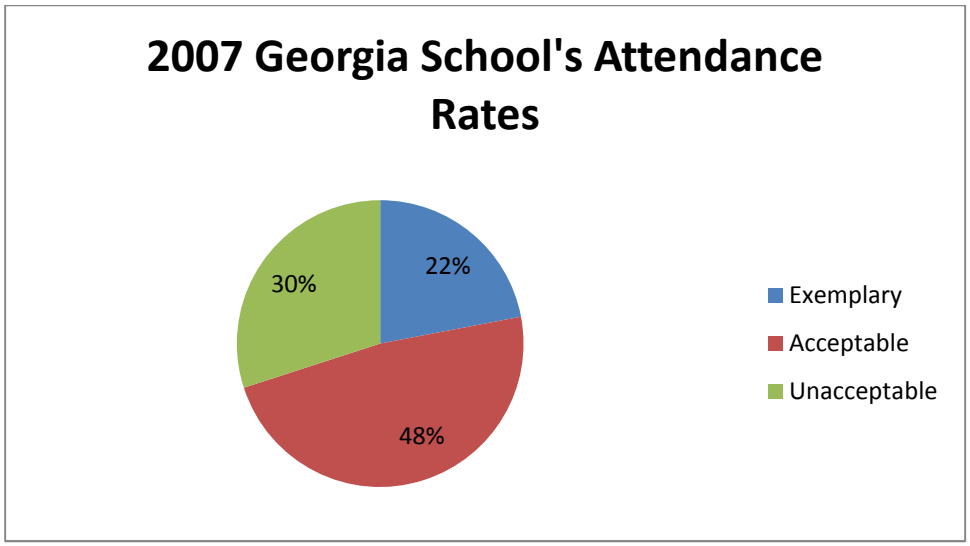
child of five unexcused days of absence without response, the school system shall send a notice to such parent, guardian, or other person by certified mail, return receipt requested. Public schools shall proved to the parent, guardian, or other person having control of each child enrolled in public school a written summary of possible consequences and penalties for failing to comply with compulsory attendance under this Code section for children and their parents, guardians, or other persons having control or charge of children. The parent, guardian, or other person who has control or charge of a child or children shall sign a statement indicating receipt of such written statement of possible consequences and penalties; children who are age ten year or older by September 1 shall sign a statement indicating receipt of such written statement of possible consequences and penalties. After two reasonable attempts by the school to secure such signature or signatures, the school shall be considered to be in compliance with this subsection if it sends a copy of the statement, via certified mail, return receipt requested, to such parent, guardian, other person who has control or charge of a child, or children. Public schools shall retain signed copies of statements through the end of the school year" Muscogee County School District, n.d.).

Georgia's Attendance Data

In the state of Georgia, the Governor's Office of Student Achievement categorizes schools by their attendance. A school is labeled exemplary if no more than 5% of the student body is absent more than 15 days. Schools with more than 5%, but less than 15%

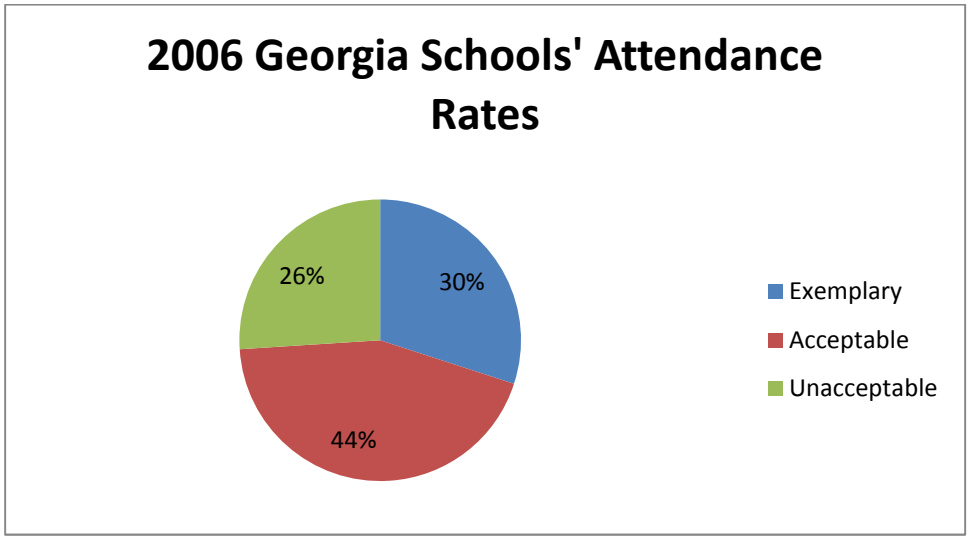
of students missing more than 15 days, are labeled acceptable. Those schools with more than 15% missing more than 15 days are labeled unacceptable. In 2007, 22% of all Georgia schools were exemplary, 48% were acceptable and 30% were unacceptable. The results are shown in Figure 2.1

Figure 2.1 2007 Georgia School Attendance Rates



In 2006 30% were labeled exemplary, 44% were labeled acceptable, and 26% labeled as unacceptable. The results are shown in figure 2.2

Figure 2.2 2006 Georgia School Attendance Rates



Between the years of 2006-2007 and 2007-2008, Georgia has seen a drop in students missing fifteen or more days. However, there has been an increase in students missing more than five days of school (Georgia Department of Education, n.d.).

Georgia, like many other states, is trying to combat student absenteeism. Districts and schools know how important it is for students to be at school. If students are not there, they cannot learn. Several districts within the state have implemented their own programs to combat student absenteeism. Fulton County introduced Truancy Intervention Project or TIP. TIP was introduced by Chief Judge Glenda Hatchett of the Fulton County Juvenile Court. This program serves both the Atlanta Public School District as well as the Fulton County School District. In this program, trained legal professionals, who willingly donate their time and services, are paired with chronic absent students and their families. This program not only strives to decrease absenteeism, but also provides families the necessary services and resources necessary for their children to do well in school as well as increase attendance. These professionals serve as caring advocates and mentors to the families as well as contribute time to serve as legal counsel in juvenile court proceedings. TIP prides itself on being a partnership among the school system, the Atlanta Bar, the Fulton County Juvenile Court, and Kids in Need of Dreams (Georgia Department of Education, 2004)

Also, due to the new performance standards that Georgia implemented in 2004, so much of the student work is completed in the classroom using hands-on activities for learning. Due to time constraints and other factors, it is hard for the student to make up this type of work. Schools are working together with community partners to alleviate the unexcused absences (Georgia Department of Education, n.d).

Georgia state law (HB 1190) requires communities and schools to work together to address truancy through the recommendations of their local Student Attendance Protocol Committee. The law requires the cooperation among officials, agencies and programs involved in compulsory attendance issues and to reduce the number of unexcused absences and increase the percentage of students who take tests required by law. A website is available to support local Student Protocol Committees as they combat the underlying causes and seek solutions to student truancy (Georgia Department of Education, n.d.).

School System Protocol for the Studied School District

Most counties create their own truancy protocol. In this northwest Georgia school district, the Truancy Reduction Protocol Committee consists of the following representatives: (a) Superior Court; (b) Magistrate Court; (c) Juvenile Court; (d) District Attorney's Office; (e) Board of Education; (f) Sheriff's Office; (g) Department of Family and Children's Services; (h) Health Department; (i) Family Collaborative; and (j) Chamber of Commerce. The committee's purpose is to make recommendations regarding attendance policies to the local Board of Education. They must also create collaboration guidelines between the local and state agencies that have an interest in the educational achievement and school attendance of the school system (Catoosa County Attendance Protocol, 2009).

Upon the enrollment in the school system, parents and guardians, (defined as any adult who has charge and control over the child, including a biological, adoptive, foster, or step-parent), are given notice of the state compulsory attendance law and the school board policy on attendance. A signature of receipt by a parent/guardian is required to

show that the attendance policy has been received and understood. Students ages 10 and over are also asked to provide a signature showing that they also received and understand the attendance policies (Catoosa County Attendance Protocol, 2009).

Principals at each school are asked to establish a school attendance team to help develop and implement strategies that promote and encourage good attendance. The attendance committee consists of an administrator, school social worker, school nurse, school counselor and teacher. One of the team's responsibilities includes making sure daily attempts are made to call parents of all absent students (Catoosa County Attendance Protocol, 2009).

After three unexcused absences have been accumulated by a student, the homeroom teacher and/or an administrator makes an additional call to the parent informing them of the absences. After five accumulated absences, a form letter is sent to the parent/guardian notifying him of his student's absences. If three unexcused absences are accumulated, a referral is made to the school attendance team. The team must assess the student's past attendance and determine a strategy for improving the individual student's attendance. A meeting is set up with the student to address this issue (Catoosa County Attendance Protocol, 2009).

After five unexcused absences, two reasonable attempts are made in writing to notify parents/guardians in of the student's attendance to date (including tardies and early dismissals), compulsory attendance law, and potential consequences and penalties for failure to comply with recommendations to increase attendance. A signature of receipt must be obtained from the parent and held on file for the remainder of the school year. Students aged ten and above also receive written notification and must also provide a

signature of receipt. If the attempt at notifying the parents are unsuccessful, then a letter is sent via certified mail with return receipt requested (Catoosa County Attendance Protocol, 2009).

If more than five unexcused absences and/or ten total absences are accumulated, a referral is made to the Catoosa Attendance Review Team (CART). CART is comprised of the school system representatives, school administrator, social worker, and counselor, as well as social agencies including the Department of Juvenile Justice, Department of Family and Children's Services and the Health Department. The attendance team meets with parents/guardians and the student, aged 10 and above to review the student's attendance and academic information. The team also reviews the strategies that have already been utilized to increase the student's attendance. The team offers assistance to the student and family for addressing the causes of absences. Assistance could include referrals to: (a) public or private mental health or counseling services; (b) public or private medical or dental services; (c) public assistance programs such as Medicaid or Peachcare; and (d) school social worker, school guidance counselor, and/or school nurse (Catoosa County Attendance Protocol, 2009).

An attendance contract between student, parent/guardian, school, and attendance team is developed and signed by all participating parties. Once students have signed an attendance contract, the contract stays in the file of the student for his/her entire school career. If the contract is not followed by the parent and student, the student of age ten to sixteen, is referred to Juvenile Court for truancy. Parents/guardians of students are referred to Magistrate Court or Superior court for failure to comply with compulsory school attendance law (Catoosa County Attendance Protocol, 2009).

Conclusion

There are many factors that may play a role in student achievement, directly and indirectly. Variables, such as attendance, may be controlled to a certain degree by educators and parents. Many variables are environmental, such as socio-economic status, and are extremely hard to control. The reviewed literature should allow educators to gain knowledge of the relationship of student achievement and student attendance as well as other related factors (Georgia Department of Education, n.d.).

Attendance laws were instituted many years ago and still the importance of attendance in schools is vital today. Attendance is not only important to the student, but also to state governments and school systems. School attendance took on a new meaning in 2001 when the No Child Left Behind Act was signed by President George W. Bush. Schools must abide by the rules set forth in this act to make AYP and receive federal money. Due to these high standards, schools are continually looking for ways to improve attendance which will in turn improve achievement. There doesn't seem to be a "one size fits all" approach to this problem. However, a key element throughout the research was a community approach. Communities and schools must first understand the relationship between attendance and achievement and then together, find the solution that best fits their community and their standards.

By analyzing the data from this study, teachers, administrators, and county office personnel will be able to see what if attendance has an impact on achievement. If achievement is affected, they will be able to see what domains are most affected by absenteeism. The literature has also presented many ways that school districts and schools have tried to combat the problem of student absenteeism. Depending on the

results of this study, teachers, administrators and county officer personnel may want to assess the current attendance protocol in this northwest Georgia school district to see if the current attendance protocol is effective in preventing student absenteeism. Also, once students are absent, does the current program keep truant students from missing additional days. The literature overwhelming supported a community based approach to solve student absenteeism in schools.

CHAPTER 3: METHODOLOGY

The purpose of this chapter is to explain the methods used to complete this quantitative research study. This study examined the difference between student attendance and his/her overall Criterion-Referenced Competency Test math score as well as each math domain score(Numbers and Operations, Data Analysis and Probability, Geometry, and Algebra). This chapter includes a description of research design, the research context, the instrument used, research participants, and how the data were analyzed to answer the research questions.

Research Design

A causal comparative study was conducted to find if there was a significant difference in non-truant and truant students when looking at attendance and achievement. The causal comparative study looked at the overall Criterion-Referenced Competency Test core, as well as the significant difference for each mathematical domain (Numbers and Operations, Geometry, Algebra, and Data Analysis and Probability). An absence in the school system's handbook is defined as a complete day's absence from school, checked out before 11:30 a.m. or checked in after 11:30 a.m.

A causal comparative study was used because of the need to identify a cause-effect relationship among two or more variables. This causal comparative study addressed if attendance had an impact on achievement when looking at non-truant and truant students and their overall Math Criterion-Referenced Competency Test scores. A more in depth study determined if there was a relationship between the student's number of missed days and each mathematical domain score.

Research Questions

The following research questions and hypotheses were addressed in the quantitative, causal comparative study.

1. Research Question: Is there a significant difference between the overall scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students?

   Null Hypothesis: There is no significant difference between the overall scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students.

2. Research Question: Is there a significant difference between the Numbers and Operations scores on the seventh Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students?

   Null Hypothesis: There is no significant difference between the Number and Operations scores on the seventh grade Georgia Mathematics Criterion Referenced Competency Test of non-truant and truant students.

3. Research Question: Is there a significant difference between the Geometry scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students?

   Null Hypothesis: There is no significant difference between the Geometry scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students.

4. Research Question: Is there a significant difference between the Algebra scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students?

   Null Hypothesis: There is no significant difference between the Algebra scores on the seventh grade Georgia Mathematics Criterion Referenced Competency Test of non-truant and truant students.

5. Research Question: Is there a significant difference between the Data Analysis and Probability scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students?

   Null Hypothesis: There is no significant difference between the Data Analysis and Probability scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students.

Research Context

The study took take place in a public school district in northwest Georgia. The school system district where the research was conducted has 10 elementary schools, 3 middle schools, 3 high schools and a Performance Learning Center. During the 2008-2009 school year, the system had approximately 10,500 students with a teaching and administrative staff of 812. All related data can been found in the appendices.

This northwest Georgia county covers approximately 162.23 square miles with an estimated population of 64,035. Approximately 24.9% of that population is under the age of 18. The county demographics consist of: 95.1% white, 2.7% Black, 0.3% American Indian and Alaska Native, 1.0% Asian, and 1.9% Hispanic or Latino origin. The majority of the house-holds are made up of two parent families (60.6%). However, eleven percent

of the house-holds are made up of female-only run house-holds (United States Census, 2009).

Middle School A, Middle School B, and Middle School C were used for this study. Each school administration included a principal and two assistant principals. At each school, one assistant principal was in charge of curriculum and the other one was in charge of discipline. Each school also had an academic coach to assist the administrative staff with curriculum design, implementation, and observation. Graduation coaches were added to middle schools during the 2008-2009 school year because of their success in the three high schools. The graduation coach worked with at risk students in the areas of behavior, attendance, and grades.

School A and School B were both Title 1 schools, located on opposite ends of the school district, serving students of lower socio-economic status. Title 1 schools made up over 50,000 schools across the United States. Title 1 schools receive additional funds to provide additional learning opportunities as well as support for low achieving students. The funds are used for students who are failing as well as those most at risk of failing. The additional support is used so that low achieving students are able to master state curriculum and standards in core academic subjects. Schools that enroll at least 40% of students from poor families are eligible to use Title 1 funds on the entire student body and not directly on those qualifying students (United States Department of Education, 2009). Schools are able to use the additional funds to: (a) close achievement gaps between higher and lower achieving students, especially with minorities; (b) provide an enriched, accelerated educational program; (c) provide school-wide reform; and (d) offer

opportunities for parents to participate in educational experiences (United States Department of Education, 2004).

In 2008, School A and School B were awarded a million dollar grant between the two schools, spread over a three year period, to assist in strengthening their after school programs. Through this grant, students were given extra homework help and daily Criterion-Referenced Competency Test practice time. They also receive educational opportunities such as cooking, karate, and art classes, along with a partnership with the local YMCA as well as intramural sports.

School C is centrally located in the county. A higher percentage of students attending School C come from more affluent homes where both parents are educated and education is considered a high priority. School C opened five years ago due to the overcrowding at both School A and B. Students from both School A and B were rezoned to attend the new school. Because of its newness and location, the School Board received numerous petitions to allow students zoned for Schools A and B to attend School C. Most of the petitions were granted.

During the 2008-2009 school year, all three middle schools had Southern Association of Colleges and Schools (SACS) accreditation. Each school also made Annual Yearly Progress (AYP) (Catoosa County Public Schools, n.d.).

Instrument

The Criterion-Referenced Competency Test is the standardized test used by the Georgia Department of Education to assess math competency as set forth in the Georgia Performance Standards (GPS). The Criterion-Referenced Competency Test is used to assess competency in the subjects of reading, language arts, math, science and social

studies. The test is required of all students in grades 1-8. However, students in grades 1 and 2, take only the reading, language arts, and math sections of the test. Students in grades 3 through 8 take the above sections as well as Science and Social Studies.

Students receive a number score which translates into one of the three categories: "does not meet expectations," "meets expectations," or "exceeds expectations." Does not meet expectations translates into a number score of below 800. In math, a student who does not meet expectations has a limited knowledge of the four content domains. This student has only a basic knowledge of the basic operations in math. He can show minimal evidence of understanding how to apply mathematical process skills into problem solving situations and have a basic knowledge of the mathematical language. A student who scores between 800 and 849 meets expectations. He has an adequate knowledge of the four content domains. This student is able to perform the basic operations in seventh grade math. This student also is able to understand and apply mathematical process skills to problem solving situations. He also has an adequate understanding of mathematical language and can translate mathematical representations to solve problems.

If a student exceeds expectation then he has scored 850 or better. This indicates that the student has an advanced understanding of the four content domains. He also has an advanced knowledge of the operations used in seventh grade math. This student is able to apply multiple strategies in problem solving activities. He is able to demonstrate an advanced understanding of mathematical language and use that language to solve mathematical problems. Any score above 900 generally indicates exceptional performance (Georgia Department of Education, n.d.).

Schools receive individual reports as well as overall school performance and averages. Each student also receives a report explaining his overall score for each subject test. The overall score is then broken down into domain scores. Seventh grade math students are tested in the areas of data analysis and probability, numbers and operations, geometry, and algebra. Numbers and Operations accounts for 20% of the overall score while data analysis and probability accounts for only 15% of the overall score; geometry makes up 25% of the test, and algebra makes up 40% of the test which accounts for the biggest percentage of the seventh grade math test.

Each subject test is assigned a certain day to be administered and is divided into two sections. A minimum of forty-five minutes is required for each test with a maximum of seventy minutes for each test. The math section of the Criterion-Referenced Competency Test accounts for 60 of the 300 total questions. Each test is divided into 30 questions.

Mathematical tools such as rulers, protractors, compasses and calculators are not permitted on the test. However, students with disabilities are tested by the guidelines set forth in their Individual Education Plan (IEP). Students with disabilities are often allowed to use calculators, test in small group settings, have the test read aloud to them, and have extended time.

The Criterion-Referenced Competency Test was administered during 2008-2009 school year during the week of April 20th. The school system had until the 29th of April to complete testing. The week of April 27th was used to test students who were absent during the previous week. Third, fifth and eighth grades are considered benchmark years on the Criterion-Referenced Competency Test. Students in these grades were required to

pass the Mathematics and Reading sections of the Criterion-Referenced Competency Test to be promoted to the 6th and 9th grade. The students who did not pass these sections of the test were offered three weeks of intensive summer school and then given the opportunity to retake the test on June 22nd and 23rd.

Attendance, using attendance records, and achievement, through the use of the Criterion-Referenced Competency Test overall score and individual domain scores, were compared using a Pearson r. If there was a significant difference in the data, then a multiple regression was used.

Validity and Reliability

The development of the Criterion-Referenced Competency Test was overseen by the Georgia Department of Education and adhered to the Standards for Educational and Psychological Testing (1999) as established by the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council of Measurement in Education (NCME). By adhering to these standards, a valid assessment was produced. According to Ary, Jacobs, Razavieh, and Sorensen (2006), validity refers to the extent to which a test actually measures the concepts it intends to measure. In the test development process, validity was of the upmost importance. However, a test cannot be valid without a certain degree of reliability (Georgia Department of Education Assessment & Accountability, 2009).

To prove that a test is valid, the first step is to establish that there is a clear purpose for the test. In Georgia, the state legislature had established the clear purpose of the test as one that measured how well the students had mastered the state curriculum (O.C. G.A. § 20-2-281). The Criterion-Referenced Competency Test is mandated by

state law and is used to measure the skills and knowledge obtained through the Georgia Performance Standards (GPS). With this being the main goal of the Criterion-Referenced Competency Test, it is also used to identify areas where students are weak and need improvement, show academic achievement in the various stakeholders, meet No Child Left Behind requirements, and show the different levels (student, class, grade level, school, school system and state) of mastery (Georgia Department of Education Assessment & Accountability Brief, 2009).

The Criterion-Referenced Competency Test was written by professional assessment specialists. Georgia educators were used for alignment with the curriculum. They also reviewed the material or any biases or sensitivity issues that might arise. When items were sent to the committee, they had the option to either accept, revise, or reject the material. If an item was accepted, it was placed on a field test. All questions were used on a field test before they were placed on an operational test. The items were used as field questions to make sure they were worded correctly as not to be confusing to students. Using test questions in this format was a well regarded practice and used in the same format as actual testing questions.

After questions on a test were field tested, results were sent back to the committee to check for a percentage of correct responses as well as the percentage chosen on each incorrect answer. A closer test was run to check for potential biases in the questions as to one race versus another. Depending on the data, the committee once again had the authority to either accept, revise or reject the question. The field questions that were accepted were later used for actual test questions (Georgia Department of Education Assessment & Accountability, 2009).

Both content and statistical data were used when creating a Criterion-Referenced Competency Test form test. Each form of the test was found to assess the same range of content as well as carry the same statistical attributes. When tests were given yearly and different forms were used in a test administration, they were equated. The tests were of equal difficulty so to make sure that all students were held to the same standard. This process enabled stake holders to view a change in test performance as a change in student achievement rather than fluctuations in the properties of the test form (Georgia Department of Education Assessment & Accountability, 2009).

The last step in the test development was the test results in the form of scores and the distribution of those score. Most test scores were distributed as scale scores and performance levels. Scale scores were based on the raw scores. The raw score was equivalent to the number of items correct on the test. Scores on the Criterion-Referenced Competency Test were based on Does Not Meet Expectations (Below 800), Meets Expectations (800-846), and Exceeds Expectations (850 or Above). Because the Criterion-Referenced Competency Test scores were presented as scale scores, they were consistently and meaningfully interpreted by educators, parents, and students (Georgia Department of Education Assessment & Accountability, 2009).

The Georgia Department of Education was active in each phase of the test development. Because of being a part of each phase, the Georgia Department of Education ensured that the Criterion-Referenced Competency Test was a valid instrument. Making sure the Criterion-Referenced Competency Test was aligned with the state curriculum and constant input from Georgia educators was vital to the test's validity. Independent studies ensured the test measured the state curriculum as well as

compared the constructs of the Criterion-Referenced Competency Test with other well known assessments were two other ways that the department of education checked for validity (Georgia Department of Education Assessment & Accountability, 2009).

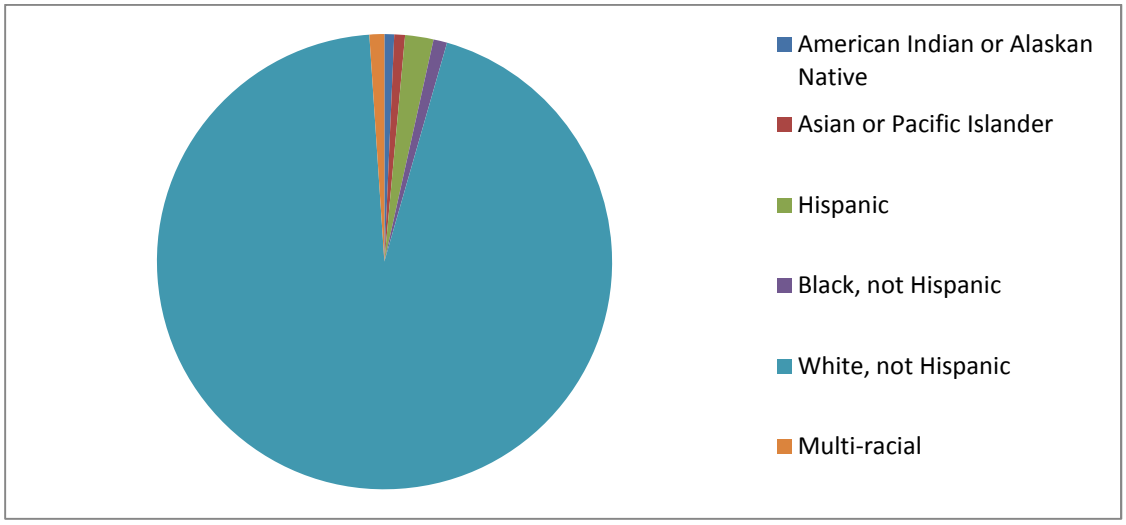
A valid test must also be reliable, but a reliable test is not always valid. According to Ary (2006), reliability is the extent in which a test gives the same consistent results when the test is given under the same circumstances. A test is proved reliable through Cronbach's alpha reliability coefficient. According to Georgia Department of Education, a reliability coefficient "expresses the consistency of test scores as the ratio of true score variance to be observed total score variance." Cronbach's alpha measures "the internal consistency over the responses to a set of items measuring an underlying unidimensional trait."

A second test used to describe test score reliability is the standard error of measurement (SEM). SEM is "an index of the random variability in tests scores in raw units." A reliability coefficient ranges from 0 to 1. The Criterion-Referenced Competency Test reliability coefficient ranged from 0.86 to 0.94 which proved that this assessment is sufficiently reliable for the intended purpose.

Population

School A had a student enrollment of 811 students (grades six through eight) during the 2008-2009 school year. The population of the 811 students consisted of 2% Asian, 4% Black, 2% Hispanic, 90% White and 2% Multi-Racial. Students with limited English proficiency make up 1% of the student population. In the population of students, 56% were eligible for free/reduced lunch (Georgia Department of Education, 2009). The ethnicity report of School A is shown in Figure 3.1

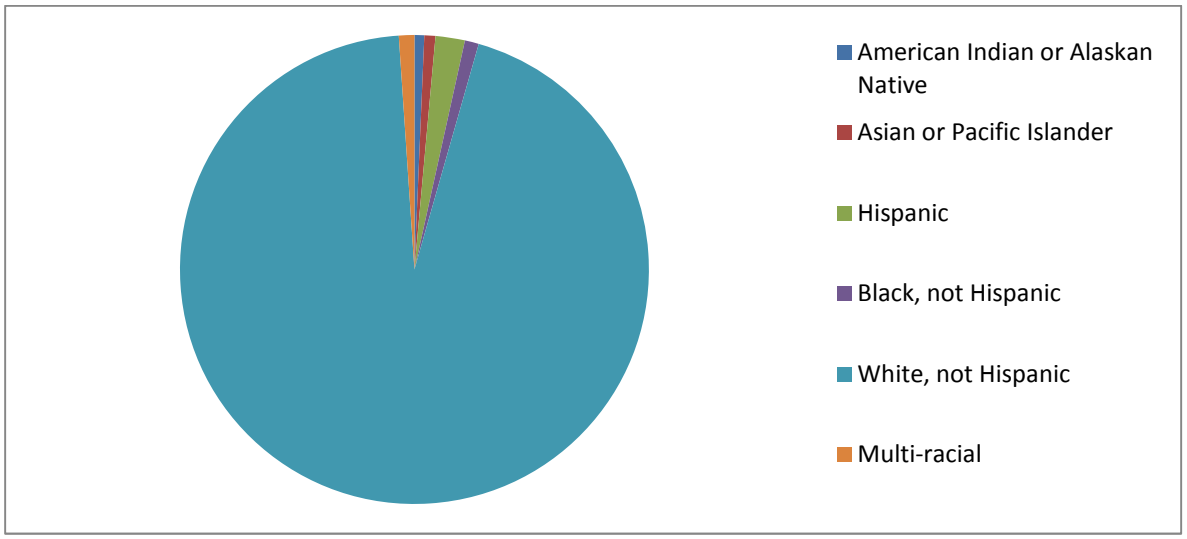
Figure 3.1 School A Ethnicity Report



(Catoosa County Ethnicity Report, 2009)

School B had a student enrollment of 790 students (grades six through eight) during the 2008-2009 school year. The population of 790 consisted of <1% Asian, 2% Black, 2% Hispanic, 93% White, and 2% Multi-Racial. In the population of students, 45% are eligible for free/reduced lunch (Georgia Department of Education, 2009). The ethnicity report of School B is shown in Figure 3.2

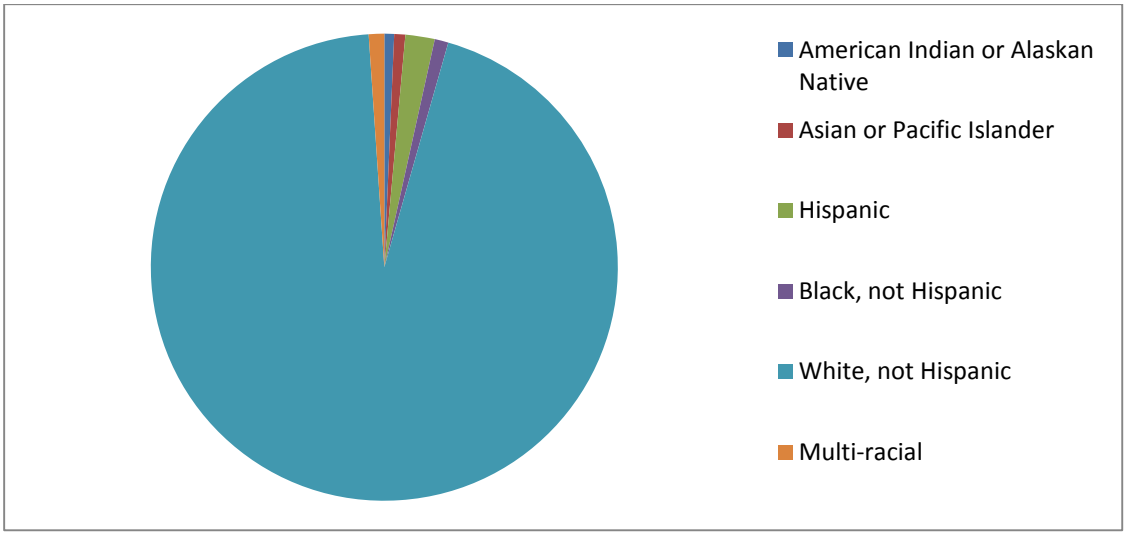
Figure 3.2 School B Ethnicity Report



(Catoosa County Ethnicity Report, 2009)

School C had a student enrollment of 1093 students (grades six through eight) during the 2008-2009 school year. The population of 1093 consisted of 1% Asian, 2% Black, 2% Hispanic, 95% White and <1% Multi-Racial. In the population of students, 32% were eligible for free/reduced lunch (Georgia Department of Education, 2009). The ethnicity report of School C is shown in Figure 3.3

Figure 3.3 School C Ethnicity Report



(Catoosa County Ethnicity Report, 2009)

Participants

The research was conducted using the related data of all seventh grade students from Schools A, B, and C in the north Georgia school district. The research data were collected August 7, 2008 through May 29, 2009. The research data were for 726 seventh grade students during the 2008-2009 school year. The ethnicity of the research participants consisted of <1% Asian, <1% Black, <1% Hispanic, 96% White, and <1% Multi Racial students.

Participants must have been present at the first Full Time Equivalent Student Count (FTE) and completed the entire year at the school in which the FTE report refers to. However, if students began at School A, B, or C and were transferred to one of the other middle schools in the county, then they were used in the data due to the consistency of the enforcement of the same rules and the same curriculum. Any student who enrolled after the first FTE count or left before testing was not used in the research data. To be part of this study, students had to have been enrolled 180 days in their identified school during the 2008-2009 school year. Students who either left their identified school during the year or enrolled in that school during the year were no used in the study.

Data Analysis

Before research data could be obtained, permission was granted by the superintendent of the school system as well as the assistant superintendent. County policy required the researcher to submit an application to conduct the study as well as to collect data from within the county. A description of the study, including a synopsis of the research as well as the procedures to be used, was required. To be granted permission to conduct the study, a research proposal had to be submitted to the assistant superintendent, through her secretary, for approval to continue the study. Each school principal had to grant the researcher approval to collect data from that individual school. Information including schools involved, the number of school personnel needed, methods of data analysis, and the overall benefit to the school system was required for the application process. The application also required the researcher to fully explain how student identity would be protected under the Family Rights and Privacy Act.

Permission was granted by each of the three middle school principals. The proper paperwork, along with the principal signatures, was submitted to the assistant superintendent. After permission was granted by the assistant superintendent, paperwork was completed for the Institutional Review Board (IRB) approval. A signature was obtained from the researcher's dissertation committee chair person and the IRB paperwork was submitted on November 30, 2009. Permission was granted by the IRB on December 10, 2009, to continue the research and gather the proper data for the study. The data were collected using Infinite Campus, the county's information data base. A report was accessed by the director of technology for the school system so that each seventh grade student's records were accessed to find her total number of absences for the 2008-2009 school year as well as her overall Math Criterion Referenced Competency Test score. The researcher did not have access to these individual records of each student due to privacy laws. The scores of each mathematical domain were also accessed through Infinite Campus. The county's director of technology assisted in the gathering of data. The reports were locked in a secure cabinet during the dissertation process to protect the secure information found in them. All collected data, attendance records and Criterion-Referenced Competency Test scores were not discussed by the researcher with anyone during or after the dissertation process. Student names were not used in the research data.

To statistically calculate the data, students were grouped into non-truant (missing fifteen or less days) and truant (missing 16 or more) to the impact attendance has on achievement. For this study, the Criterion-Referenced Competency Test scale scores were converted to percents to calculate the data. The scale scores were converted to

percents by dividing the scale score by 950, the maximum score on the overall Criterion-Referenced Competency Test score as well as each seventh grade mathematical domain, and then divided by 100 to convert to a percent. Data will be stratified to get a better picture into how attendance not only affects the individual schools, but also the whole system. To statistically calculate this data, the researcher used a t-test to test for significant differences between the means of non-truant and truant students. A t-test is a statistical test in which "what is observed (a statistic) with what we would expect to observe through chance alone (Ary, et al., 2006). Graphpad, a statistical computer software, was used to find the mean, standard deviation, t value, and statistical significant difference for each area of study (Criterion-Referenced Competency Test math score, numbers and operations, geometry, algebra, and data analysis and probability) to see if attendance had a statistical impact on non-truant and truant students. An alpha of 0.05 shows a significant difference in the two areas being compared. This is referred to as the level of confidence. The statistical significance tells the degree at which the results are true. The means of each area can also be compared when using a t-test.

CHAPTER FOUR: RESULTS

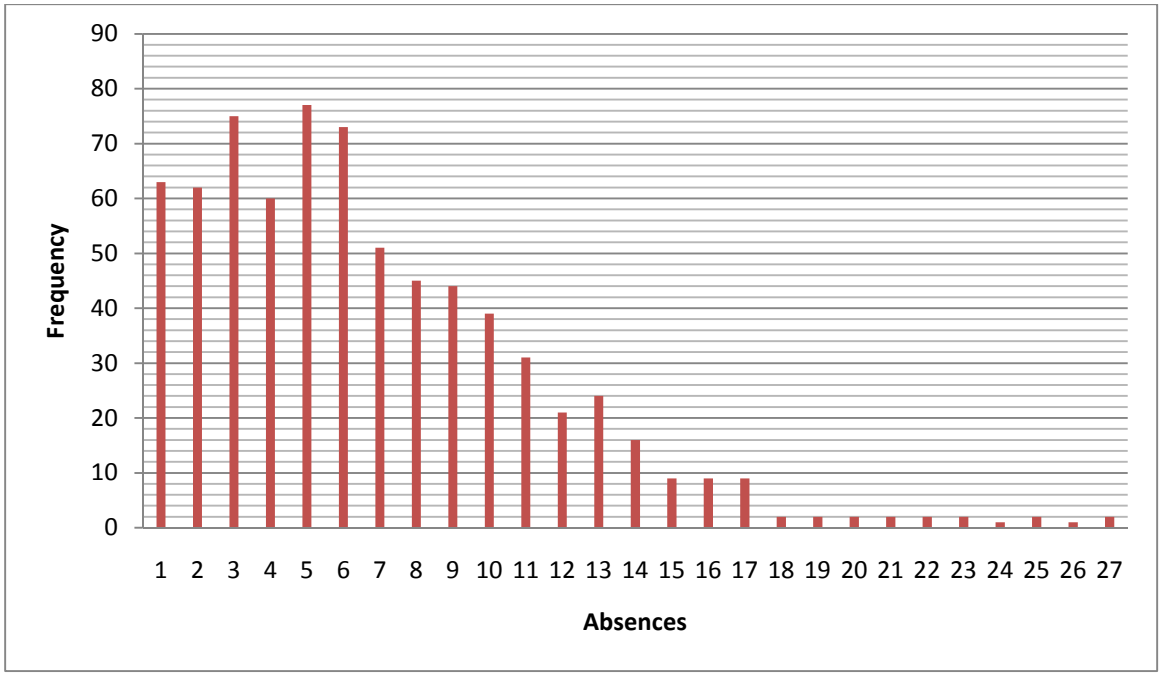
This study consisted of a quantitative, causal comparative study to examine the difference between attendance and achievement on non-truant and truant seventh grade students in three middle schools in a northwest Georgia school system during the 2008-2009 academic school year. The impact that absences have on achievement was the emphasis of the study. Attendance and achievement are two topics that are more closely analyzed today due to the signing of the No Child Left Behind Act (NCLB) in January of 2001 by President George W. Bush. Under NCLB, schools are required to meet state and national standards that are outlined in the Annual Yearly Progress (AYP) report. Achievement goals are increased each year under NCLB. Schools not meeting the requirements of NCLB and AYP are put on probation and must meet even higher requirements the following year to keep from receiving sanctions. Each year the achievement bar increases requiring schools to increase their achievement to receive annual yearly progress.

Attendance and achievement data were collected using the school system's information database, Infinite Campus. The achievement data that was used was the students' math scores on the Criterion-Referenced Competency Test. The study consisted of the attendance data and test scores for 726 students in three northwest Georgia middle schools. Students were grouped into non-truant, meaning those students missing fifteen or less days, and truant, those students missing sixteen or more days during the 2008-2009 academic school year. When grouped into these two categories, the non-truant students totaled 698 and the truant students totaled 28 students. The total

gender break down was 327 females and 400 males. When grouped into non-truant and truant, there were 310 female and 389 male non-truant students. The truant students consisted of 12 females and 15 males.

The Georgia academic school year consists of 180 days. Figure 4.1 breaks down the frequency of each number of absences recorded during the 2008-2009 academic school year.

Figure 4.1 Attendance Frequencies



The Criterion-Referenced Competency Test was given during the week of April 20, 2009. The math section of the Criterion-Referenced Competency Test was given on Wednesday, April 23, 2009, to all students present on that day in all three middle schools. All schools within a district were required to give the state required standardized test during the same window of time. The school district operated its own testing schedule as long as the test was given in the time frame enforced by the state. Any student missing the testing due to an absence or tardy is given the test on an upcoming testing date. Figure

4.2 shows the results from the 2009 Criterion-Referenced Competency Test. The graph depicts the three areas of scoring on the Criterion-Referenced Competency Test. The results showed that 9% of the students were below grade level, 60% of the students met the requirements or were on grade level, and 31% of the students exceeded the math requirements based on the Georgia performance standards.

Figure 4.2 2008-2009 Criterion-Referenced Competency Test Math Results for all Three Schools

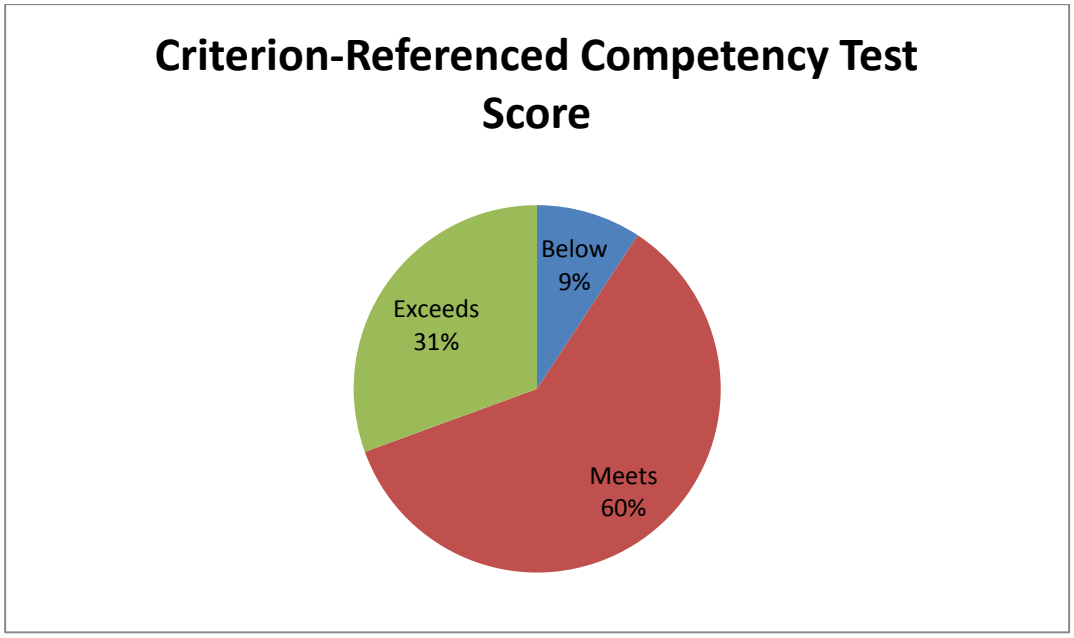


Figure 4.3 breaks the Criterion-Referenced Competency Test math score into below expectations, meets expectations, and exceeds expectations for the non-truant students in this study.

Figure 4.3 Math Criterion-Referenced Competency Test Results for Non-Truant Students

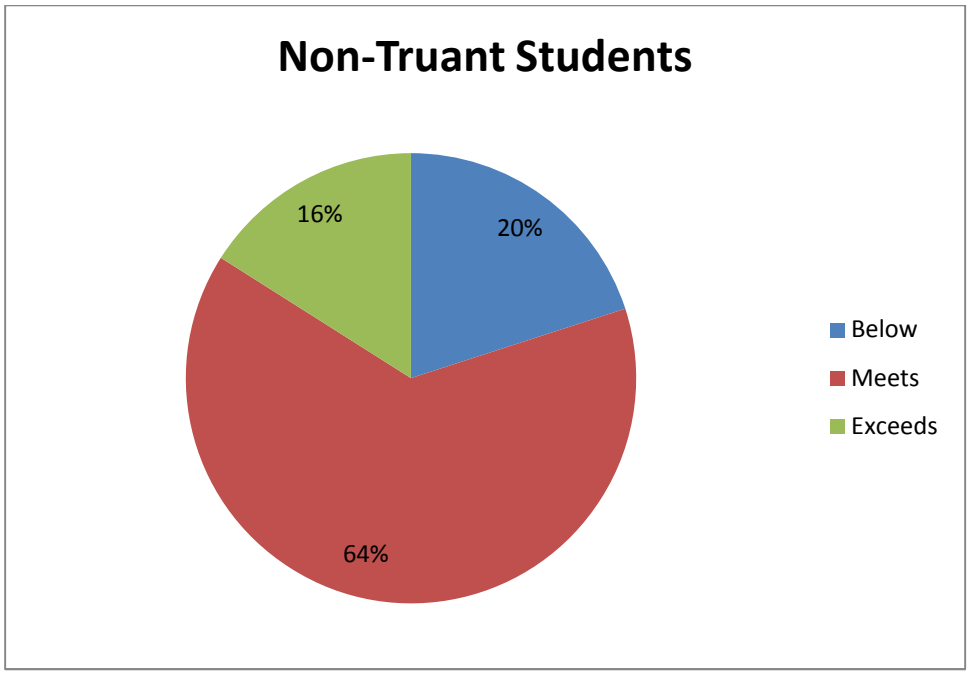


Figure 4.4 breaks the Criterion-Referenced Competency Test math score into below expectations, meets expectations, and exceeds expectations for the truant students in the study.

Figure 4.4 Math Criterion-Referenced Competency Test Results for Truant Students

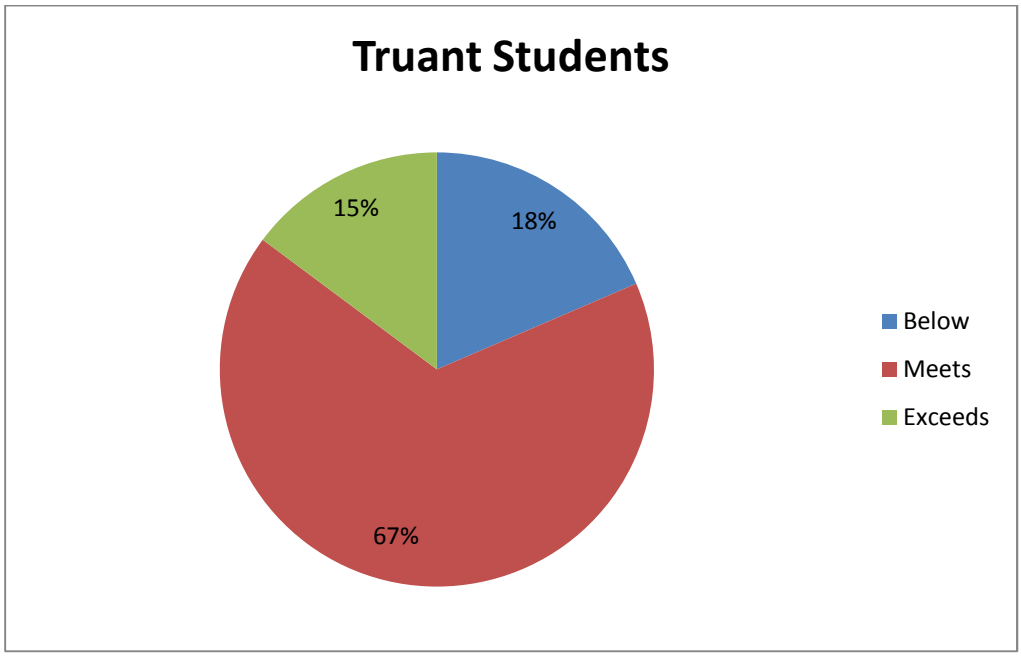


Table 4.1 breaks down the overall Math Criterion-Referenced Competency Test scores for each school within the school district.

Table 4.1 Average Criterion-Referenced Competency Test Math Score

Average Criterion-Referenced Competency Test Math Score for the Three Middle Schools			
Schools	Average CRITERION-REFERENCED COMPETENCY TEST Score for all Students	Average CRITERION-REFERENCED COMPETENCY TEST Math Score for Non-Truant Students	Average CRITERION-REFERENCED COMPETENCY TEST Math Score for Truant Students
School A	831	832	825
School B	837	838	820
School C	832	832	807

The results show a difference in average score for each school. A range of six points is shown in the average score between School A and School B. School A and School C are within one point of each other. Similar results are shown of non-truant students of the three middle schools. A range of six is also shown in the average score between School A and School B. School A and School C show the save results. The results of truant students show a different outcome. A range of eighteen exists between School A and School C. School A and School B are closer in average score when examining truant students.

The Criterion-Referenced Competency Test yielded results in each domain (Numbers and Operations, Data Analysis and Probability, Geometry, and Algebra). Scale scores for each domain are calculated differently from the overall math Criterion-

Referenced Competency Test scale score. Using the domain scale scores, the overall math Criterion-Referenced Competency Test scale score was calculated. The calculation used to create the overall scale math Criterion-Referenced Competency Test score from the domain scores is done solely by the Georgia Department of Education. The scale scores were then converted to percent scores by taking the scale score, dividing by 950 (the highest score) and multiplying by 100.

Table 4.2 displays the results of the number and operations domain for both non-truant and truant students. The numbers and operations domain accounts for 20% of the entire test (12 questions).

Table 4.2 Number and Operations Criterion-Referenced Competency Test Results

Numbers and Operations	**Below**	**Meets**
Non-Truant	**n = 116** **16.6%**	**n = 580** **83.3%**
Truant	**n = 10** **38.4%**	**n = 16** **61.5%**

Table 4.3 displays the results of the geometry domain. The geometry domain accounts for 25% of the entire test (15 questions).

Table 4.3 Geometry Criterion-Referenced Competency Test Results

Geometry	**Below**	**Meets**
Non-Truant	**n = 65** **9.3%**	**n = 629** **90.6%**
Truant	**n = 5**	**n = 21**

	19.2%	**80.7%**

Table 4.4 displays the results of the algebra domain. The algebra domain accounts for 40% of the entire test (24 questions).

Table 4.4 Algebra Criterion-Referenced Competency Test Results

Algebra	**Below**	**Meets**
Non-Truant	**n = 100** **14.4%**	**n = 594** **85.5%**
Truant	**n = 5** **19.2%**	**n = 21** **80.7%**

Figure 4.11 and 4.12 display the results of the data analysis and probability domain. The data analysis and probability domain accounts for 15% of the entire test (9 questions).

Table 4.5 Data Analysis and Probability Criterion-Referenced Competency Test Results

Data Analysis and Probability	**Below**	**Meets**
Non-Truant	**n = 105** **15.1%**	**n = 589** **84.8%**
Truant	**n = 8** **30.7%**	**n = 18** **69.2%**

Analyzing the Data

A causal comparative design was used for this study. The study addressed five research questions looking at the effect that attendance has on achievement for both non-truant and truant students. A two tailed t-test was used to calculate the data for the study. The results were found using Graphpad, a statistical computer software.

The 726 students were grouped into non-truant (missing 15 or less days) and truant (missing 16 or more days). Before the results were calculated, the test scores were converted to percents. The Criterion-Referenced Competency Test scores were divided by 950 (maximum score) and then multiplied by 100. A t-test was used to analyze the scores of each group. The groups were compared for the overall math Criterion-Referenced Competency Test score as well as each mathematical domain.

Research question one asked if there was a significant difference between the overall score of non-truant and truant students on the Georgia Criterion-Referenced Competency Test. The results are show in Table 4.6.

Table 4.6 Criterion-Referenced Competency Test Math Scale Score for Non-Truant and Truant Students

Group	n	M	SD	t	p<
Non Truant	699	87.17	7.98		
				2.4228	.0156
Truant	27	83.15	16.8		

The results show a 4.02 drop in mean score on the overall math Criterion-Referenced Competency Test score for truant students. The two-tailed, unpaired t-test at

the alpha = 0.05 level showed a significant difference ($p<0.0156$) between the overall scores of non-truant and truant students.

In addressing research question one, the study rejects the following null hypothesis: There is no significant difference between the overall score on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students.

Research question two asked if there was a significant difference on the Numbers and Operations domain score of non-truant and truant students. The results are shown on Table 4.7.

Table 4.7 Numbers and Operations Scale Score for Non-Truant and Truant Students.

Group	n	M	SD	t	p<
Non Truant	694	66.49	19.84		
				2.5441	.0112
Truant	26	56.42	19.10		

Numbers and operations accounts for approximately one-fourth of the Criterion-Referenced Competency Test. However, students must be able to meet expectations in this domain because of the way it overlaps into the other domains. The results of this domain show a 10.07 drop in the mean score for truant students. Numbers and Operations saw the greatest difference in mean score between non-truant and truant students. If numbers and operations is being affected due to absences, then it is also having an effect on the other domains.

The two-tailed, unpaired t-test indicated a significant difference ($p<0.0112$) between the overall scores of non-truant and truant students.

In addressing research question two, the study rejects the following null hypothesis: There is no significant difference between the Number and Operations scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students.

Research question three asked if there was a significant difference between the Geometry domain score of non-truant and truant students. The results are shown on table 4.8.

Table 4.8 Geometry Scale Score for Non-Truant and Truant Students

Group	n	M	SD	t	p<
Non Truant	693	75.19	17.24		
				1.3376	.1815
Truant	26	70.58	18.27		

Table 4.6 shows the t-test data for the geometry domain. A mean of 75.19 for non-truant students was compared to 70.58 for truant students. Truant students had a drop of 4.61 points when compared to non-truant students. Geometry accounts for the second highest percentage of the test which has a drastic effect on the overall Criterion-Referenced Competency Test score.

In addressing research question three, the two-tailed, unpaired t-test at the alpha = 0.05 level did not show a significant difference ($p<0.1815$) between the overall scores of non-truant and truant students.

In addressing research question three, the study accepts the following null hypothesis: There is no significant difference between the Geometry scores on the

seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students.

Research question four asked if there was a significant difference on the algebra domain score between non-truant and truant students. The results are shown in table 4.9.

Table 4.9 Algebra Scale Score for Non-Truant and Truant Students

Group	n	M	SD	t	p<
Non Truant	694	70.73	18.07		
				2.3625	.0184
Truant	26	62.23	16.20		

The mean scores for the algebra domain saw a difference of 8.50 for non-truant and truant students. Since algebra is 40% of the entire test, these results had an impact on the overall score. The two-tailed, unpaired t-test at the alpha = 0.05 level showed a significant difference ($p<0.0184$) between the overall scores of non-truant and truant students.

In addressing research question four, the study rejects the following null hypothesis: There is no significant difference between the algebra scores on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test of non-truant and truant students.

Research question five asked if there was a significant difference on the scores on the analysis and probability domain between the non-truant and truant students. The results are shown in Figure 4.10.

Table 4.10 Data Analysis and Probability Scale Score for Non-Truant and Truant Students

Group	n	M	SD	t	p<
Non Truant	692	70.55	19.84		
				1.7041	.0888
Truant	26	63.73	24.98		

Data analysis and probability had a 6.82 difference in mean score between non-truant and truant students. The two-tailed, unpaired t-test at the alpha = 0.05 level did not show a significant difference ($p<0.0888$) between the scores of non-truant and truant students.

In addressing research question five, the study accepts the following null hypothesis: There is no significant difference between the Data Analysis and Probability score of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

Summary

After the research data were collected, the data were separated into two groups, non-truant, students missing 15 or less days, and truant, students missing 16 or more days, By separating the data, the study determined if a significant difference existed between the scores of non-truant and truant students when considering whether or not attendance had an impact on achievement. To compare the data a two-tailed t-test with an alpha level of 0.05 was performed on the scores of the students involved in this study. A t-test was run for each research question to see if a significant difference was found for

overall math Criterion-Referenced Competency Test, as well numbers and operations; data analysis and probability; geometry and algebra.

First a two-tailed t-test was run to see if attendance had an impact on achievement by comparing the Criterion-Referenced Competency Test scores of non-truant and truant students on the overall Criterion-Referenced Competency Test math score. A significant difference was found between non-truant and truant students in this area of the study.

Because of the impact of attendance on achievement for the overall score, a two tailed t-test was run to see if a relationship existed between attendance and each seventh grade mathematical domain. When a t-test was run for each domain, a significant difference between non-truant and truant students on the numbers and operations section of the Criterion- Referenced Competency Test was also found. A two-tailed t-test was then run to see if a significant difference existed between non-truant and truant students in the area of geometry. The results did not show a significant difference in this mathematical domain.

A two tailed t-test was then run to see if a significant difference existed between non-truant and truant students in the area of algebra. A significant difference was also found in this domain. The last area consisted of data analysis and probability. This test did not show a significant difference between non-truant and truant students in the study.

The results also showed a drop in mean score for truant students in all areas (overall Criterion-Referenced Competency Test score, Numbers and Operations, Geometry, Algebra, and Data Analysis and Probability). These finds are beneficial to school and county officials when addressing attendance programs and adjusting

curriculum mapping. Chapter five will include a summary of the study and a detailed discussion of the results along with some recommendations for future research.

CHAPTER FIVE: SUMMARY, CONCLUSIONS

This chapter presents a summary of the research project's findings, a presentation of conclusions, and recommendations for further study based upon those findings. The contents of the summary will restate the purpose of this research study, the five hypotheses examined, and to present the results that were discovered. The results of this study will then be the focus of discussion. The chapter will conclude with implications for policy and practice, and recommendations for further research in this subject area.

Statement of the Problem

The purpose of this study was to determine if there was a significant difference between test scores on the Georgia Criterion-Referenced Competency Test and the number of school days missed for seventh graders in three middle schools in northwest Georgia. More specifically, the purpose of the study was to find if a relationship existed not only between absences and Criterion-Referenced Competency Test Math scores, but also to see if a relationship existed between absences and the scores for each seventh grade mathematical domain (numbers and operations, data analysis and probability, geometry, and algebra).

According to research, truancy is one of the top ten problems facing schools today. Studies have also shown that student attendance does have an effect on school achievement. Due to the implementation of the No Child Left Behind Act (NCLB) that was signed into law by President George W. Bush on January 8, 2001, schools must not only abide by the laws set forth in NCLB, but also improve achievement to receive federal funding. Under Annual Yearly Progress (AYP), a component of NCLB, the

achievement bar is also being raised each year. No Child Left behind requires states to create standards and models of accountability and not only abides by these standards and models of accountability, but also meet the achievement level required, which are being raised, each year. Under NCLB, schools are required to make sure all students reach proficiency level by the year 2014. Elementary and middle schools are also required to document their attendance as part of NCLB. Schools must maintain a 93% average daily attendance (ADA) over a nine month academic year as one of the requirements of NCLB.

Purpose of the Study

Due to the high standards set forth in the No Child Left Behind Act, school administrators are making sure these standards are met not only in the area of achievement, but also attendance. Teachers are also concerned with the stress of making sure students who are absent learn the curriculum and then pass the federally mandated tests. When students are absent, teachers must re-teach the material to these students. In these cases, curriculum is usually modified or even skipped due to the time constraints on both the teacher and student.

The purpose of the study was to determine if attendance had a significant impact on achievement in the areas of overall Criterion-Referenced Competency Test score, numbers and operations math Criterion-Referenced Competency Test score, data analysis and probability math Criterion-Referenced Competency Test score, geometry math Criterion-Referenced Competency Test score, and algebra math Criterion-Referenced Competency Test score. For this study, the students were divided into two groups. The groups consisted on non-truant (students missing 15 or less days, and truant (students missing 16 or more days.

Review of Methodology

As stated in Chapter 3, this was a study of the impact that student absenteeism had on student achievement based on the seventh grade Georgia Criterion-Referenced Competency Test scores. A causal comparative study was conducted to see if a relationship existed between a attendance and Criterion-Referenced Competency Test math score of non-truant and truant students, as well as the correlation between his attendance and scores on each seventh grade mathematical domain (numbers and operations, data analysis and probability, geometry, and algebra).

Permission was granted from each of the three middle school principals. After permission was granted by the principals, permission was granted by the assistant superintendent of the northwest Georgia school system. The researcher's dissertation committee approved the study and then permission was granted by the Institutional Review Board (IRB) of Liberty University. The 2008-2009 data, absences and Criterion-Referenced Competency Test scores as well as the scores from each domain, were gathered from the school's student information system (Infinite Campus) and other school records. The absences and test scores were analyzed using a t-test. A t-test was also used to determine the mean, standard deviation, and statistical significance for the overall math Criterion-Referenced Competency Test score as well as each mathematical domain of the study (numbers and operations, geometry, algebra, and data analysis and probability). The t-test results were used to compare the means between non-truant and truant students. The data were also used to see if there was a significant difference between attendance and achievement and test scores, for both non-truant and truant students.

Participants

The study was conducted with the records of 726 students from three middle schools located in a northwest Georgia school system. School A consisted of 202 participants while School B consisted of 221 participants. School C had the largest percentage of participants with 303. The ethnicity of School A consisted of 1% Black, <1% Asian, 97% White and <1% Multi Racial. School B consisted of 1% Black, <1% Asian, 97% White and <1% Multi Racial. School C consisted of <1% Black, <1% Asian, 98% White and <1% Multi Racial. The ethnicity of all three schools consisted of <1% Asian, <1% Black, <1% Hispanic, 96% White, and <1% Multi Racial students.

For the students to be used in the study, they must have been present on the first Full Time Equivalent Student Count (FTE) and completed the year at the school in which the FTE report refers to. If a student transferred from a school in the study to another school in the study, they were used in the data due to learning the same curriculum from the Georgia Performance Standards (GPS).

The 726 students were grouped into non-truant (missing fifteen or less days) and truant (missing 16 or more days). The non-truant students consisted of 698 students and the truant students consisted of 28 students.

Summary of Results and Hypothesizes

Research question one asked if there was a significant difference between the overall score of non-truant and truant students on the Georgia Criterion-Referenced Competency Test. The Math Criterion-Referenced Competency Test consists of 60 questions that are based on the mathematical domains for that given grade level. Each domain has a percentage of questions on the test.

A comparison was made of the Math Criterion-Referenced Competency Test scores of non-truant and truant students from the 2008-2009 academic school year for all three middle schools in the northwest Georgia school district. The t-test results showed a drop in mean for truant students. The two-tailed t-test at the alpha = 0.05 level showed that there was a significant difference in the overall Math Criterion-Referenced Competency Test score for non-truant and truant students. In addressing research question one; the study rejected the null hypothesis that there was no significant difference between the overall score of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

Research question two asked if there was a significant difference on the Numbers and Operations domain score of non-truant and truant students on the Criterion-Referenced Competency Test. The numbers and operations domain accounts for 15% (12 questions) of the entire seventh grade Criterion-Referenced Competency Test. Numbers and Operations also saw a drop in mean score of truant students.

A two-tailed t-test at the alpha = 0.05 level did not show a significant difference between the scores of non-truant and truant students in the area of numbers and operations of the test. Therefore, the study rejected the null hypothesis that there was no significant difference between the Numbers and Operations score of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

Research question three asked if there was a significant difference between the Geometry domain score of non-truant and truant students. Geometry accounts for the second highest percentage of the test. Geometry accounts for 25% (15 questions) of the

seventh grade Criterion-Referenced Competency Test. Once again, there was a drop in mean score of the truant students on the test.

To gather the data, a two-tailed t-test at the alpha = 0.05 level was run and there was not a significant difference between the scores of non-truant and truant students on the Geometry section of the Criterion-Referenced Competency Test. Therefore, the study accepted the null hypothesis that there was no significant difference between the Geometry score of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

Next, research question four asked if there was a significant difference of the Algebra domain scores between non-truant and truant students. Algebra constitutes the highest percentage of the test. The algebra section accounts for 40% or 24 questions on the seventh grade test. Truant students once again had a drop in mean score on the algebra section of the Criterion-Referenced Competency Test.

A two-tailed t-test at the alpha = 0.05 level was run and showed a significant difference between the Algebra score of non-truant and truant students. The study rejected the null hypothesis that there was no significant difference between the algebra score of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

The last research question asked if there was a significant difference on the Data Analysis and Probability domain score of the Criterion-Referenced Competency Test between non-truant and truant students. Data Analysis and Probability accounts for 15%, or 9 questions, of the seventh grade Criterion-Referenced Competency Test.

A two-tailed t-test at the alpha = 0.05 level did not show a significant difference between the data analysis and probability score of non-truant and truant students. Based on the findings, the study accepted the null hypothesis that there was no significant difference between the Data Analysis and Probability score of non-truant and truant students on the seventh grade Georgia Mathematics Criterion-Referenced Competency Test.

Discussion of the Results

The literature and data showed a need for the study. The Criterion-Referenced Competency Test was used to examine the effects that attendance had on achievement. The results are shown using two groups, non-truant and truant. The results were shown by looking at the overall Criterion-Referenced Competency Test score as well as the score for each domain (Numbers and Operations, Geometry, Algebra, Data Analysis and Probability).

When comparing the overall average Criterion-Referenced Competency Test for all students as compared to non-truant only a small difference was found between the mean of all students and non-truant students. However, a significant existed between the means of all students and truant students. When comparing the scores of all students to those of non-truant students, there was little difference in the scale score for all three middle schools. However, when comparing the scores of all students to those of truant students, there was a drop in the average scale score of truant students for all three middle schools. The smallest difference of the means, six, came from School A, and the largest difference of the means, twenty-five, came from School C.

The percentage of those passing each domain held constant for non-truant students. The percentage passing each domain for non-truant students ranged from 83.3% (Numbers and Operations) to 90.6% (Geometry). However, there were discrepancies in the percentage of truant students passing each domain. The percentage of passing for truant students ranged from 61.5% (Numbers and Operations) to 80.7% (Geometry and Algebra).

There was also a discrepancy in the means of each domain. Numbers and Operations saw the greatest difference in mean score (10.07) between non-truant and truant students. The smallest difference in mean score (4.61) occurred in the area of Geometry. Algebra saw a difference in mean score of 8.5 between non-truant and truant students while Data Analysis and Probability saw a difference score of 6.82 between non-truant and truant students.

By having a significant difference between the overall Criterion-Referenced Competency Test scores of non-truant and truant students, the study concluded that attendance does have a negative impact on achievement. However, the same impact was not found on all domains. There was not a significance difference in areas of Geometry and Data Analysis and Probability for non-truant and truant students. However, the difference in the scores for Data Analysis and Probability was very close to the alpha level of 0.05.

Related Research

The No Child Left Behind Act definitely had an impact on the way schools view student attendance. Schools are being held accountable for the test scores of all students. However, if students are not present in the classroom, they are missing important

instruction which many times is not made up and students lose out on important information. Scott and Friedli (2002) found that poor attendance leads to poor academic performance.. Many schools also use attendance as an academic indicator to meet the requirements of Annual Yearly Progress which falls under the No Child Left Behind Act.

In a study by Roby (2004), he also looked at the impact that attendance had on achievement. However, in his study, he compared the students in the top ten percent of attendance in grades four, six, nine, and twelve with the students in the bottom ten percent of attendance. The tool used to measure achievement was the Ohio Proficiency Test. His study included 3,171 schools in Ohio. To calculate attendance, he used the building attendance averages to show trend for the entire school population. Grades four, six, nine and twelve are considered benchmark years in the Ohio school system. In this study, seventh grade is not considered a benchmark year.

The results from this study reinforced the results from the study of Roby. Even though this study only looked at seventh graders, Roby's study saw a similar result in grades four, six, nine, and twelve with the strongest correlation in grade nine. As with this study, Roby also concluded that there was a positive correlation between student attendance and achievement.

Roby concluded that time away from the classroom is harmful to students. One of his suggestions included adding more instructional hours to the academic year for students. He also found it necessary to analyze attendance programs and make sure they are producing good attendance in the school or school system.

Amuso (2007) found that attendance did not have an effect on the achievement of higher performing students. His study examined the impact of attendance on

achievement of 274 middle school students from a small southern city. The students were randomly selected for the study. His findings concluded that attendance did have an impact on students scoring at the basic or minimal level on the Mississippi Curriculum Test. However, the scores of students scoring at the advanced or proficient level on the test were not affected by attendance.

Amuso saw different results in his study. The participants in his study were considerably lower than the participants of this study. The participants in his study were also randomly selected unlike this study where all seventh grade students from the northwest Georgia were selected for the study. Given the differences in the number of participants could have altered the differences in the results of the studies.

There are many studies examining the impact of attendance on achievement. There are studies to argue the impact that attendance has achievement. However, the majority of the research that was found for this study showed that student absenteeism does has a negative impact on student achievement. This supports the theoretical framework from Chapter 2. Bandura's social learning theory or social cognitive theory that explains that if a student is absent from a learning environment, then there are negative consequences in their learning. The theory proves that students must be present or in the learning environment to learn the material. If they are absent from that environment, they do not learn the material which causes a negative impact on their grades and standardized test scores. Most students must be present to learn and especially now that state standards are strengthening their curriculum and being presented with a more hands-on approach.

Schools are even more concerned with achievement and attendance because of the enforced standards set forth in the No Child Left Behind Act of 2001 and the yearly Annual Yearly Progress reports. Under the No Child Left Behind Act, students are allowed to attend a school of their choosing if their district school does not meet the requirements of Annual Yearly Progress. Many times this puts a financial strain on school systems when they must entertain the request of parents to transfer their child to other schools in the district.

According to Baker (2000), it is unlawful to miss school on a regular basis. The United States Department of Education (1994) found that absenteeism was the most important factor linked to negative performance. Due to the rigorous curriculum performance standards implemented by Georgia, students are expected to pass the Criterion-Referenced Competency Test each year to show they have mastered the curriculum. Grades three, five and eight are benchmark years for the Georgia Criterion-Referenced Competency Test. Third graders are required to pass the reading section which fifth and eighth graders are required to pass reading and math to be promoted to the next grade. If students are not present in the classroom, the missed instruction is many times modified or even skipped due to time constraints.

Many states, communities, and schools have become proactive in the battle against truancy. Schools are partnering with government agencies such as juvenile courts and other community agencies. Computer programs are also making it easier to tract students and find absentee patterns. Many schools are also assigning an employee to be in charge of attendance protocol and have the responsibility of contacting students and

parents when absences occur. Schools are also offering mentoring programs for students to help them want to stay in school.

There are many different interventions that have been tried to curb excessive absenteeism, also known as truancy, in schools. According to the Office of Juvenile Justice and Delinquency Program (OJJDP) (n.d.), the most important component of reducing student absenteeism was involving parents in the education of their child. Baker, Sigmon, and Nugent (2001) recommend a collaborative partnership that is comprised of community agencies, organizations, business partners, and other concerned individuals. According to Goldstein, Little, & Akin-Little (2003), interventions for absenteeism are usually either community based, family based, or school based. However, the community based approach seems to get the best results on curbing absenteeism. A study by Sheldon (2007) found that the schools that reached out to involve families experienced the greatest increase in student achievement. The results of Fantuzzo, Grim, and Hazan (2005) found similar results. Truant students referred to community court increased attendance rates versus while students referred to traditional court saw a decrease in attendance rates. With a community approach, more people are involved and more people hold a vested interest into the results.

Implications

The results of this study should benefit county office personnel, school administrators and teachers in implementing effective attendance protocol. Most teachers would agree that student attendance does have a negative impact on student achievement based on grades and standardized test scores. Under the current Georgia Performance Standards, much of the curriculum is taught and learned through interaction with the

teacher and other students. Students who are absent do not receive the same type of instruction as the other students receive due to time constraints of the student and teacher. Teachers do not have time to make up missed instruction. If instruction is made up, teachers must pull students out of their related arts classes to make up the missed instruction.

The study showed student absenteeism does have a negative impact on student achievement. If student absenteeism does have a negative impact on achievement, then county office personnel, school administrators and teachers must work together to create and implement an effective attendance protocol that is presented and understood by all students, parents and guardians. Also, for this protocol to be effective, it must be enforced by all participating parties.

Not only are teachers concerned about student absenteeism because of the No Child Left Behind and Annual Yearly progress, recently, the Governor of Georgia, Sonny Perdue, introduced merit pay which is part of President Obama's Race to the Top. Under Governor Perdue's proposal, teacher pay will be tied to student achievement. A teacher's pay will be based half on student achievement and half of how well they manage their classroom which would be decided upon by the school principal. Governor Perdue believes that teachers should be able to be compensated for exceeding the expectations of a teacher. Based on the literature presented, teachers would want to make sure students are at school so they can receive the maximum instruction and the results would be shown on their standardized test giving teachers a chance for additional income.

Recommendations for Further Research

Recommendation 1:

There are many interventions to solving the problem of student absenteeism. The research presented in the paper showed the overwhelming solution to student absenteeism is community-based attendance programs. Future studies could be done by comparing community-based attendance programs and the impact of the program in reducing student absenteeism. The study could also research the impact that a community-based program has on achievement.

Recommendation 2:

Further research could also be completed by looking at the impact absences have on achievement in the state of Georgia and then comparing the state of Georgia with another state. To do this, the researcher may want to choose a state with a similar curriculum. The state of Georgia is known to have a more rigorous curriculum than it did formerly. Choosing a state with a more rigorous curriculum might offer better results.

Recommendation 3:

Further research could also be completed by using students who miss instruction, but are not absent from school. Students miss instruction for reasons other than absences. Students with behavior problems are removed from the classroom many times to be placed in another setting such as in-school suspension (ISS) or out of school suspension (OSS). Students who are placed in ISS are able to complete their work, but often this is done without teacher instruction. If students are given instruction, it is a shortened or modified version of what the other students received. The study would evaluate the students who miss teacher instruction and the affect the missed instruction has on the grades of the student as well as the standardized test scores of the student. Depending on the school district and/or school students who are placed in OSS may or may not be able

to make up their work. If students are allowed to make up the work, many times they do not do the work.

Recommendation 4:

This study only addressed students from one school district in one grade level. To enhance the results, the study could have been extended into a longitudinal study. Data could be collected for several academic school years to see if the same results are shown. Would the overall Criterion-Referenced Competency Test score have a significant difference as shown in this study. Would the same seventh grade domains be affected as was shown in this study.

Recommendation 5:

Attendance in this northwest Georgia school district is addressed at five absences, ten absences and fifteen absences. A study could be conducted in comparing the test scores of each group of students. The test scores of students missing five or less days would be compared with the students missing six to ten days, and students missing fifteen or more. This would give more research into the time frame of when student test scores start declining due to absenteeism.

Recommendation 6:

In this northwest Georgia school district, once a student has gone before the attendance review team, the student is placed on an attendance contract that follows him or her until graduation. A future study could research the attendance of students once the student has been placed on an attendance contract. Does the attendance of the student improve once an attendance contract has been signed by the student and parent, along with the parties involved in the attendance meeting.

Limitations

There are several limitations that are noteworthy concerning the results found in this study. The study data were obtained from 726 middle school students, however they were all from the same rural, northwest Georgia county. Even though the results and conclusions are statically significant, results may have been more applicable to other school systems if other systems had been used in the study.

The study used only seventh grade students. The study did use all seventh grade students within the northwest Georgia school district, but could have been expanded to all middle school students, especially to eighth grade students since eighth grade is a benchmark year in the state of Georgia.

Another limitation to this study was that data used for this study was only collected for one academic school year. The study could have been strengthened by collecting data from several academic school years to see if the same results were shown for each year.

This study did not take into account the instruction that is being re-taught in Extended Learning Time (ELT). Extended Learning Time is offered four days a week for 40 minutes for students who needed extra instruction in Math and Reading. Students who have been absent are able to catch up on instruction that was missed in the regular classroom in their Extended Learning Time class. Extended Learning Time is also used to reinforce basic skills that are missing from many students. Math and Reading Criterion-Referenced Competency Test scores have slowly increased over the past several years since the implementation of the Extended Learning Time in all three middle schools in the school district.

The research did not desegregate the students into subgroups such as student ability or ethnicity. Schools, according to the No Child Left Behind Act, are graded for annual yearly progress (AYP) according to the achievement of its subgroups. The desegregated data were not used in this research study.

Conclusion

According to Eaton, Brener, and Kann (2008), nearly 10% of all United States' students are absent daily. When students are absent from the classroom, important curriculum is missed. When this occurs, re-teaching is required by the teacher if the students are to get the missed work. Many times the extra time needed to make up instruction is not available and instruction is either modified or skipped. This has a negative effect on a student's learning and his scores on federally mandated standardized test scores.

Absenteeism has also been associated with negative behaviors such as drug abuse, alcohol abuse, and sexual behavior (Eaton, Brener, & Kann, 2008). When looking at the data, there does not seem to be one solution to this growing problem. Many different programs have been tried. Many of these programs are costly and require time which many schools cannot handle, due to already reduced funds and personnel cuts. According to Sheldon (2007), community involvement seems to be the best solution to truancy. When the community, schools, and parents work together, everyone is working toward a common goal.

The results from this study found that attendance did have a significant impact on achievement of seventh grade students in three middle schools in northwest Georgia.

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Appendix

Non Truant Students

School	Gender	Absences	CRITERION-REFERENCED COMPETENCY TEST Math Scale Score	Num&O Scale Score	Geo Scale Score	Alge Scale Score	DataAnaPr Scale Score
HMS	M	0	806	475	636.5	399	636.5
HMS	M	0	829	712.5	636.5	598.5	845.5
HMS	M	0	790	475	503.5	237.5	532
HMS	M	0	810	475	693.5	475	532
HMS	M	0	821	636.5	636.5	513	845.5
HMS	M	0	793	475	380	437	313.5
HMS	F	0	824	636.5	636.5	636.5	636.5
HMS	F	0	877	788.5	883.5	874	950
HMS	M	0	834	712.5	570	750.5	741
HMS	F	0	905	950	950	912	845.5
HMS	F	0	850	874	826.5	788.5	532
HMS	F	0	843	788.5	570	836	741
HMS	M	0	861	950	760	788.5	845.5
HMS	M	0	865	788.5	883.5	874	741
HMS	M	0	846	874	760	750.5	636.5
HMS	F	0	831	636.5	826.5	636.5	636.5
HMS	M	0	821	636.5	446.5	712.5	636.5
HMS	F	0	837	636.5	693.5	750.5	741
HMS	F	0	857	950	760	712.5	950
HMS	F	0	884	788.5	950	874	950
HMS	M	0	871	874	883.5	788.5	950
HMS	M	0	831	712.5	760	551	845.5
HMS	F	0	857	788.5	760	788.5	950
HMS	F	0	853	636.5	760	874	845.5
HMS	M	0	829	475	693.5	750.5	636.5
HMS	F	0	810	636.5	380	513	741
HMS	M	0	806	475	380	598.5	532
LMS	M	0	819	475	760	598.5	532
LMS	M	0	801	237.5	693.5	437	532
LMS	M	0	829	636.5	636.5	712.5	636.5
LMS	F	0	826	313.5	693.5	750.5	741
LMS	F	0	861	712.5	826.5	874	845.5
LMS	F	0	853	712.5	760	912	636.5
LMS	M	0	837	475	760	788.5	741
LMS	M	0	801	313.5	570	551	313.5
LMS	M	0	857	788.5	760	836	845.5
LMS	F	0	840	475	760	836	741
LMS	F	0	815	313.5	446.5	788.5	532
LMS	M	0	857	874	826.5	788.5	741
LMS	M	0	865	874	760	874	845.5

LMS	F	0	793	313.5	503.5	399	418
LMS	F	0	846	788.5	826.5	712.5	741
RMS	F	0	857	712.5	883.5	874	636.5
RMS	M	0	801	551	503.5	437	418
RMS	F	0	877	874	883.5	874	845.5
RMS	F	0	905	874	950	950	845.5
RMS	F	0	850	636.5	693.5	836	950
RMS	M	0	843	636.5	826.5	750.5	741
RMS	M	0	853	712.5	883.5	788.5	741
RMS	M	0	834	636.5	883.5	674.5	532
RMS	F	0	950	950	950	950	950
RMS	M	0	871	788.5	883.5	874	845.5
RMS	F	0	843	475	826.5	750.5	950
RMS	F	0	837	636.5	693.5	836	532
RMS	M	0	806	636.5	570	513	209
RMS	F	0	893	950	950	874	845.5
RMS	F	0	884	874	950	912	741
RMS	M	0	826	475	693.5	788.5	418
RMS	F	0	846	874	826.5	750.5	532
RMS	M	0	853	712.5	950	712.5	845.5
RMS	M	0	834	636.5	693.5	750.5	636.5
RMS	F	0	861	874	883.5	788.5	741
RMS	F	0	853	788.5	760	788.5	845.5
HMS	F	1	771	551	313.5	161.5	104.5
HMS	M	1	865	788.5	950	788.5	845.5
HMS	M	1	837	788.5	826.5	551	845.5
HMS	M	1	829	551	693.5	674.5	741
HMS	M	1	834	712.5	826.5	598.5	741
HMS	M	1	877	874	760	950	845.5
HMS	M	1	829	712.5	570	712.5	636.5
HMS	M	1	829	874	636.5	636.5	532
HMS	M	1	806	475	380	513	741
HMS	M	1	846	636.5	883.5	750.5	741
HMS	F	1	800	399	313.5	598.5	418
HMS	M	1	850	636.5	693.5	874	845.5
HMS	M	1	846	788.5	760	712.5	845.5
HMS	M	1	853	874	760	750.5	845.5
HMS	M	1	800	475	636.5	313.5	532
HMS	M	1	821	636.5	570	674.5	532
HMS	M	1	877	950	950	788.5	845.5
HMS	M	1	804	551	636.5	399	418
HMS	F	1	804	399	380	674.5	313.5
HMS	F	1	837	788.5	760	674.5	636.5
HMS	M	1	815	551	636.5	551	532
HMS	F	1	865	712.5	826.5	874	950
HMS	M	1	950	950	950	950	950
HMS	M	1	840	712.5	826.5	788.5	418
LMS	M	1	871	788.5	950	874	741

LMS	M	1	834	636.5	636.5	750.5	741
LMS	F	1	795	313.5	570	361	532
LMS	F	1	819	313.5	760	551	845.5
LMS	M	1	840	636.5	760	712.5	845.5
LMS	M	1	850	712.5	883.5	750.5	741
LMS	F	1	797	399	570	437	313.5
LMS	M	1	884	950	883.5	836	950
LMS	F	1	776	76	256.5	437	313.5
LMS	M	1	806	475	570	513	418
LMS	F	1	829	636.5	693.5	788.5	313.5
LMS	F	1	893	950	826.5	950	845.5
LMS	F	1	834	551	570	874	636.5
LMS	F	1	819	313.5	826.5	551	741
LMS	F	1	857	551	950	912	636.5
LMS	M	1	790	313.5	503.5	399	313.5
RMS	M	1	810	551	636.5	437	636.5
RMS	M	1	893	950	883.5	912	845.5
RMS	F	1	843	712.5	883.5	674.5	741
RMS	M	1	840	788.5	826.5	674.5	636.5
RMS	M	1	797	399	693.5	313.5	418
RMS	M	1	817	399	760	674.5	313.5
RMS	F	1	812	551	826.5	437	418
RMS	M	1	850	712.5	693.5	836	845.5
RMS	M	1	817	551	693.5	598.5	418
RMS	M	1	843	874	826.5	636.5	741
RMS	M	1	871	950	826.5	836	845.5
RMS	M	1	853	788.5	883.5	788.5	636.5
RMS	M	1	784	399	313.5	313.5	418
RMS	F	1	846	712.5	883.5	712.5	741
RMS	M	1	821	712.5	636.5	551	636.5
RMS	M	1	834	712.5	826.5	712.5	418
RMS	F	1	857	636.5	883.5	874	741
RMS	F	1	824	399	826.5	636.5	636.5
RMS	M	1	871	874	883.5	836	845.5
RMS	F	1	905	950	826.5	950	950
RMS	F	1	884	788.5	883.5	912	950
RMS	M	1	846	788.5	826.5	712.5	741
HMS	F	2	846	636.5	883.5	788.5	636.5
HMS	F	2	884	788.5	950	912	845.5
HMS	F	2	884	874	950	912	741
HMS	F	2	843	788.5	760	674.5	845.5
HMS	M	2	877	874	883.5	836	950
HMS	M	2	850	551	826.5	836	845.5
HMS	F	2	861	788.5	760	836	950
HMS	M	2	850	788.5	826.5	712.5	845.5
HMS	M	2	926	950	950	950	845.5
HMS	M	2	840	551	693.5	788.5	845.5
HMS	M	2	815	636.5	503.5	598.5	532

HMS	F	2	812	551	503.5	598.5	532
HMS	F	2	857	712.5	693.5	912	845.5
HMS	M	2	804	551	446.5	475	532
HMS	F	2	837	636.5	760	636.5	950
HMS	M	2	853	712.5	760	836	845.5
HMS	M	2	850	788.5	760	788.5	741
HMS	F	2	871	950	693.5	874	950
HMS	F	2	871	950	826.5	836	845.5
HMS	M	2	800	475	570	437	313.5
HMS	M	2	834	712.5	693.5	674.5	741
HMS	F	2	806	712.5	380	437	636.5
HMS	M	2	819	399	760	674.5	418
HMS	M	2	850	712.5	883.5	712.5	845.5
HMS	F	2	850	874	693.5	750.5	845.5
HMS	M	2	837	636.5	760	712.5	741
HMS	F	2	840	712.5	826.5	674.5	741
HMS	F	2	905	874	950	912	950
HMS	M	2	824	551	570	750.5	532
HMS	M	2	837	712.5	693.5	712.5	741
HMS	M	2	865	950	826.5	788.5	845.5
HMS	M	2	819	712.5	760	361	845.5
LMS	M	2	784	399	313.5	275.5	532
LMS	M	2	893	950	883.5	912	845.5
LMS	M	2	893	874	950	874	950
LMS	M	2	893	950	883.5	912	845.5
LMS	F	2	831	712.5	693.5	712.5	532
LMS	M	2	817	313.5	693.5	712.5	418
LMS	F	2	846	636.5	883.5	750.5	741
LMS	M	2	840	788.5	760	674.5	741
LMS	M	2	806	237.5	693.5	551	418
LMS	M	2	846	551	883.5	874	532
LMS	M	2	840	475	883.5	712.5	845.5
LMS	M	2	829	712.5	693.5	598.5	741
LMS	F	2	850	874	760	874	418
LMS	M	2	771	313.5	0	437	209
LMS	M	2	824	475	503.5	674.5	950
LMS	F	2	861	636.5	883.5	874	845.5
LMS	M	2	821	636.5	760	551	532
LMS	M	2	871	950	826.5	874	741
LMS	F	2	853	712.5	760	874	741
RMS	M	2	829	712.5	693.5	636.5	636.5
RMS	F	2	793	237.5	446.5	399	636.5
RMS	F	2	831	399	760	750.5	741
RMS	M	2	846	636.5	883.5	750.5	741
RMS	M	2	893	874	950	874	950
RMS	M	2	826	788.5	570	551	845.5
RMS	F	2	829	551	883.5	551	741
RMS	M	2	788	399	190	475	418

RMS	M	2	846	874	883.5	674.5	636.5
RMS	M	2	793	313.5	503.5	399	418
RMS	M	2	853	636.5	826.5	836	845.5
RMS	M	2	857	950	950	636.5	845.5
RMS	F	2	831	475	826.5	674.5	741
RMS	F	2	857	788.5	760	788.5	950
RMS	M	2	857	788.5	826.5	836	741
RMS	M	2	893	950	826.5	912	950
RMS	M	2	834	475	883.5	712.5	636.5
RMS	M	2	857	712.5	950	750.5	845.5
RMS	M	2	810	475	313.5	674.5	636.5
RMS	M	2	806	399	693.5	437	532
RMS	M	2	808	475	313.5	551	845.5
RMS	F	2	834	313.5	826.5	788.5	741
RMS	F	2	843	636.5	883.5	750.5	636.5
RMS	F	2	800	475	636.5	275.5	636.5
HMS	M	3	795	475	380	313.5	741
HMS	F	3	843	788.5	760	712.5	741
HMS	M	3	784	313.5	446.5	313.5	313.5
HMS	F	3	804	712.5	313.5	551	313.5
HMS	M	3	812	551	570	551	532
HMS	F	3	857	874	570	912	845.5
HMS	M	3	815	399	570	636.5	636.5
HMS	M	3	861	788.5	950	750.5	845.5
HMS	M	3	837	636.5	693.5	750.5	741
HMS	F	3	834	636.5	693.5	788.5	532
HMS	M	3	877	788.5	883.5	912	845.5
HMS	F	3	837	712.5	826.5	636.5	741
HMS	M	3	850	874	826.5	674.5	845.5
HMS	F	3	829	636.5	503.5	712.5	845.5
HMS	M	3	840	874	760	636.5	741
HMS	F	3	834	788.5	693.5	674.5	636.5
HMS	M	3	853	551	883.5	874	741
HMS	M	3	853	874	826.5	674.5	950
HMS	M	3	853	788.5	950	750.5	636.5
HMS	M	3	788	313.5	446.5	399	313.5
HMS	F	3	834	636.5	693.5	712.5	741
HMS	F	3	853	788.5	760	750.5	950
HMS	F	3	950	950	950	950	950
HMS	M	3	806	551	503.5	513	418
HMS	M	3	819	475	826.5	551	532
HMS	M	3	853	551	760	912	845.5
HMS	M	3	850	788.5	760	788.5	741
HMS	M	3	779	237.5	446.5	275.5	313.5
HMS	M	3	786	399	380	361	313.5
HMS	F	3	817	636.5	503.5	598.5	636.5
LMS	M	3	831	551	760	750.5	532
LMS	F	3	850	636.5	826.5	750.5	950

LMS	F	3	865	788.5	950	874	636.5
LMS	F	3	871	788.5	883.5	874	845.5
LMS	M	3	853	788.5	760	788.5	845.5
LMS	M	3	817	475	636.5	636.5	532
LMS	F	3	824	788.5	503.5	636.5	636.5
LMS	M	3	853	551	693.5	912	950
LMS	F	3	857	636.5	826.5	836	950
LMS	F	3	853	313.5	950	874	950
LMS	M	3	826	399	693.5	674.5	845.5
LMS	M	3	871	950	693.5	874	950
LMS	F	3	815	712.5	503.5	674.5	209
LMS	F	3	829	712.5	760	636.5	532
RMS	F	3	843	636.5	883.5	712.5	741
RMS	F	3	843	712.5	760	712.5	845.5
RMS	M	3	837	636.5	826.5	712.5	636.5
RMS	F	3	857	712.5	883.5	788.5	845.5
RMS	F	3	865	874	883.5	788.5	845.5
RMS	M	3	834	475	826.5	712.5	741
RMS	F	3	806	399	380	674.5	418
RMS	F	3	801	399	446.5	513	532
RMS	F	3	817	636.5	760	636.5	104.5
RMS	F	3	861	788.5	883.5	788.5	845.5
RMS	M	3		0	0	0	0
RMS	M	3	871	712.5	950	836	950
RMS	M	3	821	636.5	693.5	551	636.5
RMS	F	3	840	475	760	874	636.5
RMS	M	3	846	788.5	883.5	750.5	532
RMS	M	3	829	636.5	693.5	636.5	741
HMS	M	4	843	475	883.5	712.5	950
HMS	M	4	808	399	636.5	551	418
HMS	M	4	837	788.5	693.5	636.5	845.5
HMS	M	4	871	712.5	883.5	912	845.5
HMS	F	4	808	636.5	446.5	513	532
HMS	M	4	793	313.5	636.5	275.5	532
HMS	F	4	846	712.5	826.5	712.5	845.5
HMS	M	4	819	475	570	674.5	636.5
HMS	F	4	831	636.5	503.5	788.5	741
HMS	M	4	819	636.5	636.5	551	636.5
HMS	M	4	790	551	446.5	313.5	313.5
HMS	M	4	861	712.5	883.5	874	741
HMS	M	4	871	874	950	788.5	845.5
HMS	M	4	817	399	636.5	674.5	532
HMS	M	4	824	712.5	570	551	845.5
HMS	M	4	834	874	760	551	741
HMS	F	4	853	788.5	826.5	912	418
HMS	F	4	821	475	760	598.5	636.5
HMS	M	4	837	712.5	883.5	636.5	636.5
HMS	F	4	843	712.5	826.5	674.5	845.5

HMS	M	4	793	399	503.5	399	313.5
HMS	M	4	829	636.5	636.5	712.5	636.5
HMS	M	4	810	636.5	503.5	513	532
HMS	F	4	843	788.5	760	788.5	532
HMS	M	4	877	950	883.5	874	741
HMS	F	4	884	874	883.5	874	950
HMS	F	4	786	237.5	446.5	399	313.5
HMS	M	4	840	712.5	883.5	636.5	741
HMS	F	4	826	551	503.5	836	532
HMS	F	4	795	551	446.5	437	209
HMS	M	4	806	313.5	693.5	475	532
LMS	F	4	821	712.5	446.5	712.5	532
LMS	M	4	815	475	760	475	636.5
LMS	M	4	861	788.5	883.5	874	636.5
LMS	M	4	829	551	760	674.5	636.5
LMS	M	4	850	874	760	836	532
LMS	F	4	831	788.5	693.5	636.5	636.5
LMS	M	4	846	551	826.5	750.5	950
LMS	M	4	817	313.5	760	598.5	636.5
LMS	M	4	790	313.5	313.5	437	532
LMS	F	4	837	636.5	693.5	788.5	636.5
LMS	M	4	774	237.5	380	313.5	104.5
LMS	M	4	850	788.5	760	788.5	741
LMS	F	4	829	551	760	674.5	636.5
LMS	M	4	795	161.5	636.5	437	418
LMS	F	4	831	475	693.5	750.5	741
LMS	M	4	871	788.5	950	788.5	950
LMS	F	4	865	874	950	712.5	950
RMS	M	4	871	874	883.5	788.5	950
RMS	M	4	804	399	636.5	437	532
RMS	F	4	817	551	570	551	741
RMS	M	4	826	399	693.5	674.5	845.5
RMS	M	4	840	874	636.5	674.5	845.5
RMS	F	4	843	475	883.5	750.5	845.5
RMS	F	4	806	551	570	513	313.5
RMS	F	4	850	788.5	760	788.5	741
RMS	M	4	865	788.5	883.5	874	741
RMS	M	4	817	399	883.5	437	741
RMS	F	4	831	551	883.5	551	845.5
RMS	M	4	810	551	693.5	313.5	845.5
RMS	M	4	865	874	883.5	788.5	845.5
RMS	M	4	831	475	760	674.5	845.5
RMS	F	4	801	475	693.5	399	313.5
RMS	F	4	857	874	760	750.5	950
RMS	F	4	821	636.5	570	636.5	636.5
RMS	F	4	843	712.5	693.5	788.5	741
RMS	M	4	810	399	760	437	636.5
RMS	M	4	804	399	636.5	361	741

RMS	M	4	797	475	446.5	437	418
RMS	M	4	812	636.5	693.5	598.5	104.5
RMS	F	4	884	874	950	912	741
RMS	M	4	846	874	760	712.5	741
RMS	M	4	871	874	826.5	874	845.5
RMS	F	4	871	874	826.5	912	741
RMS	M	4	819	475	760	598.5	532
RMS	F	4	826	237.5	826.5	674.5	845.5
RMS	M	4	804	475	693.5	361	532
HMS	M	5	821	475	693.5	674.5	532
HMS	M	5	831	636.5	693.5	636.5	845.5
HMS	F	5	829	712.5	636.5	712.5	532
HMS	F	5	826	636.5	570	712.5	636.5
HMS	F	5	840	712.5	760	788.5	532
HMS	M	5	800	475	503.5	475	313.5
HMS	M	5	797	551	503.5	437	209
HMS	M	5	834	712.5	693.5	712.5	636.5
HMS	M	5	819	788.5	446.5	551	741
HMS	F	5	843	874	570	788.5	741
HMS	M	5	846	788.5	883.5	712.5	636.5
HMS	F	5	843	475	883.5	750.5	845.5
HMS	F	5	884	788.5	883.5	912	950
HMS	F	5	819	551	503.5	674.5	636.5
HMS	F	5	806	551	503.5	513	418
HMS	F	5	843	874	570	788.5	741
HMS	F	5	817	636.5	636.5	551	532
HMS	F	5	843	712.5	570	912	636.5
HMS	F	5	815	551	693.5	551	418
HMS	F	5	826	636.5	693.5	674.5	532
HMS	F	5	865	950	760	788.5	950
HMS	M	5	829	636.5	826.5	551	741
HMS	F	5	826	636.5	760	475	950
HMS	F	5	884	874	883.5	912	845.5
HMS	F	5	776	313.5	313.5	237.5	418
HMS	M	5	821	636.5	636.5	636.5	532
HMS	M	5	829	636.5	570	712.5	741
LMS	F	5	801	313.5	446.5	513	636.5
LMS	F	5	846	551	883.5	836	636.5
LMS	M	5	834	399	760	750.5	845.5
LMS	F	5	853	874	826.5	712.5	845.5
LMS	M	5	826	551	883.5	636.5	418
LMS	F	5	843	636.5	826.5	788.5	636.5
LMS	M	5	831	712.5	693.5	598.5	845.5
LMS	F	5	797	399	636.5	399	313.5
LMS	M	5	808	313.5	570	598.5	532
LMS	F	5	871	950	826.5	836	845.5
LMS	F	5	853	712.5	883.5	836	636.5
LMS	F	5	804	399	636.5	437	532

LMS	M	5	853	874	760	836	636.5
LMS	F	5	800	313.5	503.5	399	741
LMS	F	5	776	313.5	503.5	199.5	209
LMS	M	5	801	475	446.5	513	418
LMS	M	5	843	636.5	760	750.5	845.5
LMS	F	5	834	475	693.5	836	636.5
LMS	F	5	893	950	883.5	874	950
LMS	F	5	846	788.5	826.5	712.5	741
RMS	F	5	824	551	636.5	636.5	741
RMS	F	5	853	712.5	883.5	788.5	741
RMS	M	5	857	712.5	826.5	836	845.5
RMS	M	5	865	788.5	950	874	636.5
RMS	M	5	871	788.5	883.5	836	950
RMS	M	5	834	712.5	826.5	636.5	636.5
RMS	M	5	871	874	760	874	950
RMS	F	5	850	712.5	826.5	788.5	741
RMS	M	5	834	636.5	693.5	674.5	845.5
RMS	M	5	826	551	826.5	598.5	636.5
RMS	F	5	819	475	760	551	636.5
RMS	M	5	846	551	826.5	788.5	845.5
RMS	M	5	871	874	883.5	874	741
RMS	F	5	806	475	693.5	313.5	741
RMS	F	5	865	874	826.5	874	741
RMS	F	5	800	475	503.5	437	418
RMS	F	5	824	399	693.5	674.5	741
RMS	M	5	826	551	570	712.5	741
RMS	M	5	800	399	503.5	475	418
RMS	F	5	834	712.5	693.5	712.5	636.5
RMS	F	5	877	788.5	883.5	912	845.5
RMS	M	5	884	788.5	883.5	950	845.5
RMS	M	5	877	950	826.5	874	845.5
RMS	F	5	831	399	760	712.5	845.5
RMS	F	5	865	874	826.5	874	741
RMS	M	5	861	788.5	883.5	788.5	845.5
HMS	M	6	834	636.5	826.5	712.5	532
HMS	M	6	865	874	883.5	750.5	950
HMS	F	6	850	712.5	760	836	741
HMS	F	6	801	475	503.5	437	532
HMS	M	6	926	874	950	950	950
HMS	F	6	871	874	883.5	788.5	950
HMS	F	6	837	551	826.5	712.5	741
HMS	M	6	837	636.5	693.5	750.5	741
HMS	M	6	812	788.5	693.5	437	313.5
HMS	M	6	861	712.5	950	836	741
HMS	M	6	821	636.5	693.5	598.5	532
HMS	F	6	819	636.5	503.5	712.5	418
HMS	M	6	861	874	950	750.5	741
HMS	F	6	810	475	570	551	532

HMS	M	6	812	475	760	475	532
HMS	M	6	817	712.5	760	437	532
HMS	M	6	821	313.5	693.5	712.5	636.5
HMS	F	6	808	788.5	446.5	437	532
HMS	M	6	784	237.5	380	399	313.5
LMS	F	6	812	475	570	551	636.5
LMS	M	6	819	551	693.5	551	636.5
LMS	M	6	812	399	636.5	551	636.5
LMS	M	6	843	712.5	760	712.5	845.5
LMS	F	6	857	636.5	883.5	874	741
LMS	M	6	857	636.5	883.5	874	741
LMS	M	6	781	161.5	256.5	399	532
LMS	F	6	843	636.5	760	788.5	741
LMS	M	6	797	313.5	636.5	399	418
LMS	M	6	831	475	826.5	750.5	532
LMS	M	6	857	874	826.5	750.5	845.5
LMS	F	6	821	712.5	636.5	598.5	532
LMS	M	6	800	313.5	446.5	513	532
LMS	M	6	824	551	693.5	636.5	636.5
LMS	M	6	831	636.5	693.5	712.5	636.5
LMS	F	6	884	788.5	883.5	950	845.5
RMS	M	6	853	712.5	826.5	874	636.5
RMS	M	6	861	636.5	950	874	741
RMS	F	6	819	399	636.5	636.5	741
RMS	F	6	795	399	446.5	437	418
RMS	M	6	843	475	826.5	788.5	845.5
RMS	F	6	806	313.5	503.5	551	636.5
RMS	F	6	871	712.5	950	874	845.5
RMS	F	6	815	636.5	503.5	513	741
RMS	M	6	861	874	693.5	836	950
RMS	M	6	815	636.5	570	598.5	418
RMS	M	6		0	0	0	0
RMS	M	6	793	399	636.5	361	209
RMS	M	6	812	161.5	760	636.5	532
RMS	M	6	846	712.5	760	750.5	845.5
RMS	M	6	843	788.5	826.5	788.5	418
RMS	F	6	829	475	826.5	712.5	532
HMS	M	7	861	788.5	826.5	788.5	950
HMS	F	7	884	874	826.5	950	845.5
HMS	F	7	831	636.5	826.5	674.5	532
HMS	M	7	808	399	636.5	513	532
HMS	M	7	871	950	826.5	874	741
HMS	M	7	834	874	760	598.5	636.5
HMS	M	7	831	551	636.5	750.5	741
HMS	M	7	850	636.5	826.5	788.5	845.5
HMS	M	7	861	788.5	826.5	912	636.5
HMS	F	7	843	712.5	636.5	836	741
HMS	M	7	788	399	503.5	275.5	418

HMS	F	7	877	788.5	883.5	912	845.5
HMS	F	7	853	712.5	883.5	836	636.5
HMS	M	7	804	551	380	551	418
HMS	M	7	817	551	636.5	551	636.5
HMS	M	7	812	475	570	551	636.5
HMS	M	7	826	712.5	693.5	551	741
HMS	M	7	788	237.5	380	437	418
HMS	F	7	815	475	636.5	598.5	532
HMS	M	7	797	636.5	636.5	313.5	209
HMS	F	7	840	636.5	693.5	836	636.5
HMS	F	7	840	712.5	760	712.5	741
HMS	M	7	865	788.5	883.5	788.5	950
LMS	F	7	853	874	760	788.5	741
LMS	M	7	840	712.5	883.5	712.5	532
LMS	M	7	857	874	826.5	788.5	741
LMS	F	7	846	874	570	750.5	950
LMS	M	7	857	788.5	883.5	788.5	741
LMS	F	7	857	874	760	836	741
LMS	M	7	821	636.5	503.5	598.5	845.5
LMS	M	7	840	712.5	760	712.5	741
LMS	F	7	817	475	570	636.5	636.5
LMS	F	7	826	788.5	693.5	674.5	313.5
LMS	M	7	837	712.5	760	750.5	532
RMS	M	7	871	874	950	750.5	950
RMS	F	7	806	399	446.5	551	636.5
RMS	F	7	840	551	760	874	532
RMS	F	7	829	636.5	570	712.5	741
RMS	M	7	893	950	883.5	912	845.5
RMS	M	7	817	551	636.5	598.5	532
RMS	M	7	808	399	636.5	475	636.5
RMS	M	7	795	551	570	275.5	418
RMS	F	7	815	636.5	636.5	551	418
RMS	F	7	763	237.5	256.5	199.5	209
RMS	F	7	806	313.5	570	551	532
HMS	M	8	831	874	636.5	598.5	741
HMS	M	8	850	636.5	826.5	750.5	950
HMS	M	8	853	712.5	883.5	750.5	845.5
HMS	M	8	812	551	760	437	532
HMS	F	8	817	636.5	760	437	636.5
HMS	F	8	819	788.5	636.5	598.5	313.5
HMS	F	8	877	874	950	788.5	950
HMS	F	8	817	636.5	570	551	636.5
HMS	M	8	810	636.5	256.5	551	845.5
HMS	F	8	846	788.5	826.5	674.5	845.5
HMS	M	8	766	161.5	313.5	313.5	0
HMS	M	8	819	788.5	636.5	475	636.5
HMS	M	8	837	551	760	788.5	636.5
HMS	F	8	821	636.5	760	551	532

HMS	F	8	817	475	503.5	551	950
HMS	F	8	837	874	636.5	636.5	845.5
HMS	F	8	819	475	570	712.5	532
HMS	M	8	812	551	503.5	598.5	532
HMS	M	8	871	874	760	912	845.5
HMS	F	8	810	551	636.5	475	532
HMS	F	8	834	313.5	883.5	712.5	845.5
LMS	M	8	850	712.5	883.5	750.5	741
LMS	M	8	837	636.5	693.5	674.5	950
LMS	M	8	817	475	760	513	636.5
LMS	F	8	801	399	693.5	399	418
LMS	F	8	810	551	570	437	741
LMS	F	8	877	712.5	950	874	950
LMS	F	8	788	399	446.5	313.5	418
LMS	M	8	797	551	570	313.5	418
LMS	F	8	846	874	570	836	741
LMS	M	8	797	475	503.5	361	532
LMS	M	8	837	788.5	570	788.5	636.5
LMS	M	8	834	636.5	760	674.5	741
LMS	F	8	843	551	826.5	712.5	950
RMS	M	8	815	475	760	475	636.5
RMS	M	8	812	475	693.5	551	418
RMS	M	8	843	551	883.5	750.5	741
RMS	F	8	831	475	760	712.5	741
RMS	M	8	797	399	503.5	437	418
RMS	F	8	846	788.5	826.5	674.5	845.5
RMS	M	8	793	475	636.5	361	104.5
RMS	F	8	810	399	446.5	674.5	532
RMS	F	8	840	636.5	826.5	712.5	741
RMS	M	8	861	788.5	760	912	741
HMS	F	9	810	551	503.5	513	636.5
HMS	M	9	829	551	760	674.5	636.5
HMS	F	9	815	636.5	570	598.5	418
HMS	F	9	857	788.5	826.5	750.5	950
HMS	F	9	824	636.5	693.5	674.5	418
HMS	F	9	788	237.5	636.5	237.5	532
HMS	M	9	806	636.5	570	399	532
HMS	F	9	810	475	503.5	513	741
HMS	M	9	840	788.5	826.5	636.5	741
HMS	F	9	819	551	636.5	636.5	532
HMS	F	9	786	313.5	570	313.5	209
HMS	F	9	829	399	883.5	712.5	532
HMS	F	9	853	788.5	693.5	874	741
HMS	M	9	817	788.5	570	598.5	313.5
LMS	F	9	793	237.5	636.5	475	104.5
LMS	F	9	877	874	883.5	874	845.5
LMS	F	9	812	636.5	503.5	598.5	418
LMS	F	9	857	636.5	883.5	836	845.5

LMS	F	9	826	551	570	750.5	636.5
LMS	F	9	865	874	883.5	836	741
LMS	F	9	829	712.5	693.5	636.5	636.5
LMS	M	9	871	950	826.5	836	845.5
LMS	F	9	837	551	826.5	750.5	636.5
LMS	F	9	843	551	883.5	712.5	845.5
LMS	F	9	821	475	693.5	636.5	636.5
RMS	F	9	861	712.5	883.5	874	741
RMS	M	9	893	950	950	950	636.5
RMS	M	9	817	475	693.5	551	636.5
RMS	F	9	853	712.5	826.5	836	741
RMS	M	9	846	712.5	883.5	788.5	532
RMS	M	9	801	399	446.5	513	532
RMS	F	9	853	788.5	760	788.5	845.5
RMS	M	9	861	636.5	950	836	845.5
RMS	M	9	808	475	693.5	437	532
RMS	M	9	843	636.5	826.5	712.5	845.5
RMS	F	9	853	712.5	883.5	788.5	741
RMS	M	9	843	475	950	712.5	845.5
RMS	F	9	850	712.5	883.5	788.5	636.5
RMS	F	9	884	950	883.5	912	741
HMS	M	10	824	712.5	446.5	674.5	741
HMS	M	10	819	551	636.5	598.5	636.5
HMS	M	10	837	636.5	826.5	674.5	741
HMS	M	10	786	399	380	313.5	418
HMS	M	10	831	712.5	760	712.5	418
HMS	F	10	824	636.5	636.5	598.5	741
HMS	F	10	826	712.5	503.5	712.5	636.5
HMS	M	10	850	712.5	826.5	788.5	741
HMS	M	10	871	788.5	883.5	874	845.5
HMS	M	10	824	399	826.5	674.5	532
LMS	M	10	893	788.5	950	912	950
LMS	M	10	831	551	693.5	712.5	741
LMS	M	10	815	399	636.5	513	845.5
LMS	M	10	815	237.5	693.5	674.5	532
LMS	M	10	840	551	693.5	788.5	845.5
LMS	F	10	834	712.5	503.5	788.5	741
LMS	F	10	819	313.5	760	598.5	741
LMS	F	10	826	313.5	693.5	750.5	741
LMS	F	10	831	874	693.5	636.5	532
LMS	F	10	815	399	570	636.5	636.5
LMS	M	10	808	399	570	475	741
LMS	M	10	824	475	760	551	845.5
LMS	F	10		0	0	0	0
LMS	M	10		0	0	0	0
LMS	M	10	760	237.5	256.5	161.5	209
RMS	M	10	817	636.5	760	399	741
RMS	F	10	850	636.5	883.5	750.5	845.5

RMS	F	10	826	475	760	712.5	532
RMS	M	10	865	874	950	750.5	845.5
RMS	M	10	846	551	883.5	874	532
RMS	M	10	808	551	636.5	437	532
HMS	M	11	824	712.5	636.5	636.5	532
HMS	F	11	837	788.5	760	712.5	532
HMS	F	11	769	76	190	275.5	532
HMS	M	11	790	237.5	503.5	313.5	636.5
HMS	F	11	829	712.5	760	598.5	636.5
HMS	F	11	877	788.5	950	874	845.5
LMS	M	11	801	551	570	361	532
LMS	F	11	850	712.5	760	836	741
LMS	M	11	843	551	883.5	788.5	636.5
LMS	M	11	795	237.5	636.5	399	418
LMS	F	11	817	551	570	598.5	636.5
LMS	F	11	850	712.5	826.5	788.5	741
LMS	F	11	834	399	760	788.5	741
RMS	F	11	834	712.5	636.5	674.5	845.5
RMS	F	11	831	712.5	693.5	788.5	313.5
RMS	F	11	829	551	760	712.5	532
RMS	F	11	824	475	760	636.5	636.5
RMS	M	11	850	788.5	950	750.5	532
RMS	F	11	865	788.5	883.5	836	845.5
RMS	M	11	893	950	826.5	950	845.5
RMS	M	11	821	712.5	503.5	674.5	532
HMS	M	12	853	636.5	883.5	836	741
HMS	F	12	801	313.5	570	475	532
HMS	M	12	806	399	826.5	361	532
HMS	M	12	846	874	693.5	836	532
HMS	F	12	840	551	883.5	712.5	741
HMS	M	12	850	788.5	883.5	712.5	741
HMS	F	12	810	636.5	446.5	513	636.5
HMS	F	12	861	874	826.5	836	741
HMS	M	12	877	950	826.5	912	741
HMS	F	12	857	874	883.5	788.5	636.5
HMS	F	12	846	636.5	760	788.5	845.5
HMS	F	12	831	712.5	570	636.5	950
LMS	F	12	817	399	503.5	750.5	532
LMS	F	12	840	475	883.5	750.5	741
LMS	F	12	769	237.5	256.5	275.5	209
LMS	M	12	793	399	313.5	399	636.5
RMS	M	12	871	788.5	883.5	874	845.5
RMS	F	12	834	712.5	826.5	674.5	532
RMS	M	12	840	788.5	636.5	750.5	741
RMS	M	12	884	950	950	874	741
RMS	F	12	810	551	313.5	636.5	636.5
RMS	F	12	861	712.5	760	912	845.5
RMS	M	12	826	636.5	826.5	551	636.5

RMS	F	12	790	237.5	636.5	361	313.5
HMS	M	13	804	712.5	446.5	598.5	0
HMS	F	13	840	712.5	693.5	712.5	845.5
HMS	F	13	829	712.5	636.5	712.5	532
HMS	M	13	806	475	693.5	399	532
LMS	M	13		0	0	0	0
LMS	M	13	826	788.5	636.5	551	741
LMS	F	13	843	788.5	883.5	598.5	845.5
LMS	M	13	837	788.5	693.5	636.5	845.5
LMS	M	13	840	712.5	760	750.5	636.5
LMS	F	13	821	636.5	636.5	475	950
RMS	F	13	850	636.5	883.5	836	636.5
RMS	F	13	829	636.5	693.5	674.5	636.5
RMS	M	13	877	874	826.5	912	845.5
RMS	M	13	821	551	760	475	845.5
RMS	M	13	834	636.5	760	674.5	741
RMS	M	13	829	551	883.5	598.5	636.5
HMS	M	14	808	399	570	551	532
HMS	M	14	801	475	503.5	437	532
HMS	M	14	769	237.5	256.5	275.5	209
HMS	M	14	810	636.5	503.5	475	636.5
HMS	M	14	800	636.5	446.5	313.5	636.5
RMS	M	14	824	636.5	636.5	636.5	636.5
RMS	M	14	821	551	570	712.5	532
RMS	F	14	857	712.5	883.5	788.5	845.5
RMS	F	14	817	551	760	551	418
HMS	M	15	853	874	826.5	674.5	950
HMS	F	15	837	551	826.5	674.5	845.5
HMS	M	15	769	237.5	380	199.5	209
HMS	F	15	853	712.5	693.5	912	741
HMS	F	15	806	475	503.5	551	418
LMS	M	15	834	712.5	760	674.5	636.5
LMS	M	15	819	313.5	826.5	636.5	532
RMS	M	15	829	636.5	883.5	712.5	209
RMS	M	15	850	636.5	826.5	750.5	950

Truant Students

School	Gender	Absences	CRITERION-REFERENCED COMPETENCY TEST Math Scale Score	Num&O Scale Score	Geo Scale Score	Alge Scale Score	DataAnaPr Scale Score
LMS	F	16	834	712.5	693.5	750.5	532
LMS	M	16	861	788.5	883.5	750.5	950
LMS	M	16	829	475	883.5	551	845.5
LMS	F	16	810	399	636.5	513	636.5
LMS	F	16	846	788.5	636.5	788.5	845.5
RMS	M	16	786	399	446.5	399	104.5
RMS	F	16	831	636.5	826.5	598.5	741
RMS	F	16	821	475	760	636.5	532
RMS	M	16	819	636.5	693.5	513	636.5
HMS	M	17	804	399	760	399	418
LMS	M	17		0	0	0	0
LMS	M	18	853	874	826.5	712.5	845.5
LMS	M	18	812	475	636.5	513	636.5
HMS	M	19	853	551	826.5	836	950
LMS	M	19	831	475	760	674.5	845.5
LMS	F	20	797	399	313.5	551	418
RMS	F	20	819	399	950	513	532
HMS	M	21	793	313.5	636.5	313.5	418
RMS	F	21	824	399	570	788.5	636.5
HMS	M	22	808	399	570	598.5	418
HMS	F	22	781	475	313.5	313.5	209
LMS	M	23	795	237.5	446.5	598.5	209
LMS	F	24	801	551	446.5	437	532
RMS	F	24	846	788.5	883.5	674.5	741
LMS	M	29	821	788.5	636.5	475	741
LMS	F	32	865	788.5	760	874	950
LMS	M	32	808	313.5	636.5	598.5	418