# An Examination of Chronic Absenteeism as Related to Performance on End-of-Year Missouri State Assessments 

John Wesley Collins<br>Lindenwood University

Follow this and additional works at: https://digitalcommons.lindenwood.edu/dissertations
Part of the Educational Assessment, Evaluation, and Research Commons

## Recommended Citation

Collins, John Wesley, "An Examination of Chronic Absenteeism as Related to Performance on End-of-Year Missouri State Assessments" (2015). Dissertations. 341.
https://digitalcommons.lindenwood.edu/dissertations/341

This Dissertation is brought to you for free and open access by the Theses \& Dissertations at Digital Commons@Lindenwood University. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons@Lindenwood University. For more information, please contact phuffman@lindenwood.edu.

# An Examination of Chronic Absenteeism as Related to Performance 

 on End-of-Year Missouri State Assessmentsby

John Wesley Collins

April 2015

A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

# An Examination of Chronic Absenteeism as Related to Performance on End-of-Year Missouri State Assessments 

by

## John Wesley Collins

This Dissertation has been approved as partial fulfillment of the requirements for the degree of Doctor of Education Lindenwood University, School of Education



Dr. Julie Williams Chair


Dr. Sherry Devore Committee Member


Dr. Terry Reid Committee Member


I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

Full Legal Name: John Wesley Collins
Signature: Noh Neslay Collic Date: $04 / 30 / 2014$

## Acknowledgements

I would like to thank God for His many blessings in my life. I would also like to thank Dr. Williams, Dr. Reid, and Dr. DeVore for their guidance during this process. Mr. Danny Shockley, thank you for being a just man and teaching me many life lessons. Mrs. Karen McAdams, thank you for helping me receive a full, academic scholarship. Dr. Julie Williams, Dr. Ed Williamson, Mrs. Sharon Davis, Mr. Bill Holden, and a few others, found a way to motivate me toward being extraordinary.

I would like to thank my parents, Johnny and Lillian, for instilling a love and respect of learning in me, as well as raising me in a home full of love, compassion and understanding. Thank you for your sacrifice for Johanna and me; I love you.

Proverbs 22:6--Train up a child in the way he should go: and when he is old, he will not depart from it.

I want to thank my children, John and Mahayla, for being the greatest blessings I have ever known. Many hours, nights, and weekends were sacrificed with them to complete my education. I love you and hope you aspire to the greatness within you. John, my son, keep your curiosity and your happy spirit. Mahayla, keep your fighter's heart and your passion from within. I am most blessed by you both.

Psalm 127:3--Behold, children are a heritage from the LORD, the fruit of the womb a reward. Like arrows in the hand of a warrior are the children of one's youth. Blessed is the man who fills his quiver with them! He shall not be put to shame when he speaks with his enemies in the gate.

All my other family members and friends, who have encouraged me and helped me throughout the years, thank you. I sincerely could not have done it without you.


#### Abstract

This study was designed to examine if a correlation exists between regular school attendance and academic success. As an outcome of concern for educational expectations in American schools, the government of the United States increased accountability for schools through the No Child Left Behind Act of 2001, requiring schools improve student achievement levels in designated core academic areas (Tyre, Feuerborn, \& Pierce, 2011). Unlike the findings of Robert Balfanz and Vaughan Byrnes (2012) of Johns Hopkins University, which found most educational agencies do not keep detailed statistics regarding student attendance, Missouri public school districts do have an accountability structure in place. Core Data and Missouri Student Information System (MOSIS) data collection systems are used by the Missouri Department of Elementary and Secondary Education (2014) to monitor attendance among Missouri's school children. Using data collected from Core Data and MOSIS, this study was designed to correlate variables in relation to student performance on Missouri end-of-year standardized tests to the students' annual attendance rates within a specific school district. Results were supportive of the research hypotheses; a correlation exists between chronic absenteeism and basic or below basic performance on the Missouri Assessment Program (MAP) grade-level assessments for students in the sample. These findings were generally consistent with previous research. Recommendations for future research are suggested.


## Table of Contents

Abstract ..... iii
List of Tables ..... vii
List of Figures ..... viii
Chapter One: Introduction ..... 1
Background of the Study ..... 2
Conceptual Framework ..... 4
Statement of the Problem ..... 5
Purpose of the Study ..... 6
Research Questions and Hypotheses ..... 7
Definition of Key Terms ..... 8
Limitations and Assumptions ..... 9
Summary ..... 11
Chapter Two: Review of Literature ..... 13
Conceptual Framework ..... 29
Causes of Truancy ..... 33
School ..... 34
Home ..... 37
Society ..... 43
Methods for Truancy Reduction ..... 46
Legal Authority ..... 46
School ..... 47
Family ..... 53
Community ..... 55
Summary ..... 57
Chapter Three: Methodology ..... 60
Problem and Purpose Overview ..... 61
Research Questions and Hypotheses ..... 61
Research Design ..... 63
Population and Sample ..... 64
Instrumentation ..... 65
Data Collection ..... 65
Data Analysis ..... 66
Ethical Considerations ..... 66
Summary ..... 66
Chapter Four: Analysis of Data ..... 69
Research Questions ..... 69
Research Question One ..... 69
Research Question Two ..... 70
Research Question Three ..... 71
Research Question Four. ..... 73
Research Question Five ..... 74
Research Question Six ..... 75
Research Question Seven. ..... 76
Summary ..... 80
Chapter Five: Summary and Conclusions ..... 81
Findings ..... 81
Conclusions ..... 85
Implications for Practice ..... 88
Recommendations for Future Research ..... 90
Summary ..... 93
Appendix A ..... 96
Appendix B ..... 98
Appendix C ..... 100
References ..... 102
Vita ..... 111

## List of Tables

Table 1. Correlation of MAP MA Scores to Student Absenteeism ..... 70
Table 2. Correlation of MAP CA Scores to Student Absenteeism ..... 70
Table 3. Correlation of Students in Fifth through Eighth Grade with IEP and HighAbsenteeism71
Table 4. Correlation of MAP MA Scores to Student IEP Designation. ..... 72
Table 5. Correlation of MAP CA Scores to Student IEP Designation. ..... 72
Table 6. Correlation between Students with High Absenteeism and Gender ..... 73
Table 7. Paired Samples $t$-test of Gender Differences in Absenteeism ..... 74
Table 8. Correlation of MAP CA Scores to Gender ..... 75
Table 9. Correlation of MAP MA Scores to Gender ..... 75
Table 10. Correlation of Free and Reduced Price Meal Designation and Absenteeism.. ..... 76
Table 11. Bivariate Linear Regression ANOVA ..... 80
Table 12. Chronic Absenteeism in Five States. ..... 86

## List of Figures

Figure 1. Percentage of students receiving free or reduced price meals. ......................... 77
Figure 2. Percentage of days absent ................................................................................. 78
Figure 3. Percentage of students with IEP........................................................................ 79

## Chapter One: Introduction

Attendance is one of the most important factors in academic success for children, youth, and teens (Child Trends, 2014). Studies show better attendance correlates to higher academic achievement for students of all demographics, but particularly for students coming from lower socio-economic statuses (Child Trends, 2014). Beginning in kindergarten, students who attend school regularly have greater levels of achievement on standardized tests than do their peers who are frequently absent from school (Strauss, 2014). Chronic truancy and frequent unexcused absences correlate as a strong predictor of detrimental outcomes in adolescence (Child Trends, 2014). Some undesirable outcomes stemming from chronic absenteeism include academic failure, non-completion of school (dropping out), alcohol use, potential gang involvement, and criminal activity (Child Trends, 2014).

Chronic absenteeism is increasingly identified as a critical early warning sign a student is at risk for school failure and eventual early dropout (Child Trends, 2014). Chronic absenteeism is typically defined as missing $10 \%$ or more of school days (Child Trends, 2014). Few school districts currently have the capacity to properly analyze attendance data in order to identify those students who are chronically absent (Child Trends, 2014). Multiple factors can, and do, contribute to student absenteeism (Child Trends, 2014). Family health issues, financial problems, negative school climate, drug and/or alcohol use, transportation issues, as well as differing community and/or familial attitudes towards education are among the circumstances most often associated with a child's recurrent absenteeism from the school setting (Child Trends, 2014).

The purpose of this project was to examine the correlation between chronic absenteeism and student performance on end-of-year standardized tests. The primary
investigator extracted and disaggregated archival attendance and achievement data from school years 2010-2014. Once the data were disaggregated, statistical analyses were used to determine whether a correlation exists between high absenteeism and low standardized test performance in School District A.

## Background of the Study

The modern climate of American education has placed a never-before-seen level of accountability upon educators and educational leaders (Farah, 2013). As education has moved forward from No Child Left Behind (NCLB), accountability has been measured in many ways, one of which is student performance (Missouri Department of Elementary and Secondary Education [MODESE], 2014). A metric of student performance in Missouri is end-of-year standardized tests such as the Missouri Assessment Program (MAP) test (MODESE, 2014). Tests such as the MAP are standardized with a primary goal of uniformity, rendering the assessment's results as objective as possible (MODESE, 2014). By removing subjective elements, which could skew results, scores are more useable, valid, and significant when used in comparison to the qualities assessed (Farah, 2013).

As a society, the United States has been compared to and found to be trailing many developed nations of the world (Chubb \& Clark, 2013). However, the United States is the only nation requiring standardized tests of all students in grades three through eight (Chubb \& Clark, 2013). Chubb and Clark (2013) also pointed out the unfairness of attaching high-stakes consequences to a single test, which occupies only a few hours of a student's entire academic year. An educational climate based on accountability through standardized testing is here to stay (Chubb \& Clark, 2013).

Balfanz (2011) defined chronic absenteeism as absences at a level of $10 \%$ of the school year or greater. While there are many reasons for absenteeism, such as illness, death of a family member, weather, family responsibilities, and fear of bullying, the results are the same. Chronic absenteeism has a negative effect on student achievement. Gage, Sugai, Lunde, and DeLoreto (2013) reported decades of research indicating chronic absenteeism increases the likelihood of participation in substance abuse, unsafe sexual behaviors, and the juvenile justice system. The research of Gage et al. (2013) is expounded upon by Goldstein (2015), "Administrators know that truancy proceedings mean that certain students will appear in court, not in class, and can lead to children being reassigned to alternative education programs not subject to the same testing pressures" (p. 36).

In fact, as early as elementary school, Paredes and Ugarte (2011) found students with chronic absenteeism were more likely to suffer from low self-esteem, were found to be less competent in social relationships, often felt less cohesion with their families, and suffered from feelings of poor parental acceptance. Poor attendance has been connected with a lack of feeling a connectedness and belonging in the school setting, which ultimately becomes precursors of dropping out. Paredes and Ugarte (2011) continued by stating the researchers have come to a consensus attendance is a major factor in determining the success of a student's academic career, which in turn has an effect on school completion and future earning potential.

Many factors contribute to student performance on tests, and the primary researcher through this project examined one such issue-chronic absenteeism. Absenteeism negatively impacts school systems by diminishing performance on
standardized tests, decreasing graduation rates, and increasing dropout rates (Balfanz \& Byrnes, 2012). The primary investigator extrapolated data to examine the impact of chronic absenteeism on standardized test performance in School District A (Balfanz \& Byrnes, 2012). Regular school attendance is foundational to children's success, but school absenteeism is a common, serious, and highly vexing problem (Kearney \& Graczyk, 2014). Conclusions from this project may be used to develop a program to increase underperforming students' test scores by curbing absenteeism within School District A.

## Conceptual Framework

Schools with large numbers of students receiving free and/or reduced price meal services have higher instances of absenteeism (Balfanz \& Byrnes, 2012). Students who are chronically absent during one year have also been shown to be recurrently absent over multiple years (Balfanz \& Byrnes, 2012). Some students were found to be missing between six months and one year of school days over a five-year span (Buehler, Tapogna, \& Chang, 2012). Borg (2014) found nearly one in three students in early elementary missed from six to 11 days of school during the prior academic school year, a trend leading to poor academic performance in the future. Borg (2014) further stated chronic absenteeism sets up children for a litany of academic performance and social issues. Children who were chronically absent from school in kindergarten show lower levels of achievement in mathematics as well as communication arts, and are twice as likely to be subject to grade-level retention in later years (Borg, 2014).

Dube and Orpinas (2009) stated, "In the literature researchers have distinguished between justified absences (those due to health reasons, death of a relative, weather, or
rural location) and truancy meaning absences that are not justified by school policy" (p. 4). Balfanz and Byrnes (2012) relayed the definition of chronic absenteeism as being absent $10 \%$ or more during a school year for any reason, whether excused or unexcused by the school. Balfanz and Byrnes (2012) listed the following primary causes of truancy: illness, family responsibilities, housing instability, the need to work, or involvement in the juvenile justice system. A second category of students who are not attending school cited bully avoidance, unsafe conditions while at school, harassment, and embarrassment as reasons for nonattendance (Balfanz \& Byrnes, 2012). Baxter, Royer, Hardin, Guinn, and Delvin (2011) noted some children are absent because of health-related illness associated with obesity. Expanding on the work of Delvin:

Research has shown that overweight and obese children are more likely to be bullied or teased than their normal-weight peers; this could contribute to missed school days. Also, it is possible that obese children might be absent from school because they are embarrassed to participate in physical activities. (Baxter et al., 2011, p. 421)

The final category Balfanz and Byrnes (2012) listed involves truant students, or those students who do not attend school because they, or their parents, do not see the value in attendance.

## Statement of the Problem

Chronic absenteeism is a major driver of achievement, graduation gaps, and is linked to lower reading abilities in early elementary grades (Balfanz \& Byrnes, 2012). Lower reading levels detract middle-grade students from the path to high school graduation and turn achievement gaps into chasms (Balfanz \& Byrnes, 2012). Lower
reading levels lessen the odds high school graduates will enroll and succeed in college (Balfanz \& Byrnes, 2012). Gage et al. (2013) identified many risk behaviors associated with high levels of school absenteeism including increased degrees of substance abuse, unsafe sexual behaviors, and increased rates of justice system involvement.

Paredes and Ugarte (2011) found as early as elementary school, students who are frequently absent may have low self-esteem, be less competent in social relationships, exhibit less cohesion within families, feel less parental acceptance, and have poor discipline. The issue of school non-attendance is an increasingly serious problem facing society. According to Wilkins (2008), "The link between chronic absenteeism in high school and dropping out has been well documented" (p. 12). Paredes and Ugarte (2011) pointed out researchers have come to a consensus decision attendance is a major factor affecting students' academic performance. The lack of academic performance may also cause disconnect in the school setting, leading to feelings of not belonging and boredom (Paredes \& Ugarte, 2011). The divide between students with low and high academic performance can be a precursor to dropping out and reduced earning potential (Paredes \& Ugarte, 2011).

## Purpose of the Study

The purpose of the study was to answer five research questions through analysis of data gathered from School District A using a population size of 250 students to determine if a correlation exists between students with chronic absenteeism and low proficiency (basic or below basic) on the MAP grade-level assessments. Information from the study could lend to policy revision and the creation of a program to reduce chronic absenteeism.

School District A is a kindergarten through grade eight rural school in southcentral Missouri with a student enrollment of 250 and a free and reduced priced meal rate of $89.3 \%$. English Language Learner (ELL) students are not a subgroup of the study, as no ELL students are enrolled in School District A. It is also noteworthy to mention the non-existence of an ethnicity designation in the study. There were a total of three nonwhite students in the population, thereby making inclusion of this population statistically invalid (Fraenkel, Wallen, \& Hyun, 2015).

Research questions and hypotheses. The primary investigator, through research questions, sought to find a relationship between absenteeism and other variables invalid (Fraenkel et al., 2015).

1. What is the correlation between students in fifth through eighth grade with a high absenteeism and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?
$H 1_{0}$ : There is no correlation between students in fifth through eighth grade with high absenteeism and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).
2. What is the correlation between students in fifth through eighth grade with an IEP designation and high absenteeism?
$H 2$ : There is no correlation between students in fifth through eighth grade with an IEP designation and high absenteeism.
3. What is the relationship between students in fifth through eighth grade with an IEP designation and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?
$H 3_{0}$ : There is no relationship between students in fifth through eighth grade with an IEP designation and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).
4. What is the relationship between students in fifth through eighth grade with high absenteeism and gender?
$H 40$ : There is no relationship between students in fifth through eighth grade with high absenteeism and gender.
5. What is the relationship between gender and performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?

H50: There is no relationship between gender and performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).
6. What is the relationship between students in fifth through eighth grade with a free or reduced price meal designation and high absenteeism?
$H 6_{0}$ : There is no relationship between students in fifth through eighth grade with a free or reduced price meal designation and high absenteeism.
7. What are the demographics of students in fifth through eighth grade maintaining regular attendance as determined by subgroup designation and absenteeism?

## Definition of Key Terms

High absenteeism. High absenteeism occurs when the percentage of time the student regularly attends school does not meet or exceed the state standard or demonstrate required improvement (MODESE, 2014). The individual student attendance target for the state of Missouri is equal to or greater than $90 \%$ throughout one school year
(MODESE, 2014). For the purpose of this study, high absenteeism for the population sample is seven or greater days of unexcused absenteeism in one school year.

Missouri assessment program (MAP). The MAP is a mandatory standardized test given annually to Missouri students (MODESE, 2014). Students are tested in grades three through eight in communication arts and math as well as grades five and eight in science (MODESE, 2014).

Missouri comprehensive data system (MCDS). The MCDS is a resource provided by the MODESE that allows school personnel and the public to access education-related data (MODESE, 2014).

Standardized test. A standardized test is any form of test that (1) requires all test takers to answer the same questions, or a selection of questions from common bank of questions, in the same way; and that (2) is scored in a "standard" or consistent manner, which makes it possible to compare the relative performance of individual students or groups of students (Glossary of Standardized Testing Terms, 2014). While different types of tests and assessments may be "standardized" in this way, the term is primarily associated with large-scale tests administered to sizeable populations of students, such as a multiple-choice test given to all the eighth-grade public-school students in a particular state (Gardoqui, 2015).

## Limitations and Assumptions

The following limitations were identified in this study:
Sample population. The sample size of the population in this study was 250 students from one school in rural Missouri. The study would need to be repeated with
similar methodology and performed on a larger number of students in multiple locations to be valid outside of the primary investigator's intended purpose (Frankel, 2013).

Missouri School Improvement Plan Fifth Cycle (MSIP 5). The fifth version of the Missouri School Improvement Program (MSIP 5), the state's accountability system for reviewing and accrediting public school districts, outlines expectations for student achievement with the ultimate goal of each student graduating ready for success in college and careers (MODESE, 2014). The MSIP 5 accountability plan is a limitation, as the accountability metrics are only applied to students within the state of Missouri.

The comprehensive MSIP accountability system was established in 1990 and has evolved with each version (MODESE, 2014). The MSIP 5 Resource and Process Standards are designed to promote continuous improvement and innovation within each district (MODESE, 2014). The Process Standards are often qualitative in nature (MODESE, 2014). The MSIP 5 Performance Standards are designed to recognize the achievement and continuous growth of all students as they prepare for a global economy (MODESE, 2014).

The MSIP 5 is also used to distinguish the performance of schools and districts in valid, accurate, and meaningful ways so districts in need of improvement can receive appropriate support and interventions, and high-performing districts can be recognized as models of excellence (MODESE, 2014). Annual Performance Reports (APRs) are based on the performance standards and are reviewed for accreditation purposes at the district level (MODESE, 2014). The state also produces APRs for schools and charter LEAs to support its goal of empowering all stakeholders in manners appropriate to their roles through regular communication and transparent reporting of results (MODESE, 2014).

In July of 2012, Missouri's ESEA Flexibility Request was approved by the United States Department of Education (MODESE, 2014). This was an opportunity for Missouri to use its own reliable accountability system at the forefront of school and district accountability (MODESE, 2014). The state is able to offer an aligned comprehensive system of support to schools and districts as outlined in this document (MODESE, 2014).

The adopted MSIP 5 Standards represent the work of hundreds of educators, and numerous refinements and revisions were made before the Missouri State Board of Education approved the final changes (MODESE, 2014). The standards will guide Missouri's continuing school-improvement efforts as districts work together to reach the goal of student achievement in Missouri ranking among the top 10 states by 2020 (MODESE, 2014).

## Summary

The primary investigator examined the correlation between students who are chronically absent from school and their standardized test scores. Using statistical analysis, the researcher yielded data sufficient enough to develop a plan of action to intervene in students' academic paths regarding success related to attendances. The conceptual framework centers on the research of Balfanz and Byrnes (2012). It was found students who miss six to 11 days of school during the prior academic school year will have poor academic performance in subsequent years of formal schooling (Borg, 2014).

In Chapter Two, the literature review includes research components, which influence student truancy and absenteeism. Literature sections include parental involvement, the role of the school, and peer-related factors for absenteeism. The impact
absenteeism plays on the student dropout rate and an array of negative social consequences are also explored (Ready, 2010).

In Chapter Three, the focus is on the methodology of the research. The population and sample size criteria are discussed in detail. The research approach to collecting and analyzing the data is documented. The archival data gathered and analyzed included student scores and absenteeism rates from 2010 to 2014 to determine if there was a correlation between the variables.

In Chapter Four, a review of the study design and analysis of the quantitative archival data are presented. The results from the Pearson product-moment correlation coefficient were used to determine if a correlation exists between absenteeism and how students perform on state standardized assessments. The data from bivariate linear regression ANOVA statistical analysis were used to explore the relationship among gender, free and reduced price meal status, IEP designation, and a student's propensity toward absenteeism.

In Chapter Five, a summary of the study is presented. The findings of this study are revealed to determine if a correlation exists between the mean scale scores of students who have chronic absenteeism and basic or below basic designation of proficiency on the MAP grade-level assessments. Conclusions, implications for practice, and recommendations for future research are discussed.

## Chapter Two: Review of Literature

Most schools value attendance for two reasons. First, when students are not at school, they cannot receive instruction; and second, lack of funding based on student non-attendance diminishes the resource opportunity for the school and the child (Bahr et al., 2006). Most schools are funded based on an average daily attendance formula (Adleman \& Taylor, 2008). Adleman and Taylor (2008) explained chronic absenteeism is one of the largest problems facing America's schools. Hedy Chang (2012) purported:

Too many students are missing school, causing them to fall behind academically. This exacerbates achievement gaps and dropout rates. Chronic absence not only affects the students who are absent. Absenteeism disrupts learning for an entire classroom when teachers have to repeat lessons for students returning to class. Chronic absence can drag down standardized test scores and thwart school improvement efforts. Improvements in classroom teaching and curriculum will not yield results unless students are actually in school. (p. 5)

Even the most rudimentary element of education, attending school, cannot be taken for granted for a solid educational foundation (Chang, 2012).

On average, students with fewer absences do better overall in school (Gump, 2005). As not all chronic absenteeism is caught at an early stage, it is capable of producing havoc in the educational system and tends to undermine a quarter century of attempted educational reform (Messacar \& Oreopoulos, 2013). Chang (2012) also showed absenteeism has long-lasting effects on the child, school, and economy. Researchers have linked truancy with problematic behaviors including drug use, sexual and high-risk health-risk behaviors, and school failure and eventual dropout (Flaherty,
2012). During teen and later adult life, truant students have been shown to have higher rates of absenteeism from jobs, leading to high levels of turnover among this demographic (Larson, Singh, \& Lewis, 2011). Truancy increases the likelihood issues of non-attendance and employment instability will extend into adulthood and enable undesirable and unproductive outcomes such as criminality, substance abuse, violence, unemployment, and poverty (Flaherty, 2012).

Schools value attendance because when students are not in school, they are not receiving instruction, and because school funding partially is based on student attendance (MODESE, 2014). Poor attendance means less school funding, and therefore, fewer resources for the students and the school (MODESE, 2014). In addition, when students are absent, teachers have to repeat lessons when the students return. Since chronic absenteeism has a negative effect on student achievement, chronic absenteeism can result in a decrease in standardized test scores, and therefore negatively impact a district's attempts at school improvement (Adleman \& Taylor, 2008). Improvements in curriculum and classroom teaching strategies are of less effect if students are not in school.

Chronic absenteeism is one of the largest problems facing America's schools (Adleman \& Taylor, 2008). Students who are chronically absent have more unsupervised time to engage in risky behaviors (Henry \& Thornberry, 2010). These problems often extend into adulthood and negatively affect society as individuals become involved in criminal activity, substance abuse, violence, unemployment, and poverty. As a group, students who drop out of high school earn significantly less than high school graduates, are more likely to be imprisoned, depend on entitlement programs, and have children of their own who become dropouts. Chronic absenteeism affects the economy, and the cost
to society can result in millions of dollars in lost taxes, diminished earnings, spending power, incarceration, entitlement, and rehabilitation services (Flaherty, Sutphen, \& Ely, 2012).

It is reported $9 \%$ of school children are absent every day (Gage et al., 2013, p. 118). School districts serving populations with a high-poverty or low-socioeconomic status report higher absenteeism and dropout rates (Schrodenberger, 2012). The achievement gap cannot be closed without a thorough examination of chronic absenteeism (Balfanz \& Byrnes, 2012). The lack of education and skills possessed by dropouts often result in lower-paying jobs and a reduction in the U.S. tax base. High school dropouts contribute approximately half of the taxes as do their more educated peers (Schrodenberger, 2012). The National Center for Education Statistics (NCES) (2014) estimated the national dropout rate at $3.4 \%$. This percentage includes people between 16 and 24 years old who are not enrolled in school and have not earned a high school credential (U.S. Department of Education, 2014). Combining Schoeneberger's (2012) estimate of non-contribution to the tax base of $\$ 60,000$ per dropout over a lifetime, with the $3.4 \%$ dropout rate reported by the NCES (2014), total non-contribution tax rates equal $\$ 30,854,280,000$. Clearly, chronic absenteeism and the resulting complications are harmful at the individual, district, community, and national levels.

Chronic absenteeism blocks students from reaching educational milestones. The effect is not only immediate, but also increases the likelihood the student will eventually become a dropout (Chang, 2012). Dube and Orpinas (2009) continued by stating chronic absenteeism is linked to an increase in a variety of future negative health and social problems such as anxiety, depression, and risky behaviors. Absenteeism has an
immediate effect on the youngest students. Students from low socioeconomic backgrounds are especially at risk, and by third grade, these students are often poorly prepared to read (Chang, 2012). Balfanz (2011) also found a link between chronic absenteeism, lower achievement rates, and lower reading abilities in elementary grades. By middle school, the achievement gap is likely to have become a chasm, and later those students are less likely to graduate or enroll and succeed in college. The lack of academic performance often causes disconnect between the student and school, exacerbated by feelings of not belonging and boredom. These feelings, in turn, contribute to a higher dropout rate (Paredes \& Ugarte, 2011).

Researchers in Baltimore, Maryland, determined attendance patterns in the first month of school established the pattern for the remainder of the school year. Students who were absent two to four school days during the first month of school missed an average of 25 days of school during that school year. Students who were absent more than four days during the first month of school were likely to miss an average of 70 days of school during that school year (Borg, 2014). Balfanz (2011) found students who were chronically absent for one year were more likely to be absent for multiple years, sometimes missing a total of six months or a year within a five-year time span. Students from low-income families are much more likely to have chronic rates of absenteeism as compared to their peers from higher-income families (Borg, 2014).

Balfanz and Byrnes's (2012) definition of absenteeism allows researchers to quantify data and decrease the influence of subjectivity. Other research distinguishes between justified absences and those absences not justified by school absentee policies. Chronic absenteeism can be broken down into three main categories: students who cannot
attend school, students who will not attend school, and students who do not attend school because of a perceived lack of value (Balfanz \& Byrnes, 2012).

In an earlier study, Balfanz (2011) categorized the causes of absenteeism into age groups. From preschool through elementary ages, students are most often chronically absent when parents cannot or do not get students to school (Balfanz, 2011). In middle school years, chronically absent students are more likely to feel disengaged and have an increased opportunity to be absent (Balfanz, 2011). Other reasons for chronic absenteeism include concerns about school climate and safety, safe passage to school due to neighborhood crime rates, family care responsibilities, or school discipline policies (Balfanz, 2011). In addition to all the problems listed for middle school students, high school students are also chronically absent as a result of exhibiting an minimal amount of effort, the perception not much is going on at school anyway, increased work responsibilities, pregnancy, and involvement in the juvenile justice system (Balfanz, 2011).

The failure of students to regularly attend school is problematic and costs society, both directly and indirectly. Students dropping out of high school earn about \$300,000 less over a lifetime than students graduating high school (Flaherty, 2012). Dropouts are more likely to depend on entitlement programs, be imprisoned, and perpetuate the cycle of having children who are dropouts themselves (Parke \& Kanyongo, 2012). The resulting dependency on government subsidies and imprisonment costs society millions of dollars per capita in lost taxes, diminished earnings and spending, incarceration, entitlement, and rehabilitation treatment services (Flaherty, 2012).

Chronic absence can affect the economy. Dropouts are less likely to succeed in a career. Those who do graduate will not do well without good attendance habits in the workplace. Student absences may result in missed work for a parent, which in turn has a negative effect on local employers. In some states, better attendance rates translate into more state aid (Flaherty, 2012).

In Truancy Reduction Efforts (2000), a report researched by the state of Wisconsin, two core areas of school were identified as problematic for keeping students in attendance. First is the traditional seven-class period format in a secondary school day ("Truancy Reduction Efforts," 2000). Each class period gives students the opportunity to leave the building. Some secondary schools still offer an open-campus policy which allows students to leave campus for lunch, thereby affording the students an opportunity to leave and not come back ("Truancy Reduction Efforts," 2000).. Finally, some school buildings are in poor condition, which can create or exacerbate respiratory conditions in students and in turn cause them to be absent (Simons, Hwang, Fitzgerald, Kielb, \& Lin, 2010).

Sometimes an item as simple as clothing can keep students from attending school. Out-of-fashion, inferior, or different clothing can make students feel inadequate or as if they do not belong (Brunsma \& Rockquemore, 1998). Schools with a negative climate, bullying, or poor disciple policies may make students want to avoid school (Buehler et al., 2012). Students who do not feel safe cannot learn. Maslow's (1954) Hierarchy indicates when safety needs are not met, higher levels of the hierarchy cannot be achieved. Maslow (1954) showed lower-level needs, such as air, water, and food, as well as safety needs (security/freedom from fear and the need to belong and be accepted) must
be met before individuals can move on to higher-level needs. Maslow described higherlevel needs (esteem, achievement, and mastery/self-actualization) which lead to realizing personal potential. McLeod (2014) found individuals are capable and have the desire to move up the hierarchy, but progress may be disrupted by failure to meet lower-level needs. Schools can do much to create a system in which students' needs are met in order to encourage students to move forward in their learning. If students sense the school structure is working in their favor, they are likely to feel a connection to the teachers and to the curriculum and to develop a sense of belonging. Understanding the school culture from a teenager's perspective may assist administrators in solving attendance problems (Hartnett, 2007).

Balfanz (2012) looked at reasons within the student's home setting which correlate with attendance. He noted in homes where Maslow's level one needs are not met (air, food, drink, shelter, warmth, and sleep), the student cannot move on to level two needs at home or at school. Balfanz (2012) continued to note in addition to providing for a student's basic needs, the student must feel a value for education, which comes from levels four through seven of the hierarchy. Many students have duties at home, which prevent them from attending school on a regular basis. In addition to caring for the sick, more and more students are needed as translators for their parents. Spanish-speaking immigrants have increased dramatically, and students may be needed as translators if they are the only English speakers in the home (Bradshaw, 2008).

In the elementary school years, students are far less likely to miss school of their own volition. More often, chronic absenteeism is likely to be a result of health matters, a lack of permanent housing, a lack of child care, or a lack of transportation. All these
reasons for chronic absenteeism are more likely associated with children from lowsocioeconomic households as opposed to their peers from more affluent households. The lack of private insurance and adequate health care can lead to prolonged illnesses.

Early elementary years are critical for developing skills necessary for later academic success. Chronic absenteeism during these years results in missed learning opportunities, which are difficult to remediate, and children with chronic absenteeism often fail to develop positive feelings about education and school, which in turn lessens the likelihood of academic success (Borg, 2014). Interestingly, data from the National Assessment of Educational Progress (NAEP) shows only $21 \%$ of all eighth graders who were absent more than three days of school per month scored at or above basic levels, while $45 \%$ of students with perfect attendance scored at basic levels or above on the NAEP (Ready, 2010). Balfanz (2012) noted by sixth grade, using multiple indicators including attendance, $43 \%$ of future dropouts can be identified.

Within the culture of poverty, families give education value, at least on the surface; education is seen as an abstract concept which is not attainable (Payne, 2005). The need for education is superficially seen, but it is not often realized (Payne, 2005). The belief in fate is much stronger than the belief in the value of education. Many people living in poverty lack a future story and lack the ability to think beyond the present, and. the inability to see beyond the present further reduces the importance of education (Payne, 2005). The culture of poverty gives priority to possessions, survival, entertainment, and relationships (Payne, 2005). Education is a middle-class priority (Payne, 2005). Absenteeism and the loss of school activities is significantly higher for
students from homes with reduced quality of life associated with poverty (Ferracini, Dach, \& Speciali, 2014).

Nationwide, the average persistence to graduation rate is 75\%; however, the rate is $60 \%$ among low-income students (Balfanz, 2011). Lower graduation rates contribute to a cycle of generational poverty. Once a student has dropped out of school, chances of unemployment or employment in low-wage jobs is greatly increased. In the modern world, there is little work for those without a high school education, and rarely is there employment with wages sufficient to support a family. Lack of education is a contributing factor to the ever-widening income gap and further weakens the nation with the issues associated with social and economic distress (Balfanz, 2011).

Ready (2010) noted students from low socioeconomic households are less likely to enter school with the pre-academic skillsets of their more affluent peers, and those disparities only continue to become greater over time. Balfanz (2011) discovered lower reading scores in primary grades among students with high rates of absenteeism. Ready (2010) documented the relationship between school attendance and academic achievement in various subject matter. Skills particular to classroom instruction are more often to be lacking in students with chronic absenteeism. For example, mastery of mathematic concepts is dependent on classroom instruction more so than literacy development. Out of school, students are unlikely to have access to advanced mathematical concepts.

Children living in low-socioeconomic homes are $25 \%$ more likely to miss three or more days of school per month (Ready, 2010). It is well-documented chronic absenteeism is associated with lower academic achievement, lower rates of persistence to graduation,
higher dropout rates, and higher rates of involvement in the juvenile justice system (Clubine-Ito, 2004).. The connection between household income and school attendance is complex and interconnected. Children born to unmarried teenage mothers are often associated with childhood poverty and have greater chances of chronic absenteeism in early elementary school (Ready, 2010). Formal education by itself cannot obliterate the differences in socioeconomic standing among families, but it can reduce the rate at which inequalities grow and can shrink the achievement gap (Ready, 2010).

Living in an area with a high level of violence is another indicator of chronic absenteeism (Bruner, 2011). Students may avoid school because they may not feel safe on their way to school. Exposure to verbal abuse from the community, bullying at bus stops, or the fear of being caught in the middle of a violent act can deter students from attending school (Bruner, 2011). In addition, students themselves may be participants in violent acts or in gang activities (Clubine-Ito, 2004). Those students are often involved in the juvenile justice system (Dalun, Katsiyannis, Barrett, \& Wilson, 2007). No universal definition of truancy exists; however, the number of school-age children labeled as truant by the juvenile justice system increased by $67 \%$ between the years of 1995 and 2007 (Flaherty et al., 2012).

Flaherty (2012) determined students who were abusing substances and had rates of chronic absenteeism had several traits in common. They shared a considerable dislike of the educational system, had a history of conflicts with teachers, disciplinary problems, lack of social support systems, failed to see any benefit to education, and were more likely to have low academic achievement, including low performance on end-of-the-year standardized tests (Flaherty, 2012). Flaherty (2012) concluded substance-abusing
students were more likely to make poor choices involving education and were more likely to be chronically absent. To further contribute to the problem of poor academic achievement, substance abuse results in developmental delays and cognitive impairment (Flaherty et al., 2012). According to Ingul and Nordahl (2013), "Problematic absence exceeds the incidence of major childhood behavioral disorders and has been shown to be a major risk factor for dropping out, unemployment, economic deprivation, suicide attempts, psychiatric disorders, and substance abuse as children grow" (p. 1). An unintended consequence of the zero-tolerance school policies begun in the 1990s has given students engaging in violent behavior at school more unsupervised time as the number of out-of-school suspensions and expulsions have risen (Monahan, VanDerhei, Bechtold, \& Cauffman, 2014).

Harris (as cited in Hartnett, 2007) contended a student's peer group is more important than parents in shaping values. Students tend to sort themselves into peer groups with common thinking. Eckert (as cited in Hartnett, 2007) placed student groups into two umbrella categories, which he called jocks and burnouts. Eckert reported, jocks, also called "hoop-jumpers," display a willingness to cooperate with school personnel and to embrace traditional school norms (as cited in Hartnett, 2007, p. 37). Hoop jumpers do as they are asked in school, often participate in co-curricular and extra-curricular school activities, are rewarded for their cooperation, and are typically supported by their parents in their efforts (Eckert, as cited in Hartnett, 2007).

On the opposite side, the burnout category includes those students who do not identify with school norms and are less likely to engage in after-school functions (Harnett, 2007). These students are more likely to resist the educational system and do
not realize the benefits of education. Hartnett (2007) continued to define the two groups by their absences and how those absences are handled. Both groups have absences and miss teacher-provided instruction, but the jock group is more likely to have excused absences and often absences are for school-related reasons endorsed by the school (Harnett, 2007). Those students who are "burnouts" are more likely to have unexcused absences, which are therefore unaccepted within the culture of the school setting (Harnett, 2007). The relationships between burnouts, school officials, and law enforcement are strained, since burnouts typically view school as punishing, boring, and unnecessary, which can lead to dropping out (Harnett, 2007). Voluntary absenteeism is widely accepted to have negative consequences on individuals and society as a whole.

The state of Missouri legally mandates students between the ages of seven and compulsory attendance age to be enrolled in a public, private, parochial, parish, home school, or full-time equivalent of a school setting (MODESE, 2014). There are very few exceptions to the mandate, and student non-attendance causes guardians of the student to be in violation of the law (Pupils and Special Services Act, 2014). However, school systems are designed to attack the symptoms of chronic absenteeism, not the root causes (Logan-Riordan, 2009).

Schools cannot change the socioeconomic status of students, but schools can seek to minimize factors contributing to absenteeism (Caillier, 2010). One of the previously noted factors contributing to chronic absenteeism is the lack of adequate or fashionable clothing among students in lower socioeconomic classes (Brunsma \& Rockquemore, 1998). A potential solution to overcoming this barrier is to use school uniforms. The use of school uniforms has been shown to increase attendance (Brunsma \& Rockquemore,
1998). Another example is the use of removal or expulsion of a chronically absent student, which has been shown to accelerate the growth in absenteeism by giving the student more unsupervised time to engage in risky behavior (Flannery, Frank, \& Kato, 2012). Alternatively, engaging the student in a system-of-care support has been shown to improve school functioning for some students (Anderson, 2007). Students are assisted with an individualized behavior plan, which provides them with support, increases levels of engagement, increases student attendance, and reduces challenging behaviors (Blair, Fox, \& Lentini, 2010).

Hoyle, Marshall, and Yell (2011) stated schools need to provide opportunities for parents to become involved in school functions. Parental involvement will assist in establishing a culture of school attendance. Borg (2014) stated schools should use a reporting system to provide data to state, district, and local levels. Reports can disaggregate data by income level, grade level, and other contributing factors (Borg, 2014). Local agencies can make contact with parents as soon as patterns of absences begin to emerge. Early intervention allows students to get back on track before they fall behind and create a permanent achievement gap. Once a culture of attendance is created within the school and the community, waves of chronic absenteeism can be stemmed (Borg, 2014).

With the advent of NCLB, parental involvement in education has become increasingly important. Schools have become more transparent, and accountability has increased. Family involvement, the family's investment in the child's education, has been demonstrated to increase academic achievement (Epstein \& Sheldon, 2002; HiattMichael, 2001). Parent involvement can range from helping students with homework,
volunteering at school, attending school functions, visiting the child's classroom, participating in guest speaking opportunities, taking on roles as a parent leader in the school setting, and participating in the decision-making process. High levels of parent involvement have been shown to increase student attendance, increase math and reading scores, raise graduation rates, lessen grade-level student retention, and drastically reduce discipline problems (LaRocque, Kleiman, \& Darling, 2011).

Communities can support the school's efforts to fight chronic absenteeism. A needs assessment can be completed with interventions based on specific identified targets. The intervention approach may use a component of building positive teacher and peer group relationships, group counseling, and skills training from community members (Flaherty, Sutphen, \& Ely, 2012). When schools fail, so do communities. Attendance data can lead city leaders to a deeper understanding of problems plaguing the community and provide suggestions where and how the city should allocate resources to address problems and remove barriers to school attendance (Flaherty et al., 2012) Communities have an interest to ensure all students succeed in school. Excellent schools with low dropout rates create a more educated citizen base, which in turn, creates a more stable and healthy local economy. Other benefits of excellent schools are increased property values and more safe and secure neighborhoods (Chang, 2012).

With the far-reaching implications of life-long unemployment or underemployment resulting from non-attendance during school years in mind, one must consider the ripple effects when " $9 \%$ of 50.1 million U.S. school children are absent every day" (Gage et al., 2013, p. 118). More than 4,509,000 students are absent each day in the U.S. (U.S. Department of Commerce, 2014). School districts serving student
populations with a high poverty rate or a low-socioeconomic status report higher instances of absenteeism. Balfanz (2012) indicated students who miss a large amount of school will suffer in math achievement, not only in terms of grades but in actual math comprehension and retention of information.

Low socioeconomic status is a key indicator of students who choose to drop out of high school (Schoeneberger, 2012). While some may attribute lost revenue over a lifetime to the "achievement gap," no one, school personnel, reformer, or politician, can truly work at closing disparities in achievement without a thorough examination of chronic absenteeism (Balfanz \& Byrnes, 2012). Schoeneberger (2012) stated, "The limited education and skills dropouts possess result in... a reduced contribution to the U.S. tax base, with estimates suggesting tax contributions at approximately half the rate of a high school graduate, equating to about $\$ 60,000$ less over their lifetime" (p. 8).

According to the National Center for Educational Statistics (2014), the national dropout rate for high school students is $3.4 \%$, or 514,238 students, per year. It should be noted the NCES figures the dropout rate as follows:

The status dropout rate represents the percentage of sixteen- through twenty-four-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). (U.S. Department of Education, 2014)

Using Schoeneberger's (2012) estimate of non-contribution to the tax base of \$60,000 over a lifetime per dropout, the total non-contribution tallies $\$ 30,854,280,000$, or about the same as the total Gross Domestic Product (GDP) of the nation of Jordan in 2012 (The

World Bank, 2014). As Schoeneberger (2012) postulated, "It is bad for America when students drop out" (p. 10). Consider there are 100 students in a school, and $95 \%$ attend each day; there remain five absences a day. This is a cumulative 900 absences over the course of the 180-day school year, and could mean as many as 45 students missing 20 days of school (Chang, 2012).

Research reveals too many absences can prohibit a student from reaching educational milestones, indicating immediate academic issues along with a greater likelihood the student will drop out (Chang, 2012). This is furthered with the works of Dube (2009), who posed, "Children who are excessively absent from school are at risk for various negative health and social problems. Decades of research show excessive school absenteeism is an indicator of future anxiety, depression, and risky behaviors" (p. 87). This is a multifaceted problem as "school absenteeism is a heterogeneous behavioral problem; children miss school or skip classes for multiple reasons" (Dube \& Orpinas, 2009, p. 92).

Chang (2012) stated in some schools, the truancy rate in kindergarten is comparable with that of ninth-grade students. Early childhood age absences take an immeasurable toll on the youngest students. Especially at-risk are those from low-income families where absenteeism leaves students ill-prepared to read by grade three (Chang, 2012). The problem is not always truancy per se, but rather chronic absence in which students miss $10 \%$ or more of school (18 days of a 180-day calendar) for any reason, whether excused or unexcused (Chang, 2012).

In the modern American educational climate, there exists a never-before-seen level of accountability placed on educators and educational leaders. Accountability has
been measured in many ways, one of which is student achievement based on end-of-theyear assessments such as the MAP. The United States has been identified as trailing most of the developed nations of the world in education (Ryan, 2013). However, the United States is currently the only nation administering standardized tests to all students in grades three through eight, and the unfairness of attaching high stakes to a single test which only occupies a few hours of a student's academic year has been noted (Chubb \& Clark, 2013).

## Conceptual Framework

Chronic absenteeism is a major factor in lower achievement rates, persistence to graduation, and is linked to lower reading abilities in the early elementary grades. It pushes middle grade students off the path to high school graduation and turns achievement gaps into chasms (Balfanz, 2011). Chronic absenteeism lessens the odds high school graduates will enroll and succeed in college (Balfanz, 2011). Nearly a third of students in early elementary grades were absent between six and 11 days of school during the school year in which data were collected in one study (Balfanz, 2011). This trend can lead to poor academic performance now, as well in the future of the student's education. Achievement levels have become the focus of multiple subgroups in education, and under the Missouri School Improvement Plan Fifth Cycle (MSIP 5) the following performance standards have been created for measuring achievement within K8 school districts: (1) academic achievement, (2) subgroup achievement, (3) college and career readiness, (4) attendance rate, and (5) graduation rate (MODESE, 2014).

To gauge academic achievement in Missouri public schools, each district is required to administer state assessments to measure academic achievement and demonstrate improvement in the performance of students over time (MODESE, 2014).

All groups, including subgroups, are required to meet or exceed the state standard or demonstrate required improvement from prior year(s). Missouri identifies subgroups as free/reduced price lunch, racial/ethnic background, English language learners, and students with disabilities (MODESE, 2014)

The MODESE further requires districts provide evidence of adequate postsecondary preparation as determined by graduate scores on tests such as the ACT®, SAT®, COMPASS®, or ASVAB (MODESE, 2014). As the research for this study focuses on a Missouri K-8 district, no specific college and career readiness data are considered for examination. However, one of the key variables for examination in this study is student attendance, Missouri Performance Standard 4 (MODESE, 2014). For purposes of this research, the primary investigator extracted data regarding students who do not regularly attend school.

The final MODESE (2014) performance standard, graduation rate, was a key variable for examination in this study. The primary investigator used archival dropout and attendance data to determine whether a relationship exists between students with high absenteeism and students who drop out before graduation high school.

All local educational agencies and schools are required by Missouri law to assess no less than $95 \%$ of their students and subgroups (English language learners, race, gender, and free/reduced meal price status) on the assessments required by the MAP (MODESE, 2014). Using the MODESE (2014) standard as a lens to view absenteeism, students in Baltimore's public schools were examined. According to a study of students in Baltimore's public schools, data revealed attendance patterns established in the initial month of school continue throughout the entire school year. Borg (2014) revealed
students absent two to four school days in the initial month of school missed, on average, 25 days of school throughout the corresponding school year. Borg (2014) further revealed students absent in excess of four days in the initial month of school missed an average of 70 days of school during the corresponding school year. Also in the study it was revealed children from low-income families are at an increased risk to have high rates of chronic absenteeism as compared to students from higher-income families (Borg, 2014).

Teachers and administrators are more important as role models than is typically recognized. Students who have moved out of a culture of poverty often cite an important person in their lives who was a role model, such as a teacher or counselor who mentored the students (Payne, 2013). Teachers can provide emotional resources for students when students have not otherwise had appropriate role models (Payne, 2013). Students need support systems, appropriate discipline, long-term relationships, an opportunity to learn the hidden rules, the ability to identify options, the ability to set goals, and the knowledge to develop a future story (Payne, 2013). Students need someone they can turn to when they need emotional support, physical support, or homework support. Emotional resources must be linked to appropriate boundaries which allow the adult to say no as opposed to being used (Payne, 2013). Boundaries allow both parties to maintain selfrespect, while a lack of boundaries is more likely to create a situation in which someone is over-controlling, manipulative, and fixated. Emotional resources are strengthened when appropriate discipline strategies and approaches are used (Payne, 2013).

Discipline should be used to teach a more socially acceptable way to accomplish a task or fulfill a need (Quinn, 2004). It should promote successful behaviors at school and should never be punitive in nature. The hidden rules of school must be taught directly, as
students who live in poverty operate by a set of rules at home or on the street and must learn a new set of rules to be successful at school (Payne, 2013). Attending school regularly, completing a task, and listening to the teacher or peers when they speak may be foreign concepts to a student living in poverty.

Students living in poverty often need to learn to identify options available to them. Options are not considered in poverty, which results in a polarized either/or type of thinking (Payne, 2013). Goals can start out with a student-created goal for oneself, a goal that is evaluated at the end of the day to determine if it is met or not. Goals can then become a goal for the week, and eventually students can learn to frame a future story for themselves (Morgan, 2012). A future story is a plan for the future; without it, school has no purpose. Future stories can start out as simple as helping students figure out what they see themselves doing in 10 years (Payne, 2013). Students may need the guidance and structure to choose from a list of common options, such as taking care of family, affording hobbies, pay for a vehicle, etc., rather than beginning with an open-ended assignment. Next, the students will need to determine reasons meaningful for them to graduate from high school, and finally, friends or adults who can assist them in getting to their future stories (Payne, 2013).

Paredes and Ugarte (2011) found as early as elementary school, students who are frequently absent may have low self-esteem, be less competent in social relationships, exhibit less cohesion within families, feel less parental acceptance, and have poor discipline. Paredes and Ugarte (2011) pointed out researchers have come to a consensus in agreeing attendance is a main factor affecting students' academic performance. This lack of performance may cause disconnect in the school setting, leading to feelings of not
belonging and boredom. This disconnect can lead to dropping out, which leads to lower income. It has been found schools with large numbers of students receiving free and/or reduced price meal services have higher instances of absenteeism (Paredes \& Ugarte, 2011). Students who are chronically absent during one year have been shown to be recurrently absent over multiple years, with some missing between six months and one year of school days over a five-year span (Balfanz \& Byrnes, 2012).

Dube and Orpinas (2009) stated in the literature researchers have distinguished between justified absences (those due to health reasons, death of a relative, weather, or rural location) and truancy (absences not justified by school policy). Along this line, Balfanz (2012) described chronic absenteeism as being absent $10 \%$ or more during a school year for any reason, whether excused or unexcused by the school. By doing this, Balfanz (2012) used quantifiable data as opposed to subjectivity, and therefore diminished the potential of personal judgment, bias, or prejudice. Using these criteria, the data were broken down into three main categories-students who cannot attend school, students who will not attend school, and students who do not attend school because of a perceived lack-of-value (Balfanz \& Byrnes, 2012).

## Causes of Truancy

Balfanz, in his 2011 work, presented age groups and corresponding causes of truancy. For preschool through elementary-aged students, parents cannot or simply do not get students to school on a regular basis, or the students are chronically tardy (Balfanz, 2011). Balfanz and Byrnes’ (2012) categories were correlated into a singular topic of examination. Each designates into one of three subcategories under the topic of causes of truancy: school, home, and society within the broader context of the separate age groups
(Balfanz \& Byrnes, 2012). During the middle school years, students have more disengagement, increased opportunity to be absent, school climate and safety concerns, neighborhood safety issues (such as high crime rates), familial care or related responsibilities, or school discipline policies which contribute to rates of higher absenteeism (Balfanz, 2011). The problems manifested at the high school level include the problems seen at the middle school as well as students exhibiting minimal amount of effort, and the perception of students there is not much going on at school; therefore, it is permissible to miss school (Balfanz, 2011). Other reasons for absenteeism include students working outside the home, as well as those who have increased work responsibilities within the home, pregnancy, or involvement with the juvenile justice system (Balfanz, 2011).

School. Many school administrators cited in a report of Truancy Reduction Efforts (2000) produced by the state of Wisconsin pointed to two core areas of school. The first of the core areas is the format of scheduling used in secondary schools (Simmons, 2000). By using a traditional schedule of seven hour-long periods, students have more opportunities to leave the campus and therefore be truant (Simmons, 2010). Another lesscommon yet still active issue is an open-campus policy, in which students may leave campus for a designated lunch period.

An even more obscure cause is the buildings themselves. Poor building conditions have been noted to lead to respiratory conditions causing absenteeism (Simmons, 2010). Within the student body, a sense of disunity or feeling singled out can lead to student truancy as well (Simmons, 2010). This can be from harassment, bullying, pressure from peer groups, etc. (Brunsma \& Rockquemore, 1998). Brunsma and Rockquemore (1998)
point out discord concerning items as simple as clothing may keep students from attending school. Clothing, whether out-of-fashion, inferior, or culturally different, may sow seeds of discord among students eventually leading to truancy issues (Brunsma \& Rockquemore, 1998). Clothing is a definitive social construct, which may cause students to have feelings of inadequacy or not belonging if they do not fit the social context of appropriateness (Brunsma \& Rockquemore, 1998). Other school-related problems include a negative school climate, ineffective discipline practices, or chaotic classrooms (Bruner, Discher, \& Chang, 2011). Having a negative school climate can make students not want to attend school. A toxic sense of being at the building, school, or district will make students want to avoid the situation (Bruner, 2011). Ineffective discipline can be intertwined with bullying as well as harassment (Bruner, 2011).

When a student does not feel safe, learning will not take place. If the feeling of safety is not met, the upper levels of Maslow's Hierarchy cannot be achieved (Maslow, 1954). During Maslow's (1954) analysis of existing research regarding collective human motivation, not a singular area, such as biology, achievement, or power, could explain what energizes, directs, and sustains human behavior. Maslow (1954) postulated each lower-level need must be met before moving to the next higher level. Hence, when a child does not feel safe, learning will not occur. One must satisfy the lower-level, most basic needs before progressing onward to meet higher level(s) of growth needs. Only after these needs have been reasonably satisfied does one have the ability to reach the highest level, self-actualization (Maslow, 1954). Every person has the ability and has the desire to move up the hierarchy toward a personal level of self-actualization (McLeod,
2014). Unfortunately, progress may oftentimes be disrupted by a chronic failure to meet lower-level hierarchal needs (McLeod, 2014).

Maslow (2014) later expanded his hierarchy to include cognitive needs (now level five), aesthetic needs (now level six), and transcendence needs (now level eight). Maslow's (2014) level one psychological needs must be met outside the school setting, or issues stemming from the deficiency will arise. Levels two and above are generally dealt with at school, and the issues in level two are paramount for measured success in a scholastic setting (Hall, 2012). Some parents, rather than deal directly with meeting level two needs, elect to send their children to private schools simply for a new peer group without the need to move to a new district (Hall, 2012).

The organizational structure and culture of schools can define the overall student experience while at a school. School characteristics and culture can influence student absenteeism and truancy. When students feel the system is working for them and on their behalf, they are more likely to stay connected to teachers and the curriculum (Hartnett, 2007). Some students may be effectively taught if a teacher develops a close relationship. When students do not feel the system is supporting them, they can disconnect (Hartnett, 2007). Some truancy policies are ineffective and may inadvertently cause this disconnect by rewarding the nonattendance of particular peer groups (Hartnett, 2007).

The perception of inequality amongst peer groups can cause students to feel there is favoritism embedded in the organizational culture (Hartnett, 2007). Teenagers’ perceptions, language, and thought processes regarding attendance policies may be the causes of attendance or non-attendance and consequent academic outcomes (Hartnett, 2007). Therefore, since many problems in schools are systemic in nature, understanding
school culture and organizational theory can play a major role in solving attendance problems by looking through the teenage cultural lens and viewing the organizational structure in the way teenagers see it (Hartnett, 2007).

Researchers at the University of California at Berkeley (2008) postulated females' performance on standardized mathematics assessments is now equal to that of their male counterparts. In the article, researchers hypothesized a causal relationship for females matching males in the quantity and rigor of mathematics courses taken in elementary and high school (University of California at Berkeley). Linn went on to state this was not the norm two decades ago; academic studies showed an indiscernible difference in performance at the elementary age level with females falling behind males at the high school level (as cited in University of California at Berkeley, 2008). In the past 20 years, females' participation in more rigorous mathematics classes has risen to an equal level of their male counterparts (University of California at Berkeley, 2008).

Home. Using Maslow's hierarchy (Maslow, 1954) as well as Balfanz and Byrnes' (2012) research, a picture emerges of reasons students do not attend school with a correlation to conditions at home. Maslow (1954) showed level one (biological and physiological) basic needs must be met before advancing. If basic needs are not met, it is difficult for students to move to Maslow's level two needs at school or home. Along with this, there must be a value for education (Balfanz \& Byrnes, 2012) which comes from Maslow's higher levels of the hierarchy.

Some students may have duties at home, which prevent them from attending school. Besides the traditional caring for a sick family member or working to provide more income, students may stay home to serve as a translator (Balfanz \& Byrnes, 2012).

As the number of Spanish-speaking immigrants has increased in recent years, the number of immigrants speaking English has not (Bradshaw, 2008).

When examining early elementary age school children, patterns were revealed indicating oppositional behavior is uncommon and individual autonomy is limited for students at an elementary age. Few examples exist of primary school students 'dropping out," and young children rarely skip school of their own volition. At young ages school absences more often stem from illness or other health matters, lack of stable housing, insufficient means of transportation, or child care needs (Borg, 2014). Concerns relating to instability in a student's home life are considerably more common in students who are socioeconomically disadvantaged (Borg, 2014). Children from poor families are less likely to have private health insurance and appropriate access to adequate medical care, resulting in otherwise relatively minor ailments becoming persistent and leading to more serious health conditions (Borg, 2014).

It is during these early elementary years when children develop important skills as well as cognitive approaches to learning which prove crucial for success within the classroom (Borg, 2014). Students who are chronically absent during these formative years miss educational opportunities to learn and to develop positive relationships within the school community which prove critical to the future of academic success (Borg, 2014). Data derived from the NAEP reveal only $21 \%$ of eighth graders who missed in excess of three days of school per month scored at or above basic levels of achievement on the NAEP, contrasted with $45 \%$ of children who had perfect school attendance (Ready, 2010). Using more metrics with these data, there is a negative relationship between student absences and academic performance on the NAEP (Ready, 2010).

Arthurs, Patterson, and Bentley (2014) purported, "No student has a choice about the home he or she goes to" (p.21). Unreliable transportation is another area which has an impact on attendance (Bruner, 2011). As Balfanz (2012) pointed out, students missing school for home-related reasons most commonly miss at an early age. Balfanz (2012) explained a large percentage of future dropouts can be identified by late elementary. Balfanz (2012) continued by stating by sixth grade, $43 \%$ of dropouts are identifiable using multiple metrics including attendance.

Education is valued (at least on the surface) by the families of students in poverty (Payne, 2013). However, education may also be viewed as an abstract concept, and therefore unattainable by students in generational poverty. While superficial importance is given to the need for education, it is often not realized in the home of children in poverty (Larson, Singh, \& Lewis, 2011). Couple the devaluation of education with the inability to grasp a global or even regional context of the world, and the importance of education drops again (Payne, 2013).

Balfanz (2011) cited a $60 \%$ graduation rate among low-income students, which is well below the $75 \%$ national average. This creates a vicious cycle of generational poverty with no real perception of how to obtain or formulate a vision for acquiring an education. Along with the inability to attain an education comes unemployment or underemployment, as there is little or no work in the modern world without a high school diploma and not enough work to support a family without some post-secondary education (Balfanz, 2011). The lack of education takes away any real hope of achieving the "American Dream," along with fracturing communities through the ever-widening
income gap and weakening the nation with social and economic issues (Larson et al., 2011).

The relationship of school attendance and student performance based on learned material is stronger with core academic subjects in which classroom instruction cannot be readily replaced (Ready, 2010). Research on high schools shows mathematics learning is more dependent on the processes and content of formal schooling than is literacy development (Morgan, 2012). Students must attend math class to gain content knowledge relevant to academic success, as students have little access to advanced mathematics concepts outside of the school setting (Morgan, 2012). For example, a limited number of parents have the ability or content knowledge needed to spend time at home working on trigonometry with their students (Ready, 2010). Whether for home or interpersonal reasons, absenteeism leads to lower rates of achievement, underemployment or unemployment, and an accidental caste system with differing views of education (Gagnon, \& Leone, 2005). Ready (2010) stated disadvantaged children enter school with an inferior academic skillset as compared to their counterparts, and those disparities only widen further over time leading to a fractured and even stratified society.

Payne (2013) stated, "Low achievement is closely correlation with lack of resources, and numerous studies have documented the correlation between low socioeconomic status and low achievement" (p. 119). To improve achievement, schools must rethink how instruction occurs. Historically, educational theory has been if a teacher teaches something well enough, students will learn. However, learning is contingent upon having enough background information so new materials make sense and a belief system which allows the student to accept the new information (Larson et al., 2011).

Traditionally, educators have made the assumption the cognitive skills and structures for learning are in place when a child enters school (Parke \& Kanyongo, 2012).

Unfortunately, students living in the culture of poverty are entering school without the concepts or the cognitive processes needed for learning (Simons et al., 2010).
2012). Little time is spent teaching cognitive strategies, because it is assumed intelligence is unchangeable (Larson et al., 2011).

University of California Berkeley researcher Silvia Bunge (as cited in Wright, Matlen, Baym, Ferrer, \& Bunge, 2008) conducted research in which electroencephalogram (EEG) scans of nine- and 10-year-old children living in poverty and same-age children living in middle class homes were studied. Bunge (as cited in Wright et al., 2008) concluded patterns in the brains of children living in poverty were comparable to adults who had suffered strokes. The researchers discovered lesions in the prefrontal cortex, the part of the brain controlling executive functioning (impulse control, planning and working memory), which is heavily involved in the input stages of cognition (Wright et al., 2008). The researchers concluded the problem can be remediated, but requires direct intervention (Wright et al., 2008).

If a student takes in new information in a random, episodic way and lives in an unpredictable environment, the student likely will not learn to plan (Wright et al., 2008). Payne (2013) continued the thought:

If an individual cannot plan, he/she cannot predict. If an individual cannot predict, he/she cannot identify cause and effect. If an individual cannot identify cause and effect, he/she cannot identify consequence. If an individual cannot identify
consequences, he/she cannot control impulsivity. If an individual cannot control impulsivity, he/she has an inclination toward criminal behavior. Students who do not have effective cognitive processes have no way of effectively learning new information. These students will see only $50 \%$ of what is on a printed page. In a new setting, these students may go from object to object touching everything but, when asked, will not be able to tell what they have seen. They simply do not have the cognitive processes or systematic way to complete tasks. (p. 122)

Using Payne's (2013) assertions, the educator can help build skills in students to facilitate learning.

Mediation is the process of learning how to build cognitive strategies in order to plan and handle new information in an organized way (Caillier, 2010). The seven-step process begins with mediated focusing, the ability to focus attention and see objects in detail, followed by mediated scheduling, which is based on routine (Payne, 2013). Mediation of positive anticipation is the ability to control the present for a satisfactory representation of the future (Payne, 2013). Mediation of inhibition and control is the ability to defer gratification, think before acting, and control impulses (Payne, 2013). Mediated representation of the future is the ability to use one's imagination to create a future scenario based on facts (Payne, 2013). Mediation of verbal stimulation is the use of precise language for defining and categorizing the environment (Payne, 2013). Finally, mediated precision is the ability to define situations, things, and people with precision and to use precise thinking for problem solving (Payne, 2013). Missing links in the mediation process result in cognitive problems (Payne, 2013).

Society. Truancy is associated with an array of negative social consequences, including inadequate school performance, juvenile delinquency, and high school dropout (Ready, 2010). Due largely to the effects associated with residential instability and children's health, economically disadvantaged children are more likely to be chronically absent from school and to become frequently truant (Ready, 2010). The consequences on society are multiplied, as formal education has a greater impact on disadvantaged as compared to advantaged children's achievement in school (Ready, 2010).

Children living in poverty are $25 \%$ more likely to miss three or more days of school per calendar month than are their more affluent peers (Ready, 2010). This proven connection between household income and children's school attendance rates is the product of complex and interconnected relationships within the cycle of poverty (Ready, 2010). Children born of unmarried teenage mothers, a group associated with childhood poverty, have a greater likelihood of being chronically absent from early elementary school (Ready, 2010). As previously stated, an undeniable link exists between absenteeism and increased at-risk behaviors, such as alcohol and/or drug use, unsafe sexual practices, and delinquency (Ready, 2010). Formal education cannot by itself eradicate social class differences in academic performance in the early years of a student's education. However, education reduces the rate at which such inequalities grow and can shrink the achievement gap (Ready, 2010).

Fueling the fire of generational poverty, areas with high poverty have elevated levels of violence or unaffordable housing (Bruner, 2011). Poverty and unaffordable housing are major factors regarding chronic absenteeism. Students may not feel safe on their way to school for reasons one may have never considered (Bruner, 2011). Some are
exposed to verbal abuse by those in the community while they walk, are bullied at bus stops, or are fearful of being caught up in violent acts (Clubine-Ito, 2004). As a result, these students may choose truancy as a way of avoiding the issues at hand. Some students may also participate in violent acts such as gang-related activities or other forms of violence (Clubine et al., 2004).

Students involved in violent acts in or outside of school may be involved in the juvenile justice system as well (Dalun et al., 2007). While no universal definition of truancy exists, the number of students involved in the juvenile justice system labeled as truant increased by $67 \%$ between 1995 and 2007, from 34,100 cases to 57,000 (Flaherty, 2012). With truancy come other behaviors such as adolescent substance abuse. According to Flaherty (2012), "Substance use and truancy have a relationship of mutual influence, whereby substance-using students are highly likely to be truant. Likewise, truancy is a predictor of substance use, although not all truants misuse substances" (p. 204).

Flaherty (2012) further related substance-using and truant students experience considerable disaffection with the educational system, which leads to conflicts with teachers, more disciplinary problems, lack of social attachments, lack of any perceived benefit to education, and low academic achievement including performance on end-ofyear standardized tests. Through substance-abusing youths' unconventional attitudes and anti-educational lifestyle choices, Flaherty (2012) asserted substance abuse causes truancy. Substance use results in developmental delay and cognitive impairment, which in turn contributes to school problems and truancy (Flaherty, 2012). Flaherty (2012) further pointed to research directly linking substance use to problems in school, truancy, and eventually dropping out.

As previously shown, dropping out of school greatly increases the risk for poverty (Flaherty, 2012). Truancy is proven to be a reliable predication of later substance use, be it alcohol or illicit drugs. Truancy has the effect on students of further reducing school bonding and conforming to social societal norms within a school setting, as well as increasing unsupervised time in which the risky behaviors often occur (Henry, 2010). When schools started being mandated to implement zero-tolerance policies during the 1990s for drugs, violence, and other offences, the number of out-of-school suspensions rose as did the number of school expulsions. As a result, while unintentional, time out of the school environment, oftentimes unsupervised, increases the opportunity for risk-associated behaviors (Monahan et al., 2014).

Students who are burned-out from drugs do not maintain the status quo or conform to expected norms or social constructs (Hartnett, 2007). Students in this category are not often involved in after-school functions and do not readily identify with the purposes or importance of school. This burnout category is comprised of working-class students who have developed social networks focused on escaping the tenants of the school system (Hartnett, 2007). Students in the burnout category fight the system and do not use education for their benefit (Hartnett, 2007).

While jocks and burnouts miss school and teacher-provided instruction, the jock group is excused for the absences, as most are school-related, while the burnout group is not excused (Hartnett, 2007). One reason for this is certain peer groups are endorsed by schools while others are not. Hartnett (2007) listed the following subgroups as part of the broad jock group which is endorsed by schools: "Preppies, Academics, Jocks, School Leaders, Band Geeks, Cheerleaders (Rah Rah's), Brainiacs, and Socs also known as

Socialites" (p. 42). On the opposite side of the social spectrum, Hartnett (2007) listed "Cowboys, Cutters, Freaks, Geeks, Goths, Trench-Coat Mafia, Bullies, Tomboys, Stoners, Granolas, Grunges, Mels (short for Melvins), Lesbians and Gays, Delinquents and Board Dorks, Hoods, Greasers, and Gang Bangers" (p. 42) as part of the unaccepted culture within a school setting. The strain in the relationship of students in the burnout category with school officials, parents, and law enforcement leads them to believe school is punishing or simply boring and unnecessary, which leads to a dropout rate of $50 \%$ by age 16 (Hartnett, 2007). Regardless of social designation, voluntary absenteeism has been linked to being counterproductive and has implications of violence, stealing, dishonesty, drug and/or alcohol abuse, aggression, and personnel turnover later in life (Tahir, 2011).

## Methods for Truancy Reduction

Legal authority. The state of Missouri specifically addresses the importance of school attendance within its laws. In 1905, Missouri first enacted compulsory education laws evolved in to the Pupils and Special Services Act (2014). Compulsory school attendance became valid under Missouri's 40th Governor and future United States Senator, Forrest C. Donnell (MODESE, 2015). With the creation of the office of Commissioner of Education, Mr. Huber Wheeler was appointed to the initial post in 1947 where he served until 1971. Those in charge since, and including Mr. Wheeler, have been tasked with regulating education within the state of Missouri and best serving the citizens of the state as appointees of the Missouri State Board of Education (MODESE, 2015).

Article IX, Section 2a of the Constitution of the State of Missouri (2013) decrees, "The supervision of instruction in the public schools shall be vested in a state board of education ...(p. 117)" This constitutional provision gives the State Board of Education
broad authority for publicly funded education, within limits put forth by the Missouri General Assembly (MODESE, 2015). The supervision of education in the state of Missouri and the establishment of the MSIP 5 and corresponding accountability and metrics of absenteeism comes from the power of the Board of Education and the Commissioner of Education of the state of Missouri.

School. The educational system is designed in such a way as to attack the symptoms of chronic absenteeism and behaviors as opposed to treating the root causes (Logan-Riordan, 2009). Peers and socioeconomic standing also contribute to the problem of chronic absenteeism (Caillier, 2010). For example, affluent students may achieve greater academic gains even if a teacher is inadequate, while poor students may not achieve desired gains even when teachers are excellent instructors. Both educational outcomes can be attributed to support from home (Caillier, 2010). While an educated parent who provides supplemental instruction will help students, poor student achievement could be caused by lack of support at home or lack of ability to help with studies. Schools cannot change the socioeconomic status of students; however, schools can seek to maximize or minimize outside factors contributing to absenteeism (Caillier, 2010).

One example of minimizing socioeconomic differences in students is uniforms (Brunsma \& Rockquemore, 1998). Uniforms serve a critical role in some schools and have been shown to increase attendance (Brunsma \& Rockquemore, 1998). While uniforms are helpful in raising student attendance numbers, implementing uniforms does not address the cause of why students are absent (Brunsma \& Rockquemore, 1998). Another example of failing to treat the root of an issue is the removal or expulsion of
chronically absent or truant students rather than eradicating the bigger issues leading to chronic absenteeism (Gleich-Bope, 2014). Longitudinal growth models reveal repeated and/or ongoing exposure to out-of-school-suspension (OSS) actually accelerates the growth in truancy by increasing unsupervised time to participate in risky behavior (Flannery et al., 2012). As an alternative to using OSS or expulsion, evidence supports schools use a system-of-care approach (Blair, Fox, \& Lentini, 2010). Involvement in a system-of-care is associated with improved school functioning for students (Anderson, 2007). Students are assigned a supportive, individualized behavior plan, which results in higher levels of engagement and a reduction in challenging behavior including chronic absenteeism (Blair et al., 2010).

One such program is the School-wide Positive Behavior Support (SWPBS) model. The SWPBS model emphasizes tiered levels of supports for students as well as staff to encourage and foster positive social behavior and decrease problematic behaviors within the student body (Cheney et al., 2010). The effort to make schools safer helped drive the creation of SWPBS to reduce discipline problems, absenteeism, and violence in public schools (Cheney et al., 2010). The SWPBS model is being used in public schools throughout the United States to reduce problematic behaviors (Cheney et al., 2010). Originally developed by Rob Horner, George Sugai, and others at the University of Oregon, SWPBS is a process used by school staff to prevent and intervene with student problem behaviors (Cheney et al., 2010)..

The goal of SWPBS is to provide a positive school environment in order to decrease discipline problems and improve student academic skills. School personnel teach students appropriate social behavior and give students recognition when they
exhibit these behaviors (Hoyle, Marshall, \& Yell, 2011). One example of the positive behavior supports method in use is having students make videos and posters to highlight the importance of attendance (Chang, 2012). Mentoring relationships between adults and at-risk children have provided strength and support to overcome social and academic risks. Such mentoring relationships are linked with improvements in student academic performance, regular school attendance, and self-concept (Glomb, Buckley, Minskoff, \& Rogers, 2006). Glomb et al. (2006) described the positive behavioral support strategy as follows:

School-wide positive behavior interventions and supports (SW-PBIS) is a framework for creating safe and effective learning environments and cultivating a positive educational climate. Researchers show that SW-PBIS can improve behavioral outcomes, while demonstrations of a causal relationship between improvements in students' academic achievement and implementation of SWPBIS remain equivocal. We provide evidence of reductions in behavioral incident reports, improvements in school attendance. (p. 135)

Through a school-wide approach to the PBIS system, sweeping changes may be seen (Glomb et al., 2006).

When full-time school nurses are added to schools, Rodriquez et al. (2013) found a significant decrease in absenteeism. These findings were more pronounced among younger students in elementary schools, suggesting "the importance of preventive health interventions earlier in life given the implications that worsening absenteeism has for future student health, productivity, and academic success later in life" (Rodriguez et al., 2013, p. 848). Schools must encourage and provide opportunities for parents and
community members to become involved in school functions to foster and encourage growth and establish a culture of school attendance (Hoyle et al., 2011).

School-wide homework support. Payne (2013) cited the example of a middle school in Texas which uses the last 45 minutes of every school day for homework support. Any students not finished with their homework during the 45 -minute time period stay until the homework is completed (Payne, 2013). Tutors are available to assist students with their work, and a late bus takes students home afterward (Payne, 2013). Many students living in poverty do not have anyone at home with the knowledge base to assist with homework (Payne, 2013). Another middle school has provided homework support by purchasing a set of books for each student to keep at home in addition to a set in the classroom (Payne, 2013). The school has eliminated lockers, which has effectively eliminated several problems at once (Payne, 2013)

Supplemental school-wide reading programs. Many schools have had success with using an online computer-based management program for reading, such as the Accelerated Reading Program (Payne, 2013). Students read books and then take tests online. Students read more because of the design of the program (Payne, 2013). They are not penalized for resources they do not have access to in their homes (Payne, 2013).

Keeping students with the same teacher(s) for two or more years or having a school within a school. These concepts are designed to encourage long-term relationships among teachers, parents, and students (Payne, 2013). The design also cuts down on the amount of time teachers spend building relationships at the beginning of each year (Payne, 2013).

Teaching coping strategies. One way to teach coping strategies is to address each issue as it arises when students need assistance. Many schools create small groups of students to meet with a counselor, principal, or other adult to work on coping strategies in any number of areas (Payne, 2013). This allows for ongoing group support and allows students to discuss and discover ways to effectively deal with issues (Payne, 2013). Some schools use this method to help students prepare to transition to middle school or high school (Payne, 2013). Another idea is to put students who have tendencies to be aggressive into a group and let them work on ways to lessen their aggression at school (Payne, 2013).

## School-wide scheduling that puts students in subgroups by skill for reading and

math. One of the concerns with heterogeneous groups of students is the level of difficulty for the teacher in addressing the diverse needs of individual students in the large-group setting (Payne, 2013). Schools may set math or reading times for the same time period across a span of grade levels (Payne, 2013). Students can be pretested then assigned to the appropriate group for a particular unit of instruction (Payne, 2013).

Parent training and contact through video or DVD. Families living in poverty tend to place a high value on entertainment, and may be more likely to have a DVD player than reliable transportation (Payne, 2013). Some schools have had great success when each teacher creates a 15-minute video including a personal introduction, an overview of the class, identification of class expectations, and encouragement for parents to visit or call (Payne, 2013). Those schools claim the videos are successful for a variety of reasons. Parents who are not literate can still understand the message, it provides a
visual and feeling for what kind of teacher the student has, and it prevents miscommunications early in the year (Payne, 2013).

Direct teaching of classroom survival skills. This provides a focus for essential skills to be successful in the classroom. Skills taught may focus on hidden rules such as how to stay in one's seat, how to participate in class appropriately, where to put personal items, etc. (Payne, 2013).

Requiring daily goal setting and procedural self-talk. Payne (2013) suggested starting with a daily goal and a weekly goal and set aside five minutes at the end of each day to talk about the goals and if they were met. Procedural self-talk should be in writing (Payne, 2013). Students may need assistance with the process at first and should be tied to a specific task (Payne, 2013).

Team interventions. Team interventions are a way of providing support to students. All the teachers meet with the parents of each student to create a plan for helping the student be more successful. Interventions with parents should be positive and supportive (Payne, 2013).

Borg (2014) offered the following steps for reducing rates of high absenteeism in students. The development of systems used to provide frequent reports concerning student absenteeism at multiple levels including state, district, and local school levels is an initial step, and such reports need to include data disaggregated by grade level, income, and other contributing factors (Borg, 2014). Once the data are generated, the local educational agency should monitor student attendance and make contact with parents as soon as a pattern emerges showing high rates of absenteeism (Borg, 2014). Early intervention is critical to getting students back on track to prevent students from
falling behind and a permanent gap manifesting itself in the learning (Borg, 2014). By creating a culture of attendance within the school and community and by helping parents to understand the importance of regular daily school attendance and being on-time each day, particularly in the elementary grades, the wave of high levels of student absenteeism can be stemmed (Borg, 2014).

The most important part in all this, according to Payne (2012), is relationships. The relationships formed among teachers, school staff, and others in the district have a desirable impact on the feelings of comfort and safety students have within a school as related to Maslow's (1954) hierarchy of needs. Once these most rudimentary needs have been met, students can then shift their focus to meeting higher-order needs in Maslow's (1954) hierarchy, such as belongingness, including friendship, intimacy, and family. Once these needs have been met, students move up to self-actualization and gain morality, creativity, problem solving, and other higher-order skills, which cannot be acquired until the most primal needs to attain homeostasis are met and students feel safe in their school environment (Maslow, 1954).

Family. Following the passage of NCLB, parental involvement came to the forefront of education (LaRocque et al., 2011). NCLB formalized the parents' right to know what is happening in public schools through multiple avenues, increased accountability, and school transparency. The NCLB Act forced schools into action beyond talking about parental and community involvement to actively facilitating involvement beyond superficial immersion (LaRocque et al, 2011). Family involvement, as defined by Larouque et al. (2011), is "the parents' or caregivers' investment in the education of their children" (p.27). There are multiple avenues through which caregivers
may demonstrate adherence to and investment in their child's education. Larouque et al. (2011) listed the following activities as criteria which lend to student success: (a) serving as a volunteer at school, (b) helping students with homework, (c) regular attendance at school functions, (d) visiting their child's classroom(s), (e) sharing personal expertise or experiences with the class through guest speaking opportunities, and (f) taking on roles as a parent leader in the school to participate in the decision-making process.

Parental involvement is proven to be beneficial to students' academic success through the process of family-centered buy-in (Epstein \& Sheldon, 2002; Hiatt-Michael, 2001). From high levels of parental involvement come higher levels of regular student attendance, increased math and reading performance, higher graduation rates, and less grade-level retention of students (LaRocque et al., 2011). Parental involvement is essential for the quality of the education students receive beyond achievement measures. Parental involvement correlates positively with nonacademic outcomes, such as overall parent and student satisfaction with schools, as well as a drastic reduction in discipline problems (LaRocque et al., 2011). The development of positive and productive school, family, and community connections has become one of the most commonly embraced policy advantages in schools since the inception of NCLB.

Kessler (as cited in Epstein \& Sheldon, 2002) stated 90\% of school districts surveyed had at least one policy supporting parent involvement. Professionals from a variety of non-educational backgrounds work with schools and state departments of education to develop programs which expand the school, family, and community partnership. Epstein and Sheldon (2002) asserted effective programs link multiple partnership activities to important and positive school goals using the following types of
involvement: (a) parenting, (b) communicating, (c) volunteering, (d) learning at home, (e) decision making, and (f) collaborating with the community (Epstein \& Sheldon, 2002).

Community. The effectiveness of truancy interventions can be increased through community support (Flaherty, 2012). Interventions offered through a community setting which address specific needs assessment or treatment components have had the largest effect in reducing truancy (Flaherty, 2012). Interventions focused toward reducing and eliminating student substance abuse, or other problem behaviors including chronic absenteeism, have been shown to improve school performance and produce marked improvements in attendance (Flaherty, 2012). Flaherty's intervention approach used a component composed of positive teacher and peer group relationship building as well as group counseling and skills training from community members (Flaherty, 2012).

Student school attendance is a critical component of a lifetime of prolonged success. Regular school attendance should be forefront in educational systems rather than overemphasis on academic achievement results. When schools fail, so do the communities around them (Chang, 2012). When properly analyzed, student attendance data can alert city leaders to deeper-seated community problems and suggest where and how the city should focus resources to alleviate problems and remove barriers which prevent students from regular school attendance (Chang, 2012). Communities have a vested interest to ensure all students succeed in school. Excellent schools, low school dropout rates, and a more educated citizen base are all critical to growing and maintaining a healthy and viable local economy (Chang, 2012). Other benefits include increased property values and more safe and secure neighborhoods (Chang, 2012). The following five steps are listed by Chang (2012):

1. Gather, share, and monitor chronic absence data with community leaders.
2. Use policies and parental involvement to advocate attendance as a community priority.
3. Communities can partner with school and other agencies to create a "culture of attendance."
4. Identify, address, and if possible, remove or circumnavigate barriers to student attendance.
5. Advocate for better policies and public investment in education. (p. 12)

Chang (2012) cited New York City as an example and stated the attendance situation was dire. Of all elementary school-aged students, $20 \%$ were chronically absent, but among minority students the rates were even higher (Chang, 2012). Through the work of New York City's Department of Education regarding attendance, some elementary schools saw a decline in chronic absence rates (Chang, 2012). In 2010, then-mayor Michael Bloomberg made attendance a priority and formed the Mayor's Interagency Task Force on Truancy (Chang, 2012). The policies instituted by the Task Force resulted in soaring attendance rates (Chang, 2012).

Cities with high levels of poverty, such as New York, will likely find systemic barriers to school attendance requiring programmatic or even policy-driven solutions in the effort to reduce chronic absences among students (Chang, 2012). By following the example of New York, cities have been monitoring school attendance data, making student attendance a known priority across all demographics of the community, creating a true culture of attendance, removing attendance barriers, and advocating for policy change when appropriate (Chang, 2012). City policy makers can help increase school
attendance and focus efforts to allow the nation's students to pursue maximum academic success (Chang, 2012).

## Summary

The research included in this review revealed attendance is one of the largest contributing factors to student success. Improvements in classroom teaching and curriculum will not yield results unless students are actually in school (Chang, 2012). On average, students with fewer absences do better overall in school (Gump, 2012). It is for these reasons schools, families, and communities must make regular student attendance a national, state, and local priority in the education of students.

With many interpretations of chronic absenteeism and truancy made by various educational and state entities, difficulty arises in dealing with a problem that can seem nebulous (Flaherty, 2012). The first step is to learn the impact chronic absenteeism is having on the nation and the national economy (Flaherty, 2012). The drain on social entitlement programs and lack of realized income from students failing or dropping out of schools is substantial, costing society millions of dollars per person (Flaherty, 2012). The perpetuation of poverty and attendance problems, along with other social and healthrelated consequences, must all be made apparent.

The next step is discovering why students are absent (Brunsma \& Rockquemore, 1998). The researcher placed the reasons into three categories, the first of which is the school itself. There are times the school culture, climate, and norms are what drive students away (Chang, 2012). Students who do not fit in socially, feel bullied/unsafe, or who are unintentionally driven away by polices such as zero-tolerance discipline policies, may avoid school (Chang, 2012). Peer groups play a vital role in how students perceive
school (Chang, 2012). A child who feels labeled early in his or her education may result in a feeling of unacceptance and lead to potential dropout.

Another contributing factor is home life of students. Through the work of Payne (2013), a picture has formed of the interworking of generational poverty and families who unintentionally exclude students from school. Lack of resources for transportation, housing, and child care drive higher rates of students who miss school (Chang, 2012). Students who do not meet social expectations for clothing, appearance, or other social constructs avoid school to avoid feeling left out (Payne, 2013). Most importantly, education is not truly valued or seen as attainable in generational poverty (Payne, 2013). While not all students who are chronically absent are in poverty, the instances are higher within this demographic (Chang, 2012). Other considerations from within a generational poverty home are responsibilities to work outside the home for income, to take care of a family member, or to serve as a translator (Hall \& Nattinger, 2012).

Finally, communities can contribute to high rates of absenteeism. Students with a long bus ride, dangerous walk, or who attend a failing school have been found to be chronically absent. While each blames the other, schools fail because of the communities around them, and communities fail because of schools

Once the problem has been identified and the reasons for chronic absenteeism are defined, work toward a remedy can begin (Flaherty, 2012). The base of this remedy must be cooperation. Cooperation among the three components affecting children must occur to get results (Gump, 2012). Schools are made up of children from surrounding families, families make up communities, and communities are judged based upon their schools. Once each works with the other and makes student success through attendance a priority,
real results are possible (Gump, 2012). Schools must get parents involved in the educational process and create buy-in to the investment in education. Communities must use policies and resources to encourage attendance (Gump, 2012). Parents must use resources to ensure students attend school on a regular basis which in turn ensures each student's success, making the community and city healthier (Gump, 2012).

In Chapter Three, the methodology used in the study is explained. An analysis of the data is included in Chapter Four. Within Chapter Five are the findings, conclusions, and recommendations for future research.

## Chapter Three: Methodology

Many factors contribute to student performance on tests; therefore, this project involved examination of one such issue, chronic absenteeism. Absenteeism wreaks havoc on school systems by affecting performance on standardized test scores as well as graduation and dropout rates (Balfanz \& Byrnes, 2012). Working with this knowledge, data were examined to determine the impact of chronic absenteeism on standardized test performance. Data gathered from this project were used to determine if a correlation exists between chronic absenteeism and low performance on standardized test scores within the research site. The findings expanded literature regarding achievement of students and absenteeism.

The researcher addressed and answered the following research questions through analysis of data gathered from one rural school district (School District A) using a population size of 250 students. School District A is a kindergarten through grade eight rural school in southcentral Missouri with a student population of 250 and a free and reduced price meal rate of $89.3 \%$. Regarding research questions two through five, it should be noted English language learners (ELL) are not a part of the study as there was no population of ELL-designated students available for the study. It is also noteworthy to mention the non-existence of an ethnicity designation in the study. There are a total of three students in the population classified as not-white, thereby making the disaggregated data for ethnicity statistically invalid due to a sample size being too small. This study was designed to determine if a relationship exists between two or more of the characteristics (Fraenkel et al., 2015) addressed in the research questions.

## Problem and Purpose Overview

The modern climate of American education has placed a never-before-seen level of accountability upon educators and educational leaders. As education has moved forward from NCLB, Missouri's school district accountability has been measured in many ways; one such way is student performance (SB, Section 167.031.1, 2014). One metric of student performance is end-of-year standardized tests, such as the MAP. As an educational society, the United States is compared to and found to be trailing most of the developed nations of the world (Ryan, 2013). The United States is currently the only nation requiring standardized tests of all students in grades three to eight (Chubb \& Clark, 2013). Chubb and Clark (2013) also noted the unfairness of attaching high stakes to a single test which occupies only a few hours of a student's entire academic year

Many factors contribute to student performance on tests. Absenteeism wreaks havoc on school systems by affecting performance on standardized test scores as well as graduation and dropout rates (Balfanz \& Byrnes, 2012). Working with this knowledge, the primary investigator extrapolated data to examine the impact of chronic absenteeism on standardized test performance.

Research questions and hypotheses. The researcher examined data to find a relationship between absenteeism and other variables (Frankel, 2013).

Research Question 1. What is the correlation between students in fifth through eighth grade with high absenteeism and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?
$H 1_{0}$ : There is no correlation between students in fifth through eighth grade with high absenteeism and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).

Research Question 2. What is the correlation between students in fifth through eighth grade with an IEP designation and high absenteeism?
$H 2_{0}$ : There is no correlation between students in fifth through eighth grade with an IEP designation and high absenteeism.

Research Question 3. What is the relationship between students in fifth through eighth grade with an IEP designation and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?
$H 3_{0}$ : There is no relationship between students in fifth through eighth grade with an IEP designation and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).

Research Question 4. What is the relationship between students in fifth through eighth grade with high absenteeism and gender?
$H 40$ : There is no relationship between students in fifth through eighth grade with high absenteeism and gender.

Research Question 5. What is the relationship between gender and performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?
$H 5_{0}$ : There is no relationship between gender and performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).

Research Question 6. What is the relationship between students in fifth through eighth grade with a free or reduced price meal designation and high absenteeism?
$H 6_{0}$ : There is no relationship between students in fifth through eighth grade with a free or reduced price meal designation and high absenteeism.

Research Question 7. What is the demographic of students in fifth through eighth grade maintaining regular attendance as determined by subgroup designation and absenteeism?

## Research Design

For this project, the primary investigator used only quantitative data. Quantitative research methods use objective measurements as opposed to perceptual data (Fraenkel et al., 2015). For the purpose of this project, archival attendance, subgroup, and performance data were extracted. The gathering and use of pre-existing demographic data generated by the MODESE provided raw data for statistical analysis using a Pearson product-moment correlation coefficient as the computational technique for analysis. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon (Fraenkel et al., 2015).

The primary investigator's goal in conducting this research was to define the relationships, if existent, between the dependent variable (high rates of absenteeism) and independent variables (IEP status, free or reduced price meal eligibility, and gender) within the population of the study.

The primary investigator's decision to use quantitative research was based on reliability, validity, and repeatability, as quantitative research utilizes numeric systems, logical processes, and an objective position regarding outcomes and data (Fraenkel et al.,
2015). Numerical and quantifiable data alone, with no perceptual input, increase reliability because quantitative research focuses on numeric and unchanging data and detailed, convergent reasoning rather than divergent reasoning (Fraenkel et al., 2015).

The data for quantitative research are usually gathered using structured research instruments. Results are based on larger sample sizes that are representative of the population, and the research study can usually be replicated or repeated to increase reliability (Fraenkel et al., 2015). The researcher had clearly defined research question to which objective answers were sought when all aspects of the study were carefully designed before data were collected (Fraenkel et al., 2015). Data for quantitative studies are in the form of numbers and statistics, often arranged in tables, charts, figures, or other non-textual forms. According to Fraenkel et al. (2015), a quantitative study can be used to generalize concepts more widely, predict future results, or investigate causal relationships with the overarching aim to classify features, count them, and construct statistical models in an attempt to explain what is observed.

## Population and Sample

The primary investigator used the accessible population of school District A. This included a sample of all students in grades five through eight with a total population of 250 students. Students' data were extrapolated from the prior (2010-2014) school years.

The sample size was 250 students. Archival data were retrieved for student information via school records and the Missouri Comprehensive Data System (MCDS) portal.

The primary investigator chose to use a consensus sample of students at School District A. The primary investigator chose this sample size, because reliable data in the
form of MAP achievement scores archived within the district and the MODESE MCDS Portal were available. Fraenkel et al. (2015) stated, "Drawing conclusions about a population after studying a sample is never totally satisfactory" ( p .103 ). Therefore, the primary investigator used the entire population to ensure validity and reliability. Fraenkel et al. (2015) further stated, "A sample size of at least 50 is deemed necessary to establish the existence of a relationship" (p. 103). For the purpose of this study, a consensus sample was used (Fraenkel et al., 2015).

## Instrumentation

All achievement data collected from the MCDS portal have been validated by the MODESE and are recognized as valid by the United States Department of Education. The data provided the primary investigator with demographic information including gender, free or reduced price meal status, as well as IEP designation. Additional data were gathered from archival school attendance records retained in the student information system used by School District A. These data were placed into Microsoft Excel, where once the attendance information and retrieved MCDS performance data were pooled, all personally identifiable student data were removed. Once all identifiers were redacted from data, the primary investigator used SPSS statistical software for statistical analysis using descriptive statistics, frequency analyses, and Pearson product-moment correlation coefficient tests.

## Data Collection

No data were collected until Lindenwood University approved the IRB (see Appendix A). The primary investigator obtained written permission from the school board of School District A to obtain student archival data (see Appendix B). A third-party
investigator collected and removed all identifiers from archival attendance data from the 2013-2014 school year. The third-party investigator collected and removed all identifiers from student MAP grade-level data from the 2010-2014 school years.

The primary investigator analyzed data and documented results. The data were analyzed after conducting statistical tests using SPSS.

## Data Analysis

A Pearson product-moment correlation coefficient test was used to analyze data for research questions one through four. According to Babbie (2010), "Quantitative data are numerical; qualitative data are not. Quantitative and qualitative data are both useful for different research purposes" (p. 28). Using SPSS software to analyze numerical data provided the necessary information to examine the analyzed data for a correlation.

A Pearson correlation of $.10(1 \%)$ presents a small or soft effect, and many relationships are of this level. A correlation of .30 is a medium effect, with values of .3 $(9 \%)$ easily perceptible to the eye of a trained observer. A correlation of $.50(25 \%)$ is considered a large effect and is considered to be the useful upper limit of predictive effectiveness (Gardner \& Neufeld, 2012).

## Ethical Considerations

Each student in the study had a permanent school record stored within the school district. Records contained demographic information, which pertained to the research questions including free and reduced price meal status, archived MAP scores, attendance information, IEP status, and student gender. Each file was pulled from secure storage by the third-party investigator with permission of the district's custodian of records (see Appendix C). Once each file was pulled, data were copied and names immediately
redacted with all other personally identifiable record information removed. Original files were immediately returned unaltered to the district's secure file location by the researcher. Copied files used in this project's research were transferred by the researcher to a secure, locking file cabinet within office of the researcher. Files were kept in a nondescript file folder with "Confidential" printed on the folder's tab, and the office was locked when the researcher was not present. Once research was completed, all copied files will be retained for three years at which time they will be shredded and incinerated, thereby ensuring confidentiality. Additionally, no data shall be transferred outside of the school setting or used for any other means than this study.

Each research question was analyzed using recognized statistical metrics.

## Summary

The current educational climate is one in which student success is largely a measure based on the student's score on a single high-stakes assessment (Balfanz, 2011). A positive correlation between attendance and school achievement markers, such as reading achievement and persistence to graduation, have been linked through research (Balfanz, 2011). Students with high rates of absenteeism also have been shown to have less self-esteem and less successful social and family relationships.

Chronic absenteeism is defined as missing $10 \%$ of school days per year (Balfanz, 2011). The MODESE has a target goal of $90 \%$ or better attendance for all students. This investigator determined if there is a relationship between high rates of absenteeism and poor performance on the Missouri Assessment Program (MAP), while taking into account the variables of special education identification, gender, and free and reduced meal status.

Researchers have identified barriers to student attendance such as lack of transportation, violence which may be encountered on the passage to school, clothing that is deemed unacceptable by the student's peer group, parents who need students to work inside or outside the home or to translate for them, and school policies or climate which may inadvertently increase the likelihood of absenteeism (Balfanz, 2011). Since student achievement, families, communities, and the economy are interconnected and dependent on one another, the issue of student absenteeism has garnered much attention. Once barriers to attendance have been identified, some cities, such as New York City, have put programs in place to overcome the obstacles (Balfanz, 2011). Cities with effective policies have begun to see attendance rates increase dramatically.

The purpose of this study was to determine if high rates of absenteeism have an effect on student achievement on the MAP in communication arts and mathematics for students of fifth through eighth grade in a small K-8 school district in south-central Missouri. Also measured were possible correlations between absenteeism, performance on the MAP test, and variables such as IEP status, free and reduced price meal status, and gender.

In Chapter Four, the collected data are explained. Tables and figures are used to enhance the understanding of the data. Chapter Five includes the findings, conclusions, and recommendations for future research.

## Chapter Four: Analysis of Data

This investigator proposed to answer the following five questions through analysis of data gathered from School District A. School District A is a kindergarten through grade eight rural school in south-central Missouri with a student enrollment of 250 and a free and reduced priced meal rate of $89.3 \%$.

## Research Questions

The following research questions and hypotheses guided this study:
Research question one. What is the correlation between students in fifth through eighth grade with high absenteeism and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?

To analyze research question one, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between days absent and performance on the MAP for CA and MA. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$ (Fraenkel et al., 2015). For students in grades five through eight, there was a correlation between MAP MA proficiency and days absent $[r=$ .17] which was statistically significant [ $p<.01$ ]. For this reason, null hypothesis $H 1_{0}$ was rejected. The resulting data are presented in Table 1.

Table 1
Correlation of MAP MA Scores to Student Absenteeism

|  |  | MAP MA <br> Proficiency | Days Absent |
| :--- | :--- | :---: | :---: |

Note. Statistical significance is noted at $p \leq .05$.

For students in grades five through eight, there was a correlation between MAP CA proficiency and days absent [ $r=.12$ ] which was statistically significant [ $p=.02]$. For this reason, null hypothesis $H 1_{0}$ was rejected. The resulting data are presented in Table 2.

Table 2
Correlation of MAP CA Scores to Student Absenteeism

|  |  | MAP CA <br> Proficiency | Days Absent |
| :--- | :--- | ---: | ---: |

Note. Statistical significance is noted at $p \leq .05$.
Research question two. What is the correlation between students in fifth through eighth grade with an IEP designation and high absenteeism?

To analyze research question two, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between days absent and
student IEP designation. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight, there was a correlation between days absent and student IEP designation $[r=.12]$ which was statistically significant $[p=.02]$. For this reason, the null hypothesis $H 2{ }_{o}$ was rejected. The resulting data are presented in Table 3.

Table 3
Correlation of Students in Fifth through Eighth Grade with IEP and High Absenteeism

|  |  | IEP | Days Absent |
| :--- | :--- | :---: | :---: |
| IEP | Pearson Correlation | 1 | .123 |
|  | Sig. (1-tailed) |  | .021 |
| Days Absent | Pearson Correlation | .123 | 1 |
|  | Sig. (1-tailed) | .021 |  |

Note. Statistical significance is noted at $p \leq .05$.
Research question three. What is the relationship between students in fifth through eighth grade with an IEP designation and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?
$H 3_{0}$ : There is no relationship between students in fifth through eighth grade with an IEP designation and low performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).

To analyze research question three, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between IEP designation and performance on the MAP for CA and MA. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight, there was a correlation between MAP MA proficiency and IEP designation $[r=.12]$ which was statistically significant $[p=$ .02]. For this reason, the null hypothesis $H 3_{o}$ was rejected. The resulting data are presented in Table 4.

Table 4

Correlation of MAP MA Scores to Student IEP Designation

|  |  | MAP MA <br> Proficiency | IEP Designation |
| :--- | :--- | ---: | ---: |
| MAP MA Proficiency Pearson Correlation | 1 | .123 |  |
| IEP Designation | Sig. (1-tailed) | Pearson Correlation | .123 |
|  | Sig. (1-tailed) | .021 | .021 |

Note. Statistical significance is noted at $p \leq .05$.
For students in grades five through eight, there was a correlation between MAP CA proficiency and IEP designation $[r=.31]$ which was statistically [ $p<.01]$. For this reason, the null hypothesis $\mathrm{H} 3_{0}$ was rejected. The resulting data are presented in Table 5.

Table 5
Correlation of MAP CA Scores to Student IEP Designation

|  |  | MAP CA <br> Proficiency | IEP Designation |
| :--- | :--- | ---: | ---: |
| MAP CA Proficiency | Pearson Correlation | 1 | .306 |
|  | Sig. (1-tailed) |  | .000 |
| IEP Designation | Pearson Correlation | .306 | 1 |
|  | Sig. (1-tailed) | .000 |  |

Note. Statistical significance is noted at $p \leq .05$.

Research question four. What is the relationship between students in fifth through eighth grade with high absenteeism and gender?

H40: There is no relationship between students in fifth through eighth grade with high absenteeism and gender.

To analyze research question four, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between absenteeism and gender. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight, there was a correlation between absenteeism and gender [ $r=.14$ ] which was statistically significant [ $p=.04]$. For this reason, the null hypothesis $H 4_{0}$ was rejected. The resulting data are presented in Table 6.

## Table 6

Correlation between Students with High Absenteeism and Gender

|  |  | Female Absent | Male Absent |
| :--- | :--- | ---: | ---: |
| Female Absent | Pearson Correlation | 1 | .142 |
|  | Sig. (1-tailed) |  | .042 |
| Male Absent | Pearson Correlation | .142 | 1 |
|  | Sig. (1-tailed) | .042 |  |

Note. Statistical significance is noted at $p \leq .05$.
To compare means between the genders, a paired samples $t$-test (see Table 7) showed a statistically significant difference in male and female absenteeism. Results of the paired-samples $t$-test indicated the mean score for female days absent $(M=8.73, S D=$ 6.89) and the mean score for males days absent $(M=6.47, S D=5.38)$ at the 0.05 level of significance; $t(249)=3.404, p=.00$. Data showed females to have a 2.26 greater mean
of absenteeism than males. For this reason, the null hypothesis $\mathrm{H}_{0}$ was rejected, as there were differences between the genders.

Table 7
Paired Samples $t$-test of Gender Differences in Absenteeism

|  | $M$ | $N$ | $S D$ | Correlation | $t$ | $d f$ | Sig |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Female Days Absent | 8.73 | 250 | 6.878 | 0.142 | 3.404 | 249 | 0.001 |
| Male Days Absent | 6.47 | 250 | 5.382 |  |  |  |  |

Note. Statistical significance is noted at $p \leq .05$.
Research question five. What is the relationship between gender and performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA)?
$H 5_{0}$ : There is no relationship between gender and performance on the Missouri Assessment Program (MAP) in Communication Arts (CA) and Mathematics (MA).

To analyze research question five, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between gender and performance on the MAP for CA and MA. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight, there was a weak relationship between MAP CA proficiency and gender $[r=.12, p=.07]$ which was not statistically significant with $p \geq .05$. For this reason, the null hypothesis $H 5_{0}$ was not rejected. The resulting data are presented in Table 8.

Table 8
Correlation of MAP CA Scores to Gender

|  |  | Male CA | Female CA |
| :--- | :--- | ---: | ---: |
| Male CA | Pearson Correlation | 1 | .124 |
|  | Sig. (1-tailed) |  | .066 |
| Female CA | Pearson Correlation | .124 | 1 |
|  | Sig. (1-tailed) | .066 |  |

Note. Statistical significance is noted at $p \leq .05$.
For students in grades five through eight, there was a weak correlation between MAP MA proficiency and gender $[r=.11]$ which was not statistically significant $[p=$ .11] with $p \geq .05$. For this reason, null hypothesis $H 5_{0}$ was not rejected. The resulting data are presented in Table 9.

Table 9
Correlation of MAP MA Scores to Gender

|  |  | Male CA | Female CA |
| :--- | :--- | ---: | ---: |
| Male CA | Pearson Correlation | 1 | .070 |
|  | Sig. (1-tailed) |  | .112 |
| Female CA | Pearson Correlation | .070 | 1 |
|  | Sig. (1-tailed) | .112 |  |

Note. Statistical significance is noted at $p \leq .05$.
Research question six. What is the relationship between students in fifth through eighth grade with a free or reduced price meal designation and high absenteeism?
$H 6_{0}$ : There is no relationship between students in fifth through eighth grade with a free or reduced price meal designation and high absenteeism.

To analyze research question six, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between with students in
fifth through eighth grade with free or reduced price meal designation and high absenteeism. The Pearson $r$ determines the strength of a straight linear fit closest to $r=$ 1.0 .

For students in grades five through eight, there was a weak correlation between free or reduced price meal designation and high absenteeism [ $r=.07$ ] which was not significant $[p=.11]$. For this reason, the null hypothesis $\mathrm{Hb}_{0}$ was not rejected. The resulting data are presented in Table 10.

Table 10
Correlation of Free and Reduced Price Meal Designation and Absenteeism

|  |  | F/R PM | Days Absent |
| :--- | :--- | ---: | ---: |
| F/R PM | Pearson Correlation | 1 | .070 |
| Days Absent | Sig. (1-tailed) |  | .112 |
|  | Pearson Correlation | .070 | 1 |
|  | Sig. (1-tailed) | .112 |  |

Note. Statistical significance is noted at $p \leq .05$.
Research question seven. What is the demographic of students in fifth through eighth grade maintaining regular attendance as determined by subgroup designation and absenteeism?

To analyze research question seven, descriptive statistics were used and a frequency analysis was conducted for students in fifth through eighth grades for free or reduced price meal status and absentee rates. As seen in Figure 1, $87.4 \%$ of students from the sample received free or reduced priced meals. Figure 2 depicts the frequency analysis of days absent for students included in the study. Of the sample, $30.6 \%$ of students missed between zero and three days of school, while $27.9 \%$ of students from the sample missed between four and seven days of school. Those who missed between eight and 11
days included $19.6 \%$ of students from the sample, and $21.9 \%$ missed 12 or more days of school. Figure 3 illustrates $19.3 \%$ of students from the sample have an Individualized Education Plan, or IEP.

F/RL


Figure 1. Percentage of students receiving free or reduced price meals.

Days Absent


Figure 2. The categorical data of days absent depicted in bar graph form allows the researcher to discern the characteristics of the sample, which may then be converted to percentages (Fraenkel et al., 2015).


Figure 3. Percentage of the sample of students with an IEP and those without an IEP.

To more closely examine the data, the primary investigator conducted a bivariate linear regression ANOVA for the predictors of (a) gender, (b) free and reduced price meal status, and (c) IEP designation. In Table 11, the $p$-value is well below $.05(p<.01)$. Therefore, it was concluded the relationship between the constants (a) gender, (b) free and reduced price meal status, and (c) IEP designation and student days absent is statistically significant.

Table 11
Bivariate Linear Regression ANOVA

| Model | Sum of Squares | $F$ | Significance |
| :--- | ---: | :---: | :---: |
| Regression | 816.204 | 7.427 | 0.00 |
| Residual | 10879.510 |  |  |
| Total | 11695.714 |  |  |

Note. a. Predicators: (Constant), Gender, F/R, IEP; b. Dependent variable: Days absent. Statistical significance is noted at $p \leq .05$.

## Summary

The investigator examined whether a correlation exists between regular school attendance and academic success. Specifically, the study analyzed the MAP scores in Communication Arts and Mathematics in relation to absenteeism and free or reduced price meal status for a rural Missouri school district.

The results from the Pearson product-moment correlation coefficient revealed there is a correlation between absenteeism and how students perform on state standardized assessments. A bivariate linear regression ANOVA statistical analysis confirmed there is a relationship among gender, free and reduced price meal status, IEP designation, and a student's propensity toward absenteeism. In Chapter Five are the findings, implications, and recommendations for future research.

## Chapter Five: Summary and Conclusions

In this chapter, the findings are reviewed based on the statistical analysis of the research questions (Fraenkel et al., 2015). The redacted data were processed, extrapolated, and analyzed using statistical Pearson product-moment correlation coefficient frequency analysis. Each question provided a unique set of information proving useable to the investigator for practical application and remediation of achievement issues as related to attendance.

## Findings

Research question one addressed what, if any, correlation exists between students in fifth through eighth grades in School District A with high absenteeism and low performance on the MAP in Mathematics (MA). As displayed in Table 1, a positive correlation was found between MAP MA proficiency and days absent. For the purpose of this analysis, $r=.17$ which was statistically significant $[p<.01]$.

The second part of research question one addressed what, if any, correlation exists between students in fifth through eighth grades with high absenteeism and low performance on the MAP in the area of Communication Arts (CA). The results of the analysis of data proved a positive correlation between MAP CA proficiency and days absent $[r=.12]$ which was statistically significant $[p=.02]$ with the resulting data presented in Table 2. As shown in both sections of research question one, high rates of absenteeism in grades five through eight correlate to low performance on the MAP MA and CA assessments within School District A.

Research question two was developed to determine whether a correlation exists between students in fifth through eighth grades with an IEP designation and high
absenteeism. To analyze research question two, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between days absent and student IEP designation. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$. For students in grades five through eight in school District A, there was a correlation between days absent and student IEP designation $[r=.12]$ which was statistically significant $[p=.02]$.

For research question three, the primary investigator examined data for a relationship between students in fifth through eighth grades with an IEP designation and low performance on the MAP in CA and MA. To analyze research question three, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between IEP designation and performance on the MAP for CA and MA. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight, there was a correlation between MAP MA proficiency and IEP designation $[r=.12]$ which was statistically significant $[p=$ .02]. The resulting data were presented in Table 4. For students in grades five through eight, there was a correlation between MAP CA proficiency and IEP designation $[r=$ 0.31 ] which was statistically significant [ $p<.001$ ]. The analysis of the data for MA and CA and the variable of an IEP designation revealed a statistically significant correlation for students in grades five through eight in School District A.

To analyze research question four, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between absenteeism and gender. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight, there was a correlation between absenteeism and gender $[r=0.14]$ which was statistically significant $[p=.04]$. The resulting data were presented in Table 6.

Using a comparison of means between the genders, a paired samples $t$-test showed a statistically significant difference in male and female absenteeism. Data from the analysis showed females to have a 2.26 greater mean of absenteeism than males. Results of the paired-samples displayed in Figure 2 showed the mean score for female days absent of 8.73 , and a mean score for males of 6.47 , with standard deviations of 6.878 and 5.382, respectively. The difference was statistically significant at $p<.001$.

For research question five, the primary investigator examined data to determine if a correlation exists between gender and performance on the MAP in CA and MA. To analyze research question five, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between gender and performance on the MAP for CA and MA. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight in School District A, there was a weak correlation between MAP MA proficiency and gender [ $r=.11$ ], which was not statistically significant $[p=.11]$. The resulting data were presented in Table 9. For students in grades five through eight, there was a weak correlation between MAP CA proficiency and gender [ $r=.12$ ], which was not statistically significant $[p=0.07]$. The resulting data were presented in Table 8.

In response to research question six, the primary investigator examined data for a possible relationship between students in fifth through eighth grades with a free or
reduced price meal designation and high absenteeism. To analyze research question six, a Pearson product-moment coefficient of correlation (Pearson $r$ ) was calculated to assess the relationship between with students in fifth through eighth grades with free or reduced price meal designation and high absenteeism. The Pearson $r$ determines the strength of a straight linear fit closest to $r=1.0$.

For students in grades five through eight, there was a minimal correlation between free or reduced price meal designation and high absenteeism [ $r=0.07$ ] which was not statistically significant [ $p=.07$ ]. The resulting data were presented in Table 10.

Research question seven required the use of various descriptive statistics for a satisfactory conclusion. To analyze research question seven, descriptive statistics were used and a frequency analysis was conducted for students in fifth through eighth grades for free or reduced price meal status and absentee rates. Figure 1 showed $87.4 \%$ of students from the sample received free or reduced priced meals.

Figure 2 showed the second largest percentage of students, $21.9 \%$, missed 12 or more days of school, and $19.6 \%$ missed eight to 11 days of school. With these numbers combined, $48.8 \%$ of students missed eight or more school days per school year. Nearly half of all students absent eight or more days in a school year proved to be a noticeable factor in academic success. Figure 3 illustrated $19.3 \%$ of students from the sample had an Individualized Education Plan, or IEP. This minimal percentage more clearly defines the population for which the district may wish to focus attendance improvement efforts.

To more closely examine the impact of demographics as predictors for absenteeism, the primary investigator conducted a bivariate linear regression ANOVA for the predictors of (a) gender, (b) free and reduced price meal status, and (c) IEP
designation. In Table 11, the $p$-value was well below .05 ( $p<.01$ ). Therefore, the relationship among the constants (a) gender, (b) free and reduced price meal status, and (c) IEP designation and student days absent was statistically significant.

## Conclusions

Education has long been used as a benchmark for supporting a healthy and useful culture; as early as 3500 B.C., Egyptians kept and passed along knowledge and teachings via the first scripted language (Skinner, 2014). Education has been pronounced the most important purpose of state and local governments as well as being a topic of discussion among philosophers of the ancient world and international leaders alike (Skinner, 2014). Supporting education has been a critical component of governments; as of 2012, all 50 states had education laws concerning compulsory school attendance for all students extending from ages five to 18 (Skinner, 2014).

The federal government neither requires nor asks states or school districts to report chronic absenteeism. As part of the NCLB re-authorization of the Elementary and Secondary Education Act (ESEA), most states choose to report the average daily attendance of elementary and middle schools, along with achievement tests in Mathematics and Communication Arts in grades three to eight (MODESE, 2014). Average daily attendance, however, masks more than it reveals (Balfanz \& Byrnes, 2012). As high absenteeism rates are not routinely measured, it is unknown how prevalent chronic absenteeism may actually be, as only five states (Oregon, Rhode Island, Maryland, Florida, and Nebraska) routinely track and report absenteeism data (Buehler, Tapogna, \& Chang, 2012).

Using the data from the 2012 national report on absenteeism (Balfanz \& Byrnes, 2012), a rudimentary picture begins to develop of the prevalence of chronic absenteeism, how chronic absenteeism varies between schools, and a clearer picture of the excessive amount of instruction lost for students who are chronically absent for multiple years of their school careers. The data from the report showed significant percentages and large numbers of students, predominantly in high-poverty communities, are missing school in educationally dangerous amounts (Balfanz \& Byrnes, 2012).

According to the research from the report, in the five states reporting attendance data, 320,382 students are chronically absent from school per year. According to Balfanz and Byrnes (2012), "If we apply these metrics to the roughly 50 million students enrolled in grades pre-k to 12 in America's public schools, we estimate that from 5 to 7.5 million students each year are not attending school regularly" p . 17). The data regarding the five states reporting attendance data are displayed in Table 12.

Table 12
Chronic Absenteeism in Five States

| State | Percent Chronically Absent | Number Chronically Absent |
| :--- | :---: | :---: |
| Oregon | $23 \%(2009-10)^{*}$ | 129,190 |
| Rhode Island | $18 \%(2010-11)^{* *}$ | 30,168 |
| Maryland | $11 \%(2010-11)^{* * *}$ | 85,188 |
| Florida | $10 \%(2009-10)^{* * *}$ | 302,382 |
| Nebraska | $6 \%(2010-11)^{* * *}$ | 18,100 |

Note. *Missing $10 \%$ or more of enrolled school days. ** Missing $10 \%$ of enrolled school days, for those who attended at least 90 days $* * *$ Students absent 21 or more days-of those enrolled all year (Balfanz \& Byrnes, 2012, p. 10).

Balfanz and Byrnes (2012) furthered this with data from two states regarding students missing more than 15 days of school per year. In the state of Georgia, it was reported for the 2010-2011 school year $8.8 \%$, or 164,000 students, fell into the category of missing 15 or more days of school. Nebraska reported during the same period of time $12.2 \%$, or 35,121 , students were absent 15 or more days from school (Balfanz \& Byrnes, 2012). School districts serving student populations with a high poverty rate or a low socioeconomic status reported higher instances of absenteeism (Balfanz \& Byrnes, 2012). Balfanz and Byrnes (2012) indicated students missing a large amount of school will suffer in math achievement, not only in terms of grades but in actual math comprehension and retention of information.

Low socioeconomic status is a key indicator of students choosing to drop out of high school (Schrodenberger, 2012). Schoeneberger (2012) pointed to the 2006 research of Martin and Halpern, which estimated the lost lifetime revenue for male dropouts at approximately $\$ 944$ billion, and other associated costs to the economy estimated at $\$ 24$ billion.

Going beyond a single year of chronic absenteeism and expanding the scope of data across a state, school district, or school in a single year leads to finding the number of students chronically absent at least once over a span of multiple years. Using longitudinal data from Florida following a cohort of students over seven years, Balfanz and Byrnes (2012) found $37 \%$ of students were chronically absent during one year of school, $24 \%$ for two years of school, $17 \%$ for three years of school, $6 \%$ percent for four years of school, $6 \%$ for five years of school, and $3 \%$ for six years of school. Also
revealed in their data are those who miss most frequently in one year, miss the most over many years (Balfanz \& Byrnes, 2012).

Those with the highest rates of absenteeism in one year continued to be chronically absent over multiple years (Balfanz \& Byrnes, 2012). The 20\% of students at the bottom ( $20 \%$ missing the most school) were absent a mean of 171 days over seven years equaling 28 days per year, and the remaining $80 \%$ missed only a few more days over seven years, totaling 196 (Balfanz \& Byrnes, 2012). This correlates to $20 \%$ of students creating $46 \%$ of all absences within the cohort (Balfanz \& Byrnes, 2012).

When put into perspective, 171 school days is more than one academic school year in School District A. For each of the 2013-2014 and 2014-2015 school years, School District A was in session 170 days per year. Data from the project (Balfanz \& Byrnes, 2012) revealed the $20 \%$ of students missing the most school were absent more than one full school year over the seven-year span of data collection. In addition, the next 20\% were absent nearly one-half of a school year over the same period of time (Balfanz \& Byrnes, 2012). The $20 \%$ of students missing the least amount of school missed less than one week of school per year translating to about one-quarter of an academic calendar (Balfanz \& Byrnes, 2012).

## Implications for Practice

Student success and school attendance are critical components to a lifetime of prolonged success. Student attendance for learning should be at the forefront of the American educational system rather than overemphasis on academic achievement results. When schools fail, so do the communities around them.

When properly analyzed, student attendance data can alert city leaders to deeperseated community problems and suggest where and how the city should focus resources to alleviate problems and remove barriers, which prevent students from regular school attendance (NCES, 2014). Communities have a vested interest to ensure all students succeed in school. Excellent schools, low school dropout rates, and a more educated citizen base are all critical to growing and maintaining a healthy and viable local economy. Other benefits include increased property values and more safe and secure neighborhoods.

The primary investigator suggests implementation of the following steps to improve attendance for School District A. The district should monitor, gather, and share (as appropriate) data about chronic absenteeism with community leaders, parents, and other stakeholders. A team should identify, address, and if possible, remove or circumnavigate obstacles to student attendance. Obstacles within the school district will be the easiest to address and remove. Conversely, obstacles at home will be the most difficult to work around, but can still be addressed with strong enforcement of district policies regarding non-attendance.

The district should use policies and parental involvement to advocate attendance as a community priority and should organize afterschool events for the purpose of inviting parents and students in a non-threatening atmosphere to foster better relationships among parents, students, and teachers, which will encourage attendance. The community can partner with the school and other agencies to create a culture of attendance by working with schools to help report and curb truancy through communication and by rewarding regular attendance.

Schools and partners within the community can reward regular attendance with frequent positive feedback, and schools may use daily tokens redeemable for rewards when classes have perfect attendance. Additional incentives could include quarterly trips to community recreational facilities at no cost to students and attendance recognition within the school setting. Finally, larger incentive events may be organized to maintain high attendance throughout the year.

Administrators should advocate for better policies and public investment in education. By keeping in contact with legislators, community members, and district policy makers, better policies can be developed to encourage regular attendance and discourage low attendance.

## Recommendations for Future Research

The research for this project provided an in-depth look at correlations between the dependent variable (school attendance) and the independent variables (IEP status, gender, and free or reduced price meal status) in relationship to end-of-year MAP test performance within School District A. This project was designed and executed to identify issues within a specific school district. Future research could apply the same or similar research parameters to multiple school districts within a local area, state, region, or even nationwide.

Increasing the scope of this project, both in quantity of students as well as a greater number of school districts from a more varied demographic, would provide more and reliable results. Student attendance affects the academic achievement of those students involved. Finally, high absenteeism may adversely affect the human capital for the development of the country. Suhid, Aroff, and Kamal (2012) noted:

The truancy problem will lead to other social ills. It is therefore not only a school problem but also a problem for society. To reiterate, in addressing this problem many parties and authorities must cooperate to address this problem of truancy among students. (p. 349)

By working together, attendance rates can be improved and thereby reduce possible societal ills (Kamal, 2012).

An additional consideration for future research may be to study a new variable; race could be examined for another possible correlation in performance on end-of-year standardized tests. Race was not used in this project because a statistically insufficient number of students fell outside the "White" category to yield valid results.

On the opposite end of the spectrum, School District A has a rate of over $89 \%$ of students receiving free or reduced priced meals based on household income levels. Applying this research to more districts of various socioeconomic levels could reveal different correlations for a larger study.

This study was designed to identify and address issues within the target district. Ideas for expanding the scope of the project include tracking the number of students chronically absent during at least one school year as compared those absent over a span of multiple years. Gathering data on how frequently students are chronically absent over multiple school years and how many days of educational opportunities students miss cumulatively over multiple years would be a crucial piece of evidence (Balfanz \& Byrnes, 2012).

Using perceptual data from administrators, teachers, parents, students, and community members regarding relationships between attendance and achievement may
provide insight to the processes used within school districts to deal with high rates of absenteeism. The following questions may serve to generate input from the previously mentioned groups:

1. Is attendance considered a problem within the district?
2. What are the perceived motivations for attendance?
3. What are the perceived motivations for absenteeism?
4. What steps can be taken to curb absenteeism?
5. What steps has the district taken which have had a positive effect on curbing absenteeism?
6. Is high absenteeism having an effect on student academic performance?
7. What demographic(s) have the highest rates of absenteeism?

A final area to examine for future research is teacher absenteeism. In a 2012 publication, Brown and Arnell (2012) studied the effects of chronic teacher absenteeism on performance on end-of-year test performance in grades three through six in a selected elementary school in Montgomery, Alabama. Brown et al. (2012) asserted highly qualified teachers who are absent and are replaced by unqualified substitute teachers have a direct impact on students' retention of knowledge. According to Brown et al. (2012), "In other words, having a highly qualified classroom teacher is better for the classroom learning environment" (p.1).

Brown et al. (2012) showed levels of teacher absenteeism equaling over one full year of every child's education being taught by a substitute teacher during the elementary years. Brown et al. (2012) continued by asserting substitute teachers do not always follow the regular classroom teacher's pedagogical routine and methodologies to stimulate
student learning in the school setting. Students cannot make up for time lost in the classroom, and they cannot make up for time lost due to teacher absences. Supplementary data suggest students from economically disadvantaged backgrounds most in need of continuity regarding instruction get it least (Brown \& Arnell, 2012).

## Summary

The purpose of this project was to determine if there is a correlation between attendance and achievement test scores. The study was conducted using archival data on student attendance and end-of-the-year standardized test scores from the 2010 through 2014 school years. In this age of school accountability, one of the largest measures of student achievement is based on performance on an end-of-the-year standardized achievement test.

Absenteeism has been shown to have a negative effect on school systems through lowered standardized test scores, reduced graduation rates, and increased dropout rates (Balfanz \& Byrnes, 2012). Many issues contribute to student performance on tests. Balfanz (2012) noted absenteeism affects schools because it has been shown to lower performance on standardized test scores, increase dropout rates, and decrease graduation rates.

Archived data were examined to determine the effect of chronic absenteeism on end-of-the-year achievement test scores, and based on the information, a plan to increase attendance can be created. This study was designed to answer five research questions through an analysis of data gathered from a kindergarten through eighth-grade school in south-central Missouri. The student enrollment was 250 students, and the district had a free and reduced price meal rate of $89.3 \%$. The population of fifth through eighth-grade
students for the 2010-2014 school years from which archived data were reviewed consisted of a population of 250 students.

The population contained no English language learner students and a total of three non-white students, making the inclusion of these minority populations statistically invalid. The research questions were designed to include the independent variable of student attendance, while other independent variables such as gender, socioeconomic status, and IEP status were evaluated as well.

The primary investigator used only quantitative data and quantitative research methods to underscore objective measurements, as opposed to perceptual data (University of Southern California Writing Lab, 2014). Pre-existing statistical data generated by the MODESE were used to provide raw data for statistical analysis using a Pearson product-moment correlation coefficient as the computational technique for analysis. The primary investigator's goal in conducting this research was to define the relationships, if existent, between the dependent variable (high rates of absenteeism) and independent variables (IEP status, free or reduced price meals eligibility, and gender) within the sample of the study.

Using the data gathered from this study, the primary investigator can suggest implementation of a holistic approach to reducing high levels of student absenteeism within School District A. Beyond the scope of this study, the prevalence of chronic absenteeism has caused concern within schools as well as communities. Such awareness has led to vigorous attendance campaigns, which are so dynamic, and of such a comprehensive magnitude, pay-off is oftentimes immediate. Such campaigns at the
national, state, district, and school levels have given hope for the reduction of the scourge of chronic absenteeism.

Coupled with such efforts, the United States government, state departments of education, as well as individual school districts need to recurrently measure and report the rates of chronic absenteeism so current laws may be enforced and policies followed. Comprehensive state and district attendance policies must help every student attend school every day for the support of school districts, schools, communities, parents, and the students themselves. By using evidence-based strategies and acting upon attendance data, students can be encouraged to attend school on a daily basis. Elected officials and policy makers at all levels share critical roles to play in bringing multiple civil agencies together to form corresponding efforts in order to help each student attend school every day (Balfanz \& Byrnes, 2012).

## Appendix A

## LINDENWCOD

| DATE: | February 2, 2015 |
| :--- | :--- |
| TO: | John Collins, Ed.S. |
| FROM: | Lindenwood University Institutional Review Board |
| STUDY TITLE: | [633731-1]: An Examination of Chronic Absenteeism as Related to <br>  <br> Performance on End-of-Year Missouri State Assessments. |
| IRB REFERENCE \#: |  |
| SUBMISSION TYPE: | New Project |
|  |  |
| ACTION: | APPROVED |
| APPROVAL DATE: | February 2, 2015 |
| EXPIRATION DATE: | February 2, 2016 |
| REVIEW TYPE: | Expedited Review |

Thank you for your submission of New Project materials for this research project. Lindenwood University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.
Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the IRB.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the completion/amendment form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of February 2, 2016.

Please note that all research records must be retained for a minimum of three years.

If you have any questions, please contact Robyne Elder at (314) 566-4884 or relder@lindenwood.edu. Please include your study title and reference number in all correspondence with this office.

If you have any questions, please send them to IRB@lindenwood.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Lindenwood University Institutional Review Board's records.

## Appendix B

Permission I etter

December 8, 2014

Dear Board of Education President
I am conducting a research study titled, An Fxamination of Chronic Absenteeism as Reiated to Performance on End-of-Year Missouri State Assessments, in partial fulfilment of the requirement for a doctoral degree in Educational Administration at Lindenwood University. The research gathered should assist in providing insight in regards to chronic absentecism and the correlation to performance on the Missouri Assessment Program (MAP) test

I am seeking your permission as Board of Education President of the to use archival data including student attendance data provided by the district's student information system and student MAP performance provided by the Missouri Department of Elcmentary and Secondary Fducation. All data will be redacted and secured to insure student anonymity and confidentiality.

Participation in the study is completely voluntary. You may withdraw your consent at any time without penally. The identity of the school district will remain confidential and anonymous in the dissertation or any future publications of this study.

Please do not hesitate to contact me with any questions or concerns about participation (phone: 417-457-6237 or e-mail: collinsjorville.k12.mo.us). You may also contact the dissertation advisor for this research study, Dr. Julie Williams (phone: 417-256-6150 EXT. 4510) or e-mail: Jthompson3?lindenwood.edu). A copy of this letter and your written consent should be retained by you for future reference.

Respectfully,

John Collins
Doctoral Candidate
Lindenwood University

## Permission Letter (cont.)

I have read this consent form and have been given the opportunity to ask questions.

I understand it is my responsibility to retain a copy of this consent form, if I so
choosc. I consent to participation in the rescarch described on the preceding page.


Board President's Signature/Datc
Woth W. Colh 12/8:2014
frimary Investigator's Signature/Date


Board President's Printed Name

John W. Collins
Primary Investigator's Printed Name

## Appendix C

Permission Letter

December 8, 2014

Dear Custodian of Records
I am conducting a rcsearch study titled, An Examination of Chronic Absenteeism as Related to Performance on End-of-Year Missoni State Assessments, in partial fulfillment of the requirement for a doctoral degree in Educational Administration at Lindenwood Liniversity. The research gathered should assist in providing insight in regards to chronic absenteeism and the correlation to performance on the Missouri Assessment Program (MAP) test.

1 am sceking your permission as Custodian of Records for the
use archival data including student attendance data provided by the district's student information system and student MAP performance provided by the Missouri Department of Elementary and Secondary Education. All data will be redacted and secured to insure student anonymity and confidentiality.

Participation in the study is completely voluntary. You may withdraw your consent at any time without penalty. The identity of the school district will remain confidential and anonymous in the dissertation or any future publications of this study.

Please do not hesitate to contact me with any questions or concerns about participation (phone: 417-457-6237 or e-mail: collinsjorville.k12.mo.us). You may also contact the dissertation advisor for this research study, Dr. Julie Williams (phone: 417-256-6150 EXI. 4510) or e-mail: Jthompson3@lindenwood.edu). A copy of this letter and your written consent should be retained by you for future reference.

Respectfully,

John Collins
Doctoral Candidate
Lindenwood University

## Permission Letter (cont.)

I have read this consent form and have been given the opportunity to ask questions.

I understand it is my responsibility to retain a copy of this consent form, if I so choose. I consent to participation in the research described on the preceding page.


Custodian of Records Signature/Date


Primary Investigator's Signature/Datc


Custodian of Records Printed Name

Suhn W. Collins
Primary Investigator‘s Printed Name

## References

Adleman, H., \& Taylor, L. (2008). School attendance problems: Are current policies \& practices going in the right direction? Los Angeles, CA: Center for Mental Health in Schools at UCLA Department of Psychology.

American Psychological Association. (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: American Psychological Association.

Arthurs, N., Patterson, J., \& Bentley, A. (2014). Achievement for students who are persistently absent: Missing school, missing out? Urban Review, 46(5), 860-876.

Babbie, E. R. (2010). The practice of social research (12th ed.). Belmont, CA: Wadsworth Cengage.

Bahr, M. W., Walker, K., Hampton, E. M., Buddle, B. S., Freeman, T., Ruschman, N., \& Littlejohn, W. (2006). Creative problem solving for general education intervention teams. Remedial \& Special Education, 27(1), 27.

Balfanz, R. (2011). A systematic approach to reducing chronic absence: Why it matters, what we have learned, and how to get started [White paper]. Retrieved from http://www.attendanceworks.org/wordpress/wp-content/uploads/2011/06/Bob-Balfanz-Powerpoint.pdf

Balfanz, R., \& Byrnes, V. (2012). Chronic absenteeism: Summarizing what we know from nationally available data. Baltimore, MA: Johns Hopkins University Center for Social Organization of Schools.

Baxter, S. D., Royer, J. A., Hardin, J. W., Guinn, C. H., \& Delvin, C. M. (2011). The relationship of school absenteeism with body mass index, academic achievement, and socioeconomic status among fourth-grade children. Journal of School Health, 81(7), 417-423.

Bernhardt, V. (2013). Data analysis for continuous school improvement. City, NY: Eye on Education.

Blair, K. C., Fox, L., \& Lentini, R. (2010). Use of positive behavior support to address the challenging behavior of young children within a community early childhood program. Topics in Early Childhood Special Education, 30(2), 68-79.

Borg, L. (2014, September 28). Chronic absenteeism a formula for failure, R.I. Kids Count emphasizes. Retrieved from http://www.providencejournal.com/article/20140928/News/309289983

Bradshaw, G. (2008). Must Utah imprison its parents and children?: Alternatives to Utah's compulsory attendance laws. BYU Journal of Public Law, 22(1), 229-253.

Brown, S., \& Arnell, A. (2012). Measuring the effect of teacher absenteeism has on student achievement at an "urban but not too urban:" Title I elementary school. International Journal of Humanities and Social Science, 2(17), 172-183.

Brunsma, D. L., \& Rockquemore, K. A. (1998). Effects of student uniforms on attendance, behavior problems, substance use, and academics. Journal of Educational Research, 92(1), 53-62.

Buehler, M. H., Tapogna, J., \& Chang, H. (2012). Why being in school matters: Chronic absenteeism in Oregon public schools. Attendance Works, 1-4.

Caillier, J. (2010). Paying teachers according to student achievement: Questions regarding pay-for-performance models in public education. Clearing House, 83(2), 58-61.

Chang, H. (2011). Tackling chronic absence starting in the early grades: What cities can do to ensure every child has a fighting chance to succeed. National Civic Review, 100(4), 6-12.

Chang, H. (2012). Sending the right message about attendance to parents and students. Make Every Day Count, 100(1), 1-16.

Chapter 167 Pupils and Special Services, Missouri §§ Section 167.031.1 (2014).
Cheney, D., Lynass, L., Flower, A., Waugh, M., Iwaszuk, W., Mielenz, C., \& Hawken, L. (2010). The check, connect, and expect program: A targeted, tier 2 intervention in the school-wide positive behavior support model. Preventing School Failure, 54(3), 152-158.

Child trends: Student absenteeism. (2014). Retrieved from http://www.childtrends.org/?indicators=student-absenteeism

Clubine-Ito, C. (2004). Multilevel modeling for historical data. Historical Methods, 37(1), 5-11.

Chubb, J., \& Clark, C. (2013). The new state achievement gap: How federal waivers could make it worse-or better. Retrieved from http://www.educationsector.org/sites/default/files/publications/NewStateAchieve Gap-RELEASED.pdf

Constitution of the State of Missouri. (2013). Office of the Secretary of State: Jason Kandor. Jefferson City, MO.

Dube, S. R., \& Orpinas, P. (2009). Understanding excessive school absenteeism as school refusal behavior. Children \& Schools, 31(2), 87.

Epstein, J. L., \& Sheldon, S. B. (2002). Present and accounted for: Improving student attendance through family and community involvement. Journal of Educational Research, 95(5), 308-318.

Farah, Y. N. (2013). Through another's eyes. Gifted Child Today, 36(3), 209-212
Ferracini, G. N., Dach, F., \& Speciali, J. G. (2014). Quality of life and health-related disability in children with migraine. Headache: The Journal of Head \& Face Pain, 54(2), 325-334

Flaherty, C., Sutphen, D., \& Ely, G. (2012). Examining substance abuse in truant youths and their caregivers: Implications for truancy intervention. Children \& Schools, 34(4), 201-211.

Fraenkel, J. R., Wallen, N. E., \& Hyun, H. H. (2015). How to design and evaluate research in education (9th ed.). New York, NY: McGraw-Hill.

Gage, N. A., Sugai, G., Lunde, K., \& DeLoreto, L. (2013). Truancy and zero tolerance in high school: Does policy align with practice? Education \& Treatment of Children, 36(2), 117.

Gagnon, J., \& Leone, P. E. (2005). Elementary day and residential schools for children with emotional and behavioral disorders. Remedial \& Special Education, 26(3), 141-150.

Gardner, R. C., \& Neufeld W. J. (2012). What does the correlation coefficient really tell us about the individual? Canadian Journal of Behavioural Science, 45(4), 313319.

Gardoqui, K. (2015). Formative assessment and teacher feedback: What you need to know. Retrieved from http://www.greatschoolspartnership.org/wpcontent/uploads/2015/03/NESSC15_Formative_Assessment_and_Feedback_FIN AL.pdf

Gleich-Bope, D. (2014). Truancy laws: How are they affecting our legal systems, our schools, and the students involved? Clearing House, 87(3), 110-114.

Glomb, N. K., Buckley, L. D., Minskoff, E. D., \& Rogers, S. (2006). The learning leaders mentoring program for children with ADHD and learning disabilities. Preventing School Failure, 50(4), 31-35.

Glossary of standardized testing terms. (2014). Retrieved from https://www.ets.org/understanding_testing/glossary/

Goldstein, D. (2015). Inexcusable absences. New Republic, 246(2/3), 32-37.
Gump, S. E. (2005). The cost of cutting class. College Teaching, 53(1), 21-23.
Hall, J. M. (2012). Determinants of private school attendance: Evidence from Wisconsin school districts. International Advances in Economic Research, 18(2), 245-251.

Hartnett, S. (2007). Does peer group identity influence absenteeism in high school students? High School Journal, 91(2), 35-39.

Henry, K., \& Thornberry, P. (2010). Truancy and escalation of substance use during adolescence. Journal of Studies on Alcohol \& Drugs, 71(1), 115-120.

Hoyle, C. G., Marshall, K. J., \& Yell, M. L. (2011). Positive behavior supports: Tier 2 interventions in middle schools. Preventing School Failure, 55(3), 164-172.

Ingul, J. M., \& Nordahl, H. M. (2013). Anxiety as a risk factor for school absenteeism: What differentiates anxious school attenders from non-attenders? Annals of General Psychiatry, 12(1), 25-33.

Johnson, L. (2013). Youth outcomes following implementation of universal SW-PBIS strategies in a Texas secure juvenile facility. Education \& Treatment of Children, 36(3), 135-142.

Kearney, C., \& Graczyk, P. (2014). A response to intervention model to promote school attendance and decrease school absenteeism. Child \& Youth Care Forum, 43(1), 1-25.

LaRocque, M., Kleiman, I., \& Darling, S. M. (2011). Parental involvement: The missing link in school achievement. Preventing School Failure, 55(3), 115-118.

Larson, A. M., Singh, S., \& Lewis, C. (2011). Sanctions and education outcomes for children in TANF families. Child \& Youth Services, 32(3), 180-181.

Maslow, A. (1954). Motivation and personality. New York, NY: Harper \& Row.
Maslow, A. (2014). Towards a psychology of being. Floyd, VA: Sublime Books.
McLeod, S. (2014). Maslow's hierarchy of needs. Retrieved from http://www.ouchihs.org/apps/download/2/NghLRUHA09ycRFi190Zws5youGeih n81UYVGpHLCukqjXEs1.pdf/Maslow's Hierarchy of Needs.pdf

Messacar, D., \& Oreopoulos, P. (2013). Staying in school: A proposal for raising highschool graduation rates. Issues in Science \& Technology, 29(2), 55-57.

Missouri Department of Elementary and Secondary Education. (2014). MSIP 5:
Preparing every child for success in school and in life. Comprehensive Guide to Missouri School Improvement. Retrieved from
http://dese.mo.gov/sites/default/files/MSIP-5-comprehensive-guide.pdf
Missouri Department of Elementary and Secondary Education. (2015). About the state board. Retrieved from https://dese.mo.gov/state-board-education

Monahan, K., VanDerhei, S., Bechtold, J., \& Cauffman, E. (2014). From the school yard to the squad car: School discipline, truancy, and arrest. Journal of Youth \& Adolescence, 43(7), 1110.

Morgan, H. (2012). Poverty-stricken schools: What we can learn from the rest of the world and from successful schools in economically disadvantaged areas in the U.S. Education, 133(2), 291-294.

Paredes, R. D., \& Ugarte, G. A. (2011). Should students be allowed to miss? Journal of Educational Research, 104(3), 194-197.

Parke, C. S., \& Kanyongo, G. Y. (2012). Student attendance, mobility, and mathematics achievement in an urban school district. Journal of Educational Research, 105(3), 161-164.

Quinn, W. (2004). Family solutions for youth at risk: Applications to juvenile delinquency, truancy, and behavior problems. Adolescence, 39(156), 837-840.

Ready, D. D. (2010). Socioeconomic disadvantage, school attendance, and early cognitive development: The differential effects of school exposure. Sociology of Education, 83(4), 271-276.

Rodriguez, E., Rivera, D. A., Perlroth, D., Becker, E., Wang, N. E., \& Landau, M. (2013). School nurses' role in asthma management, school absenteeism, and cost savings: A demonstration project. Journal of School Health, 83(12), 842850.

Schoeneberger, J. (2012). Longitudinal attendance patterns: Developing high school dropouts. Clearing House, 85(1), 7-11.

Simons, E., Hwang, S., Fitzgerald, E. F., Kielb, C., \& Lin, S. (2010). The impact of school building conditions on student absenteeism in upstate New York. American Journal of Public Health, 100(9), 1679.

Skinner, A. E. (2014). Reducing truancy in Indiana: A balanced approach. Brigham Young University Education \& Law Journal, 2014(1), 151-186.

Strauss, V. (2014). 11 key questions on standardized testing for Congress to answer.
Retrieved from http://www.washingtonpost.com/blogs/answer-sheet/wp/2014/03/09/11-key-questions-on-standardized-testing-for-congress-toanswer

Suhid, A., Aroff, A., \& Kamal, N. (2012). Factors causing student absenteeism according to peers. International Journal of Arts and Commerce, 1(4), 342-350.

Tahir, S. (2011). Factors influencing student's absenteeism in university level teacher attendance effects on student achievement: Research study of Ohio schools. Education, 134(2), 201-204.

The World Bank. (2014). Open knowledge repository. Retrieved from https://openknowledge.worldbank.org/handle/10986/20192

Truancy Reduction Efforts: A best practices review. (2000). Spectrum: Journal of State Government, 73(4), 13-17.

Tyre, A., Feuerborn, L., \& Pierce, J.(2011). School-wide intervention to reduce chronic tardiness at the middle and high school levels. Preventing School Failure, 55(3), 132-135.
U.S. Department of Commerce, U.S. Census Bureau. (2014). Retrieved from http://www.census.gov/prod/2013pubs/p20-571.pdf
U.S. Department of Education, National Center for Education Statistics. (2014). The condition of education, 2014 (NCES 2014-083), status dropout rates. Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=16

Wilkins, J. (2008). School characteristics that influence student attendance: Experiences of students in a school avoidance program. High School Journal, 91(3), 12-18.

Wright, S. B., Matlen, B. J., Baym, C. L., Ferrer, E., \& Bunge, S. A. (2008). Neural correlates of fluid reasoning in children and adults. Frontiers in Human Neuroscience. 3(1), 1-8.

## Vita

John Collins was born in Mountain View, Missouri, in May of 1982. Raised in rural Shannon County, Missouri, on his family's farm, he grew up learning about life in the Ozarks and the traditions passed on from generation to generation. John attended school from kindergarten to grade 12 in Summersville, Missouri, where he graduated with honors and was awarded multiple scholarships to continue his education.

In 2000, John attended Mineral Area College in Park Hill, Missouri, pursuing a degree in computer network administration. In 2002, John graduated with an A.A.S. in computer network administration and then moved to Warrensburg, Missouri, to pursue a bachelor's degree in computer network administration. In January of 2003, John moved back to rural Shannon County and changed his career path to education.

John pursued his bachelor's degree at Missouri State University, graduating with an A.A. in 2004 and a bachelor's degree in 2005. John began his career in education at Mountain View Elementary, where he taught fifth grade for six years. In 2008, John earned a master's degree in curriculum and instruction from William Woods University, followed by an educational specialist degree in educational administration in 2010. In 2012, John transferred from classroom teacher to school superintendent. John plans to pursue to goal to be a licensed pilot for fixed-wing aircraft.

John lives on his family farm in rural Shannon County where his two children are the sixth generation to reside on the farm. He and his family enjoy all the Ozarks has to offer from hunting, fishing, farming, hiking, floating, swimming, ATV riding, and caving, to quiet evenings and bonfires with friends and family.

