Is There a Relationship Between Positive Behavior Supports and Student Achievement?

Todd Edward Boucher
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IS THERE A RELATIONSHIP BETWEEN POSITIVE BEHAVIOR SUPPORTS AND STUDENT ACHIEVEMENT?

by

Todd Edward Boucher

Abstract of a Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

August 2011
ABSTRACT

IS THERE A RELATIONSHIP BETWEEN POSITIVE BEHAVIOR SUPPORTS AND STUDENT ACHIEVEMENT?

by Todd Edward Boucher

August 2011

The purpose of this study was to determine whether a relationship exists between a school’s behavior program and student achievement. This study explored the many facets of school behavior plans from across the state of Mississippi and compared the responses of high school principals to the schools’ U.S. history standardized test scores.

School discipline has become an issue that schools find themselves dealing with on a daily basis. While school discipline issues are not new to the educational arena, the way in which some schools are handling them is changing. Some of the changes are as a result of changes in legislation, while some of the changes have been brought about in response to societal concerns. Response to Intervention (RTI) and Positive Behavior Interventions and Supports (PBIS) are two of the new terminologies which have recently been introduced into the educational world. The concepts are devised around a three-tiered model that not only addresses academic concerns, but is also designed to help improve student behavior while increasing student achievement.

Quantitative data were collected to examine participating principals’ perceptions of his or her school’s behavior program. Additional state test score data were collected from the Mississippi Department of Education and then
compared with the principals’ responses. Data were then analyzed to determine whether or not a relationship existed.

The results of the study illustrated that there was very little difference in student achievement between schools that utilized positive behavior programs and those that did not. However, a correlation was discovered when implementation of such programs was analyzed. The results of the study illustrated the importance of the implementation process as it most significantly is correlated to an increase in student achievement. While there was no significant difference found in many of the areas that were compared, this study yielded some results that may be of interest for administrators considering the use of a positive behavior program.
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by

Todd Edward Boucher

A Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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CHAPTER I
INTRODUCTION

Positive Behavior Interventions and Supports (PBIS) are designed to eliminate behaviors that are deemed inappropriate for the school setting and to replace them with social skills that are acceptable and appropriate. When PBIS is effectively implemented it can decrease the need for aversive or intrusive types of punishment such as detention, corporal punishment, or even suspensions. The goal of PBIS is to bring about changes both systemically and individually. PBIS programs can be used individually, school-wide, or even district-wide and can bring about changes that not only impact behavior, but also target curriculum and social skills. Research has illustrated that proper implementation can bring successful changes to both a wide range of behaviors and students (Sugai, Horner, Dunlap, Hieneman, Lewis, & Nelson, 2000).

This research sought to determine what impact Positive Behavior Interventions and Supports (PBIS), as part of the Response to Intervention (RTI) process, has had on student achievement. Specifically, it honed in on the effects that PBIS had on the eleventh grade U.S. History Test as part of the Mississippi Subject Area Testing Program (MSATP). In addition, it attempted to determine what methods of implementation had the most success and were most appropriate when implemented within schools.

As states and school districts across the nation strive to achieve the goals set forth by No Child Left Behind (NCLB), more attempts have been made to utilize PBIS as a means of helping to achieve these goals. It is important to
understand which of the methods being utilized work and how best to implement these programs. This research project sought to determine the effects that PBIS had on one specific set of standardized test scores. This will help schools determine the best course of action as they work toward higher levels of accountability and rigor.

In 2004, the Individuals with Disabilities Education Act (IDEA 2004) was reauthorized by Congress as a means to ensure that students with disabilities were being protected and not being overlooked (Cheney, Flower, & Templeton, 2008). As part of the reauthorization, new terminology emerged, which is referred to as Response to Intervention (RTI). The ultimate goal of the RTI process was to improve procedures and practices that were in place that were used to identify students of special needs. It created a system in which schools would respond to the needs of special education students and provide them with interventions that would help facilitate their needs (Warren et al., 2006).

Response to Intervention is a multifaceted approach to aid students in a variety of different ways. It was designed in a manner that would allow educators to identify student needs before they become an issue that would impede the learning process of students in need. Through a process in which frequent monitoring and decision making takes place, it allows educators to make instructional decisions that match the needs of students. While the initial goal of RTI was to address students’ academic needs, the RTI process has evolved into a program that addresses both academic and behavioral needs of students. This has led to programs most commonly referred to as Positive Behavior Support.
(PBS) or PBIS. The goal of PBIS programs is very similar to those of the RTI principles that address student needs in the academic arena. Positive Behavior Support helps to focus the needs of students behaviorally much like RTI which seeks to help students academically (Sandomierski, Kincaid, & Algozzine, 2009). While PBIS is technically a part of the RTI process, many school districts have begun to use it as a whole new approach in dealing with student discipline. Not only is it used to address the needs of specific students, but it has evolved into school-wide programs of “noncurricular universal prevention strategies” that seek to create a new environment in which students and staff bring about positive change for both faculty and student behaviors (Bradshaw et al., 2008, p. 462). Schools across the nation are beginning to realize the benefits of implementing a school-wide PBIS system that will address the specific needs of their school. Currently more than 7,500 schools use a system of this nature to combat and minimize the disruptive behaviors that take away instructional time that is needed (Bradshaw et al., 2008). Some school districts have implemented district-wide PBIS programs while others have used them to target specific schools with discipline issues. The main focus of all of those schools is to create an atmosphere more conducive to learning while shifting the attention from those students that are displaying negative behaviors to those students that are displaying positive behavior. While all of them are systematic approaches to supervising student behavior, these types of programs vary from school to school. Even though these programs are noncurricular in nature, they are designed with the hope that they can provide more time for teachers and
administrators to focus on the curriculum and less time on disciplining students (Bradshaw et al., 2008).

As a means of deterring future unacceptable behavior, most schools model discipline programs that are typically punitive in nature that result in a student receiving a detention, a suspension, or in some instances, the use of corporal punishment. The PBIS model on the other hand focuses on positive behaviors as a preventative measure. This idea was molded after an original concept created by a specialist for the mental health field (Clonan et al., 2007). The original concept was to provide universal care to the bottom portion of the triangle as a universal preventative measure. This is much like the case in the three-tiered model of the Response to Intervention process. It is at this level in which it can be deployed school-wide, thus reducing behavioral problems. Many schools do this by displaying rules across the campus which depict the expected behaviors of students, and in some schools assemblies are held to convey these accepted behaviors as a preventative measure.

Implementing the three-tiered model of RTI takes some planning and many of those who have contributed to the PBIS model agree and have identified seven features that must be present for correct implementation. First, expectations must be defined as to what behaviors are appropriate and those that are not. These must be school-wide behaviors that all students are aware of. Second, these behaviors must be taught to all students and be modeled by faculty and staff. Third, there should be some type of reward given to students that exhibit these appropriate behaviors. While rewards are necessary, not all
rewards need to be tangible objects. Simply acknowledging the correct behavior in many instances is beneficial. The fourth factor is that there must be a set of consequences in place that are adhered to for those students who fail to abide by the rules. The fifth feature is that a system for monitoring the inappropriate behaviors must be in place so that future decisions can be made as changes are necessary. Active participation by an administrator is the sixth feature. Finally, having the support of the school district is an imperative seventh factor. Support by the school district should include training on the program, creation of policies for the program, and methods for collecting the appropriate data (Sugai et al., 2000). According to Clonan et al. (2007), schools that have implemented these seven features have indicated that they have reduced their office referrals significantly. In addition to the reduction in office referrals, a substantial change has occurred in both the social climate and academic performance (Clonan et al., 2007).

Some schools reported reductions in office referrals as high as fifty percent in one school year. Additionally, improvements in attendance, academic achievement, and school atmosphere coupled with reduction in dropout rates, referrals to special education, and delinquency in later years can all be attributed to the effective implementation of a PBIS system. A 2005 survey among teachers who had decided to leave the profession attributed one of the leading reasons for their choice was due to student behavioral issues; 44% of teachers, 39% of those surveyed, cited behavior as one of the major reasons for their decision to leave the classroom (Cregor, 2008).
One of the biggest reasons for the push toward creating these positive behavior environments is that of safety. Schools in America are considered one of the most likely places that a student will face an act of aggression (Muscott et al., 2004). Student misconduct can be plotted along a continuum in which minor offenses, such as chewing gum or violations of dress codes fall at one end of the spectrum and the more severe offenses lie at the other. The major offenses may include harassment, assault, bullying, and fighting (Muscott et al., 2004). Highly visible escalations in school violence like the ones in Pearl, Mississippi and Columbine, Colorado have prompted a strong push for safe schools. Using a system in which positive behavior is focused upon reduces the likelihood of reactive, punitive punishment that typically does not yield the desired results of a safe school environment (Muscott et al., 2004). While there is no one fix-all to the current discipline issues that schools face, implementing a PBIS system with fidelity can help to achieve a better learning environment for all stakeholders.

In addition to reducing discipline issues in schools, PBIS programs specifically target those students that have profound needs for the interventions. Research illustrates that there is a correlation between students with Emotional and Behavior Disorders (EBD) and the rates at which they drop out of school. Twenty-four percent of students not classified as special education students drop out of school while those labeled as special education have dropout rates of thirty percent. Both of these rates are relatively low when you compare them to students labeled with Emotional and Behavior Disorders (EBD) as their dropout rate is near one-half, or forty eight percent (Osher et al., 2003). PBIS, as part of
the RTI specifically targets these students with tier-three interventions designed to help these students achieve the goal of graduation. This can be done by creating a “function-based individualized behavior intervention plan,” which is not a reactive program, yet is a proactive approach to meeting the needs of individual students (Eber, 2008, p. 16).

Statement of the Problem

Is there a relationship between positive behavior interventions and student achievement? This study sought to determine whether a correlation could be discovered between positive intervention programs and student achievement. More specifically, it looked at the relationship between a school's behavior program and the impact it had on eleventh grade U.S. History subject area test scores.

Research Questions

While there are many questions that were answered as this research project progressed, this study focused primarily on the following three target questions:

Q¹: What, if any, impact does a school's behavior program have on student achievement? Do students score higher on the MSATP U.S. History test and how significant is the difference between these specific test scores?

Q²: Do the methods in which a behavior program are implemented negatively or positively affect eleventh grade U.S. history subject area test
scores and which methods have the most profound impact on student achievement?

Q3: Do students from schools that claim to follow a prescribed Positive Behavior Interventions and Supports program outperform those students from schools that do not?

Research Hypotheses

Based upon the review of the literature, it is highly probable that those schools that have been engaging in the use of positive behavior interventions have higher scores on the MSATP U.S. History test. Additionally, it is likely that the schools that are using positive behavior programs have fewer student discipline issues, therefore, providing teachers with environments more conducive to teaching and learning. This in turn will be illustrated by the fact these schools will have higher scores on the standardized tests. It is the belief of the researcher that there is a correlation between positive behavior interventions and student achievement.

H1: Students score higher on the Mississippi U.S. History Subject Area Test in schools that engage in Positive Behavior Interventions and Strategies (PBIS) programs.

H2: There is a positive relationship between implementation of PBIS programs and U.S. History Subject Area Test scores.

Statistical (Null) Hypotheses

There is no relationship or correlation between positive behavior interventions and student achievement.
Definition of Terms

The following key terms are found throughout this study. Definitions for each term are provided to help the reader better understand the study and the purpose of the study.

*Emotional and Behavioral Disorders (EBD)* – a sub category of special education students which refers to students identified to have emotional disorders or emotional issues. Some of the more common diagnoses include students with Asperger syndrome, ADHD (Attention Deficit, Hyperactivity Disorder), and autism.

*Goals 2000* – Educational goals established by the U.S Congress in the early 1990s. These goals were established to reform educational standards with the goal of achieving the intended target by 2000. Goals 2000, according to many, established the framework for the legislation which came to be known as No Child Left Behind.

*Implementation* – Is the specific process that is taken when executing or applying a new plan or program into the educational arena.

*Individuals with Disabilities Education Act (IDEA 2004)* – An act of Congress which was designed to ensure that students identified with disabilities were being provided with accommodations necessary to meet their educational needs. It was a means of accountability placed upon schools to ensure disabled children were properly being provided services.

*Individualized Education Plan (IEP)* – An IEP is a specific plan provided to all students with disabilities which ensures that they are receiving the necessary
services required to meet the individual child’s needs. These were established as part of IDEA and must be provided by both federal and state law to students designated as special education students.

**Mississippi Subject Area Test Program (MSATP)** – A series of statewide tests established in 1999 to help meet both state and federal educational accountability measures such as Goals 2000 and No Child Left Behind. It is a series of curriculum tests provided to students from grades two to eight. These tests focus on the three areas of reading, mathematics and language. Additionally, a series of subject area tests are used to check students’ content knowledge in secondary education. These tests include content specific test for the following subject areas: Algebra I, Biology I, English II, and U.S. History from 1877. Students must pass all four of the secondary subject area tests as a means of graduating from high school in the state of Mississippi.

**No Child Left Behind (NCLB)** – This is one of the latest attempts by the federal government to establish a standards-based education reform. This act of Congress was signed into law in 2002 and just as previous federal legislation has attempted to do, this law seeks to establish measurable goals and accountability measures on state educational systems. In order to receive federal education funds, states are required to achieve goals set forth by this legislation.

**Positive Behavior Intervention and Supports (PBIS)** – A process that has been established and often utilized in schools to elicit appropriate and acceptable behaviors from students. It was first established as part of the Three-tier process as a means of handling students with challenging behaviors and seeks to identify
methods in which schools can identify behaviors and correct them through reward rather than punitive measures.

**Progress monitoring** – A series of procedures designed to effectively monitor a student’s progress on a regular basis to gauge rates of improvement, design more effective approaches to aid students and to determine if the methods are appropriate for the student’s developmental process.

**Response to Intervention (RTI)** – A series of methods and interventions that have been established to provide assistance to students early when a student exhibits difficulties in learning. The intent is to identify problems early so that students can be provided early intervention and prevent them from falling further behind in their ability level. This was also designed to help students with learning disabilities as a means to meet the requirements of both IDEA and NCLB.

**Standardized test scores** – A standardized test is a test that is administered in a consistent manner and is also scored in a predetermined fashion. These type of test are already normed and given to a large number of students in a prescribed manner to gauge student achievement.

**Three Tier Process** – This multi-tiered approach is synonymous with Response to Intervention (RTI). This is a process designed to meet students’ needs. The first tier is the classroom instruction that all students receive. The second tier is more strategic in nature and targets specific students to help address their specific needs. The third and final tier is the point at which more
customized interventions are provided to students that demonstrate a need for more intense remediation or assistance.

**Delimitations**

Limitations were imposed on this study as it only focused on a small portion of the student population in one state. The following delimitations were utilized:

- High school students in Mississippi;
- Students who are in the eleventh grade; and
- Students who have taken the U.S. History test as part of the Mississippi Subject Area Test Program (SATP)

**Assumptions**

It is likely that students at schools which have instituted PBIS programs or strategies do score higher on statewide assessments. As appropriate student behaviors are not only expected, but also rewarded, students are more likely to exhibit these behaviors knowing that they will be rewarded for their actions. Consequently, less time is spent on disciplining students and fewer interruptions to instructional time occur. The degree to which these programs affect student achievement may become apparent as this study unfolds. Additionally, it is an assumption of the researcher that the principals of each high school have honestly answered each of the questions with great fidelity.

**Justification**

This research project yielded a variety of useful results which can be analyzed and used by the education community as a whole. Schools are able to
implement programs without “reinventing the wheel.” This saves both time and money for the school as well as the valued instructional time needed to increase student achievement scores. It also shows the benefits and problems associated with implementing such programs.

This research allows schools and districts to make more informed decisions about the implementation of PBIS programs, as well as, provide insight as to what aspects of the various programs are most effective in increasing student achievement. Schools can determine how to best utilize the various aspects of PBIS and be able to make decisions that best fit the needs of their students and the missions of their schools. Additionally, this study illustrated those methods which have been employed by school districts that have been proven to be successful.

Summary

The implementation of PBIS in recent history has been met with mixed results. When implemented properly, according to the literature that will be discussed in detail in chapter two, these programs can have a profound impact on both student and faculty behaviors, as well as student achievement. While PBIS stems from the Response to Intervention programs which were designed to help students, specifically special education students, these programs have evolved into school-wide, district-wide, and even state-wide behavioral programs designed to elicit appropriate behaviors from students allowing for educators to focus their attention on student achievement. However, few studies have targeted one specific segment of a standardized test, and this study attempted to
accomplish this. The Mississippi Subject Area Testing Program was established as a means to test student achievement and has been established as one of the graduation requirements for students in the state. While schools focus on preparing students for this test and work to improve student behavior, little correlation has been made between these two factors. This study is a first step in that direction.
CHAPTER II
LITERATURE REVIEW

Introduction

In 2004, the Individuals with Disabilities Education Act (IDEA 2004) was reauthorized by Congress as a means to ensure that students with disabilities were being protected and not being overlooked (Cheney, Flower, & Templeton, 2008). As part of the reauthorization, new terminology emerged which is referred to as Response to Intervention (RTI). The ultimate goal of the RTI process was to improve procedures and practices that were in place that were used to identify students of special needs. It created a system in which schools would respond to the needs of special education students and provide them with interventions that would help facilitate their needs. Positive Behavior Supports, an applied science, utilizes educational methods to help students model and learn behaviors that are socially accepted as a means of bringing about systematic change to a school’s environment (Warren et al., 2006).

This chapter discusses the findings of recent literature concerning several aspects of the Positive Behavior Interventions and Supports initiative that have been sweeping schools and districts across the nation. It provides a broad analysis of various components of how this process began and how it has evolved into a multi-faceted approach to both student achievement and behavior interventions. The review of literature addresses several topics to include the following: (a) theoretical framework, (b) Response to Intervention (RTI), (c) Differentiated Instruction (DI), (d) accountability, (e) goals and benefits of Positive
Behavior Interventions and Supports (PBIS), (f) school-wide positive behavior support, (g) monitoring progress through office referrals, (h) effects on dropout prevention, (i) implementation of PBIS programs, (j) evaluating school-wide PBIS, (k) impact on high school completion, (l) PBIS as a curriculum, (m) student assessment, and (n) effects on student achievement.

Theoretical Framework

Positive Behavior Interventions and Supports is an applied science which has combined principles from both educational and systems change methods. These are used to decrease problem behaviors while simultaneously enhancing an individual’s quality of life (Weiss & Knoster, 2008). Theoretically speaking, PBIS is based upon three movements, or theories. The three underpinnings of PBIS are applied behavior analysis; the normalization; or inclusion movement; and person-centered values. The first is that of applied behavior analysis. This seeks to determine the motivation for behaviors that are deemed undesirable and then utilizes an approach in which individualized or personalized interventions are used to bring about behavior change in a positive manner. Applied Behavior Analysis, derived from over 35 years of research, is instrumental in the creating of Positive Behavior Supports and has lead to two basic elements of the PBIS frameworks. First, it provided the conceptual framework of behavior change; and secondly, it led to the devising of numerous assessment and interventions strategies (Carr et al., 2002).

The second theory is based upon the normalization, or inclusion movement. The premise behind this movement is that student, whether they
have disabilities or behavior disorders, has the right to be included and the right to be provided the same educational opportunities as individuals who do not have disabilities. Thus, the idea of normalization directly led to the principle of inclusion. The principle of inclusion actually began in the mid 1800s with the women’s rights movement and has evolved over the past one hundred and fifty years to include many groups that had been historically excluded by mainstream society (Carr et al., 2002).

The principle behind the third movement, person-centered values, is that of self-determination, which consequently leads to the creation of interventions that focus on or meet the uniqueness of the individual. Some of the challenges that are focused on are setting individual goals, thinking independently, and gaining respect from others. The assumptions made by person-centered values are that when an individual meets these needs, their individual quality of life will improve and consequently reduce the need for problem behaviors (Carr et al., 2002).

The school-wide Positive Behavior Interventions and Supports is a system in which changes to both students and teachers are brought about by promoting positive behaviors. While it is non-curricular in nature, it can be taught as a curriculum and the goal of such a program is to improve both systems (discipline) and procedures (reinforcement) to create the environment most conducive to learning (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008). The theoretical frameworks for any Positive Behavior Interventions and Supports (PBIS) system call for three basic components: a framework for systems change, steps
available at the building level, and utilizing varying levels of interventions (Bohanon, Flannery, Malloy, & Fenning, 2009). As for the successful adoption of such a theoretical framework, there are four overarching factors that must be considered and adhered to. The first task to be accomplished is the identification of outcomes. All stakeholders, to include students; families; and faculty, must be provided the measurable description of what an effective environment would comprise. Secondly, a support system must be employed that will be completed with fidelity as well as sustainability of interventions. Having the support of the administrative staff would be of the utmost importance. Ensuring that all adopted practices are efficient, effective, and evidence-based would be the third factor. Finally, the fourth factor would be to make sure that all data sources used to evaluate and monitor the effectiveness of the program are identified (Bohanon et al., 2009). Such programs are utilized to teach appropriate behaviors, social skills, and organizational behavior expectations (Bradshaw et al., 2008). As part of RTI, PBS provides the methodology of prevention and a delivery system to bring about behavioral changes (Barnett et al., 2006).

In terms of school-wide PBIS, there are numerous components that must be included in the implementation process: establishment of both district and building level administrative support; the creation of a representative team; a methodology of assessing the program from within the school; a creation of expectations to be utilized school-wide; the creation of a system of analyzing the information as the program progresses; and finally, function based support must
be used and building a capacity to do so must be established (Bohanon et al., 2009).

Response to Intervention

Response to Intervention (RTI) is most aptly described by the research of Fuchs, Mock, Morgan, and Young (2003):

1. Students are provided with “generally effective” instruction by their classroom teacher;
2. Their progress is monitored;
3. Those who do not respond get something else, or something more, from their teacher or someone else;
4. Again, their progress is monitored; and
5. Those who still do not respond either qualify for special education or for special education evaluation. (p.159)

Response to Intervention is a multifaceted approach to aid students in a variety of different ways. It was designed in a manner that would allow educators to identify student needs before they become an issue that would impede the learning process of students in need, through a process in which frequent monitoring and decision making will allow educators to make instructional decisions that match the needs of students. While the initial goal of RTI was to address students’ academic needs, the RTI process has evolved into a program that addresses both academic and behavioral needs of students. This has led to programs most commonly referred to as Positive Behavior Support (PBS) or Positive Behavior Interventions and Supports (PBIS). The goal of PBIS programs
is very similar to those of the RTI principles that address student needs in the academic arena. Positive Behavior Support helps to focus the needs of students behaviorally much like the RTI that seeks to help students academically (Sandomierski, Kincaid, & Algozzine, 2009). While PBIS is technically a part of the RTI process, many school districts have begun to use it as a whole new approach in dealing with student discipline. Not only is it used to address the needs of special students, but it has also evolved into school-wide programs of "non-curricular universal prevention strategies" that seek to create a new environment in which students and staff bring about positive change for both faculty and student behaviors (Bradshaw et al., 2008, p. 462). With the creation of these types of discipline plans, schools began to shift how discipline was being handled. It shifted from discipline plans which were punitive in nature and began to focus on the positive behaviors that students were modeling. Many of these types of programs provide incentives for students to behave appropriately rather than using forms of punishment that had been used for decades in the American public school systems.

Progress monitoring is a major factor in the RTI process. This is the integral part of RTI that involves assessing student progress and tracking it in a systematic method. Progress monitoring is utilized to help practitioners create early interventions and help determine the best courses of action to be followed with individual students (Fuchs & Fuchs, 2006). As part of the Individual Education Plan (IEP) process for special education students, continuous monitoring is necessary to help educators support students as they work at
accessing the general curriculum. Recent studies have found that students were only receiving basic level of access to a general curriculum (Danielson, Doolittle, & Bradley, 2005).

Another term to emerge as a result of RTI is that of Differentiated Instruction (DI). Differentiated Instruction is a term that can be used for both academic and behavioral interventions with the goal being to address the varying degrees of student needs. This is approached from a three-tiered model in which the first tier focuses on all students, the second tier addresses specific needs of groups of students and the third, and final tier, addresses the needs of specifically targeted students (Sandomierski et al., 2009). Each of the successive tiers provides more rigorous and focused needs-based interventions. General classroom instruction, which is provided to all students, is considered Tier I interventions. Tier II interventions are techniques that may not necessarily be used with all students but are designed to target students who are exhibiting difficulties with the regular instruction that is taking place. The third and final tier interventions, Tier III, are designed to target specific students and are tailored to individuals as they display a more profound need for interventions. Just as the three-tiered model is used to address academic needs, schools have developed methods to use the three-tiered model to address behavioral issues as well.

Change that takes place in a school cannot be accomplished without the guidance and strong pursuit of the building principal. The success of the positive behavior supports program and RTI as a whole is entirely dependent upon the amount of time and dedication that the principal is willing to put into the program.
Professional development opportunities alone will not be enough. The principal must take an active role in the entire process and this can be done by demonstrating his or her involvement in all aspects of RTI and PBIS (Sansosti, Noltemeyer, & Goss, 2010). The Problem-Solving Model (PSM) is also directly linked to both RTI and PBIS. Lau et al. (2005) note that:

> It is ongoing administrative support that will ultimately have the greatest impact upon the success of the PSM. This involves budgeting for materials, staff time, professional development, and other important elements of PSM. It also means administrative participation in team meetings, faithful implementation of data-based practices within the building, investment in research based interventions, the provision of staff development and meeting time, and so on. There is no substitute for the investment of time by the principal. (p. 123)

RTI has fundamentally changed the approaches by which educators help both special and regular education students. It is argued that stakeholders do recognize that there are variations between states, and even between districts within states, as to how RTI is implemented. Even with the variations, the process is implicitly the same (Fuchs, Fuchs, & Stecker, 2010).

Differentiated Instruction

Individual Education Plans (IEP) have long been a key component of both special education and gifted program. A tool, or practice, which has been a key component of IEPs, is the idea of Differentiated Instruction. Differentiated instruction has become a major way in helping teachers meet the new
requirements of both standardized assessments and standards-based curricula (Van Garderen & Whittaker, 2006). According to Van Garderen and Whittaker (2006), the underlying principle of differentiated instruction is the ability to plan instruction that will meet the needs of the diverse learning population that students bring to the classroom. However, differentiated instruction may not be the solution as it is very difficult to accomplish in the regular classroom with large diverse populations and research has found that most teachers do not use it (Fuchs, Fuchs, & Stecker, 2010). Teachers often struggle with finding both time and methods to effectively plan differentiated instruction, and this is especially true for teachers with large and diverse student populations (Van Garderen & Whittaker, 2006).

Allor, Mathes, Jones, Champlin, and Cheatham (2010), recently conducted a research project emphasizing individualized reading instruction for students with intellectual disabilities and found that when a program is implemented with fidelity, and it is created in a manner to meet the individual students’ needs, it can be successful. The students were each taught with individualized plans, and it was determined that they all could learn if they were differentiated in a manner that provided immediate feedback in a motivating and positive environment. This differentiation of instruction coupled with the positive behavior supports illustrates the success of such programs when implemented properly (Allor et al., 2010). Collaboration is as essential as implementation. Collaboration must take place among all stakeholders and must be linked to district outcomes and the individual standards of all children (Simpson & Yocom,
Many teachers are however reluctant to utilize differentiated instruction as part of RTI due to the fact that many simply do not feel adequately prepared to take on these new requirements; thus, training is essential (Mokhtari, Porter, & Edwards, 2010). However, various studies have also suggested that professional development that is properly utilized can influence teachers’ classroom practices and will in the end positively impact student achievement (Danielson, Doolittle, & Bradley, 2007).

Accountability

Another term that has recently entered the educational arena as a result of the No Child Left Behind Act (NCLB) is Adequate Yearly Progress (AYP). AYP is a method that is used to measure student achievement, and it is now used as a measure of accountability (Vannest, Temple-Harvey, & Mason, 2009). These measures vary from state to state as NCLB has given the authority to the states to devise measures which will measure AYP; therefore, students in one state will not necessarily have to meet the same goals as a neighboring state (Hunt, Afolayan, Byrd-Blake, Fabunmi, Pryor, & Aboro, 2009). A dilemma that has arisen as a result of these new accountability measures is the fact that many educators have felt pressure to utilize tactics such as drill and practice as a means of ensuring that students are prepared for the newly implemented high-states tests (Paciotti, 2010). Paciotti (2010) further states that as teachers employ such mundane tactics they are also working to reinforce positive behavior as a means to prevent classroom disruptions. When students get bored, they may find other outlets such as misbehavior to relieve the pressures of the
classroom environment. Employing positive behavior tactics is one method that may help achieve an environment conducive to learning.

High-stakes testing, or formative assessment, is now the most powerful tool available to educators to help measure student achievement, as well as a tool to hold teachers accountable for what their students are learning (Dorn, 2010). Consequently, teachers have found themselves in a precarious position as they work to increase academic achievement while also working to decrease behavioral concerns (Vannest et al., 2009). According to Hunt et al. (2009), recent studies illustrate the fact that many of the NCLB models that are used are being implemented by teachers in a fashion that simply teaches to the test, resulting in a narrowing of the overall curriculum. One lesson that can be taken from studies that have examined high-stakes testing is that many of the state initiated accountability systems that are being used have had some detrimental effects on the teaching profession. Teacher commitment and motivation have been profoundly impacted by high-stakes testing. Many educators feel as they have lost a connection with the students due to the new accountability models and mandate being placed upon them (Hunt et al., 2009). However, while there are problems and issues with high-stakes, structured formative assessments, the literature demonstrates that this is necessary when developing the RTI frameworks (Dorn, 2010).

AYP must also be analyzed by each school district and the individual schools. Pisha and Stahl (2005) note that as part of the federal and state guidelines:
All schools must provide achievement data in four separate areas: reading/language arts, mathematics, and either graduation rate (for high schools and districts) or attendance rate (for elementary and middle/junior high schools). Schools that do not meet AYP goals (established by individual states) in each of these three areas may be identified as “needing improvement.” Finally, AYP requires a disaggregation of student achievement data by economic background, race, ethnicity, English proficiency, and disability. The intent of separately assessing the progress of students in these subcategories is to ensure an eventual parity in achievement for students perceived as disadvantaged. (p. 69)

RTI is also conceptually different, in terms of accountability, when analyzed from the elementary school and compared with RTI at a middle or high school perspective. RTI in the elementary school serves the purpose of identifying and avoiding risk of academic failure, and therefore, focuses on RTI for the purpose of introducing more intense treatments as needed. However, at the middle and high school levels, the mission is to reduce and limit already existing academic deficiencies (Fuchs, Fuchs, & Compton, 2010). Fuchs, Fuchs, and Compton (2010) continue by pointing out that at the middle and high school level the goal is to provide interventions that will eventually help decrease a student’s dependence on such interventions.

Goals and Benefits of PBIS

One of the goals of the behavioral three-tiered system is to use the system as a preventative measure rather than a reaction to the discipline issues as
students exhibit them. The first tier is the universal tier by which all students in the school are affected. This is the system that is put into place as a school-wide program designed to elicit appropriate behavior from all students on campus. Additionally, all of the staff members in the school are tasked with helping to supervise and oversee the administration of this tier. This can often be seen present in a school as there are often a few basic rules to which students must adhere. These rules are often prominently displayed around the school as a constant reminder to both the students and the teachers at the school. The second tier becomes a little more specific to the needs of targeted groups of students. These students may or may not be special education students and will include students that may have indicators which may lead them to become problem students. Some of the indicators may include academically deficient, limited parental support, and awkward social histories. These are the students that simply need more attention, but not necessarily to the degree that those on the third tier may need. Universal screeners are often used to identify these students so that strategies can be identified or developed for use with these students. Tier-three students are those that are habitually referred to the office for possibly both academic and behavioral issues. Students on the third tier will receive a more individualized plan that focuses on specific needs and techniques to meet their individual required needs (“Illinois Officials,” 2006). Students who are identified as tier-three behavioral students are often disruptive in more than one teacher’s classroom and often have had a history of behavioral issues that can be traced throughout their academic career.
Schools across the nation are beginning to realize the benefits of implementing a school-wide PBIS system that will address the specific needs of their schools. Currently more than 7,500 schools use a system of this nature to combat and minimize the disruptive behaviors that take away much needed instructional time that is needed (Bradshaw et al., 2008). Some school districts have implemented PBIS programs district-wide while others have used them to target specific schools with discipline issues. PBIS programs can be tailored to the needs of the schools based upon the discipline issues that are more prevalent in the school and or community. While the main focus of all of those schools is to create an atmosphere more conducive to learning while shifting the attention from those students that are acting inappropriately to those students that exude the behaviors that are expected of students in school. These types of programs vary from school to school while all of them are systematic approaches to supervising student behavior. While these programs are non-curricular in nature, they are designed with the hope that they can provide more time for teachers and administrators to focus on the curriculum and less time on disciplining students (Bradshaw et al., 2008). Additionally, many of these programs, while non-curricular in nature, can be taught to students as a specific curriculum set.

School-Wide Positive Behavior and Support

School-wide Positive Behavior Interventions and Supports (SWPBIS) have emerged as a methodology and a systematic way to create a culture within a school. Additionally, it provides supports related to behavioral issues thus
creating an environment that will allow all students the opportunities necessary to be successful both academically and socially. This is not a canned curriculum; rather it is guide that can easily be identified through several universal strategies. SWPBIS is similar to the three tiered system, or triangle, of RTI and each of the three levels of the pyramid has core elements (Office of Special Education Programs [OSEP], 2007).

The first level is often referred to as the “Primary” level and has several core elements. This is the level at which expectations for behavior are defined and taught. Students must be made aware of what is expected of them behaviorally; therefore, established rules need to be presented to the students so that they are well aware of what is expected of them. Another core element of this tier is that consequences for both positive and negative behaviors should be established and placed on a continuum for each of the types of behavior. When students misbehave, they must understand that there are consequences for their actions; conversely, when they behave appropriately they need to know the benefits they will reap. Once behavioral goals are established and presented to the students and they are aware of the recourse of their actions, supervision is the next key element. Supervision is something that must take place continuously and it must also be uniform and carried out in all schools settings. Finally, methods of monitoring the program, collecting the data, and implementing the data must also be planned out in advance. The monitoring component is essential and must be an ongoing process in which adjustments are made to
ensure that the program is as effective as possible to enhance student behavioral expectations (OSEP, 2007).

The second tier is typically referred to as the secondary tier and begins with a system in place that permits early universal screening of all students at the school. It is at this level that specific groups of students are targeted based upon their being identified by the universal screeners. Once the students have been identified as a sub-group of those with at risk behaviors, methods of monitoring their progress must be put into action. Additionally, a variety of systems are also essential components of this tier. Systems that are used should address issues such as increasing the predictability and structure of student behaviors, providing for more feedback from adults, establishing links between students’ behaviors and academics, and a methodology by which communication between the home and the school is increased. Finally, a systematic method of collecting data to be used in the decision-making process is a core element of this tier (OSEP, 2007).

The third and final tier is commonly referred to the tertiary tier, and, just as the previous two tiers, it too has several core elements. It is at this level that a functional behavioral assessment is to be conducted on those students identified to be on this level. The decision making that takes place at this level is also much more team-based and both interventions and assessments are more comprehensive. Supports that are used for the students are more likely to show links between student behavior and academics. This third tier is also much more individualized as the students typically show a significant need for one-on-one interaction with an adult. The interventions must be based upon information
obtained through assessments and should also address five specific issues. The first issue addresses the fact that problem contexts must be at the core of prevention purposes. Secondly, instruction should be based upon both functionally equivalent skills and desired performance skills. Third, a set of strategies must be devised that will ultimately eliminate problem behaviors. Fourth, a system must be developed that will enhance the reward system of rewarding desired behavior. The fifth, and final issue, is the idea that consequences which address safety or negative behaviors must be in place should they be needed. These five issues must be addressed when discussing individualized interventions. This third tier will also develop a set of localized behavior expertise, and again, similarly to the second tier a decision-making method is to be established for data collection and use (OSEP, 2007).

The core elements of all three tiers must be integrated into the overall scheme of the SWPBIS plan. Thus, the entire organizational system must be made a part of the overall goal. Administrators and behavioral specialists must know their roles and should take on leadership roles to ensure that all staff are provided with proper training. Additionally, supports must be established in both policy and from the organization as a whole. Finally, to be considered an effective use of the SWPBIS plan, three areas must be considered. They are implementation, application that is both consistent and active, and a committed use of the core elements of the program (OSEP, 2007).
Monitoring Progress through Office Referrals

Office referrals are one of the most basic methods of monitoring whether a PBIS system has been implemented properly and can be used to determine the effectiveness of such a discipline plan. Office referrals are easy to track and can be used as a simple measure to gauge progress that is made. A school-wide system is one in which students as well as staff work in conjunction with each other and “actively teach and acknowledge expected behavior” (Clonan, McDougal, Clark, & Davison, 2007, p. 19). In this approach, expected behavior is praised and acknowledged as a means to promote what is expected. Those students that do not follow the expected norms are often referred to the office as a means of punishment and a consequence for their unacceptable behavior choice. While this is typically the approach at most schools, the goal is to reduce the number of office referrals, thus, minimizing the time it distracts from instruction as well as from the amount of time that administrators must deal with discipline issues. Tracking office referrals can also help pin-point specific behaviors that can be targeted on a school-wide basis. As these behaviors are identified they can become part of the larger discipline program that the school is attempting to effectively change.

Most schools’ model discipline programs tend to be typically punitive in nature. The end result of these type of discipline plans result with a student receiving a detention, a suspension, or in some instances the use of corporal punishment as a means of deterring future behaviors that have been deemed to be unacceptable. The PBIS model, on the other hand, focuses on positive
behaviors as a preventative measure. Rather than focus on the negative behaviors that students display, the attention is, consequently, focused on the behaviors that are preferred. In doing so, a system of rewards is typically established to identify those students that display the correct behaviors. This idea was molded after an original concept created by a specialist for the mental health field (Clonan et al., 2007). The original concept was to provide universal care to the bottom portion of the triangle as a universal preventative measure. This is much like the case in the three-tiered model of the Response to Intervention process. It is at this level in which it can be deployed school-wide, thus, reducing behavioral problems. Many schools do this by displaying rules across the campus that depict the expected behaviors of students; and in some schools, assemblies are held to convey these accepted behaviors as a preventative measure. While these are typically some of the most useful methods at the first tier, it is believed that they are also the most underutilized form of methods to help students understand what is expected of them (Clonan et al., 2007). The ultimate goal for this positive behavior program is to provide a constant reminder as to what behaviors are appropriate rather than to focus on negative behaviors. It is also the goal of these types of behavior programs that students will learn from positive reinforcement and other students will also begin to display the appropriate behaviors as they see the gains that can be made in doing so.

The second tier would only focus on a small percentage of the school population and would typically encompass those students who did not respond appropriately to the tier-one measures. Many of these students are easily
identified as they are the ones that begin to generate office referrals on a more regular basis. These are the students who are considered to be more at-risk and, therefore, often require more personalized interventions. Tier-two students do not require the extensive interventions that will become more evident with the students on the third level (Clonan et al., 2007). These students are often disruptive to the learning environment but not to the point where it becomes detrimental to the entire school learning process. They are often “class clowns” or enjoy being the focus of attention in the classroom, the cafeteria, or on campus in general.

The third level of the three tiered system would encompass a relatively small percentage of the student population; however, these are the students that often take the most time in terms of office referrals. These are the students that are chronically, or habitually, in the office often with multiple office referrals (Clonan et al., 2007). Many of these students can be classified as emotionally disabled or possibly as having an extreme functional disorder (“Illinois Officials,” 2006). Students that encompass the third tier often act out as a means of dealing or coping with issues not necessarily school related but have had a profound impact on their ability to focus on the task at hand.

Effects on Dropout Prevention

While many schools across the nation are using PBIS program as a means to increase student achievement and decrease student discipline issues, one state in particular has found that programs of these nature can also aid the prevention of high school dropouts. The state of New Hampshire has
implemented a dropout prevention project at two schools which had exhibited higher than average dropout rates. This project included two components. These components both use of tertiary interventions and a secondary transition model that has become recognized across the nation and known as RENEW (Rehabilitation for Empowerment, Natural Supports, Education and Work) (Bohanon, Flannery, Malloy, & Fenning, 2009):

The implementation of PBS in one high school was associated with reduced annual dropout rate from 17% (2000-2001) to less than 3% in 2005-2006, and office discipline referrals were reduced by more than 60%. Additionally, fifty-one students received intensive, one-on-one school-to-career management services, experiencing significant functional improvements as measured by the Child and Adolescent Functional Assessment Scale (CAFAS) (Wells, Malloy, & Cormier, 2006). It is hoped that students who exhibit fewer problem behaviors, and are exposed more with intensive transition services, will be more likely to complete high school and have better postsecondary outcomes. (p. 36)

Supports are a necessary component of the PBIS program and merely implementing one will not provide the desired results. The intensity of intensive supports coupled with both frequency and availability also are related to achieving desired results of a PBIS program (Bohanon et al., 2009).

Implementation of PBIS Programs

Schools across the nation have begun the process of implementing PBIS programs but not as a reactive approach to student misbehavior and
underachievement. Rather, they have started this proactive, preventative approach with three basic steps. The first step is that teacher expectations must be clarified as teachers must first understand what it is that the program is attempting to accomplish. Then, these expectations must be taught to the entire student body. Finally, those students that meet the publicized expectations must have those behaviors reinforced in a positive manner. The ultimate goal of such a program is to simply prevent problematic behaviors and to accomplish this as often as possible (Bohanon et al., 2009).

According to Bohanon et al. (2009), the complexities and differences found in high schools can make implementing PBIS program much more difficult:

High schools are generally larger than their elementary and middle school counterparts. The typical size (numbers of teachers and students), and organizational structure (e.g., departments, multiple administrators) increases the complexity of developing school-wide systems of PBS.

Communicating information about initiatives with over one hundred staff members and faculty requires a coordination of communication. (p. 33)

Additionally, complexities involved with organization of high schools only exacerbate the problem. High schools are generally larger in nature with content area departmentalization. Additionally, facilities tend to be larger and more complex. Other issues to consider are the facts that classes are longer, and there is more student movement from one location to another. These issues make it more difficult for teachers to get to know students on a more personal basis (Bohanon et al., 2009). Classroom structures also vary from teacher to teacher.
Therefore, classroom management also varies. Boulden (2010) states that research has indicated that individual classroom management styles and teachers’ actions have had larger impacts on student behavior in comparison to school-wide policies. These factors combined make the implementation of a school-wide behavior program somewhat difficult.

According to a study completed by Scott, Alter, Rosenberg, and Borgmeier (2010), 80% of students respond positively to the first tier of interventions while the other 20% require secondary and tertiary interventions. One of the key components to ensuring that the secondary and tertiary interventions are effective is to ensure that the program has a solid foundation. Another key strength would be a program with a lot of flexibility that includes a wide-array of interventions that are tailored to the specific needs of the students (Scott et al., 2010).

Implementing the three-tiered model of RTI takes some planning, and many of those who have contributed to the PBIS model agree and have identified seven features that must be present for correct implementation. First, expectations must be defined as to what behaviors are appropriate and those that are not. These must be school-wide behaviors that all students are aware of. Often, these behaviors are displayed on posters as constant reminders to students and faculty. Second, these behaviors must be taught to all students and should be modeled by faculty and staff. Many schools teach these behaviors as a curriculum, and they are often incorporated into daily lessons. Third, rewards given to students that exhibit these appropriate behaviors are essential. While
rewards are necessary, not all rewards need to be tangible objects. Simply acknowledging the correct behavior in many instances is beneficial. Simple acknowledgment from a teacher can often be met with other students displaying the same behaviors with the expectation that they too will be praised for their actions. The fourth factor is that there must be a set of consequences in place that are adhered to for those students who fail to abide by the rules. While there must be some form of consequences established, the overall focus of this behavior plan is not on the negative consequences, but instead focus is on the positive behaviors and rewards. The fifth feature is that a system for monitoring the inappropriate behaviors must be in place so that future decisions can be made as changes are necessary. This is often accomplished by recording or charting discipline referrals or tardies for example. This can provide data which will help guide the decision making process of the program. Active participation by an administrator is the sixth feature. To encourage the entire student body and faculty invest into the behavior plan, administration support and participation is vital. Administrative decisions must be based upon complete understanding of the program; therefore, participation of administration is a key element to a successful program. Finally, having the support of the school district is an imperative seventh factor. Support by the school district should include training, creation of policies for the program, and methods for collecting the appropriate data (Sugai, Sprague, Horner, & Walker, 2000). According to Clonan et al., (2007), schools that have implemented these seven features have indicated that they have reduced their office referrals significantly. In addition to the reduction in
office referrals, a substantial change has occurred in both the social climate and academic performance (Clonan et al., 2007). The ultimate goal of a well-implemented PBIS program is to bring about systematic, cultural change and a more positive climate that reinforces appropriate behaviors.

Some schools reported reductions in office referrals as high as fifty percent in one school year. Additionally, improvements in attendance, academic achievement, and school atmosphere coupled with reduction in dropout rates, referrals to special education, and delinquency in later years can all be attributed to the effective implementation of a PBIS system. A 2005 survey of teachers who had decided to leave the profession attributed one of the leading reasons for their choice was due to student behavioral issues; 44% of teachers, and 39% of those surveyed, cited behavior as one of the major reasons for their decision to leave the classroom (Cregor, 2008). While accountability has become a source of contention among educators, much of the policy that impacts teachers is far removed from their classrooms. While, on the other hand, discipline is something that teachers can effectively influence daily in both their classrooms and the school as a whole.

One issue that schools and districts must contend with when the decision to implement a PBIS program is the sustainability of such a program. While implementation is a critical element in getting the program started, sustainability is equally important. Decision must be made as to who will oversee the infrastructure and maintain the various elements of such an undertaking (George & Kincaid, 2008).
Evaluating School-Wide PBIS

Over the years, a variety of tools have been developed to help schools that have implemented a PBIS program to evaluate their successes. While decreases in discipline and increases in student achievement are gauges used to determine the successful impacts such programs have on students, tools to measure the application of the process have also been developed. The most widely used tool is the School-Wide Evaluation Tool (SET). Ervin, Schaughency, Matthews, Goodman, and McGlinchey, (2007) provide the following components of the SET:

SWPBS dimensions assessed by the SET include Expectations Defined, Expectations Taught, Rewards for Following Expectations, Responding to Rule Violations, Monitoring and Decision Making, Administrator Support, District Support, and an overall total score. Data are collected via direct observation, interviews with administrators, teachers, staff members, and students, and review of permanent products (e.g., written school policies, training curricula, meeting notes). (p. 9)

The aforementioned requirements of the SET once again illustrate the importance of administrative support in addition to fiscal support (Sansosti et al., 2010). Lack of support for this program can often be found when the SET tool data is evaluated. Among many findings is the fact that teachers often resist changes brought upon by the PBIS program due to issues such as lack of personal ownership, lack of administrative support, and most importantly the perception that such a program can bring about increased work and
responsibilities (Lau et al., 2006). Another issue concerning the SET is the fact that it is time intensive and also requires on-site implementation. This often requires up to eight hours of training and will often yield false results due to the fact that the SET allows schools to score higher than eighty percent even if they do not have many of the critical factors necessary to truly have a school-wide PBS system in place (Cohen et al., 2007).

Impact on High School Completion

Issues such as tardiness, attendance, profanity, defiance, disrespect and the like are often lumped into one simple category known as behavior problems. These types of issues are often linked to a student’s probability of completing high school or simply dropping out (Bohanon et al., 2009). The key component that schools must be able to do at this point is to be able to address issues such as tardies, absences, and other behavioral issues that can lead to further dropouts and call for more prevention methods to be implemented. There is little research available to illustrate the fact that the school environment plays a role in preventing dropouts and absenteeism. However, what literature that is available does indicate this to be the case (Bohanon et al., 2009). Some findings have found that a student’s belief that he or she belongs to a school are fostered by an environment that is supportive. This can impact how much a student engages and achieves while in school. A positive behavior program can create this type of environment while, conversely, an environment of isolation can hinder the learning process. Learning is complex and must take into account the interactions that take place as well as any perceptions that may occur as a result.
of these interactions. This is paramount to successful student achievement and preventing students who are having academic and behavioral issues from getting lost in the shuffle (Walker & Greene, 2009).

A key ingredient to a positive behavior support system is to ensure that wide arrays of supports, which can be placed upon a continuum, are utilized. For many students, when they get to high school they have exhausted many of the typical interventions and find themselves in a position in which dropping out is one of the last few options available to them. In addition to the frustration that the student feels, his or her families and teachers are also equally frustrated. This frustration, while not necessary from a lack of caring, can decrease morale and produce a climate of ill proportions. Bohanon et al. (2009) eloquently state that:

As the chasm between expected academic, social, and emotion expectations and the student’s abilities widens, it appears that levels of frustration can increase. It is our belief that by embedding preventative strategies within the high school setting, educators can bridge the gap between risk factors and improved school completion rates. (p. 42)

By increasing the knowledge base of teachers with intervention strategies aimed to both improve student behavior and keep them in school, teachers will have the ability to establish supportive and stable environments conducive to student learning. This will also create the multi-leveled intervention and prevention supports needed in the high school setting (Moore-Partin, Robertson, Maggin, Oliver, & Wehby, 2010).
PBIS as a Curriculum

Positive Behavioral Interventions and Supports (PBIS) is much like a school’s curriculum. It must be managed and planned well in advance with clear goals and expectations set forth in advance. Some schools utilize lesson plans much like they do for their classroom curriculum. These lesson plans must have clear objectives and activities that can be replicated from classroom to classroom and allow teachers time to model the expected behaviors (Cregor, 2008).

Another key component is the data that is generated by the program itself. Utilization of the data that is created, such as office referrals or student achievement scores, should be used at regular intervals when evaluating the effectiveness of the behavior strategy that is in place.

Taking the time to change the entire culture of a school is a task that will take a deep commitment by all stakeholders involved. Therefore, it is imperative that not only faculty and students become involved in the planning process, but it also is imperative that parents and parent-teacher organizations become integral parts of the implementation process. A successful program cannot be implemented without the support of key district administration and at least eighty percent of the teachers in the school (Cregor, 2008). Along with the key support, a school-wide evaluation tool (SET) should be utilized to determine which components of the PBIS system are being utilized properly and whether those being utilized are working (Bradshaw et al., 2008). These evaluations should be conducted at regularly scheduled intervals as a means of monitoring progress. This would help determine a more accurate decision as to which components
needed to be worked on or implemented in a different manner (Bradshaw et al., 2008). While the reauthorization of IDEA has officially mandated the use of behavior intervention plans, no specific forms have been provided; thus, a wide array of different approaches has emerged (Killu, Weber, Derby, & Barretto, 2006). Schools have developed a variety of different tools to help measure their success and progress. Initially, these types of measures and supports were lacking.

Regional differences have also added to the climate of uncertainty as to the best approach. For example, areas such as disciplinary procedures (e.g., corporal punishment) and how to manage specific behavioral issues have created a sense of chaos in the academic world in terms of PBIS implementation. While each state’s respective department of education has been tasked with monitoring these programs a real lack of direction has been evident. Many schools have simply implemented PBIS programs as a means of addressing severe behavior issues (Killu et al., 2006). Some schools have implemented a mere portion of these programs to target specific behaviors while other schools have implemented the process fully. The needs of each specific school have drastically altered the size and scope of their individual PBIS programs.

One of the biggest reasons for the push toward creating these positive behavior environments is that of safety. Schools in America are considered one of the most likely places that a student will face an act of aggression (Muscott et al., 2004). Student misconduct can be plotted along a continuum in which minor offenses, such as chewing gum or violations of dress codes falling at one end of
the spectrum and the more severe offenses lie at the other. The major offenses may include harassment, assault, bullying, and fighting (Muscott et al., 2004). Many states have also begun to pass profound pieces of legislation to help deal with issues such as harassment and bullying. Highly visible escalations in school violence like the ones in Pearl, Mississippi and Columbine, Colorado have prompted a strong push for safe schools. Using a system in which positive behavior is focused upon reduces the likelihood of reactive, punitive punishment, which typically does not yield the desired results of a safe school environment (Muscott et al., 2004). While there is no one fix-all to the current discipline issues that schools face, implementing a PBIS system with fidelity will help to achieve a better learning environment for all stakeholders.

Another effective way to implement a school-wide PBIS is to begin with the implementation of the program on a class-wide level. While many schools have done this in dealing with students with emotional or behavior disorders, this is an approach that can get schools moving in the right direction toward a school-wide program. Some researchers refer to the implementation of a PBIS as a treatment. Analyzing the degree to which it is carried out is referred to as “treatment integrity” (Jeffrey, McCurdy, Ewing, & Polis, 2009, p. 538). This tends to be one of the most critical aspects when analyzing changes in behavior (Jeffrey et al., 2009). If the PBIS system is not carried out with integrity, then it is less likely to yield the desired results as set forth in the implementation plan. Due to this reason, it is vitally important that feedback is collected regularly to validate the integrity of the program as it was intended to function. Failure to follow
through on this level can yield results that are less than those which were the initial intention of the program.

Implementation and integrity monitoring are important components of a successful school-wide PBIS program. Proof to this fact can be found in the programs such as the one that was implemented in Illinois in the late nineties. The Illinois PBIS initiative started with a systematic training program and has evolved into a program that encompasses over three hundred and ninety-four schools (Muscott et al., 2004). Illinois is only one of many states that have implemented successful state-wide programs. Other states that have had similar success include New York, Arizona, Alabama, Colorado, New Hampshire, Hawaii, Missouri, and Maryland. It is the results of the programs from these states that are adding to the literature of what is successful and what methods have proven to be more advantageous (Muscott et al., 2004). While many states have been striving to create programs to help facilitate behavioral issues and many of them have moved in the right direction, there are some instances in which states’ results have been less than impressive. New Hampshire is a state that exemplifies this dilemma. One study conducted on New Hampshire’s implementation process found that while success was achieved in fifty-four percent of a cohort group of schools, none of the high schools in the cohort group successfully met the standards set forth in the study (Muscott et al., 2004). While the overall success rate was not what the New Hampshire Department of Education had hoped for, they were cautiously optimistic as some areas did show successful implementation. This study illustrates the fact that there is no
simple solution as schools work to implement PBIS programs and bring about school-wide changes in behavior and student achievement.

In addition to reducing discipline issues in schools, PBIS programs specifically target those students that have profound needs for the interventions. Research illustrates that there is a correlation between students with Emotional and Behavior Disorders (EBD) and the rates at which they drop out of school. Twenty-four percent of students not classified as special education students drop out of school while those labeled as special education have dropout rates of 30%. Both of these rates are relatively low when you compare them to students labeled Emotional and Behavior Disorders (EBD) as their dropout rate is near one-half, or 48% (Osher, Morrison, & Bailey, 2003). PBIS, as part of the RTI specifically targets these students with tier-three interventions designed to help these students achieve the goal of graduation. This can be done by creating a “function-based individualized behavior intervention plan,” which is not a reactive program, yet is a proactive approach to meeting the needs of individual students (Eber, Breen, Rose, Unizycki, & London, 2008, p. 16).

Wraparound is a tool rather than a process in which relationships can be built for students who have been identified as having emotional or behavior disorders (EBD). This tool is useful to help not only the students but also can help teachers and families of these students as well. Additionally, the use of wraparound ensures that appropriate interventions and supports are utilized. This will lead to improved behavior as it promotes positive proactive behavior among all students (Eber, Sugai, Smith, & Scott, 2002).
Finding ways to address students with profound behavioral issues is paramount to maintaining an environment in a school that is conducive to learning. A recent study conducted by the U.S. Department of Education in 2000 illustrates this with the fact that while only one to five percent of student populations are comprised of students classified as having a severe emotional or behavior problem, they account for more than fifty percent of both administrators and teachers time (Cheney, Flower, & Templeton, 2008). A consequence of these statistics is that instructional time is misspent and many educators leave the profession due to these types of issues (Cheney et al., 2008). According to Cheney et al., (2008) students with Emotional Behavior Disorders are the most underserved and underidentified disability group. Proper implementation of both PBIS and RTI can help facilitate better identification procedures and help to address the needs of these students. To help fix this problem, both PBIS and RTI can be used as early identifiers that early interventions will be able to indicate (Cheney et al., 2008).

RTI provides opportunities for early identification of problem students and can be used in such a manner as to prevent the need for further interventions as stipulated by so many special education regulations. The “wait and see” or the “wait and fail” models that have been employed by many educators over the past few decades have not provided the early identifiers necessary as RTI has (Cheney et al., 2008, p. 109). RTI that is implemented in conjunction with PBIS can help to alleviate the over-identification of special education students as well as provide early interventional opportunities for those students that may be
heading in that direction. Additionally, RTI provides a system of classifying students that have special needs without labeling them inappropriately (Barnett et al., 2006).

One problem that has been encountered by both the RTI and the Positive Behavioral Interventions and Supports (PBIS) is the fact that it can become time consuming and cumbersome. Since so much of the process relies upon accurate collection of data as a means to aid in the decision-making process, it is imperative that an accurate system is utilized. One way that schools are doing this is by employing the use of database software designed to specifically support the RTI frameworks (Demski, 2009). As software has become more in line with the goals of RTI and PBIS, it has become easier for school districts to analyze student data and provide interventions early. Software used by teachers has also become content specific which assists classroom teachers as they determine their Interventions and Supports as well (Demski, 2009).

One study in particular, conducted in Maryland, sought to determine whether there was a significant difference when schools were properly trained in implementing a PBIS program as part of the RTI (Bradshaw et al., 2008). A school-wide evaluation tool was devised and implemented in both schools that received the proper implementation training and schools that did not receive proper training. This 5-year study sought to determine whether proper implementation of a PBIS program had a significant impact on the outcomes. Training was provided to some schools while others agreed not to implement a PBIS program for the duration of the study. A Multivariate Analysis of Variance
(MANOVA) was conducted initially to determine a baseline between all the schools participating in the study. It was determined that no significant differences existed in the baseline among all schools, both those receiving training and those that would not (F(9,19) = 1.022, p=.46) (Bradshaw et al., 2008).

The results of this study were collected during the 5-year study, and data was analyzed using repeated measures analysis. This analysis revealed a significant difference between schools that were trained properly and those that were not. Additionally, the schools that were trained properly outperformed those schools that were not in all but one of the subscale areas that was used during the study (Bradshaw et al., 2008). The subscale area in which there was not much difference was the schools “system for responding to behavior violations” as both the trained and non-trained schools showed progress (Bradshaw et al., 2008, p. 3). Ultimately the study proved that schools that were provided with proper training showed a greater success rate in their PBIS program while schools that were not trained showed improvement in some areas but did not have the success as those properly trained (Bradshaw et al., 2008).

The researchers made the following suggestions for those interested in implementing a PBIS program: (a) Use a school-wide evaluation tool and conduct a baseline test to determine where the school is starting; (b) Conduct regularly scheduled school-wide evaluations to collect data to determine what is working and what is not; and (c) Invest a significant amount of time up front with teachers as they are trained on strategies and behavior expectations. This also
includes planning lessons for the students with the suggestion that frequent
review of the lessons take place in the initial implementation stages of the PBIS
program (Bradshaw et al., 2008). Not only does the study make suggestions for
how to implement a program, but it also provided rationale for creating a system
that would enable the program to sustain itself over a period of time. The findings
of this study provide a good baseline for a school to begin the implementation
process of a PBIS system.

While there is not a cure-all for what ails discipline issues in schools today,
there are proven methods available to educators that can be utilized to improve
upon current conditions. PBIS and RTI are merely tools at the disposal of
educators. Effective use of such tools can bring about systematic change to a
system that has become antiquated and at times rather dysfunctional. As
education in America evolves, it is the role of educators and administrators to find
tools to help their students become successful. Positive behavior programs are
another tool in the toolbox designed to help achieve this goal.

Student Assessment

Assessing student work and achievement can take many forms and can
be done in a variety of methods. Traditionally, student assessment relied on
simple rote memorization and recall of knowledge. Students with disabilities or
behavioral disorders typically underperformed in these types of assessments. As
such, authentic assessment evolved out of the need for more realistic and
educational outcome measures (Villa, Thousand, Nevin, & Liston, 2005).
Authentic assessment takes place when students demonstrate their
understanding and skills, and when it is done so in a manner that is not standardized as most achievement tests are designed. Student assessments are also often either formative or summative. Formative assessments often take place during student work to help structure the lessons in a manner that will help the students. On the other hand, summative assessments are given to students at the end of a unit or specific time frame to gauge what they actually learned. The Mississippi Subject Area Testing Program is one such example of a summative, standardized test. While standardized tests are often used to analyze student understanding, other forms of authentic assessment that are often used includes the portfolio assessment. This type of assessment allows the student to also set individual goals to help guide their learning experience (Villa et al., 2005).

An additional type of assessment is utilized when a school uses the PBS system. This is known as the functional behavior assessment (FBA) and this type of assessment tool is utilized to help determine what interventions and supports would be most appropriate to lead to the desired outcomes (Weiss & Knoster, 2008). The FBA can be utilized to help address issues mandated by the Individuals with Disabilities Act (IDEA) as it requires that educators address behaviors that interfere with student learning or block the learning environment. Research shows that functional assessments are effective tools to utilize in dealing with undesirable behaviors (Zuna & McDougall, 2004).

With any type of assessment, whether it is the FBA, authentic, formative, or even summative, there are four key elements/questions that need to be
addressed. Scott, Alter, Rosenberg, and Borgmeier (2010) sum these questions up concisely in the illustration seen following as Figure 3.1. The four questions to be addressed are prediction, intervention, consistency, and assessment. This is a continuous cycle in which modifications to a student learning, whether it be academic or behavioral in nature, must be ongoing. The assessment which takes place in step four creates output data which can then be used to evaluate the intervention for effectiveness, identify those students that are not responding to the intervention, and will then provide more data that can help determine the effectiveness of the next cycle as the process is continuous (Scott et al., 2010).

![Effectiveness Cycle](image)

*Figure 3.1. Effectiveness Cycle.*

While many assessments could be used in this study, traditional assessments such as the U.S. History Mississippi Subject Area Test, which is a standardized test, may be the most appropriate. Students are gauged on
achievement by state standards set forth by NCLB and standardized tests are typically what are used to accomplish this. Authentic assessment is best described by Wiggins (1993) as:

Engaging and worthy problems or questions of importance, in which students must use knowledge to fashion performances effectively and creatively. The tasks are either replicas of or analogous to the kinds of problems faced by adult citizens and consumers or professionals in the field. (p. 229)

While authentic assessment may be geared towards testing a student’s readiness for real world applications, standardized summative assessments like the state history test would be more appropriate for this study. While there are variables will all types of assessments, students results on assessments are dependent on several factors. Teacher instructional strategies, test-taking skills, and student motivation all have impacts on how students perform on assessments (Lassen et al., 2006).

Effects on Student Achievement

The most effective method to determine whether positive behavior programs impacts student achievement is to measure this by analyzing how well students did on standardized achievement tests. While this is not the only factor to analyze, and it must also take into account the multifaceted and complex factors that can account for how a student scores on such a test, there is research that suggests that one of the most significant factors may indeed be
problem behaviors (Lassen, Steele, & Sailor, 2006). As noted by Lassen et al. 2006:

Because disruptive behavior typically results in lost instructional time and, thus, compromised learning, interventions that recover and maximize instructional time by keeping students in class should produce improvements in academic areas. Horner, Sugai, Todd, and Lewis-Palmer (2005) report on preliminary descriptive data that suggest a relationship between school-wide PBS and changes in academic performance. (p. 703)

Warren et al. (2006) cite that while most studies have focused on issues related to behavior, more time and effort should be devoted to studying the impacts that PBIS programs have on how these improvements impact academic outcomes. It is their belief that:

It is reasonable to expect that decreased behavior problems will correspond with increased academic achievement; with fewer students losing instruction time due to office referrals and suspensions, and with less time being sacrificed in responding to behavioral issues, opportunities for instruction and learning should be increased. (p. 196)

While there are many factors that can be attributed to an increase in student achievement such as test-taking skills, instructional strategies, and student motivation, a change in student behaviors can and will significantly impact student achievement over a period of time (Lassen et al., 2006). Additionally, the teaching and learning processes are often disrupted by problem
behaviors and effective classroom management and school-wide behavior programs provide students with an environment that is both effective and safe for learning (Sugai & Horner, 2006). Over reliance on the usage of correcting problematic behaviors in a punitive fashion often results in an escalation of these types of problem behaviors. Students that disrupt the academic setting are often prone to repeat these behaviors when confronted in a punitive manner and zero tolerance discipline practices have also created opportunities in which students are often missing valuable instructional time. These students often fall behind and have difficulties when it comes to taking standardized tests. Thus, the negative behaviors have a direct effect on student achievement (Morrissey, Bohanon, & Fenning, 2010).

Summary

In essence, the process of implementing and changing a school culture from the ground up is not an easy task. It will take time, training, money, effort, and dedication by all those who are involved in the process (Cregor, 2008). The implementation process must be done with both fidelity and due diligence, and it must adhere to the basic components of a PBIS system in order to properly achieve the goals it is established for. While the process stems from the Response to Intervention model, this school-wide plan has the potential to bring about changes that can create a better social climate for the students, increase corrective behavior in a non-punitive manner, and help foster an environment targeted to increase student achievement. IDEA 2004 has mandated that students with special needs must be exposed to and have access to general
education curriculum in the least restrictive environment. Many teachers are finding themselves dealing with these students on a daily basis. Programs specifically designed for these students are becoming more commonplace (Morrissey et al., 2010). Additionally, as pointed out by Morrissey et al. (2010):

Teaching and acknowledging appropriate behaviors on a prevention-oriented basis, rather than reacting through suspension once a problem occurs, may be the first step in turning the tide toward safer schools designed for keeping students in school and experiencing success. (p. 27)

Research shows that the wrong approach has been taken by many schools over the past few decades. Zero-tolerance policies that do not allow for variation and result in suspensions or even expulsions have not improved student behavior, nor have they made schools safer environments (Muscott et al., 2004). Rather, addressing students’ emotional needs based upon the three tiered approaches has been more successful. Students that reach the tertiary level need more individualized interventions to help them achieve success. The three-tiered approach of both RTI and PBIS are tools that can help achieve this. Another tool available is the wraparound approach that can also build deliberate and constructive relationships for all stakeholders in our schools (Eber et al., 2008). Finally, school-wide PBS, coupled with the multitude of tools described throughout this review of literature may effectively bring about change for students both behaviorally and academically. Increasing time spent in the classroom and decreasing time spent in the office are two of the premises pushing for more PBS programs in schools (Lassen et al., 2006). How schools
implement these programs and to what degree will show varying degrees of success as implementation is one of the most critical components (George et al., 2007).
CHAPTER III
METHODOLOGY

Overview

This study sought to determine whether there are any relationships between school behavior programs and student results on the U.S. History state test which is part of the Mississippi Subject Area Testing Program (MSATP). Specifically, it focused on those schools which claim to be utilizing a positive behavior interventions and strategies approach to reinforcing acceptable student behavior as compared to those schools which do not employ such tactics. While the study is correlational for the most part, it also took a causal-comparative approach to determine which methods were most advantageous to student achievement.

Research Design

This study took place by analyzing data from both questionnaires submitted by building level principals and state archival data. Variables examined included schools that are appropriately utilizing the PBIS system, those that are attempting to implement a PBIS system, and those that have not used PBIS programs. Based upon current research, this study compared methods of implementation, with those methods that have been proven, to determine whether there are any correlations. While the data that was collected was from building level administrators and based upon their perceptions of the effectiveness of their individual programs, a careful analysis was made between schools that have proven research based track records. School achievement
scores (U.S. History state test scores) were also collected and compared with responses from the questionnaires. Additionally, a questionnaire was administered to principals to determine the various methodologies that schools have used to implement PBIS programs to determine which programs and implementation processes have been most successful.

Careful creation of the instrument that was utilized in this research also led to analysis of data which may determine whether PBIS programs have an impact on discipline in addition to student achievement. Careful collection of the data was followed by analysis through the use of the computer software known as SPSS.

The dependent variable for this study is the Mississippi U.S. history test scores, specifically, the mean U.S. history test score for each high school involved in the study. The independent variables used in this study included implementation of the school behavior plan, and whether positive behavior interventions and supports were used.

Participants

Mississippi has approximately 249 high schools, of which 102 responded to the survey for this study. High school principals from each of these schools were asked to participate in the study by completing a questionnaire aimed at determining the type of discipline plan that is utilized in their respective schools. Test data used in this study is archival and was collected from the Mississippi Department of Education website (http://orsap.mde.k12.ms.us/MAARS/index.jsp). No students were directly
involved in the collection of data although mean student test scores were made a part of the study; furthermore, no test scores or data used in this study can be linked to individual students. Additionally, pseudonyms are used when referring to specific schools and no schools or principals have been identified in the study.

The instrument used in this study was created by the researcher and is based upon research which can be found in the review of literature. The instrument was pilot tested immediately after approval from the IRB. The questionnaire is divided into multiple sections and designed to elicit responses to a particular segment of a positive behavior intervention and strategies program. These particular areas include the overall school discipline plan, implementation, critical elements of PBIS, and positive reinforcement. Additionally, state test data was collected via the use of the Mississippi Department of Education website. The pilot study included a sampling of administrators in positions to be able to answer the questions provided on the instrument. Theoretically, the questions were designed in a manner that allowed the researcher to determine if the school is using a true positive behavior interventions and strategies program or if the school is using a program that has not been fully implemented in an appropriate manner.

Procedures

After permission was received from The University of Southern Mississippi’s Internal Review Board (IRB) (Appendix D), the researcher collected data in three ways. One set of data is archival data from the Mississippi Department of Education which consisted of U.S. history SATP test scores,
number of students tested, and school demographics. The second set of data collected was through the use of an instrument that was provided to all high school principals in the state. This was done using two methods. The first method was administered through the use of an online survey, and the second method was through the mailing of surveys to every high school principal in the state. Once the data was collected from the various sources, an analysis was conducted.

Data collected for this study was from both participating schools and data which are published by the Mississippi Department of Education. The questionnaire was designed in a manner that allowed for the collection of both quantitative and qualitative responses that resulted in a mixed methods study. The questionnaire (Appendix A) was initially conducted electronically by providing the principal of the school a link via an e-mail. In addition, the researcher provided a written letter (Appendix B), as an attachment to the e-mail (Appendix C), informing the principals of the study and to provide them with some background information.

This study was conducted with all high schools in the state of Mississippi that administered the U.S. history state test. Surveys were sent to two hundred and forty nine schools of which one hundred and two schools responded. This was a response rate of just above forty percent.

The research project took place immediately following IRB approval. It was the goal of the researcher that data collection was to begin in the fall of 2010 and conclude the following spring. However, data collection was delayed and
actually began in the early spring of 2011 and took approximately two and one half months to complete. The research took place in the following sequence. First, the researcher sent out an e-mail with appropriate attachments. This was followed by a letter and survey via U.S. mail to each of the schools that were being asked to participate in the study. The letter and e-mail detailed the purpose and intent of the study. A follow-up e-mail then followed with directions and a link to the online questionnaire. At this point, principals were able to begin taking the survey. Approximately two weeks after the initial survey was introduced to the principals, a follow-up reminder was sent out asking those that had not yet participated to please take time to complete the survey and thanking those that had already completed the survey. The follow-up survey also provided a date at which responses would no longer be utilized for the purposes of this study. The data collected at this point was analyzed for completeness and additional archival data was collected and matched to the schools that had responded. Once all of the data was collected, the information was combined into one Excel document to prepare it for analysis using the chosen statistical package (SPSS). At the completion of the research and analysis, a detailed report was provided to each of the schools that had participated in the study and had requested a complete report.

This study is an incomplete picture of what is happening at all high schools throughout the state. One limitation is the fact that this study is limited only to high schools and only one particular set of test scores. A more complete study would analyze all state test scores in all grade levels throughout the state.
This study was also limited to the state of Mississippi while Positive Behavior Interventions and Strategies (PBIS) is a program that is not limited to this state solely. It is a program that is utilized throughout the nation. The scope of this study is simply unable to take into account all the possible variables that should be considered to obtain a truly accurate picture of the impact PBIS has on student achievement.

Another limitation to this study was the fact that research has shown that the return rate for studies completed electronically do not usually yield the desired results as not everyone asked to participate in these studies did so. In addition to that fact, this study only sought to solicit input from one small segment of those involved in a PBIS program. Students, parents, teachers, counselors, and other stakeholders should be considered in future studies conducted on this topic. The following questions were addressed in this study:

Q1: What, if any, impact does a school’s behavior program have on student achievement? Do students score higher on the MSATP U.S. History test and how significant is the difference between these specific test scores?

Q2: Do the methods in which a behavior program are implemented negatively or positively affect eleventh grade U.S. history subject area test scores and which methods have the most profound impact on student achievement?
Q3: Do students from schools which claim to follow a prescribed Positive Behavior Interventions and Supports program outperform those students from schools which do not?

Data Analysis

The following two hypotheses have been created and were utilized for this study:

H1: Schools that engage in Positive Behavior Interventions and Strategies (PBIS) programs students score higher on the Mississippi U.S. History Subject Area Test.

H2: There is a positive relationship between implementation of PBIS programs and U.S. History Subject Area Test scores.

The first hypothesis is central to this study and was analyzed using both the state test scores and the questionnaire completed by the building administrators. For both hypotheses, t-tests were utilized, and two-tailed tests were conducted setting alpha at .05. Data collected from the surveys completed by building-level principals across the state was compared against archival data collected from the Mississippi Department of Education (MDE). Some of the data that was collected from MDE included U.S. History MSATP test scores, number of students tested during the 2009-2010 school year, and school grade levels.

The questionnaire that was used for this research project has been divided into six sections: (a) school information, (b) overall discipline plan, (c) school discipline plan, (d) implementation, (e) critical elements of PBIS system, and (f) positive reinforcement. Each of the different sections was utilized to
address different portions of this study. The principals were asked to identify their schools, but they did not have to identify themselves on the questionnaire. This has been done so that archival data can be matched to the individual schools. For the purposes of this study, pseudonyms were used to maintain the school’s and principal’s anonymity. The first question asked following this school identifier was “Does your school utilize a Positive Behavior Supports and Interventions (PBIS) system in dealing with discipline issues for all students?” The purpose of this question was to determine the principal’s self-perceptions as to whether they are administering a PBIS program. This was then compared to their answers provided on the questionnaire to analyze whether their perceptions matched the indicators of a PBIS school. The second question asked was whether the school participates in a known PBIS program such as Jostens Renaissance Program. This also helped determine whether the school is utilizing a true and fully implemented PBIS program.

In addition to the questionnaire, the data that was collected from MDE also addressed specific parts of this study. The Mississippi SATP is comprised of four different statewide tests, Algebra I, Biology I, English II, and U.S. History from 1877. The Algebra I and Biology I tests are typically given to students in the ninth grade, the English II test is given to students in the tenth grade, and the U.S. History test is given to students in the eleventh grade. While this study could have chosen any of these tests to examine, the reason for choosing data from the U.S. History test was based on several factors. First, high schools across the state are comprised differently as far as their grade compositions go. For
example, some schools in the state cater to grades nine through twelve while others have a separate school for their ninth graders. Therefore, to remain consistent in comparing schools, it was decided that the tests that were given in the ninth grade (Algebra I and Biology I) may not be a true comparison in terms of high schools as some of these students are located in separate facilities or academies. The tenth grade test (English II) was also considered but was ruled out due to the fact that for many students it may actually be their first year in a true high school setting. The U.S. History test was chosen because it gives the students time to settle into the high school environment as well as provides them time to become accustomed to the rules or expectations of their school. As an extension of this study, data from the first three tests could also be used as it is all archival data readily available to the researcher.

There are two specific hypotheses that were addressed during this study in addition to three specific questions. The first question analyzed what impacts a school’s behavior program had on student achievement. To address this question, archival data, specifically U.S. History test scores, was compared to the first section of the questionnaire which addressed the overall discipline plan of the school. The researcher was then able to gauge the simplicity of a school’s overall discipline plan and determine whether students scored higher on the standardized U.S. History test. The second and third overarching questions will assess the implementation of the schools behavior plan and once again compare these questions with U.S. History scores. To help guide this study, schools that
responded that they strongly agreed to these questions will be those schools that will be considered as properly implementing their PBIS program.

All three questions took into account the extent to which the school’s positive behavior program had been initiated. To answer these questions, the U.S. History test scores were compared to the responses from the “Critical Elements of PBIS System” and “Positive Reinforcement” sections of the questionnaire. For these two sections, those schools that responded to the questions with *strongly agree* were considered to have fully implemented a PBIS program and those that simply responded *agree* were considered to have implemented some components of the PBIS program.

The study addressed the two hypotheses in the following manner:

H₁: Schools that engage in Positive Behavior Interventions and Strategies (PBIS) programs students score higher on the Mississippi U.S. History Subject Area Test.

This hypothesis was answered by comparing the data from the questionnaire with the results of the U.S. History state test scores. Schools that are classified as schools that engage in PBIS programs were determined by categorizing them based upon the following criteria: If the schools’ responses to questions were *strongly agree* they were classified as a school that was fully utilizing a PBIS program. Those that responded *agree* were considered to have implemented components of PBIS, but not fully implemented the program. School that were *neutral, disagree, or strongly disagree* were classified as school with PBIS programs.
$H^2$: Schools with fully implemented PBIS programs score higher on the U.S. History Subject Area test than those schools which only employ PBIS programs partially.

To address this hypothesis, the same classification system was used to determine whether a school is a PBIS school as was used with the first hypothesis. However, this question utilized the data reported by the schools under the "implementation" section of the questionnaire and compared it with those schools classified as PBIS schools and those that were not. This hypothesis took into account all of the data together and compared those schools which had been identified as PBIS schools to those that were not classified in this manner. In addition to U.S. History test scores, it also took into account the number of students that were tested at the school and the grade levels present at that school. Based upon the results of these comparisons, this research project was able to make some conclusion as to the effects a PBIS program has on student achievement.
CHAPTER IV

RESULTS

Introduction

The data collection for this research was a tedious one that took a little more than two months to complete. Initially, the questionnaires were distributed electronically to every high school principal in the state of Mississippi. The rate of return was very low. The researcher then mailed, via U.S. Postal Service, a copy of the questionnaire to every principal in the state. Each questionnaire was accompanied by a self-addressed stamped-envelope. It was during this process that it was discovered that there were actually more schools in the state than initially discovered. At this point, it was determined that there are 259 schools that would qualify for this study. The qualifications simply being that the school has an eleventh grade of which the students participated in the U.S. History state test, which is a part of the Mississippi Subject Area Testing Program.

The return rate was still too low following the mailing of the questionnaires; therefore, the researcher mailed a second survey to all the schools that had not participated in the study. Eventually, 105 completed responses were received over a ten week period of time. The rate of return for this study is 42.2%. However, there were three surveys that were received that were not filled out and simply noted that they would not be participating in the study. One survey was completed, but it did not identify the school, making it impossible to connect it to the state test data and rendering this survey unusable. This left 101 usable surveys for this study.
Descriptive

The instrument used in this research project was broken into six sections: School Information, Overall Discipline Plan, School Discipline Plan, Implementation, Critical Elements of PBIS, and Positive Reinforcement. The first section consisted of three questions. The first question asked the principal to identify their school. This was done so that their state test data could be matched with their responses. Questions two and three were asked to determine whether the school utilizes a PBIS program and, if so, was it one that was already established such as the Josten’s Renaissance Program.

Of the schools that responded, 60.4% of the schools stated that they did indeed use a PBIS system. However, only 23.8 of the respondents cited that they utilize an established PBIS system. These findings are illustrated in Tables 1 and 2.

Table 1

Questionnaire Question #2 - Utilization of PBIS

<table>
<thead>
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<td>Yes</td>
<td>61</td>
<td>60.4</td>
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<td>Total</td>
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<td>100.0</td>
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Table 2

Questionnaire Question #3 – Participate in Structured Program

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</thead>
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<td>76</td>
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<td>Yes</td>
<td>24</td>
<td>23.8</td>
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<tr>
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</table>

The second part of the questionnaire addressed the Overall Discipline Plan and consisted of six pointed questions to determine the nature of the respondent’s specific discipline plan. These questions were also designed to elicit the perception of the building administrator to gauge his or her views as to whether he or she believed that the students and teachers were able to easily understand the overall discipline plan. These questions were designed on a five-point Likert scale which ranged from strongly agree to strongly disagree. Results to these questions can be found in Table 3 through Table 8, all of which are illustrated below.

Table 3

Questionnaire Question #4 - Discipline Plan Easy for Teacher to Understand

<table>
<thead>
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<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>2</td>
<td>2.0</td>
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<tr>
<td>Agree</td>
<td>51</td>
<td>50.5</td>
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Table 3 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>48</td>
<td>47.5</td>
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<td>Total</td>
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Table 4

*Questionnaire Question #5 - Discipline Plan Easy for Students to Understand*

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<th>Percent</th>
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<tr>
<td>Disagree</td>
<td>1</td>
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<tr>
<td>Neutral</td>
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<tr>
<td>Agree</td>
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<td>46</td>
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Table 5

*Questionnaire Question #6 - Discipline Plan is Complex and Confusing*

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<td>2</td>
<td>2.0</td>
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<tr>
<td>Total</td>
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Table 6

*Questionnaire Question #7 - System of Punishment and Rewards*

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<tr>
<td>Disagree</td>
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<td>15.8</td>
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<tr>
<td>Neutral</td>
<td>13</td>
<td>12.9</td>
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<tr>
<td>Agree</td>
<td>47</td>
<td>46.5</td>
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<tr>
<td>Strongly Agree</td>
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Table 7

*Questionnaire Question #8 - Methods of Punishing Students is Effective*

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<tr>
<td>Agree</td>
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<td>66.3</td>
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<tr>
<td>Strongly Agree</td>
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<td>18.8</td>
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<tr>
<td>Did Not Answer</td>
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<td>1.0</td>
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<tr>
<td>Total</td>
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Table 8

*Questionnaire Question #9 - Methods of Rewarding Students is Effective*

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<tr>
<td>Disagree</td>
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<tr>
<td>Neutral</td>
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<tr>
<td>Agree</td>
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<td>12.9</td>
</tr>
<tr>
<td>Did Not Answer</td>
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<td>1.0</td>
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<tr>
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The third section, consisting of three questions also on the same Likert scale as the previous section, asked questions about the school discipline plan. Each of these questions was preceded by “Our school discipline plan emphasizes.” While these questions were directly linked to the questions in the previous section, they were more geared toward how discipline is taught and reinforced in their particular school. Tables 9, 10, and 11 provide the results to these three questions.

Table 9

*Questionnaire Question #10 - Teaching Behaviors Like We Teach Academics*

<table>
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<th>Percent</th>
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<table>
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<td>46.5</td>
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<tr>
<td>Strongly Agree</td>
<td>13</td>
<td>12.9</td>
</tr>
<tr>
<td>Total</td>
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Table 10

*Questionnaire Question #11 - Reinforcing Expected Behaviors*

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<tr>
<td>Neutral</td>
<td>10</td>
<td>9.9</td>
</tr>
<tr>
<td>Agree</td>
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<td>67.3</td>
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<tr>
<td>Strongly Agree</td>
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<td>17.8</td>
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<tr>
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Table 11

*Questionnaire Question #12 - Pre-Correcting to Ensure Positive*

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Table 11 (continued).

<table>
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<td>Did Not Answer</td>
<td>2</td>
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<tr>
<td>Total</td>
<td>101</td>
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</table>

Section four dealt with the implementation of the school’s behavior plan. The six questions in this section were designed to ascertain the process through which the school initiated its plan. According to the research, implementation is one of the critical factors behind a successful PBIS program. The process through which a school implemented was the focus of these questions, also written on the same 5-point Likert scale. The results can be found in Tables 12 through 17.

Table 12

Questionnaire Question #13 - Goals Clearly Visible for Teachers

<table>
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<td>Neutral</td>
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<tr>
<td>Agree</td>
<td>56</td>
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<td>Strongly Agree</td>
<td>28</td>
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<td>Did Not Answer</td>
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Table 13

*Questionnaire Question #14 - Goals Clearly Visible for Students*

<table>
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<th>Frequency</th>
<th>Percent</th>
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<tr>
<td>Neutral</td>
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<td>8.9</td>
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<tr>
<td>Agree</td>
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<td>60.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>26</td>
<td>25.7</td>
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<tr>
<td>Did Not Answer</td>
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<td>1.0</td>
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<tr>
<td>Total</td>
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Table 14

*Questionnaire Question #15 - Expectations Clearly Defined*

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<td>Neutral</td>
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<td>7.9</td>
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<tr>
<td>Agree</td>
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<td>56.4</td>
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<td>Strongly Agree</td>
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<td>31.7</td>
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<tr>
<td>Did Not Answer</td>
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<td>1.0</td>
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<tr>
<td>Total</td>
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</table>
Table 15

*Questionnaire Question #16 - Behavioral Expectations Taught to Students*

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<th>Frequency</th>
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</thead>
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<tr>
<td>Agree</td>
<td>59</td>
<td>58.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
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<td>23.8</td>
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<tr>
<td>Did Not Answer</td>
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<td>1.0</td>
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<tr>
<td>Total</td>
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</table>

Table 16

*Questionnaire Question #17 - Implementation and Rewarding Expectations*

*Established*

<table>
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<tr>
<td>Disagree</td>
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<tr>
<td>Agree</td>
<td>48</td>
<td>47.5</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>19</td>
<td>18.8</td>
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<tr>
<td>Did Not Answer</td>
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<td>2.0</td>
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<td>Total</td>
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</table>
Three questions comprised the fifth section entitled Critical Elements of PBIS. The elements that are critical to the establishment of a PBIS system are a PBIS team with administrative support, a committed faculty, and five positively stated school-wide expectations posted around the school. These questions were designed to help determine whether a school did indeed have these elements present. The results to these questions are illustrated in Tables 18, 19, and 20.

Table 17

*Questionnaire Question #18 - Monitoring and Evaluation Methods Established*

<table>
<thead>
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</tr>
<tr>
<td>Disagree</td>
<td>9</td>
<td>8.9</td>
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<tr>
<td>Neutral</td>
<td>17</td>
<td>16.8</td>
</tr>
<tr>
<td>Agree</td>
<td>56</td>
<td>55.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>15</td>
<td>14.9</td>
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<tr>
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<td>3.0</td>
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<tr>
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Table 18

*Questionnaire Question #19 - Administrative Support and Clear Mission/Purpose*

<table>
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<th>Percent</th>
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<tr>
<td>Agree</td>
<td>23</td>
</tr>
<tr>
<td>Strongly Agree</td>
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### Table 19

*Questionnaire Question #20 - Faculty is Committed*

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<tr>
<td>Disagree</td>
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Table 20

*Questionnaire Question #21 - Five Positive Expectations Posted*

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<tr>
<td>Disagree</td>
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<td>24.8</td>
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<tr>
<td>Neutral</td>
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<td>Agree</td>
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<td>13.9</td>
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<td><strong>100.0</strong></td>
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</table>

The final seven questions of the questionnaire comprise the sixth and final section of the survey, Positive Reinforcement. While PBIS programs are specifically designed with positively reinforcing behaviors, these questions solicited responses to determine the school’s reward system that was being used. Again, on a 5-point Likert scale, principals’ responses ranged from *strongly agree* to *strongly disagree*. The results are provided in Tables 21 through 27.

Table 21

*Questionnaire Question #22 - Implemented Consistently*

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<tr>
<td>Disagree</td>
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<td>16.8</td>
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Table 21 (continued).

<table>
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Table 22

*Questionnaire Question #23 - Variety of Methods Used to Reward*

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Table 23

*Questionnaire Question #24 - Rewards Linked to Expectations*

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<tr>
<td>Strongly Disagree</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 23 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral</td>
<td>14</td>
<td>13.9</td>
</tr>
<tr>
<td>Agree</td>
<td>57</td>
<td>56.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>21</td>
<td>20.8</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 24

*Questionnaire Question #25 - Rewards Varied to Maintain Student Interest*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>6.9</td>
</tr>
<tr>
<td>Neutral</td>
<td>20</td>
<td>19.8</td>
</tr>
<tr>
<td>Agree</td>
<td>52</td>
<td>51.5</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>17</td>
<td>16.8</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 25

*Questionnaire Question #26 - Students Involved in Developing Incentives*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>26</td>
<td>25.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>30</td>
<td>29.7</td>
</tr>
<tr>
<td>Agree</td>
<td>28</td>
<td>27.7</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>10</td>
<td>9.9</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 26

*Questionnaire Question #27 - Includes Incentives for Staff/Faculty*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>30</td>
<td>29.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>26</td>
<td>25.7</td>
</tr>
<tr>
<td>Agree</td>
<td>32</td>
<td>31.7</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>8</td>
<td>7.9</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 27

*Questionnaire Question #28 - Staff Utilized Reward System Appropriately*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
<td>8.9</td>
</tr>
<tr>
<td>Neutral</td>
<td>29</td>
<td>28.7</td>
</tr>
<tr>
<td>Agree</td>
<td>49</td>
<td>48.5</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>8</td>
<td>7.9</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>101</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 28, shown on the next page, illustrates the descriptive statistics found for each of the questions on the survey. In addition to the minima and maxima, the mean and standard deviation are also provided. Question number four, which asks about the understandability of the school discipline plan for teachers, yielded the highest mean score of 4.44 with a standard deviation of .61. The lowest mean score was with question number six, which was the converse of questions four and five. It stated that the discipline plan was complex and confusing. The mean score of 1.66 and a standard deviation of 1.10 were expected to reflect this. The mean scores for the questions that dealt with implementation were, for the most part, 4.0 or higher while questions related to the sixth section, positive reinforcement, were lower and tended to have a mean score between 3.8 and 3.1. This meant that most principals were either neutral or...
slightly agreed with the questions that addressed student reward systems in place. All of these findings are found in Table 28.

Table 28

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Question</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4 Our school discipline plan is easy for teachers to understand.</td>
<td>2.00</td>
<td>5.00</td>
<td>4.44</td>
<td>.61</td>
</tr>
<tr>
<td>Q5 Our school discipline plan is easy for students to understand.</td>
<td>1.00</td>
<td>5.00</td>
<td>4.40</td>
<td>.66</td>
</tr>
<tr>
<td>Q6 Our school discipline plan is complex and confusing.</td>
<td>1.00</td>
<td>5.00</td>
<td>1.66</td>
<td>.68</td>
</tr>
<tr>
<td>Q7 Our school discipline plan has a system of both punishment and rewards.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.64</td>
<td>1.10</td>
</tr>
<tr>
<td>Q8 Our school's methods of punishing students is effective.</td>
<td>2.00</td>
<td>5.00</td>
<td>4.01</td>
<td>.67</td>
</tr>
<tr>
<td>Q9 Our school's methods of rewarding students is effective.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.75</td>
<td>.78</td>
</tr>
<tr>
<td>Q10 Teaching behaviors like we teach academics.</td>
<td>2.00</td>
<td>5.00</td>
<td>3.51</td>
<td>.97</td>
</tr>
<tr>
<td>Q11 Reinforcing expected behaviors.</td>
<td>2.00</td>
<td>5.00</td>
<td>3.98</td>
<td>.69</td>
</tr>
</tbody>
</table>
Table 28 (continued).

<table>
<thead>
<tr>
<th>Question</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q12 Pre-correcting to ensure positive behaviors are displayed.</td>
<td>2.00</td>
<td>5.00</td>
<td>3.89</td>
<td>.78</td>
</tr>
<tr>
<td>Q13 When implementing our behavior plan, the goals of our plan were clearly visible for teachers.</td>
<td>2.00</td>
<td>5.00</td>
<td>4.09</td>
<td>.74</td>
</tr>
<tr>
<td>Q14 When implementing our behavior plan, the goals of our plan were clearly visible for students.</td>
<td>2.00</td>
<td>5.00</td>
<td>4.09</td>
<td>.71</td>
</tr>
<tr>
<td>Q15 When implementing our behavior plan, the expectations were clearly defined.</td>
<td>2.00</td>
<td>5.00</td>
<td>4.18</td>
<td>.70</td>
</tr>
<tr>
<td>Q16 When implementing our behavior plan, behavioral expectations were taught to the students.</td>
<td>2.00</td>
<td>5.00</td>
<td>4.01</td>
<td>.77</td>
</tr>
<tr>
<td>Q17 When implementing our behavior plan, a system for rewarding behavioral expectations was established.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.70</td>
<td>.98</td>
</tr>
<tr>
<td>Q18 When implementing our behavior plan, monitoring and evaluation methods were established.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.77</td>
<td>.86</td>
</tr>
</tbody>
</table>
Table 28 (continued).

<table>
<thead>
<tr>
<th>Question</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q19 Our school has a PBIS team in place with administrative support, holds team meetings regularly (at least monthly), and has established a clear mission/purpose.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.13</td>
<td>1.21</td>
</tr>
<tr>
<td>Q20 Our faculty is committed to our school’s behavior plan and demonstrates this by showing awareness of behavior problems across campus through regular data sharing, involved in establishing and reviewing goals, and is provided opportunities to give feedback throughout the year.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.51</td>
<td>1.00</td>
</tr>
<tr>
<td>Q21 Expectations and rules have been developed and in doing so, three to five positively stated school-wide expectations are posted around school.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.29</td>
<td>1.12</td>
</tr>
<tr>
<td>Q22 A system of rewards has elements that are implemented consistently across campus.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.43</td>
<td>1.04</td>
</tr>
<tr>
<td>Q23 A variety of methods are used to reward students.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.80</td>
<td>.96</td>
</tr>
</tbody>
</table>
Table 28 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q24 Rewards are linked to expectations and rules.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.90</td>
<td>.89</td>
</tr>
<tr>
<td>Q25 Rewards are varied to maintain student interest.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.74</td>
<td>.93</td>
</tr>
<tr>
<td>Q26 Students are involved in identifying/developing incentives.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.14</td>
<td>1.06</td>
</tr>
<tr>
<td>Q27 The system includes incentives for staff/faculty.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.12</td>
<td>1.03</td>
</tr>
<tr>
<td>Q28 Staff utilize a reward system appropriately.</td>
<td>1.00</td>
<td>5.00</td>
<td>3.51</td>
<td>.89</td>
</tr>
</tbody>
</table>

Table 29 took the questions of each section of the questionnaire and provided some descriptive statistics for each section. The U.S. history state test score had a range of 325.2 to 408.1 with the median test score being 362.75. The overall plan, with a mean score of 4.09 had the highest mean score of all of the sections. The lowest mean score was 3.31 which referred to the critical elements of a PBIS system. This may be due to the fact that while many principals considered their schools to be following a PBIS system, they were missing some of the key elements of a true PBIS school. Another area that tended to have a mean score which was toward the middle, or neutral area, was that of positive reinforcement. Many of the schools lacked a system of rewards for faculty as was illustrated in Table 26. Only eight respondents strongly agreed,
while another 32 agreed to having had a system that rewards teachers as well as students.

Table 29

Descriptive Statistics by Sections

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Plan</td>
<td>2.67</td>
<td>5.00</td>
<td>4.09</td>
</tr>
<tr>
<td>Implementation</td>
<td>2.00</td>
<td>5.00</td>
<td>3.97</td>
</tr>
<tr>
<td>Positive Reinforcement</td>
<td>1.00</td>
<td>5.00</td>
<td>3.52</td>
</tr>
</tbody>
</table>

U.S. History SATP Score

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>325.3</td>
<td>408.1</td>
<td>362.75</td>
</tr>
<tr>
<td>School Discipline Plan</td>
<td>2.00</td>
<td>5.00</td>
<td>3.80</td>
</tr>
<tr>
<td>Critical Elements</td>
<td>1.00</td>
<td>5.00</td>
<td>3.31</td>
</tr>
</tbody>
</table>

Statistical

The hypotheses for this study are as follows:

H₁: Schools that engage in Positive Behavior Interventions and Strategies (PBIS) programs students’ score higher on the Mississippi U.S. History Subject Area Test.

H₂: There is a positive relationship between implementation of PBIS programs and U.S. History Subject Area Test scores.

The first hypothesis (H₁), a t-test was used to determine whether there was a relationship between Positive Behavior Interventions and Strategies
(PBIS) programs and U.S. History state test scores. The t-test showed that there was no significant difference between those schools that used PBIS programs and those that did not. Those schools which stated that they did not use a PBIS system actually scored slightly high on the U.S. History state test. This is illustrated in Table 30 where it shows that the thirty nine schools that responded to not using a PBIS system had a mean score of 363.94 and a standard deviation of 18.21 as opposed to a mean score of 361.75 and standard deviation of 17.90 for those school citing that they do indeed utilize a PBIS system. The t-test yielded the following results: \(t(98)=.592, p=.555\); therefore, there is no significant difference between the districts which utilize PBIS and those which do not on their U.S. History state test scores.

Table 30

<table>
<thead>
<tr>
<th>Q2 Utilization of PBIS</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010 U.S. History SATP Score</td>
<td>No</td>
<td>363.94</td>
<td>18.21</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>361.75</td>
<td>17.90</td>
</tr>
</tbody>
</table>

The second hypothesis was that there was a positive relationship between implementation of PBIS programs and U.S. History Subject Area Test scores. To test this hypothesis a correlation was done between the responses to the implementation section and U.S. History test scores. The findings revealed that there was a positive correlation between the two. It was significant because the
results yielded that $r(99)=.273$, $p=.006$. While a correlation was found, it was a very low correlation since the correlation was less than .30.

Qualitative (Research Questions)

The following three research questions were addressed in this study:

Q\(^1\): What, if any, impact does a school's behavior program have on student achievement? Do students score higher on the MSATP U.S. History test and how significant is the difference between these specific test scores?

Q\(^2\): Do the methods in which a behavior program are implemented negatively or positively affect eleventh grade U.S. history subject area test scores and which methods have the most profound impact on student achievement?

Q\(^3\): Do students from schools which claim to follow a prescribed Positive Behavior Interventions and Supports program outperform those students from schools which do not?

Research questions one and three were both answered through the first hypothesis. The research has illustrated that there is no significant difference between schools that use PBIS and those that do not use PBIS in terms of test results for the U.S. History state test. This was shown to be true when a comparison was made between the mean scores (Table 30).

As for research question two, this questioned whether methods in which behavior programs are implemented negatively or positively affect U.S. history test scores, and which methods have the most profound impact on student
achievement. Table thirty one provides the Pearson Correlations for each or the survey questions geared toward implementation. While all of the correlations were low, as they fell below .30, some of the questions illustrated stronger correlations than others. Question number thirteen, from the survey, asked if the goals of the behavior plan were clearly visible for teachers. The correlation between this question and the U.S. history test scores was .257. The second highest correlation was .238 and it was between test scores and whether expectations were clearly defined. Monitoring and evaluation methods, goals clearly visible to students, and a system for rewarding behavioral expectations rounded out the top five correlations with scores of .228, .220, and .204, respectively. The higher the schools implementation score, the higher the U.S. history test score. Implementation was the only area in which a correlation was noted to have an impact on U.S. history test scores. These findings are illustrated in Table 31.
Table 31

*Implementation and Test Scores Correlations*

<table>
<thead>
<tr>
<th>Question</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q13 When implementing our behavior plan, the goals of our plan were clearly visible for teachers.</td>
<td>.257*</td>
<td>.010</td>
</tr>
<tr>
<td>Q14 When implementing our behavior plan, the goals of our plan were clearly visible for students.</td>
<td>.220*</td>
<td>.028</td>
</tr>
<tr>
<td>Q15 When implementing our behavior plan, the expectations were clearly defined.</td>
<td>.238*</td>
<td>.017</td>
</tr>
<tr>
<td>Q16 When implementing our behavior plan, behavioral expectations were taught to the students.</td>
<td>.177</td>
<td>.077</td>
</tr>
<tr>
<td>Q17 When implementing our behavior plan, a system for rewarding behavioral expectations was established.</td>
<td>.204*</td>
<td>.043</td>
</tr>
<tr>
<td>Q18 When implementing our behavior plan, monitoring and evaluation methods were established.</td>
<td>.228*</td>
<td>.024</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

Additionally, a few principals noted on their surveys that certain points of the PBIS system were intriguing to them. The principal from High School 98 noted that while he or she disagreed with the fact that his or her school has three to five positively stated school-wide expectations, he or she noted on their survey that it was a “great idea.” The principal from High School 82 stated that he or she currently does not adhere to a PBIS system, yet his or her school has recently established a PBIS system. This principal also noted that the reward system “in
our school needs work." Outside these few comments, no other principals added any additional comments to their questionnaire.

Ancillary Findings

One finding that was interesting was the fact that schools that responded that they did indeed participate in PBIS programs had slightly lower test scores than schools that do not. Another interesting finding was that when all of the schools in the state that had responded to the survey were plotted on a map (Figure 4.1), it can be noted that few responses came from the western side of the state, west of Interstate 55. The rate of return from the Delta was particularly low. While it could be assumed that many of these schools are low-performing schools and they were not interested in having their state test scores compared to the rest of the state, this would merely be speculation on the researcher’s behalf. It does raise some questions to be explored in future studies, which are discussed in further detail in Chapter V.
Figure 4.1. Mississippi Map with Responding Schools Indicated.
CHAPTER V

CONCLUSIONS AND DISCUSSION

The fifth and final chapter contains a discussion of the relationship between positive behavior programs and student achievement. Areas to be discussed in this chapter include an overall summary of the study, both conclusions and discussions of the study, limitations, recommendations for policy or practice, and recommendations for future research into the subject. The results of this study will help educators determine whether positive behavior programs implemented correctly are able to help with student achievement.

While many studies suggest that schools with fewer discipline problems have higher achievement scores on standardized tests, this study provides insight into one particular test score and sheds light as to whether these scores were indeed impacted by a school’s behavior program.

This purpose of this study was to investigate the relationship between a school’s behavior program and student achievement on the U.S. history subject area test. More specifically, the researcher wanted to determine whether schools that utilized a positive behavior and supports system had higher test scores. The findings were enlightening and somewhat contrary to previous research and what were discussed in the review of literature.

Q¹: What, if any, impact does a school’s behavior program have on student achievement? Do students score higher on the MSATP U.S. History test and how significant is the difference between these specific test scores?
The research in this study has shown that a school’s behavior program has very little impact on student achievement. Test scores for both sets of students were about the same and very little difference was noted. Schools that reported that they utilized PBIS programs had student scores that were actually slightly lower than those schools that cited that they did not use these types of behavior programs. While the differences were minimal, they were contrary to what previous literature had supported. As stated in Chapter II, Warren et al. (2006) cite that while most studies have focused on issues related to behavior, more time and effort should be devoted to studying the impacts that PBIS programs have on how these improvements impact academic outcomes. It is their belief that,

It is reasonable to expect that decreased behavior problems will correspond with increased academic achievement; with fewer students losing instruction time due to office referrals and suspensions, and with less time being sacrificed in responding to behavioral issues, opportunities for instruction and learning should be increased. (p. 196)

This does not seem to be the case as there was no significant difference between those schools utilizing PBIS programs and those which did not. This may be the case as many schools may not be fully implementing the PBIS programs as they are intended to be used. Principal perceptions as to his or her behavior programs may also be another issue. While some principals reported that they were using PBIS programs, they may not have been conducted in a truly PBIS format.
Q^2: Do the methods in which a behavior program are implemented negatively or positively affect eleventh grade U.S. history subject area test scores and which methods have the most profound impact on student achievement?

According to the research data collected in this study, the method in which a program is implemented is correlated with student achievement. While a correlation was discovered in the implementation component, the differences in student achievement were still minimal. Implementation was the one area in which a correlation was discovered in this study. According to Clonan et al. (2007), schools that have implemented these seven features have indicated that they have reduced their office referrals significantly. In addition to the reduction in office referrals, a substantial change has occurred in both the social climate and academic performance (Clonan et al., 2007). While Clonan et al., (2007), cited a substantial change in academic performance; this was not the case in this study. The differences in achievement scores were not significant although implementation was the area that was most closely correlated with achievement scores.

Q^3: Do students from schools which claim to follow a prescribed Positive Behavior Interventions and Supports program outperform those students from schools which do not?

The findings in this study illustrate that students in schools with PBIS programs do not outperform those students from school which do not utilize a positive behavior program. Again, this is different than what had been previously
reported by Clonan et al. (2007). In addition, Boulden (2010) states that research has indicated that individual classroom management styles and teachers’ actions have had larger impacts on student behavior in comparison to school-wide policies. While implementation is important, consistency in a schools program is paramount to its success. This study did not address the subtle differences in school behavior programs from school to school.

There may be several reasons that a more significant correlation was not discovered between student achievement scores and a school’s discipline plan. One reason may be due to the fact that many schools may already have strong discipline programs in place. Some of the schools reported that they did not utilize a PBIS system, yet they had high test scores. This may be because they utilize a discipline program that works for their specific needs. The school may also have a very stable faculty which has been in place for some time. Many of these subtle differences may have impacted the outcome of this study.

Recommendations for Policy or Practice

The results from this study will add to the wide breadth of knowledge that is available to educators and will aid them in the decision making process in terms of what type of school-wide behavior program to be implemented. As schools across the state and nation work to find solutions to increase student achievement while decreasing student discipline problems, this study provides a few key pieces of information. The most important issue discovered was that school-wide positive behavior programs must be implemented appropriately if they are to achieve the desired results of higher student achievement. Canned
programs, such as the Josten’s Renaissance program, may be the best alternative for schools looking to implement a program. The fact that the program has already been created and established will allow for educators to simply implement the program as it is intended and frees the school administration from having to reinvent something that has already been created. This will allow school administrators to focus on issues that are more pressing in nature.

The findings in this study will allow building level administrators to make more comprehensive decisions when it comes to utilizing school-wide behavior programs. The principals will be able to analyze the results and compare it to other research literature which is available to help aid in the decision making process. Focusing on key components of a positive behavior program will allow them to initiate effective programs focused on increasing student achievement. Both Superintendents and school boards will also benefit from the findings discovered in this study. As school districts continue to search for programs that can be used district-wide, this study will provide insight. Budgetary concerns are prioritized by the individuals who are charged with making key decisions for school districts. Using this research-based study will allow them to realize the best resolution to two key issues: student behavior and achievement.

Colleges and universities are charged with the daunting task of preparing both teachers and administrator of dealing with issues directly related to this study. As the federal government becomes more entwined with the state responsibility of providing public education to its citizens, accountability will become more pervasive. For this reason, educators need to know what works
and what does not. Institutes of higher education must provide training to educators to keep them abreast of trends in education. The results of this study will assist in this aspect.

It can also be stated that since positive behavior programs can be both time consuming and costly, and the fact that they do not result in significant differences in student achievement, school administrators may be more inclined to focus their attention on programs that do yield higher student achievement rates.

Implementation, according to the study, being one of the most critical components should be the focus of attention for those administrators interested in beginning a positive behavior program. A good first step would be to create a plan which is clearly visible for teachers, with clearly defined expectations and a plan of evaluation would be the best first step a school could take when implementing a program. Getting teachers to “invest” in the program is critical and would be a good first step in planning such a program. Otherwise, the school, administrator, teachers, and students may simply be exerting their time and efforts on a program that will yield no significant advances in student achievement.

Limitations

There were limitations to this study. While the study solicited input from principals throughout the state, only 42% of schools responded to the study. Additionally, while results were received from throughout the state, some areas of the state were underrepresented in the study. For example, fewer results were
received from schools West of Interstate 55, which left out a good number or the
more rural schools. Schools in the Mississippi Delta were also more difficult to
get to participate.

Another limitation was that this study was limited to high schools only. The
data that was collected was based upon the principal’s perceptions of his or her
school’s behavior program. This data could be skewed due to the fact that
principals may not have been totally truthful in their responses or they may have
been biased in their responses.

Since not all schools in the state participated, the results may be
somewhat incomplete. Participation was voluntary and may have been at an
inopportune time as schools were focusing on preparing students for
standardized tests which typically take place in the spring.

Finally, the only test score that was used was the U.S. history test score.
A more complete study would have comprise of three grade levels, elementary,
middle, and secondary, and could have included a wider array of test scores.

Recommendations for Future Research

Further research into this area is suggested. While this study was
conducted to determine whether a relationship existed between Positive
Behavior and Support programs and student achievement, there are a lot of
questions that have been left unanswered. This study only looked at one small
segment of Mississippi’s testing program. Future students could be more
inclusive and look at the different school levels (elementary, middle, and
secondary) and different tests that are offered, such as the MCT (Mississippi
Curriculum Test), other subject area tests, and even standardized tests like the SAT and ACT. A study utilizing standardized national tests such as the SAT and ACT would also allow for a wider study not limited to the state of Mississippi.

This study also only looked from the perspective of building-level administrators. Future studies may want to approach it from either a teacher or student perception. A comprehensive study would actually include all three viewpoints.

A more concise instrument could be created that would allow the researcher to pinpoint specific levels of implementation of positive behavior programs. Some schools may be using some components of a PBIS program or a few select pieces of what is considered to be key to such programs. It would be interesting to find out what components were more impactful on student achievement. Another factor to be considered when devising an instrument to further this study would be to focus in on the amount of time a program has been in place at the schools. This study did not take into account the length of time a discipline program had been in place and this may be a variable that could significantly affect the outcome of future studies.

Finally, a future study may include some sort of Meta Analysis study that focused on the low response rates from schools, in areas, which tend to have low test scores. Many of the areas in the state which are known to have lower test scores did not respond to this study. A comparison may be appropriate to determine commonalities between this and other studies that have yielded the same results.
Summary

The researcher designed this study with a specific purpose, that being to determine whether there was a relationship between positive behavior programs and student achievement. The first part of this study was conducted by a thorough review of the literature. The review of the literature included a wide range of topics, a few of which included: theoretical frameworks, Response to Intervention, Differentiated Instruction, school-wide positive behavior and support, implementation of PBIS, and effects on student achievement. Additionally, it was conducted in a comprehensive manner, as to address the many aspects of PBIS, and was completed so that it would provide a detailed discussion of related topics. Upon completion of the review of literature, an instrument was designed and the study was completed. This study was conducted through the use of both an electronic questionnaire as well as a questionnaire that was mailed through the U.S. Postal Service. The questionnaire was provided to every high school principal in the state of Mississippi. The survey was sent to a total of 259 schools in the state of Mississippi, of which 105 responded to the request to participate in the study. After the data was compiled, it was analyzed through the use of SPSS. Research data collected was analyzed using descriptive statistics, a t-test for independent samples, and correlations. Descriptives were run on all of the questions used in the questionnaire, a t-test for independent samples was conducted to compare the relationship between student achievement and U.S. history test scores, and a Pearson correlation was amongst some of the variables.
The researcher then analyzed the data in close cooperation with a statistician which yielded a comprehensive explanation of the results. The results were reported in the final chapter of this dissertation. Following a discussion of the findings, a dialogue ensued which analyzed both the implication of the findings and possible future studies into the subject at hand. The conclusion of this study provided recommendations for both practice and future studies on the topics of positive behavior programs and student achievement.
APPENDIX A

SURVEY INSTRUMENT

School Information

Please take time to fill out this survey.

The question that the researcher is attempting to answer is: Is there a relationship between positive behavior interventions and student achievement.

1. Please provide the name of your high school. (Pseudonyms will be used in the reporting of results and no schools will be identified by their names in this study) This is necessary to match the correct state data with your school.

2. Does your school utilize a Positive Behavior Supports and Interventions (PBIS) system in dealing with discipline issues for all students?
   - Yes
   - No

3. Does your school participate in the Josten's Renaissance Program or a similar program designed to reward and recognize positive student behaviors?
   - Yes
   - No

Overall Discipline Plan

4. Our school discipline plan is easy for teachers to understand.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

5. Our school discipline plan is easy for students to understand.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

6. Our school discipline plan is complex and confusing.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

7. Our school discipline plan has a system of both punishment and rewards.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

8. Our school's methods of punishing students is effective.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

9. Our school's methods of rewarding students is effective.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
Our school discipline plan emphasizes

10. Teaching behaviors like we teach academics.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

11. Reinforcing expected behaviors.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

12. Pre-correcting to ensure positive behaviors are displayed.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

Implementation

13. When implementing our behavior plan, the goals of our plan were clearly visible for teachers.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

14. When implementing our behavior plan, the goals of our plan were clearly visible for students.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

15. When implementing our behavior plan, the expectations were clearly defined.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

16. When implementing our behavior plan, behavioral expectations were taught to the students.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

17. When implementing our behavior plan, a system for rewarding behavioral expectations was established.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

18. When implementing our behavior plan, monitoring and evaluation methods were established.
    - Strongly Agree
    - Agree
    - Neutral
    - Disagree
    - Strongly Disagree

Critical Elements of PBIS System
19. Our school has a PBIS team in place with administrative support, holds team meetings regularly (at least monthly), and has established a clear mission/purpose.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

20. Our faculty is committed to our school’s behavior plan and demonstrates this by showing awareness of behavior problems across campus through regular data sharing, involved in establishing and reviewing goals, and is provided opportunities to give feedback throughout the year.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

21. Expectations and rules have been developed and in doing so, three to five positively stated school-wide expectations are posted around school.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

## Positive Reinforcement

22. A system of rewards has elements that are implemented consistently across campus.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

23. A variety of methods are used to reward students.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

24. Rewards are linked to expectations and rules.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

25. Rewards are varied to maintain student interest.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

26. Students are involved in identifying/developing incentives.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

27. The system includes incentives for staff/faculty.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

28. Staff utilize a reward system appropriately.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
APPENDIX B

LETTER TO PRINCIPALS

January 2, 2011

Dear Principal,

My Name is Todd Boucher and I am a doctoral student at The University of Southern Mississippi. I am currently working on my dissertation, which is to determine whether there is a correlation between positive behavior programs and student achievement. Specifically, I will be comparing data provided to me by principals from every high school in the state with student achievement results on U.S. History test of the Mississippi Subject Area Testing Program. The comparison of schools will be made by comparing your responses about your school behavior program with the mean U.S. History test score for your school. No data will be collected that can be linked to any individual student.

I am writing this letter asking for your help with my study. In approximately two weeks you will receive an e-mail from me (todd.boucher@biloxischools.net) asking you to complete questionnaire. The questionnaire should take no longer than fifteen (15) minutes to complete. All data that is collected will be confidential and participation is completely voluntary. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow strict regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board (IRB), The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6920.

Your participation in this research project is strictly voluntary and you can withdraw from this study at any time. If you agree to participate in this study, please follow the instructions in the e-mail which will follow in the upcoming weeks. A copy of the results from this study will be provided to you via electronic e-mail once the study is completed should you desire to have them. As a fellow administrator and educator, I do thank you for your valuable time and consideration of my request.

Best regards,

Todd E. Boucher
Doctoral Candidate
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Vancleave, MS 39565
228-297-7260

Ronald A. Styron, Jr., Ed.D.
Director and Associate Professor
GCSSC 134-C
Gulf Coast Instructional Leadership Center
The University of Southern Mississippi
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228-214-3224 (office)
228-214-3279 (fax)
APPENDIX C

E-MAIL TO PRINCIPALS

Principal,

Hello, my name is Todd Boucher and I am doctoral candidate with the University of Southern Mississippi. A few weeks back I sent out a letter requesting that you participate in a study which is part of my dissertation research. The study aims to show correlations between student behavior programs and student achievement. I have attached a copy of that letter to this e-mail. If you are inclined to participate, please follow the hyperlink below and complete the questionnaire. I understand that your time is very limited and I truly appreciate your time and consideration with my request.

https://www.surveymonkey.com/r/pubs_achievement

Thank you and feel free to contact me if you should have any questions.

Sincerely,

Todd Boucher

9801 Pine Trail
Vancleave, MS 39565

228-297-7160 (cell)
228-826-9607 (home)
APPENDIX D

IRB APPROVAL LETTER

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board
118 College Drive, D5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6828
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 21, 111), Department of Health and Human Services (45 CFR Part 46), and University guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered, regarding risks to subjects must be reported immediately, but no later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 10111803
PROJECT TITLE: Is There a Relationship Between Positive Behavior Supports and Student Achievement?
PROPOSED PROJECT DATES: 11/15/2010 to 11/15/2011
PROJECT TYPE: Dissertation
PRINCIPAL INVESTIGATORS: Todd Boucher
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Leadership & Research
FUNDING AGENCY: N/A
HSRRC COMMITTEE ACTION: Expedited Review Approval

Lawrence A. Hosman, Ph.D.
HSPRC Chair

[Signature]

12-14-2010
Date
REFERENCES


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