

**MEASURING THE SELF-ASSESSED PRESENCE OF THE ESSENTIAL
FEATURES OF PBIS IN WEST VIRGINIA SCHOOLS**

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James Franklin Harris

Approved by

Dr. Edna Meisel, Committee Chairperson

Dr. Elizabeth Campbell

Dr. Marc Ellison

Dr. Robert Rubenstein

Marshall University
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SIGNATURE PAGE

I hereby affirm that the following project meets the high academic standards for original scholarship and creative work established by my discipline, college, and the Graduate College of Marshall University. With my signature, I approve the manuscript for publication.

Project Title: Measuring the Self-Assessed Presence of the Essential Features of PBIS in West Virginia Schools

Student's Name: James Franklin Harris

Department: Curriculum and Instruction

College: Marshall University College of Education and Professional Development

Edna M. Meisel

Committee Chairperson

Date 4/7/16

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DEDICATION

I dedicate this document and all the work I have put into it to my boys, Jacob and Cody. During the times when I was not sure whether I could or wanted to finish I thought of you and what kind of example I would be to leave this task undone. You give me the greatest reason to be a better man!

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ABSTRACT

The purpose of this study was to explore the implementation of Positive Behavior Interventions and Supports (PBIS) for the 19 schools participating in the West Virginia Department of Education's (WVDE) PBIS Project. Specific attention was given to which critical elements are more or less likely to be put in place during the first year of implementation, and which variables related to the process and the schools seem to positively and negatively influence implementation. Schools showed a positive trend of implementation and based upon the literature this should have a positive impact on the students and staff at these schools. There was no significant difference found in implementation based on the demographics of school type, socioeconomic status (Title 1 Designation), or school size. Overall, that findings of the study support to continuation of the project and inform improvements that should be considered in future planning.

CHAPTER 1

INTRODUCTION

Background

Arne Duncan, the former United States Secretary of Education, recommended in his letter (2009) to Chief State School Officers the implementation of the Positive Behavior Interventions and Supports (PBIS) framework to help address the educational issues of social culture, academic struggles, problem student behavior, and the use of seclusion and restraint. This recommendation was re-affirmed in the U.S. Department of Education's *Guiding Principles: A Resource for Improving School Climate and Discipline* (2014a) report where the PBIS framework is mentioned seven times as an evidenced-based intervention that can be used to improve school climate and discipline processes.

PBIS is defined as a framework for enhancing the adoption and implementation of a continuum of evidenced-based interventions to achieve academically and behaviorally important outcomes (Sugai et al., 2000). The history of PBIS can be traced to behavioral research conducted in the 1980s at the University of Oregon. This research was related to the need for improved selection, implementation, and documentation of effective behavioral interventions for students with behavioral disorders (Sugai & Simonsen, 2012). Early PBIS research indicated a need for increased emphasis on prevention, research-based practices, data-based decision-making, school-wide systems, explicit social skills instruction, team-based implementation and professional development, and student outcomes (Biglan, 1995; Colvin, Kame'enui, & Sugai, 1993a; Horner, Sugai, & Anderson, 2010; Lewis & Sugai, 1999; Mayer, 1995; Sugai & Horner, 2002).

As a part of the 1997 reauthorization of the Individuals with Disabilities Education Act, a grant to create a National Center for Positive Behavioral Interventions and Supports was established to disseminate and provide technical assistance to schools on evidenced based practices for improving supports for students with behavior disorders (Sugai & Simonsen, 2012). The University of Oregon was awarded the grant to create the center. The National Technical Assistance (TA) Center on PBIS is currently in its 17th year and has assisted in the shaping of the PBIS framework, also known as school-wide positive behavioral interventions and support (PBIS), as well as providing direct professional development and technical assistance to schools (Sugai & Simonsen, 2012). For nearly two decades the National Technical Assistance (TA) Center on PBIS has disseminated information related to effective behavioral strategies using web-based information systems, leadership conferences, best practices documents, publications, presentations, as well as school, district, and state implementation demonstrations (Sugai & Simonsen, 2012).

The West Virginia Department of Education (WVDE) first trained school personnel in PBIS in the fall of 2000. Original trainings were conducted on a school-by-school basis. Unfortunately, no data were collected during this period to document the number of schools trained, implementation fidelity, or changes in behavioral and/or academic outcomes. In 2013, the WVDE recommitted to training school personnel in PBIS. To help with the project, WVDE forged a partnership with the West Virginia Autism Training Center (WVATC) at Marshall University. It is important to note that PBIS is not an autism specific intervention, although the WVATC does have an interest in PBIS as the positive outcomes benefit all students including those with Autism Spectrum Disorders. The project focused on using national implementation research to assess effectiveness of the system and to inform

continued improvement in implementation, training, and support. Twenty-one schools were chosen to pilot the project; outcome data would be collected to inform future efforts.

Statement of the Problem

In *The Education of Children* Alfred Adler (1930) states:

The ideal school should serve as a mediator between the home and the wide world of reality, and should be a place not merely for book knowledge, but a place in which the knowledge and art of living should be taught (p. 12).

Eighty-plus years later, Adler's statement remains relevant. Schools have long been a critical social institution charged with the task of assisting families and other entities in preparing children to be productive members of society. Adler articulates how this preparation is not solely related to the development of academic skills. Given the presence and severity of social issues such as mental health disorders, single-parent families, substance abuse, poverty and violence, schools and other social institutions have no shortage of challenges in achieving the goal of preparing children for a productive adulthood.

The National Institute of Mental Health (2016) estimates that just over 20 percent (or 1 in 5) children, either currently or at some point in their, have had a seriously debilitating mental health disorder. The U.S. Department of Education's Twenty-third Annual Report of the Individuals with Disabilities Education Act (2001) states that approximately 50 percent of students aged 14 and older living with a mental illness drop out of high school. Teens who live with mental illness have the highest dropout rate of any disability group. Gilliam (2005) reported that significant emotional and behavioral issues have also been on the rise in early childhood programming, as more and more students in preschool and kindergarten are being expelled due to behavioral issues.

The increase in prevalence and severity of emotional and behavioral issues in students today has placed increased burden on the education system as a whole. This burden has escalated with incidents of school violence, such as the April 20, 1999, shootings at Columbine High School. Tragedies like Columbine have placed pressure on schools to respond to behavioral issues with a swift and firm hand (Carnig, Fisher, Lieberman, & Cummings, 2009). This firm response to challenging behavior is in part responsible for the creation of zero tolerance policies that commonly result in the increase of suspensions and expulsions in a school (American Psychological Association Zero Tolerance Task Force, 2008). Suspension and expulsion are reactive strategies, and serve simply to remove potential harm. A key issue with the use of such strategies is that they are anti-social or exclusionary in nature, meaning that the core function of the strategy is to remove the student from the social/learning environment. Less severe examples of anti-social or exclusionary discipline strategies include, but are not limited to, detention and time-out. The major shortcoming of these strategies is that they isolate or remove students who commonly struggle socially and academically from the social-learning environments. The removal then decreases the amount of time the student is spending in an environment that will address his or her skills deficits.

The appeal of these strategies is obvious: they provide immediate relief in challenging situations by removing what is viewed as the problem. They fail, however, to address the more serious issues that contribute to the presence of challenging behavior. Indeed, the American Psychological Association Zero Tolerance Task Force's (2008) review of exclusionary and zero tolerance discipline policies found no evidence that the use of suspension, expulsion, or zero tolerance policies has resulted in improvement of student behavior or an increase in school safety. Robers, Kemp, and Truman (2013) found that youths

of color and youths with disabilities were disproportionately impacted by suspensions and expulsions. The American Psychological Association Zero Tolerance Task Force (2008) did find that the use of these strategies are linked to an increased likelihood of future behavior problems, academic difficulty, detachment, and dropout.

As the consequences of using reactive and anti-social or exclusionary strategies become more evident, the education system finds itself in need of more progressive and pro-social behavioral intervention systems that respond to the increasingly complex social and emotional needs of students today. One such behavioral intervention system that has shown effectiveness in research and received support from policymakers is School-wide Positive Behavior Interventions and Support (PBIS). PBIS has been identified as an evidenced-based practice for supporting positive student behavior in the educational setting (U.S. Department of Education, 2014a; Horner et al., 2010).

The implementation of PBIS is a process that involves specific and sequential steps. The first step in this process is to assess the presence of the critical elements of PBIS within educational settings. The information gained from baseline assessment identifies priorities for implementation action planning specific to each educational setting's level of need and understanding regarding PBIS. The state of West Virginia is currently pursuing the implementation of PBIS as well.

Problem Statement

At this point there are no data related to the level of implementation of the critical elements of PBIS to inform and guide the implementation process. This study will attempt to address key questions related to the implementation process for 21 pilot schools in West Virginia.

Research Questions

1. What is the current level of implementation of Tier 1 critical elements of the PBIS framework within West Virginia schools that participated in the PBIS project as measured by the Benchmarks of Quality (BoQ)?
2. Which critical elements did most schools implement as measured by the Benchmarks of Quality (BoQ)?
3. Which critical elements did most schools not implement as measured by the Benchmarks of Quality (BoQ)?
4. Which school demographic elements (school size, school type, and low socioeconomic percentage) show correlation with levels of implementation of the Tier 1 critical elements of the PBIS framework?

Purpose of the Study

The purpose of this study was to explore the implementation of PBIS for the 19 schools participating in the WVDE's PBIS Project. Specific attention is will be given to which critical elements are more or less likely to be put in place during the first year of implementation, and which variables related to the process and the schools seem to positively and negatively influence implementation.

Significance of the Study

Increasingly, education has placed emphasis on the identification and implementation of evidenced-based practices. School-wide Positive Behavior Interventions and Supports (PBIS) has been identified as an evidenced-based practice for supporting positive student behavior in the educational setting (U.S. Department of Education, 2014a; Horner et al., 2010). Because of this identification of PBIS as an evidenced-based practice, educational

settings at a national and international level are working to implement the critical elements of PBIS to improve academic and behavioral outcomes.

WVDE's support for more comprehensive discipline systems was solidified with the passage of West Virginia Education Policy 4373 entitled *Expected Behaviors in Safe and Supportive Schools* (West Virginia Board of Education, 2012). The policy placed emphasis on preventative discipline practices, clear behavioral expectations, behavioral teaching systems, and clear discipline procedures; all elements of the PBIS framework. In West Virginia Education Policy 2322 entitled *Standards for High Quality Schools*, passed on August 18, 2011, the first high quality standard stated is Positive Climate and Cohesive Culture. The connection of this policy to PBIS is supported by the U.S. Department of Education's *Guiding Principles: A Resource for Improving School Climate and Discipline* report (2014a) that recommends the use of the PBIS and other similar models to improve school climate and culture. Given the political and practice implications regarding the implementation of PBIS, the significance of this study is clear. As organizations such as WVDE study the implementation of PBIS, ways to improve implementation practices and overall outcomes can become evident.

Definition of Terms

BoQ. The Benchmarks of Quality (BoQ) is a 53-item self-assessment scale used to measure the degree of implementation fidelity in schools that are implementing Tier 1 critical elements of PBIS (Kincaid, Childs, & George, 2010).

Critical Elements of Tier 1. Specific areas measured for Tier 1 implementation fidelity by the Benchmarks of Quality (BoQ) which include PBS Team, Faculty Commitment, Effective Procedures for Dealing with Discipline, Data Entry & Analysis Plan

Established, Expectations & Rules Developed, Reward/Recognition Program Established, Lesson Plans for Teaching Expectations/Rules, Implementation Plan, Classroom Systems, and Evaluation (Kincaid et al., 2010).

Focus School. A designation assigned to a school in West Virginia based upon achievement data. For an elementary and middle school, learning gaps based on academic progress on the WESTEST 2 between student groups is too large. For high school students, the graduation gap between student groups is too large (West Virginia Department of Education, 2014).

Implementation Fidelity. As defined by Mowbray, Holter, Teague, & Bybee (2003), “the extent to which the delivery of an intervention adheres to the protocol or program model originally developed” (p. 315).

Multi-tiered System of Support (MTSS). A term used to describe an evidence-based model of schooling that uses data based problem solving to integrate academic and behavioral instruction and intervention. The integrated instruction and intervention is delivered to students in varying intensities (multiple-tiers) based on student need.

PBIS. A framework for enhancing the adoption and implementation of a continuum of evidenced-based interventions to achieve academically and behaviorally important outcomes for all (Sugai et al., 2000).

Priority School. A designation assigned to a school in West Virginia based upon achievement data. The school is among the lowest performing in West Virginia based on the number of students at or above mastery on WESTEST 2 (West Virginia Department of Education, 2014).

Tier 1 Interventions. Processes and procedures also referred to as Primary or Universal Interventions implemented across the school for all students and all staff, in all settings (Horner et al., 2010)

Tier 2 Interventions. Processes and procedures, also referred to as Secondary or Targeted Interventions, designed for students who are not responding to the primary level of support. Students receiving Tier 2 supports will continue to receive Tier 1 supports; they are also receiving additional supports to help them be successful. Examples of Tier 2 intervention include check and connect, check-in/check-out, first step to success, think time and social skill groups (Horner et al., 2010).

Tier 3 Interventions. Processes and procedures, also referred to as Tertiary Interventions, designed for students whose behavior is not responding (or is unlikely to respond) to the Tier 1 and 2 interventions in a school. Tier 3 includes the completion of a functional behavioral assessment (FBA) and an individualized behavior plan (Horner et al., 2010).

Assumptions

Because the data being collected is self-reported, it is assumed that the respondents will be honest when responding to the BoQ. Since participants completing the BoQ will have completed the three-day PBIS training academy, three-day PBIS follow-up training, and monthly team meetings, it is assumed that they will have a high enough level of understanding regarding PBIS to allow them to complete the BoQ accurately. Because the curriculum and format used for the PBIS trainings was based upon BoQ, it is assumed that the BoQ can accurately measure the implementation of the content covered.

Limitations

This study is limited to only 21 schools in West Virginia due to the nature and focus of the WVDE PBIS Project. The small sample size was related to the fact that this phase of the PBIS Project was a pilot that would be used to collect information and make revisions to the process to improve large-scale efforts in future. The 21 schools were selected via an application process. The selection process gave priority to schools with the focus or priority designation. Only five of the 21 schools were not focus or priority schools and those five schools were selected based on the amount of implementation support offered by the regional stakeholders. A random selection process was not used because the focus of the pilot project was on schools that were either in most need for the intervention (focus and priority schools) or schools that had the most support from regional stakeholders. The study will be constrained to the summer of 2014 to the spring of 2015. Future studies may extend this timeframe, but for the purposes of timely feedback this study will be limited to one academic year. The BoQ that is used in the study to measure implementation fidelity is a self-report tool, which can increase the likelihood of bias; however, the BoQ was selected due to its inter-rater reliability between Time 1 and Time 2 of .94 ($p < .01$) and correlation of .51 ($p < .05$) with total scores on the School-wide Assessment Tool, a tool that uses an external assessor and is commonly viewed as the standard for measuring PBIS (Cohen, Kincaid, & Childs, 2007). Later research will likely consider using other forms of data to clarify results and provide more clarity related to findings.

CHAPTER 2

REVIEW OF LITERATURE

This chapter will address information concerning the evolution of school-based behavior support programs, and the behavioral issues these programs seek to address. Characteristics of behavior support programs will be explored along with the results of using such programs. This chapter will also present a description of the Positive Behavior Interventions and Supports (PBIS) Program which is the main focus of this dissertation.

Evolution of School-Based Behavior Supports

Schools as a Social Learning Environment. The Education Commission of the States reported that schools in West Virginia are required to complete 180 instructional days over the period of an educational calendar year (Bush & Rose, 2011). According to statistics provided by the National Center for Education (2008) the average school day in West Virginia is 6.87 hours. Based on these two numbers, a student in West Virginia will spend approximately 1,237 hours at school each year, giving a total of approximately 16,076 hours from kindergarten through 12th grade. Excluded from those totals is the additional time that many students spend at school participating in extracurricular activities and before and after school care. Based on the significant time students spend in schools, it is logical to presume that the educational system is a primary institution that contributes greatly to the development of young people. The primary charge of the educational system is to provide academic instruction to help prepare young people to contribute to society throughout their lifespan. Along with the provision of academic instruction, the education system is also one of the primary institutions for the social and emotional development of young people. The challenge of supporting the academic, social, and emotional development of young people is obviously

not a simple task. The pursuit is complicated by the continuous changes in social and economic context. How to execute the task of supporting the development of young people is not without debate. There has, and likely always will be, disagreement regarding the best ways to support the academic and social development of young people.

Behavioral Issues in Schools Today. It seems logical to presume that behavioral issues in the school environment can impede the overall process of education. A key element of the process involves students being engaged in instruction and learning activities. One of the most effective behavior support practices is increasing student engagement in classroom activities (Jordan, Schwartz, & McGhie-Richmond, 2009). Behavioral issues such as hyperactivity, inattention, disrespect, and noncompliance obviously impede the effectiveness of the educational process, for both individuals who display the behaviors, and for classmates and peers. In a national survey of middle and high school teachers, 76 percent indicated they would be better able to educate students if discipline issues were not so prevalent; over one-third reported they had considered leaving the profession because of student discipline issues (Public Agenda, 2004). In an analysis of office discipline referrals (ODRs) representing a stratified sample of 3,600 school-age children in public schools, mental health clinics, and hospitals from 375 sites in 40 states between the years 2002 and 2004, disruptive and hyperactive behaviors were found as the most common problem behaviors in general education classrooms (Harrison, Vannest, Davis, & Reynolds, 2012). A survey of a nationally representative sample of 1,000 teachers and 1,180 students in the 3rd through 12th grade found that 11 percent of teachers and 23 percent of students reported being victims of school violence (Leitman & Binns, 1993).

The U.S. Department of Health and Human Services (2000) estimates that four million school-age children in the United States live with a serious mental health disorder that causes significant impairment in their ability to function at school, at home, and with peers. The report also states that of children ages 9 to 17 years old, 21 percent have a diagnosable mental or addictive disorder that causes at least minimal impairment. The U.S. Department of Education's *Twenty-third Annual Report of the Individuals with Disabilities Education Act* (2001) stated that approximately 50 percent of students age 14 and older who live with mental illness drop out of high school. The result is that teens who live with mental illness are now the largest dropout population.

Responses to Behavioral Issues

Zero Tolerance and Exclusionary Discipline Policies. The rise in frequency of behavioral issues in schools has placed increasing burden on the education system as a whole. This burden is compounded by highly publicized incidents of school violence, as occurred at Columbine High School in 1999, which place school safety and discipline in the public eye. Tragedies like Columbine have placed pressure on schools to respond to behavioral issues with a swift and firm hand (Carnig, Fisher, Lieberman, & Cummings, 2009). This move toward a firm response to challenging behavior is in part responsible for the creation of zero tolerance policies that commonly result in the increase of suspensions and expulsions in a school (American Psychological Association Zero Tolerance Task Force, 2008). Suspension and expulsion are reactive strategies, which serve simply to remove potential harm. Less severe examples of anti-social or exclusionary discipline strategies include, but are not limited to, detention and time-out. A key issue with such strategies is that they are anti-social or exclusionary in nature, meaning that the core function of the strategy is to remove the

student from the environment. The American Psychological Association's (APA) Zero Tolerance Task Force's (2008) review of exclusionary and zero tolerance discipline policies found no evidence that the use of suspension, expulsion, or zero tolerance policies has resulted in improvement in student behavior or increase school safety. In fact, the APA's Zero Tolerance Task Force's (2008) did find that the use of exclusionary and zero tolerance strategies are linked to an increased likelihood of future behavior problems, academic difficulty, detachment, and dropout. These findings are even more alarming when paired with the information from the Federal Bureau of Investigation's (FBI) (1999) report regarding risk factors to consider when assessing for potential student violence in school. The FBI reports that a lack of attachment to other students, teachers, and school activities is a risk factor that increases a student's risk for violence in school. Considering this finding, one could start to entertain the possibility that the very interventions (e.g. exclusionary and zero tolerance policies) created in reaction to school tragedies could actually increase the risk of school violence. When looking specifically at the student-teacher relationship, the connection between exclusionary and zero tolerance policies and a lack of attachment to teachers is another area to consider for school safety. A negative student-teacher relationship, especially in early education, has been connected to school avoidance (Palermo, Hanish, Martin, Fabes, & Reiser, 2007) as well as decreased academic performance (Hamre & Pianta, 2001).

Inequitable discipline was another risk factor identified in the FBI's report. The term describes the student's perception that disciplinary practices are applied with bias and/or inconsistency (FBI, 1999). This issue, commonly referred to as disproportionality, is garnering a lot of political attention in education today. An example of disproportionality can be found in the Robers, Kemp, and Truman (2013) work, which found that youth of color and

youth with disabilities were disproportionately subject to the disciplinary practices of suspensions and expulsions. This is compounded by the fact that these students already have a number of social risk factors working against them in the educational setting. These findings speak to the fact that disproportionality is a matter of equity of access to supports and services in the educational environment.

Intervention, in the strictest sense, refers to addressing a problem to achieve an improved outcome. It is logical to expect, then, that an effective intervention should decrease the severity or frequency of the problem it was designed to address. The application of this logic is essential when analyzing discipline. Skiba and Sprague (2008) stated that students suspended in the 6th grade are more likely to receive office referrals or suspensions by the 8th grade than students who had not been suspended. This finding may not be surprising, but it should raise questions as to whether the earlier interventions created a change in the student's future behavior or if the intervention actually contributed to the progression of negative behavior. This subtle difference is not clarified in the study, but both possibilities are concerning. In 2011 through 2012 nearly 3.5 million public school students were suspended at least once. Of the 3.5 million suspended, 1.55 million were suspended at least twice (Schollenberger, 2015). Given that an average suspension lasts 3.5 days, U.S. public school children lost nearly 18 million days of instruction in 2011-12 because of exclusionary discipline (Losen, Hodson, Keith, Morrison, & Belway, 2015). The APA's Zero Tolerance Task Force (2008) found that students that have been suspended or expelled are more likely to drop out of school and/or be involved with the juvenile justice system. The Task Force (2008) also found that schools with higher rates of out-of-school suspension tend to have lower academic quality, pay less attention to school climate, and receive lower ratings on

quality of school governance measures. Emerging data also indicated that schools with higher suspension and expulsion rates have lower outcomes on standardized achievement tests, regardless of economic or student demographics (Davis & Jordan, 1994; Mays, 2014; Skiba & Rausch, 2006).

The use of suspension, expulsion, or zero tolerance policies is not isolated to older children. Gilliam (2005) reported that more preschool and kindergarten students are being expelled due to behavioral issues. In fact, Gilliam (2005) states that expulsion rates for pre-kindergarteners exceed those of students in K-12 classes in all but three states. There is obvious cause for concern if one of the primary discipline strategies for three to five year olds is isolation and removal from programming. Two of the primary goals of prekindergarten are school readiness and social-emotional development. It is only logical to question whether removal from programming might compromise the achievement of these goals.

The major shortcoming of these strategies is they isolate or remove students from the learning environment, which in turn decreases the amount of time spent working on the skill deficits in that setting. Skiba and Sprague (2008) refer to this as “a devil’s bargain” as schools have the right and responsibility to ensure that students can learn and the teacher can teach, but it is hard to justify the reliance on the removing students from the learning environment when it is what they need most for positive academic outcomes. The West Virginia Department of Education (WVDE) reported that more than 60 percent of documented school disciplinary action in West Virginia forces students out of the class, even though in the majority of cases the behaviors were classified as “minimally disruptive”, meaning the student did not pose a danger to themselves or others. The WVDE also states that some students were even expelled for minimally disruptive behavior (Mays, 2014).

The appeal of anti-social or exclusionary strategies is obvious as they provide immediate relief in challenging situations by removing what is viewed as the problem. The basic logic for exclusionary strategies is as a risk removal intervention. A risk removal intervention is the removal of a specific element (in this case a student) in order to improve the overall functioning of a system (in this case a school). An example of a risk removal technique in medicine would be a surgical procedure to remove a cancerous tumor. The tumor is viewed as a potential threat to the health of the organism, so it is removed. A key aspect of this approach is that the needs of the potentially harmful element are not of concern. The primary concern is the health of the overall system. The shortcoming in applying this approach in the educational setting is that the needs of the student with challenging behavior are also important to the health of the overall system and simple removal fails to offer the essential instructional support to build the student's skills, which in turn increases the likelihood of the challenging behavior in the future. One assumption used to justify the use of removal or exclusionary strategies is that exclusion from the learning environment creates social and academic discomfort resulting in a decrease in the likelihood of challenging behavior in the future. This might be the case in some instances, but the findings from Skiba and Sprague (2008) speak to a different correlation as they found that students suspended in the 6th grade are more likely to receive office referrals or suspensions by the 8th grade than students who had not. This evidence paired with the information from the FBI threat assessment report (1999) speaks to the concern that the overuse of exclusionary strategies falls short in addressing the behavioral needs of students and might actually be making issues related to challenging behavior and school violence worse.

Descending Levels Behavior Assessment Systems. Descending levels behavior assessment systems is another common behavior intervention strategy (Shindler, 2009). In this system each student begins the day at the top behavioral level indicated by a specific colored card, symbol (e.g. smiley face), or without their name on the board. If the student complies with the school rules they will remain on the acceptable level indicator; however, a student violates the rules the infraction is indicated by drop in level as indicated by a change in the colored card, change in the symbol, or having his/her name written on the board. Consequences are paired to a student's descent down the level system (Shindler, 2009). An example of this using the color system would be a student starting the day at the green level indicating that they are behaving at the acceptable behavioral level. If the student displays a behavior that violates the rules the teacher would then change the student's color to yellow; being placed on yellow would result in the student losing 30 minutes of his/her recess. The theoretical roots of this system are based on behavioral theory pioneered by B. F. Skinner in the early and mid-1900s. A key element of Skinner's theory was operant conditioning, which is a form of learning where the use of positive and negative consequences are used to modify the frequency of a behavior (Sadock & Sadock, 2007). In the example given above, the removal of recess would be an example of using negative punishment to modify the student's behavior. The challenge with descending level systems is that they are loss-based. This means they depend heavily on the student's motivation to avoid the punishment to guide positive behavior. Social pressure is another key element of this intervention as the status of each student is posted for all to see. This is done in an effort to motivate students to remain on the acceptable behavior indicator and avoid negative social attention (Shindler, 2009).

The primary issue with the descending level system is that it is reactionary. The system is based on responding to negative behavior after it happens. This focus can lead to supervision being about threatening and catching students in violation of the rule, as opposed to acknowledging students for successfully following the rules (Shindler, 2009). This focus on infractions and descending down the levels affects the nature of the interactions between the staff and students by creating an expectation of negativity in interaction. In regards to the social pressure element, the public display of the indicators or symbols (e.g. colors, faces, or name on the board) connect the creation of public shame for students that are reduced to lower levels. The issue with using shame as a primary motivator is that it tends to have weak long-term impact on reducing challenging behaviors and can create unwanted consequences related to future behavior and social development (George, White, & Schlafler, 2006; Levine, 2005).

Shortcomings of Common Discipline Practices. One of the central issues when analyzing behavior management strategies like suspension, expulsion, time-out, detention, and descending level systems is that they are reactionary. The strategies depend heavily on the application of punishment in various forms to motivate behavioral change. Schools are a primary social institution charged with the development of students academically, socially, and emotionally. Even someone with a basic understanding of human development recognizes that the development of a skill is connected with a variety of critical factors being present, such as: instruction, a supportive environment, a developmentally appropriate challenge, correction, and reinforcement. These foundational concepts begin to show how punitive and reactionary strategies alone fall short in supporting the pursuit of social and emotional maturity in students.

Positive Behavior Interventions and Supports (PBIS)

As the consequences of using reactive and anti-social or exclusionary strategies become more evident, the education system finds itself in search of more progressive and pro-social behavioral intervention systems that respond to the increasingly complex social and emotional needs of students today. One behavioral intervention system that has demonstrated effectiveness in research and received support from policymakers is School-wide Positive Behavior Interventions and Support (PBIS). PBIS has been identified as an evidenced-based practice for supporting positive student behavior (U. S. Department of Education, 2014; Horner, et. al., 2010).

A Historical Review of PBIS. Arne Duncan, the former United States Secretary of Education, recommended the implementation of PBIS framework in his letter to Chief State School Officers to help address educational issues related to social culture, academic struggles, problem student behavior, and the overuse of seclusion and restraint (2009). This recommendation was re-affirmed by the U.S. Department of Education's *Guiding Principles: A Resource for Improving School Climate and Discipline* (2014a) report as the PBIS framework is mentioned several times as an evidenced-based intervention that can be used to improve school climate and discipline processes.

WVDE has followed the national trend toward more comprehensive discipline systems with the passage of West Virginia Education Policy 4373 entitled *Expected Behaviors in Safe and Supportive Schools* (West Virginia Board of Education, 2012). The policy places emphasis on several elements of PBIS framework, including preventative discipline practices, clear behavioral expectations, behavioral teaching systems, and clear discipline procedures . In West Virginia Education Policy 2322 entitled *Standards for High*

Quality Schools (2011), the first high quality standard is Positive Climate and Cohesive Culture. The connection of this policy to PBIS is supported by the U.S. Department of Education's *Guiding Principles: A Resource for Improving School Climate and Discipline* report (2014a), which recommends the use of PBIS and other similar models to improve school climate and culture.

PBIS is defined as a framework for enhancing the adoption and implementation of a continuum of evidenced-based interventions to achieve academically and behaviorally important outcomes (Sugai et al., 2000). The history of PBIS can be traced to behavioral research conducted in the 1980s at the University of Oregon. This research pointed at the need for improved selection, implementation, and documentation of effective behavioral interventions for students with behavioral disorders (Sugai & Simonsen, 2012). Early PBIS research indicated a need for increased emphasis on prevention, research-based practices, data-based decision-making, school-wide systems, explicit social skills instruction, team-based implementation and professional development, and student outcomes (Biglan, 1995; Colvin, Kame'enui, & Sugai, 1993b; Horner et al., 2010; Lewis & Sugai, 1999; Mayer, 1995; Sugai & Horner, 2002). With the passage of the Elementary and Secondary Education Action (ESEA) in 2001 and the revision of the Individuals with Disabilities Education Act (IDEA) schools are required to use proactive academic and behavioral approaches to match the level of student need with the interventions and supports provided. As a part of the 1997 reauthorization of IDEA, a grant from the U.S. Department of Education's Office of Special Education Programs established a National Center for Positive Behavioral Interventions and Supports and was legislated to conduct research, disseminate findings, and provide technical assistance to schools on identified evidenced based practices for improving supports for

students with behavior disorders (Sugai & Simonsen, 2012). The University of Oregon was awarded the grant to create the center. Since the initial grant award, the University of Oregon has collaborated with several other universities and national experts. The National Technical Assistance (TA) Center on PBIS is currently in its 17th year and has assisted in the shaping of the PBIS framework, also known as School-Wide Positive Behavioral Interventions and Support (PBIS), as well as providing direct professional development and technical assistance to schools (Sugai & Simonsen, 2012). For nearly two decades the TA Center on PBIS has disseminated information related to effective behavioral strategies using web-based information systems, leadership conferences, best practices documents, publications, and presentations; it has also conducted school, district, and state implementation demonstrations (Sugai & Simonsen, 2012). According to the TA Center there are currently over 7,000 schools currently implementing PBIS and creating successful changes in their school environment (Positive Behavior Interventions & Support OSEP Technical Assistance Center, 2014)

Elements of PBIS. PBIS is based on three tiers of supports for positive behavior. This tiered model of intervention, commonly referred to as multi-tiered system of support (MTSS hereafter), has become commonplace in education as a responsive system of varying intervention levels to meet the behavioral and academic needs of students. The MTSS focuses on providing need-based student supports in a proactive manner in accordance with IDEA (Florida's Positive Behavior Support Project, 2011). Besides PBIS, other multi-tiered intervention models include, but are not limited to, Response to Intervention (RtI) for delivering academic supports and Expanded School Mental Health (ESMH) for delivering mental health supports.

The three tiers of the PBIS framework include primary intervention, secondary intervention, and tertiary intervention. Primary interventions, often referred to as universal supports or Tier 1, are interventions or processes implemented throughout the school for all students in all settings. A core element of Tier 1 is the articulation of behavioral expectations that are taught using a variety of instructional methods (Horner et al., 2010). For example, a school may have the behavioral expectations for all students to “Be Safe, Be Respectful, and Be Responsible.” Students would then be taught how to meet these expectations in specific locations and situations such as the hallway or during an assembly. According to the Benchmarks of Quality (BOQ), a Tier 1 implementation fidelity self-assessment, the other critical elements of Tier 1 include the formation of a PBIS Team, Faculty Commitment, Effective Procedures for Dealing with Discipline, Data Entry & Analysis Plan Established, Reward/Recognition Program Established, Lesson Plans for Teaching Expectations/Rules, Implementation Plan, Classroom Systems, and Evaluation (Kincaid, et al., 2010).

Secondary interventions, often referred to as targeted supports or Tier 2, are interventions designed for students who are not responding to the supports provided by Tier 1. Tier 2 interventions are simply supports in addition to Tier 1 to help students be successful in school. Examples of frequently implemented Tier 2 interventions include check and connect, check-in/check-out, first step to success, think time, and social skills groups (Horner et al., 2010). The focus of Tier 2 interventions is to provide extra supports without the creation of a highly individualized plan. For example, check-in/check-out is an intervention where a student has a specific staff person that they meet with at the beginning and end of each day. During the check-in and check-out time the staff person reviews the student’s academic and behavioral status and offers support and encouragement as needed.

Tertiary interventions, often referred to as intensive supports or Tier 3, are interventions designed for students whose behaviors have not responded, or are unlikely to respond, to the Tier 1 and 2 interventions. Tier 3 supports are individualized to the unique needs of the student and require a significant investment of time and resources as well as collaboration and expertise to guide implementation. Tier 3 commonly includes a functional behavior assessment (FBA) to determine factors that are affecting the student's behavior in order to guide the development of individualized interventions (Horner et al., 2010).

By using this multi-tiered framework schools are able to provide responsive need-based behavioral support for all students. A key difference between the PBIS framework and other behavioral programs is that it provides guidelines in which schools create culturally specific and need-based interventions, whereas many behavioral programs are guided by scripted text and protocols that allow little variance on the part of the school personnel. This lack of script and protocol has resulted in some criticism of PBIS, stating that it is difficult to replicate, but research studies have attempted to address this concern through the identification of essential implementation features and fidelity measures.

PBIS Outcomes. The implementation of PBIS has shown promising outcomes. A critical finding related to the implementation of PBIS is that it can be implemented with fidelity in a wide range of contexts and by typical implementation agents such as state, district, and school level personnel (Horner et al., 2010). This is a positive in that schools do not need to pay exorbitant amounts of money to hire outside consultants or added staff or to purchase expensive materials. The support and materials needed to begin implementation of PBIS can be accessed for free from the National Technical Assistance (TA) Center.

School personnel have also reported that the implementation of PBIS improved clarity of purpose, predictable coordination, and perceived impact on student outcomes (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008). This perceived improvement from the school personnel is critical when looking at concepts like school climate. A primary focus of PBIS is the reduction of problem behaviors that result in the office discipline referrals, disruption, and reduced academic engagement. An increasing body of evidence supports that the implementation of PBIS is associated with reductions in problem behavior (Colvin, Kame'enui, & Sugai, 1993a; R. H. Horner et al., 2009; Nelson, Martella, & Marchand-Martella, 2002; Safran & Oswald, 2003). Specific positive outcomes related to PBIS in impoverished rural schools include the decrease in discipline referrals, lowering of suspension rates, and reduction in failure rates (McCrary, Lechtenberger, & Wang, 2012). This is especially relevant for the implementation of PBIS in West Virginia given the number of impoverished rural schools across the state. Although it is difficult to claim that implementation of PBIS is causally associated with improved academic outcomes; an inverse relationship between problem behavior and weak academic performance has been found (Nelson et al., 2002). It is within the realm of logic that as problem behaviors decrease the learning environment should improve, which could create opportunities for improved instruction and academic performance. This is an area that continues to be researched in order to isolate the basic mechanism related to the relationship of PBIS implementation and academic outcomes.

The implementation of PBIS is not without controversy. According to Horner, Sugai, and Anderson (2010), PBIS does not fit easily and conveniently into past descriptions of a practice, but it does carry sufficient experimental documentation to be classified as evidence

based and warrant large-scale implementation. This claim, it must be said, is not without its challengers. Chitiyo, May, and Chitiyo (2012) state while methodological limitations are addressed to strengthen the evidence base, PBIS should be classified as a promising practice as opposed to an evidenced based intervention as methodological limitations are addressed to strengthen the evidence base. The primary methodological limitations cited by Chitiyo, May, and Chitiyo is that there is an overuse of descriptive non-experimental studies to support the effectiveness of PBIS and there needs to be more experimental studies to provide clarity as to experimental effect of implementation (2012). This criticism should be noted, but it is still the case that PBIS is cited several times by U.S. Department of Education's *Guiding Principles: A Resource for Improving School Climate and Discipline* (2014a) as an evidenced-based intervention that can be used to improve school climate and discipline processes in the.

Professional Development in Education

Identifying an evidence based practice in education is only one part of improving schools, albeit a very important part. The second critical element to improving schools is providing professional development (sometimes referred to as professional learning) that increases the likelihood that a school will implement the identified evidenced based practices with fidelity. As Hammer (2013) stated:

Professional development is the essential mediator of the success of any innovation, especially innovations aimed at changing classroom practices. Unless it is approached systematically and with a high level of commitment, the likely result will be little change, disappointing student test scores, political fall-out, and another call for education to go back to the basics (p. 1-2).

There seems to be a steady demand for quality professional development as the educational system and its stakeholders continue to try to improve student outcomes. The easiest but commonly criticized form of professional development is the single-shot, one-day

workshop. This criticism is addressed in the U. S. Department of Education (2001) definition of professional development found in No Child Left Behind Act which states that professional development activities “are not 1–day or short-term workshops or conference” (p. 1963). The primary criticism of this approach is the lack of depth and comprehensive and ongoing support to address complicated issues (Ball & Cohen, 1999). Even beyond the single-shot workshops professional development often lacks an implementation framework and continuity of opportunities for learning and application (Wilson & Berne, 1999).

In response to the need for high quality professional development, both the political and research communities have been working to clarify the essential features of quality professional development. For example, in the *No Child Left Behind Act of 2001* professional development is clarified using a list of 15 activities. The activities include the following:

1. Improve and increase teachers’ knowledge of the academic subjects the teachers teach, and enable teachers to become highly qualified;
2. Are an integral part of broad schoolwide and districtwide educational improvement plans;
3. Give teachers, principals, and administrators the knowledge and skills to provide students with the opportunity to meet challenging State academic content standards and student academic achievement standards;
4. Improve classroom management skills;
5. Are high quality, sustained, intensive, and classroom-focused in order to have a positive and lasting impact on the classroom instruction and the teacher’s performance in the classroom, and are not 1-day or short-term workshops and conferences;
6. Support the recruiting, hiring, and training of highly qualified teachers, including teachers who become highly qualified through State and local alternative routes to certification;
7. Advance teacher understanding of effective instructional strategies that are:
 - a. based on scientifically based research (expect that this subclause shall not apply to activities carried out under part D of Title II); and
 - b. strategies for improving student academic achievement or substantially increasing the knowledge and teacher skills of teachers; and
8. Are aligned with and directly related to:
 - a. state academic content standards, student academic achievement standards, and assessments; and

- b. the curricula and programs tied to the standards described in the subclause (a) except that this subclause shall not apply to activities described in (2) and (3) of section 2123(3)(B);
9. Are developed with extensive participation of teachers, principals, parents, and administrators of schools to be served under this Act;
10. Are designed to give teachers of limited English proficient children; and other teachers and instructional staff, the knowledge and skills to provide instruction and appropriate language and academic support services to those children, including the appropriate use of curricula and assessments;
11. To the extent appropriate, provide training for teachers and principals in the use of technology so that technology and technology applications are effectively used in the classroom to improve teaching and learning in the curricula and core academic subjects in which the teachers teach;
12. As a whole, are regularly evaluated for their impact on increased teacher effectiveness and improved student academic achievement, with the findings of the evaluations used to improve the quality of professional development;
13. Provide instruction in methods of teaching children with special needs;
14. Include instruction in the use of data and assessments to inform and instruct classroom practice; and
15. Include instruction in ways that teachers, principals, pupil services personnel, and school administrators may work more effectively with parents [...] No Child Left Behind Act of 2001, p. 1963-1964).

Building on the intent and efforts of the U.S. Department of Education, in 2012 the West Virginia Board of Education (WVBE) approved a definition and standards to help guide the planning and application of professional learning across the state. The definition states, “Professional learning includes sustained experiences that lead to the development of knowledge, skills, practices, and dispositions educators need to help students perform at higher levels and achieve college and career readiness” (West Virginia Board of Education, 2014, p. 2). The standards for professional learning were adopted from the Learning Forward Standards for Professional Learning, which were created by The Professional Learning Association. The standards include the following:

1. Occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

2. Requires skillful leadership to develop capacity, advocate, and create support systems for professional learning.
3. Requires prioritizing, monitoring, and coordinating resources for educator learning.
4. Uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.
5. Integrates theories, research, and models of human learning into learning designs to achieve its intended outcomes.
6. Applies research on change and sustains support for implementation of professional learning for long-term change.
7. Aligns its outcomes with educator performance and student curriculum standards (West Virginia Department of Education, 2014).

The research community has also weighed in on the topic of professional development. One of the most comprehensive contributions from research came out of collaboration between researchers from the American Institutes for Research (AIR) and Advance Research. The project was sponsored by the Regional Education Laboratory-Southwest (RELSW) and funded by the Institute of Education Sciences (IES) of the U.S. Department of Education. The researchers reviewed more than 1,300 studies using the What Works Clearinghouse of the U.S. Department of Education standard of credible evidence to assess which studies were conducted with sufficient rigor to address impacts of professional development on student learning. Of the 1,300 studies the researchers reviewed, only nine met the criteria (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). While the researchers cautioned readers about generalizing too broadly due to the small number of studies

identified, there were still some meaningful findings. All nine studies focused on elementary schools and were conducted between 1986 and 2003 (Guskey & Yoon, 2009).

The studies included measures of student learning in varying areas including reading, language arts, and science. The number of teachers participating in the studies ranged from five to 44, the number of students ranged from 98 to 779. The nine studies shared five common elements and characteristics related to professional development. The five elements or themes included workshops, outside expertise, time, follow-up, activities, and content. In regards to workshops, all nine studies showed a positive relationship between professional development, improving student learning, and the involvement in workshops or summer institutes. The studies also included the training and support from an outside expert. Another theme in the studies was time. In the nine studies that met the criteria each included 30 or more professional development contact hours. An interesting commonality that seems to be counter to the best practices conversation was that the nine studies had no set of common activities or designs linked to effect on student outcomes. Finally, the studies focused on specific subject-related content or pedagogic practices (Guskey & Yoon, 2009).

It is clear from the information above that the definition and application of quality professional development is driven by policy and research. The professional development model used for the West Virginia Department of Education's (WVDE) School-wide Positive Behavior Interventions and Support (PBIS) Project was developed with the inclusion of these policies and research in mind. The WVDE PBIS model was also heavily influenced by the Florida's Positive Behavior Support Project, which has been a leader in research and implementation of PBIS under the leadership of Director Don Kincaid, Ed.D., BCBA-D. Dr. Kincaid has published over 15 articles in peer reviewed journals, 15 books or book chapters,

and collaborated on over 30 funded grants related to the topics of behavior support (University of South Florida Children and Family Studies, 2015). Based on these accomplishments, Dr. Kincaid is nationally recognized as an expert in the areas of PBIS and professional development. Dr. Kincaid provided technical assistance as WVDE developed the professional development model for implementing PBIS. Details related to the professional development model are outlined in subsequent chapters.

CHAPTER 3

METHODOLOGY

As consequences to using reactive and anti-social or exclusionary strategies become more evident, the education system finds itself in search of more proactive and pro-social behavioral intervention systems that respond to the increasingly complex social and emotional needs of students today. One behavioral intervention system that has shown effectiveness in research and received support from policymakers is School-wide Positive Behavior Interventions and Supports (PBIS hereafter). PBIS has been identified as an evidenced-based practice for supporting positive student behavior in the educational setting (U. S. Department of Education, 2014a; Horner, Sugai, & Anderson, 2010).

The West Virginia Department of Education (WVDE) first started training school personnel in PBIS during fall of 2000. The original trainings were conducted on a school-by-school basis. Unfortunately, no data were collected during this period to document the number of schools trained, implementation fidelity, or changes in behavioral and/or academic outcomes. In 2013, the WVDE recommitted to training school personnel in PBIS. Currently, the project focuses on using national implementation research to assess effectiveness of the system and to inform continued improvement in implementation training and support.

The purpose of this study is to explore the implementation of PBIS for the 19 school teams participating in the WVDE PBIS Project with specific attention being paid to which critical elements are more and less likely to be put in place during the first year of implementation and which variables related to the process and the schools seem to positively and negatively influence implementation. This chapter will describe the methods and data

analysis of this study related to the implementation of a PBIS project in West Virginia schools.

Research Design

Descriptive research methodology was used to identify the reported changes in the implementation of the essential features of SWPBS for 19 school teams participating in the PBIS Project. A survey was used to collect data at the beginning of the project and at the end of the first school year of implementation. This method was selected because it offers an efficient and effective means to collect general data for future planning and implementation.

Population and Sample

According to the U.S. Department of Education (2014b), there are 808 public schools in West Virginia serving approximately 291,811 students. The WVDE selected a sample of 21 schools to participate in the PBIS Project; however, two of the schools did not complete the pre-and post-surveys, leaving a total of 19 schools participating in the research section of the project. A small sample was selected due to the intensity of training and support provided to each school in the project and the amount of infrastructure and resources currently available to provide those supports.

The initial invitation for schools to participate in the PBIS Project was sent from the WVDE Office of Special Programs (OSP) via a listserv to the special education directors in all 55 counties. The PBIS Project is not only for students with special education needs. The project focuses on improving behavior supports for all students. The information and registration was sent to the county special education directors because all county offices have a special education director position, which assured equal access to the information and efficiency of communication. The county special education directors could gain more

information about participation in the project from a link to an information webpage (Appendix B). The county special education directors would then forward the information to schools that they thought would be interested or benefit from participating. If the school administration reviewed the information and wanted to participate, they would go to a registration link provided on the information webpage and register his/her school team.

A total of 237 individuals registered to participate in the project. That number was reduced to 172 individuals by eliminating those who were not registered with a complete school team. To be considered a complete team, at least 4 members had to register and one had to be a building administrator. It was recommended, but not required, that the team also have a general education teacher, special education teacher, and counselor or school psychologist. The 172 individuals comprised 35 teams ranging from four to eight members. From that 35, there were a total of 21 schools selected to participate in the project. Teams from schools designated as *Focus* or *Priority* by the WVDE designation system were given priority for selection. A *Priority* designation is assigned to a school in West Virginia based upon achievement data. These schools are among the lowest performing in West Virginia based on the number of students at or above mastery on WESTEST 2. A *Focus* designation assigned to a school in West Virginia is based upon learning gaps between student groups. For elementary and middle schools, learning gaps were measured by academic progress on the WESTEST 2. For example, if there is a larger than expected learning gap between the general student population and students receiving special education services, the school would be given a *Focus* designation. For high school to be given the *Focus* designation, there must be larger than expected graduation gap between student groups (West Virginia Department of Education, 2014). Using this preference for selection, 17 schools were

selected. Of these 17 teams, 14 were Focus schools and three were Priority schools. The remaining four spots were filled with teams that had committed regional support. Having committed regional support was defined as teams that had staff from their county or regional offices participating in the PBIS training and providing ongoing support. Two schools did not complete the pre and post surveys, leaving a total of 19 schools participating in the research section of the project. The 19 schools represented 15 different counties across West Virginia. Nine of the schools were from the northern region of the state and 10 were from the southern region of the state. Nine of the schools were elementary schools (grades K-5), seven were middle schools (grades 6-8), and three were high schools (grades 9-12).

The PBIS Project began in the summer of 2014 with two separate three-day training academies. The teams in the northern region participated in the three-day academy in Morgantown, WV, and the teams in the southern region participated in the three-day academy in Daniels, WV. Goals of the academies were: train the school teams on the essential elements of Tier 1 Interventions within the PBIS framework; assist teams in assessing a baseline level of the presence of the essential elements; and assist in action planning for the implementation of PBIS in the coming school year. During the three-day academy each team worked with a regional coach. Regional coaches were either staff from the county board of education or the Regional Education Service Agency (RESA) where the school is located. RESAs are regional service agencies that provide technical assistance and other supports to the county boards of education. Following the three-day academies, the regional coaches had monthly contact with teams to assist in troubleshooting or accessing outside resources to assist in implementation. Teams could also request technical assistance from the two state-level PBIS coordinators.

All teams attended a follow-up session in October, 2014. The focus of the follow-up session was to provide each team with information regarding common challenges in implementation, assess their current level of implementation compared to the beginning of the year, and action planning for the remainder of the school year. Teams also participated in an end-of-year planning meeting in the spring of 2015. The planning meetings were held either at the school or via conference call with the participation of the school team, the regional coach, and at least one of the state-level coordinators. The purpose of the end-of-year meetings was to collect data related to the level of implementation since the beginning of the year and start action planning for the year to come.

Instrumentation

The evaluation tool with which teams used to assess their level of implementation was the Benchmarks of Quality (BoQ) (Appendix A). The BoQ is a 53-item self-assessment scale used to measure the degree of implementation fidelity which a school is implementing Tier 1 critical elements of PBIS (Kincaid, Childs, & George, 2010). The fact that the BoQ is a self-assessment scale can increase the likelihood of bias; however, the BoQ was selected due to its interrater reliability between Time 1 and Time 2 of .94 ($p < .01$) and correlation of .51 ($p < .05$) with total scores on the School-wide Evaluation Tool (SET). The SET is a tool that uses an external assessor and is commonly viewed as the standard for measuring PBIS (Cohen, Kincaid, & Childs, 2007). A scoring matrix is also provided as a guiding document to clarify values connected with the ratings on each item on the BOQ to help increase reliability and validity (Appendix A). The BoQ was selected due to the efficiency in which a self-assessment tool can be used and applied to the action planning process of implementation.

Data Collection

The primary function of the data was to help school teams assess their baseline status and progress related to the implementation of the essential features of the Tier 1 interventions within the PBIS framework. Data would then be used to guide action planning and future technical assistance from WVDE and other support agencies. Therefore, data used in this research was not collected solely for this study.

Teams completed the baseline BoQ measure by the end of the academies in the summer of 2014. The southern region academy ended June 26, 2014 and the northern region academy ended on July 10, 2014. Each team submitted one BoQ to the PBIS coordinator for a total of 19 baseline BoQs. The teams completed a second BoQ in the spring of 2015 following their end-of-year meeting. The end-of-year meetings were held during the months of May and June.

Project data was collected by and is housed at the West Virginia Autism Training Center (WV ATC hereafter). The WV ATC was a collaborative partner with WVDE, housing the PBIS coordinator and all data systems. Permission to use the data collected from the project was obtained from the WV ATC.

Data Analysis

Data from the baseline and end of year BoQ's were analyzed in order to answer the research questions related to implementation of the essential features of Tier 1 within the PBIS Framework. The IBM SPSS Statistics Version 22 data analysis software was used to calculate statistical measures. Descriptive statistics such as mean, mode, and standard deviation were calculated for general description and application to more complex statistical tests. A paired t-test was used to calculate the differences in levels self-reported

implementation from the baseline BoQ to the end of the school year BoQ. A one-way analysis of variance (ANOVA) was performed to determine whether there were any significant differences in self-reported implementation between schools. A significance level of $p < .05$ was used.

CHAPTER 4

ANALYSIS OF FINDINGS

Introduction

The purpose of this study was to explore the implementation of Positive Behavior Interventions and Supports (PBIS) for the 19 schools participating in the West Virginia Department of Education's (WVDE) PBIS Project. Specific attention was given to which critical elements are more or less likely to be put in place during the first year of implementation, and which variables related to the process and the schools seem to positively and negatively influence implementation. Findings are organized in the following manner: (a) data collection, (b) participant characteristics, (c) findings for each of the four research questions, and (d) a summary of the results.

Participants

The WVDE selected a sample of 21 schools to participate in the PBIS Project; however, two of the schools did not complete the pretest and posttest, leaving a total of 19 schools participating in the research section of the project. A small sample was selected due to the intensity of training and support provided to each school in the project and the amount of infrastructure and resources currently available to provide those supports.

The initial invitation for schools to participate in the PBIS Project was sent from the WVDE Office of Special Programs (OSP) via a listserve to the special education directors in all 55 counties. The PBIS Project is not only for students with special education needs; it focuses on improving behavior supports for all students. The information and registration was sent to the county special education directors, however, because all county offices have a special education director position, which assured equal access to the information and

efficiency of communication. The county special education directors could gain more information about participation in the project from a link to an information webpage (Appendix B). The county special education directors would then forward the information to schools that they thought would be interested or would benefit from participating. When the school administrators reviewed the information and decided to participate, they would go to a registration link provided on the information webpage and register their school team.

A total of 237 individuals registered to participate in the project. That number was reduced to 172 individuals by eliminating those who were not registered with a complete school team. To be considered a complete team, at least 4 members had to register and one had to be a building administrator. It was recommended, but not required, that the team also have a general education teacher, special education teacher, and counselor or school psychologist. The 172 individuals comprised 35 teams ranging from four to eight members. From that 35, there were a total of 21 schools selected to participate in the project.

Teams from schools designated as *Focus* or *Priority* by the WVDE designation system were given priority for selection. A *Priority* designation is assigned to a school in West Virginia based upon achievement data. These schools are among the lowest performing in West Virginia based on the number of students at or above mastery on WESTEST 2. A *Focus* designation assigned to a school in West Virginia is based upon learning gaps between student groups. For elementary and middle schools, learning gaps were measured by academic progress on the WESTEST 2. For example, if there is a larger than expected learning gap between the general student population and students receiving special education services, the school would be given a *Focus* designation. For a high school to be given the *Focus* designation, there must be larger than expected graduation gap between student groups

(West Virginia Department of Education, 2014). Using this preference for selection, 17 schools were selected. Of these 17 teams, 14 were Focus schools and three were Priority schools. The remaining four spots were filled with teams that had committed regional support. Having committed regional support was defined as teams that had staff from their county or regional offices participating in the PBIS training and providing ongoing support.

Two schools did not complete the pre and post surveys, leaving a total of 19 schools participating in the research section of the project. The 19 schools represented 15 different counties across West Virginia. Nine of the schools were from the northern region of the state and 10 were from the southern region of the state. Nine of the schools were elementary schools (grades K-5), seven were middle schools (grades 6-8), and three were high schools (grades 9-12). The distribution between the different demographics of school size, type, and socioeconomic status were fairly even making comparing the groups easier overall.

Table 1 provides a breakdown of the demographic information for the schools that participated in the PBIS Project by school type, socioeconomic status (Title 1 designation), and school size.

Table 1
School Team Demographic Information

Characteristics	n	%
School Type (N = 19)		
Elementary	9	47.4
Middle or High School	10	52.6
Socioeconomic Status (N = 19)		
Title 1 Status	8	42.1
Regular Status	11	57.9
School Size (N = 19)		
Small (202-318)	6	31.6
Medium (354-504)	6	31.6
Large (549-907)	7	36.8

Intervention

The PBIS Project began in the summer of 2014 with two separate three-day training academies. The teams in the northern region participated in the three-day academy in Morgantown, WV, and the teams in the southern region participated in the three-day academy in Daniels, WV. Goals of the academies were: train the school teams on the essential elements of Tier 1 Interventions within the PBIS framework; assist teams in assessing a baseline level of the presence of the essential elements; and assist in action planning for the implementation of PBIS in the coming school year. During the three-day academy each team worked with a regional coach. Regional coaches were either staff from the county board of education or the Regional Education Service Agency (RESA) where the school is located. RESAs are regional service agencies that provide technical assistance and other supports to the county boards of education. Following the three-day academies, the regional coaches had monthly contact with teams to assist in troubleshooting or accessing outside resources to

assist in implementation. Teams could also request technical assistance from the two state-level PBIS coordinators.

All teams attended a follow-up session in October, 2014. The focus of the follow-up session was to provide each team with information regarding common challenges in implementation, assess their current level of implementation compared to the beginning of the year, and action planning for the remainder of the school year. Teams also participated in an end-of-year planning meeting in the spring of 2015. The planning meetings were held either at the school or via conference call with the participation of the school team, the regional coach, and at least one of the state-level coordinators. The purpose of the end-of-year meetings was to collect data related to the level of implementation since the beginning of the year and start action planning for the year to come.

Data Collection

The primary function of the data was to help school teams assess their baseline status and progress related to the implementation of the critical elements of the Tier 1 interventions within the PBIS framework. Data will be used to guide action planning and future technical assistance from WVDE and other support agencies. Therefore, data used in this research was not collected solely for this study.

Teams completed the baseline Benchmarks of Quality (BoQ) measure (pretest) by the end of the academies in the summer of 2014. The southern region academy ended June 26, 2014, and the northern region academy ended on July 10, 2014. Each team submitted one BoQ to the PBIS coordinator for a total of 21 baseline BoQ's. The teams completed a second BoQ in the May and June of 2015 (posttest) following their end-of-year meeting. Two of the schools

that completed the baseline BoQ did not complete end-of-year BoQ, resulting in 19 total schools participating in the research/data analysis section of the project.

Project data was collected by and is housed at the West Virginia Autism Training Center (WV ATC hereafter). The WV ATC was a collaborative partner with WVDE, housing the PBIS coordinator and all data systems. Permission to use the data collected from the project was obtained from the WV ATC.

Data Analysis

The data analysis of this study was organized by each of the four research questions.

Research Question #1: What is the difference in the level of implementation of Tier 1 critical elements of the PBIS framework within West Virginia schools after participating in the PBIS project as measured by the Benchmarks of Quality (BoQ)?

Research Question #2: Which critical elements were schools most likely to implement as measured by the Benchmarks of Quality (BoQ)?

Research Question #3: Which critical elements were schools least likely to implement as measured by the Benchmarks of Quality (BoQ)?

Research Question #4: Is there a significant difference in PBIS implementation due to demographics (school type, Title 1 designation, and school size)?

Table 2 shows the results from the paired t-test used to analyze the difference in the means between the pretest and posttest scores of the schools. Table 2 also shows the percentage change in the school's score from pretest to posttest. The information in Table 2 was used to help answer research questions one through three.

Table 2

Difference between pre and post tests for critical elements

Critical Element	Mean Pretest Score (Std. Deviation)	Mean Posttest Score (Std. Deviation)	Highest Possible Score	% Change	T Score	Significance
PBS Team	3.7 (1.6)	5.4 (0.9)	6	45.9	4.2	.000*
Faculty Commitment	2 (1.9)	4.1 (1.1)	6	105	5.2	.000*
Effective Procedures for Dealing with Discipline	8 (2.6)	9.3 (2.1)	11	16.2	1.9	.0 72
Data Entry & Analysis Plan Established	2.8 (2.1)	5.5(2.1)	8	96.4	4.7	.000*
Expectations & Rules Developed	4.4 (2.9)	9.4 (1.9)	11	113.6	7.6	.000*
Reward/Recogni tion Program Established	6.1 (4.4)	10.5 (3.7)	16	72.1	4.9	.000*
Lesson Plans for Teaching Expectations /Rules	2.4 (2.7)	5.5 (2.9)	9	129.2	3.8	.001*
Implementation Plan	2.9 (2.9)	8.0 (3.6)	13	175.9	6.6	.000*
Classroom Systems	5.9 (3.4)	10.1 (3.5)	14	71.2	6.4	.000*
Evaluation	3.6 (4.3)	8.6 (3)	13	138.9	5.0	.000*
All (%)	39.1 (19.)	71.4 (17.8)	100	82.6	7.7	.000*

* Significance attained at $p < 0.05$

A significant difference was attained at the $p < 0.05$ level between the means scores for all of the critical elements, except for Procedures. A positive percent difference was found for all critical elements, with the average percent difference from pretest to posttest for all critical elements being 82.6 percent. The critical elements Expectations, Plans, Evaluations, and Implementation showed a positive percentage difference of over 100 percent, with the highest being Implementation at a 175.9 percent difference. The lowest percent difference was 16.2 percent for Procedures and the next to lowest was Team 45.9 percent.

Table 3 shows the pretest percentage scores, posttest percentage scores, and percentage change scores and also compares each PBIS component via rankings from pretest to posttest. For example, Table 3 shows how Effective Discipline Procedures for Dealing with Discipline was ranked number one for pretest percentage score of 72.7 percent, and then ranked number three with a posttest percentage score of 84.5 percent. But this component is ranked tenth by its percentage change of 16.2 percent due to its already elevated score at pretest. Percent change was calculated by subtracting the pretest mean score from the posttest mean score then dividing by the pretest mean score; then multiplying by 100. The information from Table 3 was used to answer research questions one through three.

Table 3

Ranking of critical elements from pretest to posttest

Rank	Pretest %	Pretest Rank	Posttest %	Posttest Rank	Percent Change	Percentage Difference Rank
1	72.7	Effective Procedures for Dealing with Discipline	90	PBS Team	113.6	Expectations & Rules Developed
2	61.7	PBS Team	85.5	Expectations & Rules Developed	175.9	Implementation Plan
3	42.1	Classroom Systems	84.5	Effective Procedures for Dealing with Discipline	138.9	Evaluation
4	40.0	Expectations & Rules Developed	72.1	Classroom Systems	129.2	Lesson Plans for Teaching Expectations /Rules
5	38.1	Reward/Recognition Program Established	68.8	Data Entry & Analysis Plan Established	96.4	Data Entry & Analysis Plan Established
6	35.0	Data Entry & Analysis Plan Established	68.3	Faculty Commitment	105	Faculty Commitment
7	33.3	Faculty Commitment	66.2	Evaluation	72.1	Reward/Recognition Program Established
8	27.7	Evaluation	65.6	Reward/Recognition Program Established	71.2	Classroom Systems
9	26.7	Lesson Plans for Teaching Expectations /Rules	61.5	Implementation Plan	45.9	PBS Team
10	22.3	Implementation Plan	61.1	Lesson Plans for Teaching Expectations /Rules	16.2	Effective Procedures for Dealing with Discipline

The critical elements that ranked in the top four based on pretest scores also ranked in the top four for posttest scores. This was also true with the bottom two critical elements based on pretest as they remained in the bottom two for the posttest. In regard to difference, the two critical elements with the highest pretest and posttest scores were ranked in the bottom two for percentage difference. The highest ranking critical elements when looking at percentage difference were Expectations and Rules Developed, Implementation Plan, and Evaluation.

Table 4 organizes schools based on percentage implementation scores on the BoQ from pretest to posttest. The key point of this table is to show the difference in the distribution of the school’s score from the pretest to the posttest. The information from Table 4 was used to answer research questions one through three.

Table 4
Percentage Implementation Scores on BoQ by Number of Schools

Percentage of Implementation	Number of School Pretest	Number of Schools Posttest
80% to 100%	0	7
60% to 79%	3	7
40% to 59%	5	4
20% to 39%	7	1
0% to 19%	4	0

School implementation scores were organized in five equal groups to compare overall changes in school implementation score. According to PBIS implementation procedures, a school with an overall implementation score of 80 percent is considered to be implementing the critical elements with fidelity. This is the level of implementation that schools need to attain before moving on to Tier 2 of the implementation process. Overall, there was a steady

pattern of increase in the percentage implementation score for schools. There were four schools that scored in the 0 to 19 percent range for the pretest, but there were no schools scoring in that range for the posttest. The number of schools in the 20 to 39 percent range went from seven to one school. From the 40 to 100 percent range there was a pattern of increase from the pretest to the posttest, with the 80 to 100 range showing the highest increase in schools from 0 to 7.

The information in Table 5 is used to answer research question five in regards to school type and PBIS implementation. The ANCOVA was used when comparing the school scores by school type. Significant difference between the groups' pretest scores and homogeneity were tested in order to satisfy the requirements of reliability of the ANCOVA scores.

Table 5
School Type to Critical Elements Comparison

Element	School Type	Posttest Mean (SD)	F Score	Significance
PBS Team	Elementary	5.4 (.8)	.197	.663
	Middle or High	5.3 (.9)		
Faculty Commitment	Elementary	3.8 (1.1)	.297	.593
	Middle or High	4.4 (1.2)		
Effective Procedures for Dealing with Discipline	Elementary	8.8 (2.6)	0.120	.743
	Middle or High	9.7 (1.6)		
Data Entry & Analysis Plan Established	Elementary	5 (2.4)	.315	.582
	Middle or High	6 (1.7)		
Expectations & Rules Developed	Elementary	9.4 (1.7)	.089	.769
	Middle or High	9.4 (2.3)		
Reward/Recognition Program Established	Elementary	10.7 (4.7)	.539	.474
	Middle or High	10.3 (2.8)		
Lesson Plans for Teaching Expectations /Rules	Elementary	5.3 (3.4)	.031	.862
	Middle or High	5.6 (2.8)		
Implementation Plan	Elementary	7.3 (4.1)	1.056	.319
	Middle or High	8.7 (3.1)		
Classroom Systems	Elementary	10.8 (2.9)	1.278	.284
	Middle or High	9.5 (3.9)		
Evaluation	Elementary	9.1 (3.3)	3.276	.089
	Middle or High	8.2 (2.9)		
All	Elementary	70.7 (20.6)	.593	.453
	Middle or High	72.1 (15.9)		

* Significance attained at $p < 0.05$

There was no significant difference in regards to implementation when comparing schools by type.

The information in Table 6 was used to answer research question five in regards to school socioeconomic status (Title 1 designation) and PBIS implementation. The ANCOVA was

used when comparing the school scores by socioeconomic status. Significant difference between the group's pretest scores and homogeneity were tested in order to satisfy the requirements of reliability of the ANCOVA scores.

Table 6

Socioeconomic Status (Title 1 Designation) to Critical Elements Comparison

Element	Socioeconomic Status	Posttest Mean (SD)	F Score	Significance
PBS Team	Title 1	5.5(.9)	.216	.648
	Regular	5.3 (.9)		
Faculty Commitment	Title 1	3.8 (1.3)	.652	.431
	Regular	4.4 (1.0)		
Effective Procedures for Dealing with Discipline	Title 1	9.3 (2.7)	.053	.821
	Regular	9.3 (1.8)		
Data Entry & Analysis Plan Established	Title 1	5 (2.7)	1.692	.212
	Regular	5.9 (1.6)		
Expectations & Rules Developed	Title 1	9.8 (1.8)	.918	.352
	Regular	9.2 (2.0)		
Reward/Recognition Program Established	Title 1	11.1 (4.6)	.652	.431
	Regular	10.0 (3.0)		
Lesson Plans for Teaching Expectations /Rules	Title 1	6.8 (2.9)	2.725	.118
	Regular	4.5 (2.8)		
Implementation Plan	Title 1	8.9 (3.3)	3.128	.096
	Regular	7.5 (3.8)		
Classroom Systems	Title 1	10.4 (3.5)	.008	.930
	Regular	9.9 (3.6)		
Evaluation	Title 1	9.0 (3.8)	1.045	.322
	Regular	8.4 (2.4)		
All	Title 1	74.1 (21.7)	1.083	.313
	Regular	69.4 (5.2)		

* Significance attained at $p < 0.05$

There was no significant difference in regards to implementation when comparing schools by socioeconomic status.

The information in Table 7 is used to answer research question five in regards to school size and PBIS implementation. The ANCOVA was used when comparing the school scores by school size. Significant difference between the group's pretest scores and homogeneity were tested in order to satisfy the requirements of reliability of the ANCOVA scores.

Table 7
School Size to Critical Elements Comparison

Element	School Size	Posttest Mean (Std. Deviation)	F Score	Significance
PBS Team	Small (202-318)	5.3 (1.0)	.355	.707
	Medium (354-504)	5.2 (.9)		
	Large (549-907)	5.6 (.79)		
Faculty Commitment	Small (202-318)	3.5 (1.4)	.532	.598
	Medium (354-504)	4.2 (.8)		
	Large (549-907)	4.6 (1.1)		
Effective Procedures for Dealing with Discipline	Small (202-318)	9.0 (3.0)	.181	.836
	Medium (354-504)	8.8 (2.1)		
	Large (549-907)	9.9 (1.2)		
Data Entry & Analysis Plan Established	Small (202-318)	4.5 (2.4)	.0853	.446
	Medium (354-504)	5.7 (1.4)		
	Large (549-907)	6.3 (2.1)		
Expectations & Rules Developed	Small (202-318)	9.2 (1.8)	.298	.746
	Medium (354-504)	9.2 (2.6)		
	Large (549-907)	9.9(1.6)		
Reward/Recogni tion Program Established	Small (202-318)	9.3 (4.7)	.067	.935
	Medium (354-504)	10.8 (4.6)		
	Large (549-907)	11.1(1.9)		
Lesson Plans for Teaching Expectations /Rules	Small (202-318)	5.2 (3.1)	.420	.665
	Medium (354-504)	6.7 (1.8)		
	Large (549-907)	4.7(3.8)		
Implementation Plan	Small (202-318)	7.3 (3.3)	.292	.751
	Medium (354-504)	9.5 (2.9)		
	Large (549-907)	7.4 (4.4)		
Classroom Systems	Small (202-318)	9.3 (3.6)	1.805	.198
	Medium (354-504)	11.2 (3.3)		
	Large (549-907)	9.9(3.8)		
Evaluation	Small (202-318)	8.5 (4.1)	.255	.778
	Medium (354-504)	8.7 (2.9)		
	Large (549-907)	8.7(2.5)		

All	Small (202-318)	66.5 (20.9)	.122	.886
	Medium (354-504)	74.6 (17.9)		
	Large (549-907)	72.9 (16.8)		

* Significance attained at $p < 0.05$

There was no significant difference in regards to implementation when comparing schools by school size.

Summary of Findings

This chapter described the data analysis and findings in this study exploring the implementation of PBIS for the 19 schools participating in the WVDE’s PBIS Project. Specific attention was given to which critical elements are more or less likely to be put in place during the first year of implementation, and which variables related to the process and the schools seem to positively and negatively influence implementation. Implementation scores were collected in a pretest posttest format using the BoQ fidelity tool.

There was a statistically significant difference at the $p < 0.05$ level from pretest to posttest for all the critical elements with the exception of Procedures. The critical elements Expectations, Plans, Evaluations, and Implementation showed the highest positive percentage difference. Procedures and Team showed the lowest percent difference. There was an overall increase in school scores with 7 of 19 schools reaching the fidelity threshold of 80 percent. There was no statistical difference found when comparing the implementation scores of critical elements to differences in school type, socioeconomic status, and size.

CHAPTER 5

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This chapter includes the purpose, demographic data, and methods used in the study. A summary of the findings is followed by conclusions organized by four research questions. The chapter ends with implications, recommendations for further study, and concluding remarks.

Purpose of the Study

The purpose of this study was to explore the implementation of Positive Behavior Interventions and Supports (PBIS) for the 19 schools participating in the WVDE's PBIS Project. Specific attention was given to which critical elements are more or less likely to be put in place during the first year of implementation, and which variables related to the process and the schools seem to positively and negatively influence implementation. The following four research questions guided the study.

1. What is the current level of implementation of Tier 1 critical elements of the PBIS framework within West Virginia schools that participated in the PBIS project as measured by the Benchmarks of Quality (BoQ)?
2. Which critical elements did most schools implement as measured by the Benchmarks of Quality (BoQ)?
3. Which critical elements did most schools not implement as measured by the Benchmarks of Quality (BoQ)?

4. Which school demographic elements (school size, Title 1 designation, and school type) show correlation with levels of implementation of the Tier 1 critical elements of the PBIS framework?

Demographic Data

The population for the study was 19 public schools throughout West Virginia. Demographic data was organized by school type, school size, and socioeconomic status (Title 1 designation). Nine of the schools were elementary and 10 were middle or high schools. Six of the schools had student enrollment ranging from 202 to 318. Six of the schools had a student enrollment ranging from 354 to 504, and seven had student enrollment ranging from 549 to 907. Eight of the schools qualified for Title 1 designation and 11 did not.

Methods

The study was completed using quantitative methods. The evaluation tool used to assess each school's level of implementation was the Benchmarks of Quality (BoQ) (Appendix A). The BoQ is a 53-item self-assessment scale used to measure a school's fidelity of implementation for the Tier 1 critical elements of PBIS (Kincaid, Childs, & George, 2010).

The PBIS Project began in the summer of 2014 with two separate three-day training academies. The teams in the northern region participated in the three-day academy in Morgantown, WV, and the teams in the southern region participated in the three-day academy in Daniels, WV. Goals of the academies were: train the school teams on the essential elements of Tier 1 Interventions within the PBIS framework; assist teams in assessing a baseline level of the presence of the essential elements; and assist in action planning for the implementation of PBIS in the coming school year. Teams completed the baseline or pretest BoQ measure by the end of the academies in the summer of 2014. Each team submitted one

BoQ to the PBIS coordinator for a total of 19 baseline BoQ's. Following the three-day academies, the regional coaches had monthly contact with teams to assist in troubleshooting or accessing outside resources to assist in implementation. Teams could also request technical assistance from the two state-level PBIS coordinators.

All teams attended a follow-up session in October, 2014. The focus of the follow-up session was to provide each team with information regarding common challenges in implementation, assess their current level of implementation compared to the beginning of the year, and action planning for the remainder of the school year. Teams also participated in an end-of-year planning meeting in the spring of 2015. The planning meetings were held either at the school or via conference call with the participation of the school team, the regional coach, and at least one of the state-level coordinators. The purpose of the end-of-year meetings was to collect data related to the level of implementation since the beginning of the year and start action planning for the year to come. The teams completed a second BoQ or posttest in the spring of 2015 following their end-of-year meeting.

The data were collected and analyzed according to each of the four research questions. A paired t-test was used to determine the level of significance ($p < 0.05$) for pretest and posttest scores for each of the critical elements and overall scores. Score rankings and grouping were also used to analyze difference in critical element and overall scores from pretest to posttest. Research question four was analyzed using the ANCOVA to compare the school implementation scores by school type, size, and socioeconomic status (Title 1 designation). Significant difference between the group's pretest scores and homogeneity were tested in order to satisfy the requirements of reliability of the ANCOVA scores.

Summary of Findings and Conclusions

The data collected as part of this study support the following summary of findings and conclusions:

Question 1: What is the difference in the level of implementation of Tier 1 critical elements of the PBIS framework within West Virginia schools after participating in the PBIS project as measured by the Benchmarks of Quality (BoQ)?

A significant difference was attained at the $p < 0.05$ level between the means scores for all of the critical elements, except for Effective Procedures for Dealing with Discipline. A positive percent difference was found for all critical elements with the average percent difference from pretest to posttest for all critical elements being 82.6 percent.

School implementation scores were organized in five equal groups to compare overall changes in school implementation scores. A school with an overall implementation score of 80 percent is considered to be implementing the critical elements with fidelity and ready to move toward training and implementation of Tier 2 supports. There was a steady pattern of increase in the percentage implementation scores for the schools. Four schools scored in the 0 to 19 percent range for the pretest, but no schools scored in that range for the posttest. The number of schools in the 20 to 39 percent range went from 7 to 1. Only 8 schools achieved a score within the 40 to 100 percent range for the pretest; all schools but one reached this range for the posttest. The 80 to 100 range showed the highest increase in schools with 0 schools at pretest and 7 at posttest.

Question 2: Which critical elements were schools most likely to implement as measured by the Benchmarks of Quality (BoQ)?

Question 3: Which critical elements were schools least likely to implement as measured by the Benchmarks of Quality (BoQ)?

The critical elements Expectations and Rules Developed, Lesson Plans for Teaching Expectations/Rules, Evaluations, and Implementation Plan showed a positive percentage difference of over 100 percent with the highest being Implementation Plan at a 175.9 percent difference from pretest to posttest. The lowest percent difference was 16.2 percent for Effective Procedures for Dealing with Discipline and the next to lowest was PBS Team at 45.9 percent.

The pretest, posttest, and difference scores were also compared via rankings. The critical elements that ranked in the top four based on pretest scores also ranked in the top four for posttest scores. Those critical elements were Effective Procedures for Dealing with Discipline, PBS Team, Classroom Systems, and Expectations and Rules Developed. This was also true with the bottom two critical elements based on pretest as they remained in the bottom two for the posttest. Those two critical elements were Lesson Plans for Teaching Expectations/Rules and Implementation Plan. In regards to difference, the two critical elements with the highest pretest and posttest scores were ranked in the bottom two for percentage difference. Those critical elements were PBS Team and Effective Procedures for Dealing with Discipline. The highest ranking critical elements in regards to percentage difference were Expectations and Rules Developed, Implementation Plan, and Evaluation.

Question 4: Is there a significant difference in PBIS implementation due to demographics (school type, Title 1 designation, and school size)?

The ANCOVA was used when comparing the school scores by school type, Title 1 designation, and school size. Significant difference between the group's pretest scores and homogeneity were tested in order to satisfy the requirements of reliability of the ANCOVA scores. There was no significant difference in regards to implementation when comparing schools by the demographic categories.

Discussion

It is promising that there was a statistically significant difference in pretest and posttest scores for all the critical elements except for one. This supports the idea that the changes in the implementation of the PBIS critical elements were not likely due to chance. This offers statistical support for the effectiveness of the PBIS training that the schools received. This also acts as a rationale for the WVDE to move forward with this project.

The fact that the critical element related to Effective Discipline Procedures did not show a significant difference from pretest to posttest is not completely surprising. This is due to the fact that all schools in West Virginia are required to receive training related to the state educational policies concerning discipline policies and procedures. Schools also have ongoing access to training and technical assistance related to this topic from the WVDE and the RESAs. This means that many schools may have already been working on improving their Effective Discipline Procedures before participating in the PBIS Project in order to be compliant with the current state policies.

The percent difference scores related to each of the critical elements and overall implementation are also promising. The average percentage difference from pretest to posttest

for overall implementation was 82.6 percent. This means that on average the participating schools almost doubled their original implementation score. When looking at specific critical elements, Expectations and Rules Developed, Lesson Plans for Teaching Expectations/Rules, Evaluations, and Implementation Plan showed over a 100 percent difference in pretest and posttest scores, with Implementation Plan having the highest percentage difference at 175.9 percent. It is reasonable that the highest difference would be related to the critical element of Implementation Plan as the focus of the PBIS Project is to guide schools through the implementation process. The fact that the critical element Effective Procedures for Dealing with Discipline showed the least overall percentage difference at 16.2 percent aligns with the explanation above that many schools have already received training and technical assistance related to this topic prior to participating in the PBIS Project. The next to lowest percentage change, at 45.9 percent, was related to the critical element of forming a PBS Team. A possible explanation for this lack of percentage change could be related to the fact that working in teams is a common practice in education today and during the initial training school teams were encouraged to find ways to use existing problem solving and implementation teams as their PBS Team.

The findings related to ranking the critical elements by pretest, posttest, and percentage difference deepen this discussion. Three of the four critical elements that showed over a 100 percent difference from pretest to posttest still ranked in the bottom four in pretest and posttest scores but were ranked in the top four for percentage difference. This means that even though there were significant gains made from pretest to posttest the posttest scores are still some of the lowest when compared to those for other critical elements. The opposite is also true when looking at the critical elements Effective Procedures for Dealing with

Discipline and PBS Team. These two critical elements were in the top three for pretest and posttest scores and the bottom two for percentage difference. This means that the scores for these two critical elements were already high and even though they did not show significant difference from pretest to posttest their scores were still higher than most of the other critical elements at posttest.

The findings above are helpful when planning which critical elements schools may need the most training and technical assistance to implement. It may be the case that many schools entering the PBIS Project will already have high levels of implementation related to Effective Procedures for Dealing with Discipline and PBS Team due to prior training and infrastructure. If this is the case, then less time and support will need to be committed to these items in the initial training and ongoing technical assistance. The inverse would then be true regarding items with the lower pretest and posttest scores such as Lesson Plans for Teaching Expectations/Rules and Implementation Plan. Efforts will need to focus more on training and technical assistance to help schools make gains in regards to these critical elements. This increased focus could be achieved through changes to the training material, access to supplemental materials such as webinars and articles, or plans to monitor implementation of these specific elements on a more regular basis.

When looking at overall implementation it was encouraging to see that there was a clear positive trend related to percentage implementation by school number. Four schools scored in the 0 to 19 percent range for the pretest, but no schools scored in that range for the posttest. The number of schools in the 20 to 39 percent range went from seven to one. Only 8 schools achieved a score within the 40 to 100 percent range for the pretest; all schools but one reached this range for the posttest. The 80 to 100 range showed the highest increase in

schools with 0 schools at pretest and 7 at posttest. The fact that 16 of the 19 schools scored below 59 percent at pretest and 14 of the 19 schools scored 50 percent or above at posttest is a clear positive gain. At pretest, 11 of the 19 schools scored below 39 percent and only 1 school scored below 40 percent at posttest. Of the 19 schools, 7 scored 80 percent or above on the posttest. Scoring an 80 percent or above on the BoQ suggests that the school is ready for Tier 2 implementation training (Kincaid, Childs, & George, 2010). This informs the need for the WVDE to allow access to such training for these schools to assist them in moving forward with PBIS implementation. The other side of this statistic is that 12 of the schools are still in need of continued support to implement the critical elements of Tier 1. What this suggests to future planning for the project is that many schools may need more than one year to reach the level of fidelity needed to move on to Tier 2 training and implementation. This information can help prevent the mistake of assuming that just because a school has completed the first year of training for Tier 1 that they are automatically ready to move to Tier 2 implementation. The decision-makers for the project must resist the urge to standardize the timelines based on duration of implementation and use the fidelity thresholds to guide progress through the PBIS implementation tiers. Considering the fact that 11 of the 19 schools had pretest scores below 40 percent it is not unreasonable to think that they would need a fair amount of time to bring their implementation score up to or above 80 percent. An underlying theme of these scores shows the need to keep the focus of training and technical assistance on individualized supports for schools as many are starting from different levels of implementation and do not implement at the same pace. That said, the findings do clearly suggest that the training and technical assistance offered by the project did result in positive difference for all schools.

The results related to difference in implementation due to demographics (school type, Title 1 designation, and school size) will be helpful as the project moves forward to decide if training and technical assistance needs to be adjusted based on these factors. The core theme for the data analysis was that demographic differences of the schools did not account for significant differences in implementation scores from the pretest to the posttest. This is a positive trend to consider when looking at training and technical assistance planning. The data from this sample suggests that making specific changes to training and technical assistance is not necessary to account for differences related to school demographics such as school type, Title 1 designation, or school size. It should be noted that a few critical elements did approach statistical significance at the $p < 0.05$ level and the relationship between those critical elements and school demographics should be explored further. For example, the relationship between school type approached statistical significance in regards to Evaluation (.089) as was the case for Implementation Plan and Title 1 designation (.096), as well as Classroom Systems and school size (.198). It might be helpful to gain deeper information related to these items and watch for similar trends with other samples.

Implications

The gains in Tier 1 PBIS critical elements reported by the schools that participated in the project could have positive implications. Based on the findings of Bradshaw, Koth, Bevans, Ialongo, and Leaf (2008), school personnel have reported that the implementation of PBIS improved clarity of purpose, coordination of work, and perceived impact on student outcomes. This perceived improvement from the school personnel is critical when looking at concepts like school climate. A primary focus of PBIS is the reduction of problem behaviors that result in office discipline referrals, disruption, and reduced academic engagement. An

increasing body of evidence supports the implementation of PBIS is associated with a reduction in problem behavior (Colvin, Kame'enui, & Sugai, 1993a; R. H. Horner et al., 2009; Nelson et al., 2002; Safran & Oswald, 2003).

Based on these findings, the gains in Tier 1 PBIS critical elements should help to reduce the problem behavior in the schools that participated in the WVDE PBIS Project. The reduction in problem behavior could then reduce the usage of anti-social or exclusionary strategies such as time-out, detention, and suspension. The major shortcoming of these strategies is they isolate or remove students from the learning environment, which in turn decreases the amount of time the students spend working on their areas of need, whether they be academic, behavioral, or both. Skiba and Sprague (2008) refer to this as “a devil’s bargain”, as schools have the right and responsibility to use all effective means to ensure that students can learn and the teacher can teach, but it is hard to justify the use of interventions that rely on the removal of a student from the learning environment when we know that time spent there is the best predictor of positive academic outcomes. The WVDE reported that more than 60 percent of documented school disciplinary action in West Virginia forces students out of the class, even though in the majority of cases the behaviors were classified as “minimally disruptive”, meaning the student did not pose a danger to themselves or others. The WVDE also states that some students were even expelled for minimally disruptive behavior (Mays, 2014).

The implementation of PBIS in the schools that participated in the project will help to address this issue by offering students a more prosocial environment via predictable discipline processes, consistent behavior expectations and rules, direct instruction of how to meet those expectations and follow those rules, as well as positive reinforcement/feedback

systems to acknowledge students when they are being successful. PBIS gives the schools a framework to proactively support the positive behavior of students rather than relying exclusively on the use of reactive and punitive methods. Although it is difficult to claim that implementation of PBIS is causally associated with improved academic outcomes, an inverse relationship between problem behavior and weak academic performance has been established (Nelson et al., 2002). It is logical to presume that as problem behaviors decrease in these schools, opportunities for improved instruction and academic performance will rise.

Recommendations for Further Research

The purpose of this study was to explore the implementation of PBIS for the 19 schools participating in the WVDE's PBIS Project during the academic year of 2014-2015. The following recommendations for future research would be beneficial to expand upon the findings of this study and guide future implementation and evaluation.

1. This study was limited to only 19 schools in West Virginia. Since the purpose of this research is primarily to help improve the implementation of PBIS in West Virginia schools, the first step would be to conduct research using a larger sample of schools. West Virginia has approximately 808 public schools, so this sample only represented about 2 percent of the total public schools in West Virginia.
2. This study was limited to measuring implementation over one school year. Further research may benefit from studying implementation for two or more years. Studying implementation for a longer period of time may provide further information as to how long it takes schools to reach the 80 percent Tiered-Fidelity Inventory score needed to move on to implementation of Tier 2. This information would be critical for schools as

well as WVDE and other stakeholders. The information would be helpful for future scheduling, budgeting, and planning of training and technical assistance.

3. Based on the findings that schools entered the PBIS Project with already high scores in the areas of PBS Team and Effective Procedures for Dealing with Discipline it would be beneficial to explore how schools arrived at these scores before participating in the project. This could be done via an in-depth readiness assessment related to training and technical assistance they have received in regards to topics such as discipline policies and procedures as well as working in teams.
4. This study was also limited to the use of one fidelity measurement tool. Further research may benefit from using another form of measurement to affirm the findings from the BoQ fidelity implementation score. Given that the BoQ is a self-reporting tool, it might be beneficial to include another tool that is completed by an outside coach or evaluator. This tool might include such activities as building walkthroughs and interviews with staff and students. One such tool is the School-Wide Evaluation Tool (SET). To provide a deeper understanding of implementation assets and challenges it may be helpful to do follow-up interviews with school teams that showed considerable growth as well as school teams that showed limited growth in an effort to tease out the differences that can be considered when developing future training and supports.
5. This study only measured fidelity of implementation, which means the measures were only focused on whether the critical elements were being implemented. Only focusing on fidelity counts on the effectiveness of PBIS in the literature to support the anticipated outcomes if PBIS is implemented with fidelity. Future research may want to include outcome measures that can speak to whether the implementation of the critical elements

with fidelity actually resulted in positive behavioral outcomes such as decreases in discipline referrals, decreases in suspension and expulsions, increases in school climate survey scores and/or increases in academic measures. Including these outcome measures will also help to explore if there is a difference in outcomes as fidelity scores increase. Showing a correlation between implementation with fidelity and outcomes would match the trends in the literature and could really help to bolster buy-in and support within West Virginia for the PBIS Project.

6. Another interesting piece of information that may be helpful in exploring which schools are more or less likely to implement PBIS would be to ask schools why they chose to participate in the project. It would be interesting to see if certain motivating factors for participation in the project correlate with more positive outcomes. For example, one might assume that a school that was made to participate by their county leadership might not show the same level of gains as a school that chose to participate based on shared interest and motivation among the administration and staff to improve climate and culture. Understanding a correlation between why schools chose to participate and outcomes could help to advise stakeholders on how best to engage schools to participate in the project.
7. Another data point that might be interesting for future research would be to create a tool that would assess the school team's perspective regarding the supports offered by their regional coach, county office, and WVDE. It would be helpful to see if differences in the schools' experiences with the different levels of support correlated with differences in implementation and other outcome measures.

Concluding remarks

This study provides a starting point for future planning to improve the training and technical assistance offered as a part of the WVDE PBIS Project. The findings share information related to the implementation of specific critical elements of PBIS and overall implementation. The findings also explore differences related to PBIS implementation as it relates to school demographic such as school type, Title 1 designation, and school size. WVDE should be encouraged with the outcomes of the study. Overall, schools showed a positive trend of implementation and this should have a positive impact on the students and staff at these schools. Based on the positive findings it is fair to say that the PBIS Project was a good investment for WVDE.

However, the work related to PBIS in West Virginia schools is far from finished. WVDE needs to continue to follow the schools from this study as they move to year two of implementation and consider the recommendations above as other groups of schools are trained in years to come. WVDE needs to dig deeper into the PBIS implementation process and outcomes to fine-tune the training and technical assistance to be as efficient and effective as possible. If the journey of a thousand miles begins with one step, this was a successful and encouraging first step for PBIS implementation in West Virginia schools.

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APPENDIX A
IRB Approval Letter



Office of Research Integrity
Institutional Review Board
One John Marshall Drive
Huntington, WV 25755

FWA 00002704

IRB1 #00002205
IRB2 #00003206

November 30, 2015

Edna Meisel, Ed.D.
Elementary and Secondary Education, MUGC

RE: IRBNet ID# 836541-1

At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Meisel:

Protocol Title: [836541-1] Measuring the Self-Assessed Presence of the Essential Features of PBIS in West Virginia Schools

Expiration Date: November 30, 2016

Site Location: MUGC

Submission Type: New Project APPROVED

Review Type: Exempt Review

In accordance with 45CFR46.101(b)(1), the above study was granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Designee for the period of 12 months. The approval will expire November 30, 2016. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for student James Harris.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, ThD, CIP at 304-696-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.

APPENDIX B
School-wide Benchmarks of Quality Scoring Form (Revised)

BASELINE School-wide Benchmarks of Quality Scoring Form (Revised)

School Name: _____ District: _____

Coach's Name: _____ Date: _____

To be completed with your team during Tier 1 training.

Based on your observations and available data, read the Benchmarks Scoring Guide and **QUICKLY** (1 minute per item) come to consensus on point values for each item. Score each item according to its current status in your school - do not base your score on future plans for implementation (e.g., after you present your drafts to your staff). When you have finished the assigned items, add up your score for each critical element. The total Benchmarks score is not important for this activity. When the activity is complete, your team can use this information to prioritize plans for problem solving and implementation.

Critical Elements	BoQ Item					Critical Element Score
PBS Team	1. Team has administrative support	3	2	1	0	/ 6
	2. Team has regular meetings (at least monthly)		2	1	0	
	3. Team has established a clear mission/purpose			1	0	
Faculty Commitment	4. Faculty are aware of behavior problems across campus through regular data sharing		2	1	0	/ 6
	5. Faculty involved in establishing and reviewing goals		2	1	0	
	6. Faculty feedback is obtained throughout the year		2	1	0	
Effective Procedures for Dealing with Discipline	7. Discipline process described in narrative format or depicted in graphic format		2	1	0	/ 11
	8. Discipline process includes documentation procedures			1	0	
	9. Discipline referral form includes information useful in decision making		2	1	0	
	10. Problem behaviors are defined	3	2	1	0	
	11. Major/minor behaviors are clearly differentiated		2	1	0	
Data Entry & Analysis Plan Established	12. Suggested array of appropriate responses to major (office-managed) problem behaviors			1	0	/ 8
	13. Data system is used to collect and analyze ODR data	3	2	1	0	
	14. Additional data are collected (attendance, grades, faculty attendance, surveys) and used by SWPBS team			1	0	
	15. Data analyzed by team at least monthly		2	1	0	
Expectations & Rules Developed	16. Data shared with team and faculty monthly (minimum)		2	1	0	/ 11
	17. 3-5 positively stated school-wide expectations are posted around school	3	2	1	0	
	18. Expectations apply to both students and staff	3	2	1	0	
	19. Rules are developed and posted for specific settings (settings where data suggest rules are needed)		2	1	0	
	20. Rules are linked to expectations			1	0	
	21. Staff are involved in development of expectations and rules		2	1	0	

Critical Elements	BoQ Item					Critical Element Score
Reward/ Recognition Program Established	22. A system of rewards has elements that are implemented consistently across campus	3	2	1	0	/ 16
	23. A variety of methods are used to reward students		2	1	0	
	24. Rewards are linked to expectations and rules	3	2	1	0	
	25. Rewards are varied to maintain student interest		2	1	0	
	26. Ratios of acknowledgement to corrections are high	3	2	1	0	
	27. Students are involved in identifying/developing incentives			1	0	
	28. The system includes incentives for staff/faculty		2	1	0	
Lesson Plans for Teaching Expectations/ Rules	29. A behavioral curriculum includes teaching expectations and rules		2	1	0	/ 9
	30. Lessons include examples and non-examples			1	0	
	31. Lessons use a variety of teaching strategies		2	1	0	
	32. Lessons are embedded into subject area curriculum		2	1	0	
	33. Faculty/staff and students are involved in development & delivery of behavioral curriculum			1	0	
	34. Strategies to share key features of SWPBS program with families/community are developed and implemented			1	0	
Implementation Plan	35. A curriculum to teach the components of the discipline system to all staff is developed and used		2	1	0	/ 13
	36. Plans for training staff how to teach expectations/rules/rewards are developed, scheduled and delivered		2	1	0	
	37. A plan for teaching students expectations/rules/rewards is developed scheduled and delivered	3	2	1	0	
	38. Booster sessions for students and staff are planned, scheduled, and delivered		2	1	0	
	39. Schedule for rewards/incentives for the year is planned			1	0	
	40. Plans for orienting incoming staff and students are developed and implemented		2	1	0	
	41. Plans for involving families/community are developed & implemented			1	0	
Classroom Systems	42. Classroom rules are defined for each of the school-wide expectations and are posted in classrooms.		2	1	0	/ 14
	43. Classroom routines and procedures are explicitly identified for activities where problems often occur (e.g. entering class, asking questions, sharpening pencil, using restroom, dismissal)		2	1	0	
	44. Expected behavior routines in classroom are taught		2	1	0	
	45. Classroom teachers use immediate and specific praise		2	1	0	
	46. Acknowledgement of students demonstrating adherence to classroom rules and routines occurs more frequently than acknowledgement of inappropriate behaviors		2	1	0	
	47. Procedures exist for tracking classroom behavior problems		2	1	0	
	48. Classrooms have a range of consequences/interventions for problem behavior that are documented and consistently delivered		2	1	0	
Evaluation	49. Students and staff are surveyed about PBS		2	1	0	/ 13
	50. Students and staff can identify expectations and rules		2	1	0	
	51. Staff use referral process (including which behaviors are office managed vs. teacher managed) and forms appropriately	3	2	1	0	
	52. Staff use reward system appropriately	3	2	1	0	
	53. Outcomes (behavior problems, attendance, morale) are documented and used to evaluate PBS plan	3	2	1	0	
Scoring the Benchmarks of Quality: _____ / 107 = _____ Benchmarks Score Total pts.						

Kincaid, D., Childs, K., & George, H. (March, 2010).
School-wide Benchmarks of Quality (Revised). Unpublished instrument. USF, Tampa, Florida 2

APPENDIX C
2014 School-Wide PBIS Academies

2014 School-Wide PBIS Academies

Description: There will be two (2) separate three-day, face-to-face summer academy, in June and July 2014, with a minimum of monthly follow-up activities that will bring school/county teams together to examine the School-Wide Positive Behavioral Interventions and Supports (PBIS) framework. Participants will be expected to train their school or county staff and implement the PBIS framework.

Content: PBIS is a systematic approach using evidence-based practices and data driven decision making to improve school climate and culture; to improve academic and social outcomes; and to increase learning for all students. It encompasses a wide range of systemic and individualized positive strategies to reinforce desired behaviors, diminish reoccurrences of challenging behaviors while teaching appropriate behaviors to students.

Participants: Commitment and support begins at the county level. County leaders need to be informed and dedicated to the implementation of PBIS. Building administrators are expected to be actively involved in implementation.

A PBIS Team is comprised of a broad representation of four staff members including: building administrator (**required**), general education personnel, special education personnel, and a counselor/behavior specialist. Preference for admission will be given to Focus and Priority schools.

Dates/Locations: The 2014 PBIS Academies will occur in two (2) locations on two (2)

Dates	RESA	Venue	Note
June 24 th - 26 th	1, 2, 3, & 4	The Resort at Glade Springs Daniels, WV	Participants can arrive on June 23 rd .
July 8 th – 10 th	5, 6, 7, & 8	Waterfront Place Hotel Morgantown, WV	Participants can arrive on July 7 th .

separate sets of dates accommodating forty-five (45) participants per set of dates:

Cost: Beginning the night before the training the WVDE will pay the cost of meals and materials for all participants in the training sessions. Lodging cost for participants living more than thirty (30) miles from the training site will be paid by the WVDE. Each county has been issued a grant to finance summer travel and district determined stipends. Participating counties will pay the participants travel expenses and summer stipends as well as five and one-half days of substitute coverage for each participant that they send. Additional stipends may be required for individual consultation beyond the school day.

Registration: After the Special Education Director has conferred with appropriate personnel and he/she will register their county's team(s) online at the following link: <http://wvde.state.wv.us/forms/osp/summer/pbis.php>

Questions will be addressed by:
Jim Harris, PBIS Coordinator, at harris106@marshall.edu

Please register by May 10, 2014 to allow for necessary lodging arrangements to be made.

James F. Harris
302 Township Road 1483
Chesapeake, OH 45619
Harris106@marshall.edu
(304) 638-2435

Academic Preparation

- 2006-2016** **Marshall University**, Huntington, WV
- *Doctorate of Education*
 - *Major: Curriculum & Instruction*
 - *Area of Emphasis: Counseling*
 - *Research: Positive Behavior Support Interventions*
- 2006-2009** **Marshall University**, Huntington, WV
- *Educational Specialist*
 - *Major: Curriculum & Instruction*
 - *Research: Teacher Perceptions & Training Regarding Mental Health Issues*
- 2001-2003** **University of Kentucky**, Lexington, KY
- *Master of Social Work*
 - *Research: Adolescent Residential Program Effectiveness*
- 1998-2001** **Morehead State University**, Morehead, KY
- *Bachelor of Social Work – Summa Cum Laude*
 - *Research: Public Opinion Regarding Mental Health Services*

Professional Experience

- 2014-Present** **WV Autism Training Center** – Huntington, WV
- *Associate Director of Training*
 - Program Development
 - Program Evaluation
 - Supervision of Direct Service Program
 - *PBIS Coordinator for WV Schools*
 - SW-PBIS Program Expansion
 - Behavioral Intervention Training
 - Program Evaluation
- 2008-Present** **Opportunities Consulting Services** – Chesapeake, OH
- *Owner/Consultant*
 - Educational, Mental Health, & Business Training
 - Educational Behavior Consultation
- 2011-2012** **West Virginia University** – Morgantown, WV
- *Visiting Assistant Professor*
 - Foundational Courses
 - Direct Practice Courses
 - Field Instruction Courses

- 2007-2011 Oasis Behavioral Health Services - Barboursville, WV**
- *Behavioral Health Therapist*
 - Individual, Family, & Group Therapy
 - Educational & Mental Health Consultation/Training
- 2004-2008 Southern Ohio Behavioral Health - Ironton, OH**
- *Clinical Director*
 - Supervisor of All Clinical Services
 - Mental Health Clinical Service Provider
 - Program Development
- 2002-2004 Oak Ridge Treatment Center - Pedro, OH**
- *Clinical Director*
 - Supervisor of All Clinical Services
 - Mental Health Clinical Service Provider
 - Program Development
 - *Individual and Group Therapist*
 - Mental Health Therapy Provider
 - Treatment Team Chair
 - *Partial Hospitalization Instructor/Therapist*
 - Activities Leader
 - Curriculum Development
- 2001-2002 River Valley Child Development Services-Huntington, WV**
- *Birth to Three Service Coordinator/Behavioral Specialist*
 - Intervention Plan Coordination
 - Service Coordination
 - Behavioral Strategy Development/Implementation
 - *Parent Educator*
 - Parental Education
 - Children Services Evaluator

Teaching Experience

Lecturer

- 2011 – SOWK 540: Generalist Social Work Practice**
-West Virginia University (Charleston, WV)
- 2011 – SOWK 682: Advanced Internship, Direct Practice Track**
-West Virginia University (Charleston, WV)
- 2010 - EDF 319: Application of Learning Theory: Educational Psychology**
-Marshall University (Huntington, WV)
- 2009 - EDF 218: Child and Adolescent Development**
-Marshall University (Huntington, WV)
- 2008 - HST 290: Challenging Behavior in Children**
-Ohio University Southern Campus (Ironton, OH)
- 2008 - EDF 218: Child and Adolescent Development**
-Marshall University (Huntington, WV)

- 2008** - EDF 319: *Application of Learning Theory: Educational Psychology*
-Marshall University (Huntington, WV)
- 2007** - HST 290: *Challenging Behavior in Children*
-Ohio University Southern Campus (Ironton, OH)
- 2006** - HST 290: *Challenging Behavior in Children*
-Ohio University Southern Campus (Ironton, OH)

Certifications/Licensure

- 2008** - Neuro-linguistic Programming (NLP)
- School Based Life Space Crisis Intervention (LSCI)

Research Interests

Positive Behavior Intervention and Support
Early Childhood Mental Health
Mental Health in the Educational Setting
Professional Development Effectiveness

Professional Affiliations

NASW - National Association of Social Workers
NAADAC – National Association for Alcoholism and Drug Abuse Counselors
OAIMH – Ohio Association for Infant Mental Health

Honors

- 2006** – Head Start Outstanding Volunteer Award
2012 – OCWTP Rising Star Award

Publications - Periodical

- 2009** – Harris, J. F. (2009). Challenging Behavior: The What or the Why, That is the Question. *West Virginia Early Childhood Provider*, 10 (3), 8-10.
- 2006** – Harris, J. F. (2006). Dealing with difficult parents: Understanding and prevention. *West Virginia Early Childhood Provider*, 7 (2), 20-21.

Conference Papers

- 2008** – Harris, J. F. Elementary teacher perspectives regarding student behavior: Exploring training, prevalence, and resources. Eastern Education Research Association, Hilton Head, South Carolina.
- 2008** – Harris, J. F. Understanding the Appalachian in the modern world. Appalachian Studies Association, Huntington, West Virginia.