THE EFFECTS OF SCHOOL-WIDE POSITIVE BEHAVIOR INTERVENTION

SUPPORTS ON STUDENTS WITH EMOTIONAL BEHAVIOR DISORDERS IN

ELEMENTARY SCHOOLS

by

Marva I. Clarke Howard

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2018

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APPROVED BY:

David Gorman, Ed.D., Committee Chair

LaSynge Guyton, Ph.D., Committee Member

Rebecca M. Lunde, Ed.D., Committee Member

ABSTRACT

The purpose of this study was to explore the effectiveness of implementing School-Wide

Positive Behavior Intervention Supports (SWPBIS) in elementary schools for students with

Emotional Behavior Disorders (EBD) that engaged in poor adaptive behaviors. Therefore, the

researcher sought to determine if there existed a difference in the overall adaptive scores of

elementary students with EBD who attended a SWPBIS school and a non-SWPBIS school. The

purpose of this research study was to determine if the implementation of SWPBIS decreased the

poor adaptive scores among students with EBD and if lower adaptive scores decreased the

chance of disruptive and violent behaviors. Higher adaptive behavior scores are stronger

predictors for violence among youths (Koth et al., 2009). A causal-comparative design study

was used to evaluate the effectiveness of SWPBIS on the adaptive behavior scores of elementary

students with EBD. The instrument that was used for the evaluation was the Teacher

Observation Classroom Adaptive-Checklist (TOCA-C) developed by the Woodlawn Research

Center in Chicago. A convenience sample of a minimum of 100 teachers selected from 20

elementary schools located in a suburban school district outside of a metropolitan city in Georgia

during the fall semester of the 2017-2018 school year was used in this study. A MANOVA

statistical analysis was used to analyze the research data.

Key terms: School-Wide Positive Behavior Intervention Supports, Emotional Behavior

Disorder, Teacher Observation Classroom Adaptive-Checklist

Acknowledgements

First, I would like to give honor and praise to my personal Savior, Jesus Christ, for giving me the strength and knowledge to get through the process of completing this dissertation. Without my faith in my Lord and Savior, I would not have gotten through this challenge.

Second, I would like to thank my daughter Britney, for encouraging me to keep going even when I felt like giving up. There were many times that she prepared breakfast and dinner, on my nonstop days of working on my paper. Additionally, my canine, Shylo, of 15 ½ years, kept me entertained many times when he decided to walk across my laptop, because he wanted my attention. Unfortunately, he went onto doggy heaven before I completed my dissertation. Throughout this process, I also lost two favorite uncles, Julien and Calvin, who would have been so proud, had they lived to see me through this process. Last, but not least, I would like to thank my sister, Monica, for always asking, "Did you work on your paper today?" Her constant reminder contributed to my motivation.

Finally, I would like to acknowledge and extend my appreciation to my dissertation committee members, Dr. Gorman, Dr. Guyton, and Dr. Lunde, whose guidance propelled me to the next steps throughout the process. Dr. Gorman was especially encouraging, and always remained positive. His positive words of encouragement certainly brought me to the end of this dissertation journey.

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List of Abbreviations

Applied Behavior Analysis (ABA)

School-Wide Positive Behavior Intervention Supports (SWPBIS)

Emotional Behavior Disorders (EBD)

Teacher Observation Classroom Adaptive-Checklist (TOCA-C)

Attention Deficit Hyperactivity Disorder (ADHD)

Response to Intervention (RTI)

Oppositional Defiant Disorder (ODD)

Conduct Disorder (CD)

Office of Special Education Programs (OSEP)

Universal Leadership Team (UTL)

Functional Behavior Assessment (FBA)

Behavior Intervention Plans (BIP)

CHAPTER ONE: INTRODUCTION

Overview

Chapter One will discuss the background related to the effects of implementing School-wide Positive Behavior Intervention Supports (SWPBIS) on student with Emotional Behavior Disorders (EBD) in elementary schools based on their concentration problem, disruptive behavior, and prosocial behavior. The problem statement was discussed, including recommended research from previous studies. The purpose of this study was discussed, as well as the significance of the current study. Finally, the research questions were introduced, and definitions pertinent to this study were given.

Background

Conduct and disruptive behavior problems pose a significant concern for children's development (Bradshaw, Waasdorp, & Leaf, 2012). The population of students with Emotional Behavior Disorders (EBD) has increased in schools (Bradshaw et al., 2012). Consequently, teachers are challenged with providing effective classroom management and tasked with changing students' behaviors. Because of the challenging behaviors that students with EBD display, they are less likely to be educated in less restrictive environments (Smith, Katsiyannis, & Ryan, 2011). Young children identified with behavior and mental health issues often have relationship problems and aggression (Browne, Cashin, & Graham, 2012). "Lack of support for and/or interventions with these children can mean they develop short and long-term problems" (Browne et al., 2012, p. 49). Students with EBD in general education settings are at risk for placement in self-contained EBD settings and present a more complex picture to educators

(Basset & Dunn, 2012). In these classes, students with emotional and behavior challenges are grouped with students who have similar or more severe behaviors than their non-disabled peers (Browne et al., 2012).

The ability to model positive behaviors is not an ingrained characteristic for students. Regardless of their exceptionality, students with EBD need to be taught positive behaviors and to feel included in the whole school environment (Browne et al., 2012). Built on the tenets of prevention, SWPBIS advocate that schools restructure their discipline systems to provide universal, targeted, and intensive levels of supports to encourage positive social, emotional, and behavioral growth in all students (Feuerborn & Chinn, 2012). There is growing interest in school-wide prevention models such as SWPBIS for preventing an early onset of behavior problems and promoting positive adjustments (Bradshaw et al., 2012).

The common approach to developing educational and prevention programs has been to create a program, test it through a randomized trial, and then offer it to community institutions (Pas & Bradshaw, 2012). The study of disruptive conduct has been an ongoing topic of investigation for researchers studying disruptive behaviors (Esturgó-Deu & Sala-Roca, 2010). Education professionals have always been concerned about problematic behaviors that impede teaching students in the classroom and prevent learning activities from being carried out satisfactorily by the students (Esturgó-Deu & Sala-Roca, 2010). Teachers are challenged with establishing an effective classroom management plan and delivering the curriculum at the same time, because behaviors that were a disruption to classroom rules are no longer limited to students talking out or chewing gum during instructional time (Esturgó-Deu & Sala-Roca, 2010). On some occasions they are a manifestation of a medical condition, such as attention deficit hyperactivity disorder (ADHD) or a psychological condition such as conduct disorder, but in

most cases, they are not linked to any disorder (Coles, Slavec, Bernstein, & Baroni, 2012).

Research has been conducted on the topic of emotional intelligence since its inception in 1990

and its popularization by Goleman, but individuals with ADD or conduct disorder may act on

impulsivity and often do not rely on their emotional intelligence (Esturgó-Deu & Sala-Roca,

2010). When an individual possesses emotional intelligence, he or she has the ability to perceive

and express his or her emotions.

The increase in aggressive behaviors in schools throughout the United States has reached

high number proportions of students with EBD concerns (Armstrong, 2014). Koth, Bradshaw, &

Leaf, 2008, conducted a study that consisted of 134 first-grade classrooms and found varying

levels of aggressive behavior in the classroom with the schools that participated in the study.

When an individual possesses emotional intelligence, he or she has the ability to recognize

challenging behaviors versus an individual who acts on impulsivity and does not have the ability

to recognize challenging behaviors. Although not all students with EBD possess violent

tendencies, some students with EBD if not addressed and treated can lead to physically

aggressive and disruptive behavior (Armstrong, 2014). The behavior of students with EBD can

become increasingly challenging, therefore, presenting challenges with placing students in the

best school setting. The unbalanced situation of students with EBD in disconnected environment

appears to be upsetting to many, however, options give minimal indisputable support (Skerbetz

& Kostewicz, 2015). Approximately 17% of students with EBD obtained their education

fulltime in segregated settings, in comparison to 6% of all students with disabilities (National

Center for Education Statistics, 2014).

Simonsen et al. (2012) found an EBD network of educational administrators in Chicago,

Illinois, who initiated SWPBIS for the entire school district. In doing so, all students could

receive SWPBIS as a positive intervention for combatting any future behavior problems. Results from the study were favorable overall and revealed maintenance or improvement in outcomes over time for all schools in the fidelity of SWPBIS implementation. Simonsen et al. concluded that, in most cases, an association between SWPBIS and implementation with fidelity, resulted in significantly better outcomes for SWPBIS schools across the years.

As schools continue to face problematic behavior concerns such as bullying, substance abuse, and other challenging behaviors, teachers and administrators are recognizing the need for prevention. If administrators and teachers are going to influence preventing emotional and disruptive behaviors, operational programs must be acknowledged, dispersed, and executed soundly (Molloy, Moore, Trail, Van Epps, & Hopfer, 2013).

When a child lacks emotional intelligence, he or she is more likely to encounter difficulty with behavioral challenges and emotional behavior disorders (Brackett, Rivers, & Salovey, 2011). These skills can be acquired throughout the socialization process, particularly during the period between the child's birth and puberty (Esturgó-Deu & Sala-Roca, 2010). If a student lacks emotional intelligence, then supports are necessary to assist that student in making good behavioral choices. The implementation of SWPBIS supports students in making good behavioral choices (Esturgó-Deu & Sala-Roca, 2010).

SWPBIS is a consequence-based classroom management strategy that is used to counteract a student's initial noncompliant response to a teacher's request for the student to stop a problem behavior (Benner, Nelson, & Ralston, 2012). SWPBIS is a universal prevention strategy currently implemented in more than 16,000 schools across the United States (Bradshaw et al., 2012). When positive intervention supports such as token economy systems are implemented, teachers usually offer the student an incentive, whether tangible or intangible, for

the desired behavior. Consequently, something is taken away from the offender. This is often referred to as a token economy. Positive intervention is usually enforced using research-based strategies, but the primary goal is to increase the desired behaviors (Bradshaw et al., 2012).

The research on problem behavior has shown that SWPBIS can be an effective alternative to traditional reactive and punitive approaches to problem behavior (Nocera, Whitbread, & Nocera, 2014). Currently, 18,000 primary and secondary schools throughout 49 states employ SWPBIS in their school districts; this increase occurred over the past 11 years (Molloy et al., 2013). There is a need for more research on factors that enhance the adoption and adequate implementation of programs that lead to effective practice and outcomes, particularly in school settings where there is a growing emphasis on the implementation of evidence-based prevention programs (Pas & Bradshaw, 2012). Pas and Bradshaw (2012) conducted a Type II translational research approach that examined how the implementation fidelity of an increasingly popular and widely disseminated school-based prevention model called SWPBIS related to positive student outcomes. A unique feature of this study was the use of data from a statewide scale-up effort of SWPBIS that included over 870 Maryland public schools (Pas & Bradshaw, 2012).

Feuerborn and Chinn (2012) found that despite the positive outcomes associated with SWPBIS, many schools continue to employ reactive discipline systems. Throughout their study, Feuerborn and Chinn determined that often, this affects the school's philosophy as it relates to teachers and administrators. As noted by Feuerborn and Chinn, initially, school-based behavior leadership teams reported major inhibiting and facilitating factors related to the level of staff support for SWPBIS. The researchers concluded that inhibiting factors included administrative support, faculty buy-in, philosophical differences, staff training, student training, and reward

systems. They also found that these factors can negatively or positively impact the implementation of SWPBIS. Feuerborn and Chinn pointed out that the facilitating factors included the availability of necessary facilitators such as coaches and district coordinators to improve understanding of the inhibiting barriers and to facilitate successful implementation of SWPBIS. "Clearly the perceptions that teachers hold toward SWPBIS can affect implementation" (Feuerborn & Chinn, 2012, p. 220). The purpose of Feuerborn and Chinn's study was to gain a deeper understanding of the perception and practices of teachers by examining the way they viewed student needs and the interventions teachers used.

Students who are identified with behavior and psychological challenges often have social adaptive relationship problems; therefore, these students display a variety of behaviors that seriously affect their ability to be successful academically and socially (Brown et al., 2010; Mihalas, Morse, Allsop, & McHatton, 2009; Armstrong, 2014). Accordingly, universal SWPBIS modifies the school environment by implementing clear school rules through better-quality systems and procedures that endorse positive change for both teachers and students (Molloy et al., 2013).

SWPBIS is centered on behavioral, social learning, and organization behavioral principles (Pas & Bradshaw, 2012). SWPBIS theories were founded in research-based practices and behaviors in the field of education and include applied behavior analysis, differentiated instruction, and the use of data to inform practices (Nocera, Whitbread, & Nocera, 2014). Early psychological theorizing was founded on behavioristic principles that embraced an input-output model linked by an internal conduit that makes behavior possible but exerts no influence of its own on behavior (Bandura, 2001). Based on Bandura's cognitive behavioral theory, procedures must be implemented to change students' challenging and disruptive behaviors by using

cognition to generalize their behavior throughout the entire school building, not just in their respective classrooms. A person's expectation in terms of increased self-efficacy, which can be gained through rapid mastery of a specific animal phobia can increase coping efforts in social situations as well as reduce fears of other animals (Bandura, 1977). Self-efficacy is restored when general effects occur, most likely on activities that are like those principal sources, through the operation of different modes of treatment such as performance, accomplishments, vicarious experiences, verbal persuasion, and emotional arousal (Bandura, 1977). During treatment for behavioral change, when modeling and guided practice are employed, participants gain a generalizable skill for working successfully with stressful situations; these skills can be used to overcome a variety of challenging behaviors (Bandura, 1977).

Problem Statement

A decrease in students with Emotional Behavior Disorders (EBD) behavior problems and increase in positive behavior skills have been discovered through the implementation of SWPBIS. The implementation of School-wide Positive Behavior Intervention Supports (SWPBIS) is promising, but there are some children who do not respond effectively to the model; therefore, additional work is needed (Bradshaw et al., 2012). The collection of research is needed on the influences of evidence-based intervention models that promote the adaptation of programs that are designed to lead to effective practice and outcomes in schools (Pas & Bradshaw, 2012). The research is also necessary to show how implementation of quality intervention programs predict outcomes of students with EBD within the range of programs and settings (Molloy et al., 2013); therefore, the problem is there is limited research on the adaptive behavior scores of students with emotional behavior disorders.

Purpose Statement

The purpose of this quantitative study was to investigate the effectiveness of School-wide Positive Behavior Intervention Supports (SWPBIS) when implemented with elementary students with emotional behavior disorders (EBD) in elementary schools. SWPBIS offer important and meaningful benefits to students with disabilities (Coffey & Horner, 2012). Students with EBD are categorized as students with disabilities as defined by the Individual with Disability Education Act (IDEA). This quantitative causal-comparative research study was to determine if the implementation of SWPBIS lowered poor adaptive behavior scores among students with EBD. A minimum of 100 elementary teachers participated in the study by completing the Teacher Observation Classroom Adaptive-Checklist (TOCA-C) for 100 elementary school students with EBD who attend 20 elementary schools located in a large suburban school district outside of a metropolitan city in Georgia. The dependent variable was the overall adaptive behavior scores of students who were rated by their classroom teacher using the TOCA-C. There were three subcategories of the dependent variable: Concentration Problems (CP), Disruptive Behaviors (DP), and Prosocial Behaviors (PB). The independent variable was SWPBIS. The treatment schools were those schools where SWPBIS was implemented, and the non-treatment schools were those schools where SWPBIS was not implemented.

Significance of the Study

The aim of School-wide Positive Behavior Intervention Supports (SWPBIS) is to establish a safe school environment and a positive school culture that supports positive behavioral and academic outcomes for all students (Chitiyo, May, & Chitiyo, 2012). There are studies that have made endeavor at refreshing the discernment of teachers and all things

considered schools, towards children and pre-adult conduct. There are studies that have emphasized the need for orderly social change at school and classroom levels, for instance, proposing: the advancement of positive practices by students as opposed to an attention on bad conduct; a deliberate review of frameworks around conduct by schools; the express instructing of social and passionate abilities/learning; and the utilization of coaching and of sustain gatherings to support students (Armstrong, 2014). Future research ought to additionally research the degree to which acknowledgment and positive interventions can be coordinated into working SWPBIS models, and how such incorporation impacts students' general well-being and prosperity (Wilson, 2015). Researchers of recent studies have tested and distinguished indicators of sustained usage of SWPBIS in schools (McIntosh, Mercer, Nese, & Ghemraoui, 2016). This study will add to the literature by determining whether the implementation of SWPBIS lowers the adaptive behavior scores of students with EBD in elementary schools. Additionally, the study will add to the existing knowledge of the effect of SWPBIS and help to improve the conditions, lives, well-being, and work environment of students and teachers.

Research Question(s)

RQ1: Is there a difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

RQ2: Is there a difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

RQ3: Is there a difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

RQ4: Is there a difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

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Null Hypothesis(es)

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The following null hypotheses are proposed:

H$_0$1: There is not a statistically significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

H$_0$2: There is not a statistically significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

H$_0$3: There is not a statistically significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

H$_0$4: There is not a statistically significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

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Definitions

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The following definitions are used for this study:

1. *Emotional Behavior Disorder* – Emotional Behavior Disorder is defined as any behavior, disorder, or syndrome that is related to functional impairment or personal distress (American Psychiatric Association [APA], 2000).

2. *School-Wide Positive Behavior Intervention Supports* - The systematic application of empirically validated practices that are applied across the entire school and designed to achieve social and learning outcomes and prevent behaviors (Sugai & Horner, 2008).

3. *Adaptive behaviors* – Adaptive behaviors are a combination of concentration problems, disruptive behaviors, and prosocial behaviors (Koth, Bradshaw, & Leaf, 2009).

4. *Concentration problems* – Concentration problems reflect inattentive and off-task behavior (Pas & Bradshaw, 2013).

5. *Disruptive behaviors* – Disruptive behaviors are defined as disobedient, disruptive, and aggressive behaviors (Koth, Bradshaw, & Leap, 2008).

6. *Prosocial behaviors* – Prosocial behaviors are defined as positive social interaction (Koth et al., 2008).

CHAPTER TWO: LITERATURE REVIEW

Overview

Chapter Two will review the literature that addresses the research and theory of School-wide Positive Behavior Intervention Supports (SWPBIS), the theory behind SWPBIS, and how the theory attributes to implementing SWPBIS to lower adaptive behavior scores of students with Emotional Behavior Disorders (EBD) in elementary schools. The researcher presented a summary of analysis of pronounced theories and findings within the literature review and at the end of the literature review chapter. The literature review was divided into four sections. The first section reviewed the literature on students with EBD. In the second section, the researcher discussed SWPBIS including the origination, description, and empirical studies that validated the SWPBIS model. The researcher continued with the historical background and theoretical framework of SWPBIS in the third section. The final section examined components of SWPBIS that have had an impact on school initiatives. The literature review identified what was already known about SWPBIS as it related to the focus of the research study and the significance for the need of more research to address the problem in this study. In addition, the literature review was used to align the existing literature to the study's research questions. The researcher defined social cognitive theory and described characteristics that pertained to certain limitations of implementing SWPBIS in the elementary schools.

Theoretical Framework

Applied Behavior Analysis (ABA) Theory

The federal government recognized the challenges that students with Emotional Behavior Disorders (EBD) encountered in elementary and postsecondary educational settings. Consequently, the federal government passed legislative mandates that had the propensity to intensify positive outcomes for students with EBD (Lewis, Jones, Horner, & Sugai, 2010). It is important to note that not all students' behaviors are characteristic of an EBD disability but may reflect an unknown between the school and home environment and students' culture, leading some researchers to believe that some disruptive behaviors are accepted in the home and community (McIntosh et al., 2014). The School-wide Positive Behavior Intervention Supports (SWPBIS) framework is an effective program for students with EBD because the framework provides a continuum of supports that emphasize (a) prevention, (b) early intervention, (c) data-based decision-making, and (d) capacity building within and across schools (Lewis et al., 2010).

Ward and Gersten (2013) concluded that teachers in the public education system are met with the challenge of addressing emotional and disruptive behavior challenges in their classes, factors that are concerning to school leaders. From the revelation of Bloom's Taxonomy in schools to the origination of the Individuals with Disability Education Act (IDEA) in the 1970s, schools have embraced many innovative practices to fix the challenges faced by educators. Ward and Gersten stated in the literature that punishment methods have no lasting effect on student behavior and using punishment diminishes misbehavior temporarily (Ward & Gersten, 2013). A study in Applied Behavioral Analysis (ABA), the characteristics of effective schools, and systems change have merged over the past 38 years into a set of strategies and policies designed to improve student behavior within a framework of multi-tiered positive intervention supports (Ward & Gersten, 2013). ABA is a branch of brain research that is centered around the investigation and adjustment of human conduct (Hernandez & Ikkanda, 2011).

ABA is a science and, consequently, includes dynamic methodologies and out-comes that enhance conditions of social pertinence for individuals with EBD (Leaf et al., 2015). As Horner and Sugai (2015) advocated, SWPBIS has both its abstract and theoretical foundations in ABA. While an outpouring of support for any approach is not essentially characteristic of a viable and proficient framework, this force over various government and state organizations to support and fund the framework suggested by Horner and Sugai ought to make the field better understand how SWPBIS grasps the standards of ABA (Putnam & Kincaid, 2015).

SWPBIS, a curriculum based on prevention science and ABA was developed to address some of the concerns public education systems are confronted with by students who exhibit disruptive behavior challenges (Burke et al., 2012). In ABA, emphasis is set on the practical relationship between human conduct and the earth, the estimation of conduct and a dependence on noticeable factors (Hernandez & Ikkanda, 2011). When schools implement SWPBIS and classroom management, they promote safety and success for all students. The term ABA was founded by John Watson and he further developed his theory of behaviorism beyond neuroses to unconscious contents and processes in everyday life (Reese, 2014).

The work of Thorndike and his stimulus-response theory is relevant to the development of SWPBIS. Thorndike's law of effect states, "An act followed by a favorable effect is more likely to be repeated in similar situations" (Slavin, Holmes, Madden, Chamberlain, & Cheung, 2010, p. 141). When a positive behavior is displayed by a student, the teacher should recognize and reinforce the student's behavior, so that the positive behavior can be modeled by the student again. Positive behavior supports were developed in the mid-1980s because of social forces that demanded effective socially and ecologically procedures to address destructive and disruptive behaviors (Dunlap, Carr, Horner, Zarcone, & Schwartz, 2008). The effect of ABA on SWPBIS

is most certain in (a) the accentuation on operational meanings of conduct and mediation components, (b) the rationale model used to choose natural controls intended to change student and staff conduct, and (c) a tenacious responsibility regarding estimation of both execution fidelity and the effect of SWPBIS on student results (Horner & Sugai, 2015).

SWPBIS involves the following: data-based assessment, empirically validated intervention strategies, a system change that promotes utilization and sustainability, and procedures for reinforcing responsiveness to consumers' preference and community relevance (Dunlap et al., 2008). The theory of ABA utilizes data to drive interventions and designs that are implemented to evaluate the success of the interventions (Leaf et al., 2015). This theory combines evidence-based practices with formal systems that focus on both improving the valued lifestyle options available for an individual and reducing problem behaviors (Carr, Dunlap, Horner, Koegel, & Turnbull, 2002). The SWPBIS viewpoint is designed to support humanistic values and should not replace but inform empiricism (Carr et al., 2002). ABA made two major contributions to SWPBIS as it provided an element of a conceptual framework relevant to behavior change and provided many assessment and intervention strategies. SWPBIS could not have existed if it were not for the many years of research into ABA which expands into over 35 years of research (Burke et al., 2012).

Although ABA was originally theorized as an approach used at the individual student level, a systems-level perspective has led to the incorporation of these strategies into a prevention-oriented school-wide framework for promoting appropriate behavior among all students utilizing positive interventions (Ward & Gersten, 2013). Interventions under the SWPBIS umbrella are built on the foundations of ABA and represented in a more positive, collaborative, and all-inclusive structure (Spaulding et al., 2010). The study of conduct

examination consists of three noteworthy branches: behaviorism, which is the theory of the investigation of conduct; exploratory investigations of conduct, which is the region of lab research and ABA, which is concerned with breaking down and creating procedures for the conduct change (Hernandez & Ikkanda, 2011). The specific focus, reliance on data, and expectation of observable change relevant to ABA are adapted to become more acceptable to practitioners in the field of education and health services (Henandez & Ikkanda, 2011). In an aggregated clinical experience by Leaf et al. (2015), the researchers concluded that the best execution of mediation utilizing ABA happens when the interventionist is skilled in examining the behavior of the individual.

Normalization and Person-Centered Values

Positive behavior supports subscribe to the principle and ideal of normalization; people with disabilities should live in the same settings as nondisabled others and have access to the same opportunities (Morhardt & Spira, 2013). Social norms are neither neutral nor objective and are culturally created, whereas normalization follows the principle that the goal is to ensure that individuals are given assistance so that they are capable of functioning socially in their communities instead of being devalued because they may lack social skills (Njelesani, Teachman, Durocher, Hamdani, & Phelan, 2015). It is important for teachers and students to have the tools that would assist in teaching and learning the appropriate and expected behaviors; therefore, direct teaching of at least three to five positive behavior expectations to all students is essential (Burke et al., 2012). When SWPBIS are implemented, such challenges can be addressed, and normalization leads to the principle of inclusion (Carr et al., 2002). Students with EBD, sometimes referred to as a disenfranchised group, still need to be mainstreamed because

youths are often seen as the most important group to be governed and normalized to create the society the community wishes for (Wasshede, 2015).

In addition, SWPBIS takes on the idea that while humanistic values should not replace empiricism, they should inform empiricism (Carr et al., 2002). The needs and objectives of an individual drive the formation of new service matrices in self-centered planning and are custom fitted to address the extraordinary attributes of a person (Albrecht, Mathur, Jones, & Alazemi, 2015).

Social Cognitive Theory

The Social Cognitive theory (SCT), which was coined by Bandura, for the dominance of environmental control of human behavior, is an updated and expanded version of social learning theory, developed by Millard and Dollard (Swearer, Wang, Berry, & Meyers, 2014). The part of human conduct while affecting the earth is an extension of social psychological hypothesis specifically identified with the behavioral condition and the effect of insight and individual elements on the conduct of people (Bandura, 2001). Swearer et al. (2014) found that social learning hypothesis suggested that people learn not just through direct guideline be that as it may, likewise by watching others' practices and the results that come after. Furthermore, the researchers concluded that for learning to happen, people should attend to the observed conduct, encode pictures of the observed conduct, repeat those pictures, and be propelled to play out the conduct.

Social competencies are essential to life success, and many children at-risk fail to learn socially acceptable behaviors (Albrecht et al., 2015). As indicated by SCT, Martin, Burns, and Collie et al. (2016) found that there are personal components and relational elements that add to individuals' agentic thought, behavior and feeling. They further went on to identify two major

constructs significant to individual organization, which are self-viability and control. As far as scholastic outcomes, relational sustenance from the educator is a key component of relational agency (Martin, Burns, & Collie, 2016).

As it relates to social cognitive theory, children and adolescents tend to stay away from practices that they believe will be punishable and, rather, engage in practices that they believe will be compensated (Swearer et al., 2014). Similarly, Martin, Burns, and Collie (2016), indicated, as to relational components supporting human agency, a student's feeling of relatedness with others emerges when they tend to and acknowledge others, and feel cared for and acknowledged by others. Constructive relational connections (including those with teachers) are viewed as a cushion against stress and risk, essential for help on academic assignments, a foundation of enthusiastic support in everyday life, an empowering capacity, and a reason for social-passionate improvement and self-satisfaction that each prompts positive behavioral and enthusiastic reactions (Martin, Burns, & Collie, 2016). When prosocial behaviors are developed, children overcome social barriers, but to do so, they need to experience a social climate in school; SWPBIS promotes a social climate in schools (Albrecht et al., 2015).

Observational or vicarious learning is another breadth of social cognitive theory (Bandura, 1977). Learning usually takes place through practice, but vicarious learning takes place without actively participating since learning occurs using symbols (Bandura, 1977). The four constituent processes that are administered by vicarious learning are attention, retention, production, and motivation (Bandura, 2001). The process of attention comes from aspects of modeling; the process of retention comes from what is observed; the process of production requires the individual to physically act on the information stored in memory; the process of motivation is linked to action demonstrated (Bandura, 1977). In accordance with the process of

attention, retention, production, and motivation, these theories relate to one another because

certain aspect of the theories are combined to influence the dependent variable because

- the ABA theory promotes a conceptual framework relevant to behavior change, assessment, and intervention strategies;

- normalization ensures assistance is given to individuals so that they can be inclusive; and

- social cognitive theory demonstrates that learning takes place through practice (Bandura, 2001, p. 14).

Theory of Diffusion of Innovation

The constant change and replacement of many programs over the years have added to the

lack of trust educators present when they are asked yet again to embrace a new program that is

being introduced to the school district. School administrators and their faculty, along with both

parents and students, begin to feel like another experiment. These practices and concerns have

turned out to be developing issues for educational agencies and partners, because the dynamics

of the classroom are changing when compared to decades ago, which makes it even more

challenging for educators to teach all children (Gage, Sugai, Lewis, & Brzozowy, 2015). An

inventive approach is required for educating and realizing when connected to both scholastics

and practices (Gage et al., 2015). In the meantime, it is important to recognize the individual

needs of all or a few students. According to Eckenrode, Rowe, Laird, & Brathwaite (1995),

family factors such as parental mental health, substance abuse histories, marital discord, child

maltreatment, and parenting styles are strong predictors of later problem behaviors in schools.

Problematic behaviors such as physical aggression and harassment that occur in homes and

community are not only disruptive to the classroom but also lead to an increased likelihood of

negative outcomes for students, such as mental health problems and disinterest in school (Kelm,

McIntosh, & Cooley, 2014). "Research shows that the school social environment can act as either a protective or risk factor for problem behavior" (Kelm et al., 2014 p. 196).

Schmidt and Brown (2007) give a hypothetical structure to why the innovative decision process and teaching strategy diffuse within the context of the implementation process to guarantee sustainability with the process. Rogers (2003) defined diffusion as, "the process by which an *innovation* is *communicated* through certain *channels* over *time* among the members of a social system" (p. 11). Appendix A links the channels by which innovation is processed and identifies Roger's (2003) linkage of student competency with the Theory of Diffusion of Innovations. In the social system, an individual faces an innovation decision that follows a five-step process: Knowledge, Persuasion, Decision, Implementation and Confirmation.

When individuals acquire information regarding implementing an innovation, (a) the individual's knowledge of the innovation must be advanced; (b) the individual then forms an opinion about the innovation through persuasion; and (c) the decision follows an individual accepts or rejects the innovation. Lastly, implementation is the use of innovation by the adopter which is later confirmed as the adopter looks for information that indicates the innovation is advantageous or not (Schmidt & Brown, 2007).

Related Literature

SWPBIS Overview

The concern for students' increasingly aggressive and uncharacteristic behaviors in many schools throughout the United States has reached dangerous proportions (Safran & Oswald, 2003). It is the desire of parents, students, and administrators that teachers react more viably to the worries as they identify with the challenging behaviors of students in public schools, but conversely, students in classrooms without basic components of SWPBIS spent more time and

more energy that was occupied with off-task practices, such as disrupting the class and talking inappropriately (McIntosh, Ty, & Miller, 2014). An alternative to the usual disciplinary practices is the use of a SWPBIS curriculum, a preventive and support-based arrangement of enhancing student conduct that has been experiencing constant change for over 20 years (Filter, Sytsma, & McIntosh, 2016). The theory base of SWPBIS is discussed in the following paragraph, but the decision to implement SWPBIS with fidelity is where schools deviate one way or another (Schmidt & Brown, 2007).

SWPBIS is an applied science and a comprehensive methodology for the prevention and management of problem behavior that uses educational approaches to expand a person's behavioral repertoire and system change methods to redesign a person's living environment (McIntosh, Ty, & Miller, 2014). SWPBIS has been in existence for quite some time now, so it is not a new methodology. The purpose of SWPBIS is to accentuate recognizable strategies, for example, operational meaning of behavioral desires, dynamic guidelines, and predictable uplifting feedback (Horner, Sugai, & Anderson, 2010). SWPBIS is also designed to change ineffective practices in schools to create positive and predictable environments so that students can be successful both academically and behaviorally (McIntosh et al., 2014).

The practices and framework of SWPBIS are sorted out along a three-tiered continuum of counteractive action with a hypothetical and empirical foundation of ABA. At Tier 1, intervention strategies focus on preventing new behaviors by utilizing school-wide discipline, classroom management, and meaningful practices; at Tier 2, SWPBIS programs offer group-based interventions for students at risk; and at Tier 3, the interventions are more individualized for more severe behavior concerns (Eiraldi et al., 2014). Horner et al. (2010) found SWPBIS to be highly successful in reducing problem behaviors among students, such as aggression, self-

injury, and property destruction. With the implementation of SWPBIS, the primary focus is to teach all students important behavioral expectations and routines, which leads to better communication for students and staff (Eiraldi et al., 2014).

Skills that increase the likelihood of success and personal satisfaction in normative academic, work, social, recreational, community, and family settings are covered in SWPBIS (Childs, Kincaid, George, & Gage, 2016). The existence of positive behavior supports enables a person to make changes to their lifestyle so that the community has a chance to enjoy a quality life (Spaulding et al., 2010). As stated by Sugai and Horner (2009), positive behavior support emerged from three major sources: (a) applied behavior analysis, (b) the normalization/inclusion movement, and (c) person-centered values. It has been more than 21 years since behavioral services, also known as positive behavior support, has taken on a movement that is highly visible (Johnston, Foxx, Jacobson, Green, & Mulick, 2006). "Although positive behavior supports has been substantially influenced by applied behavior analysis (ABA), other factors are also part of its history" (Johnston et al., 2006, p. 51).

SWPBIS is widely recommended as an effective intervention that helps students with behavioral challenges develop their social skills (Swoszowski, Jolivette, & Fredrick, 2013). SWPBIS consists of a three-tier behavioral framework that is proactive in addressing challenging behaviors (Swoszowski et al., 2013). At the primary level, which is tier one, developing and teaching rules and awarding incentives for expected behaviors are what enables 80% of students to display positive behaviors (Lewis & Sugai, 1999; Sugai & Horner, 2002, 2006).

In their study, Flores and Hill (2013) found that SWPBIS can be successfully facilitated when it is implemented with fidelity through staff-level program-wide PBIS. The researchers determined that SWPBIS is a proactive way to deal with school-wide discipline, generally

implemented at the student level, and intended for use by all grown-ups inside a school. After much research and literature reviews by the researcher, implementing SWPBIS encourages students to behave in a positive and effective manner that adds to their life-long social development. Discussion of the SWPBIS literature is limited to the first tier to focus on the research question, resulting in no discussion of the secondary and tertiary tiers (Flores & Hill, 2013).

According to Chitiyo, May, and Chitiyo (2012), the goal of implementing SWPBIS, which is an approach that derived from the principles of ABA, is to create a safe school environment and a safe and productive school culture that conform positive behavioral and academic results for all consumers. The researchers also, determined that the outcomes of a successful and meaningful SWPBIS program are dependent upon data-driven decision making that targets realistic outcomes that can be attributed to certain practices that are put into place in all settings throughout the school building. The implementation of SWPBIS is implemented with the goal of improving school climate, student academics, and prosocial behavior, which takes place through the implementation of three tiers of support (Tobin, Dickey, Horner, & Sugai, 2008). Student discipline problems and poor administrative supports are two challenging areas that can adversely affect the operation of any school environment; therefore, SWPBIS is a layered mediation model that addresses both areas through the execution of viable practices and the production of a more positive school condition (Ross, Romer, & Horner, 2012).

Advancing SWPBIS

This research study will attempt to provide new literature on how positive interventions can be applicable to improving adaptive behavior scores for students with EBD. The framework of positive behavior interventions in the field of disability studies to state public schools that are

educating youths with behavior challenges will be applied to the study. One such innovation provides interventions for academics and behaviors which can help all students that are at risk, whether they have been identified for special education services.

Legislative acts such as the ones written to implement the No Child Left Behind (NCLB) and the Individuals with Disabilities Education Act (IDEA), have recommended the use of such innovations as SWPBIS to meet the needs of students that struggle with academic and behavior challenges. SWPBIS has received recognition from many researchers and school districts across the country (Bradshaw, Waasdorp, & Leaf, 2012). Students who experience positive social climate in their school experiences, tend to be more engaged in their overall school activities and spend less time engaged in disruptive behaviors, which is often a characteristic of students with EBD (Albrecht et al., 2015). The use of SWPBIS is proven effective using a three-tiered model of evidence and research-based interventions where the fidelity of the program has been analyzed from systemic data collection (Jackson & Panyan, 2002).

A study that was conducted by Hektner, August, and Realmuto (2015), revealed that children with disturbing and aggressive behaviors had fewer friendships when compared to the number of children who increased their number of mutual friendships because of their opportunities for receiving social skills training. Many educational institutions have adopted a tiered Response to Intervention (RTI) framework so that the organization and implementation of social and behavioral supports are delivered. For this reason, SWPBIS has been suggested as an effective way to provide the framework for interventions that are needed to increase the desired behaviors and decrease problem behaviors (Albrecht et al., 2015). It has been demonstrated through research that students with behavioral disorders and learning disabilities are disproportionately suspended at rates two to three times higher than for their nondisabled peers;

therefore, SWPBIS, a proactive approach, shows promise for schools (McNeill, Friedman, & Chavez, 2016).

The role of the public education system was created with many goals in mind. One goal was the desire to provide children and youth with a structured and disciplined setting so that they could learn the norms and morals of society to become productive and well abiding citizens in their communities (Jackson & Panyan, 2002). The process was not fully thought through because the norms of all races and genders were not a deciding factor. The challenges that are faced by families that are at an economic disadvantage, certain ethnic minorities, and students identified with disabilities may face many challenges when it comes to conforming to the rules of engagement (Jackson & Panyan, 2002).

For many educators, the most effective way to deal with unwarranted behaviors is using punishment and exclusion; unfortunately, this happens most often with students with EBD. Children with psychiatric problems such as oppositional defiant disorder (ODD) and conduct disorder (CD) have abnormal amounts of social, emotional and behavioral problems, which have led to removing students from settings with their nondisabled peers, citing that the primary reason for removing students from an inclusive setting is a response to inappropriate behavior (Breeman et al., 2016).

When students with EBD become disruptive, teachers often prefer for the students to be removed from the classroom which equates to putting a bandage on the real issue. Teachers sometimes feel powerless when behaviors occur that challenge their abilities to manage their classrooms. The use of punitive discipline is often based on control, coercion, and dominance (Jackson & Panyan, 2002). These methods of controlling behavior frequently backfire on the

person implementing the punishment, as the students are affected negatively which causes them to withdraw, escalate in their behavior, and receive more discipline referrals.

Although negative behavior may be prominent in the classroom along with the push for inclusion for students with disabilities such as EBD, teachers are still expected to teach all students so that they can progress academically. In their study, Freeman et al. (2016) recognized that the pressure continues to grow as policies are mandated from the federal government to increase test scores among all students, close the achievement gap, and increase graduation rates among all students, including students with EBD. The researchers also found that to meet the challenges set forth by the legislature and to produce students that can be successful in their academic and social endeavors, it is vital that students receive as much classroom and instructional time as possible.

In 2007, Senator Barak Obama sponsored the Positive Behavior for Effective Schools Act in the U.S. Senate (S.2111) to improve the Elementary and Secondary Education Act of 1965. Similarly, McIntosh, Mercer, Nese, Strickland-Cohen, and Hoselton (2016) found that the improvements to the Act allowed state, district, and local education agencies to increase their implementation of early interventions, principally SWPBIS, to address the number of discipline referrals, suspensions, and expulsions. The Office of Special Education Programs (OSEP) and state level support on SWPBIS, termed SWPBIS as a framework that uses best evidence-based practices for implementing academic and behavioral procedures for instilling success for all students, and not just another behavior management methodology (McIntosh et al., 2016).

SWPBIS promotes changing schools systemically to recognize and address challenges that relate to inappropriate behaviors as well as address the social and emotional concerns of students with or without disabilities (Farmer, 2013). SWPBIS is a top-down methodology based

in behaviorism and concentrations "on the pathologizing of difference in pursuit of normalization" (Ware, 2005, p. 105). SWPBIS is based on a consistency model that uses a universal matrix to teach all students the desired behavior expectations of the school. Students are rewarded when the desired behaviors are exhibited using a school-wide universal token system.

Frequently, students with emotional behavior disorders (EBD) encounter academic challenges due to negative behavior. For this reason, students with EBD are usually placed in self-contained classes where the probability for meeting their needs are better than an inclusive setting. Implementing a program such as SWPBIS may prove to be beneficial for students but requires the school to implement the program with fidelity (Sugai & Horner, 2008). SWPBIS protocol was developed by Sugai and Horner (2002) and they noted that interventions that are used by teachers must follow the protocols and implementation must be done with fidelity to adequately measure success.

SWPBIS is essentially built on positivism and students' behaviors are measured and ranked using databases and variables that are being gathered on the students in the school (Sugai & Horner, 2006). In their research, Sugai and Horner (2006) collected a plethora of data that shows positive results. According to the researchers, if students do not respond to evidence-based interventions, there may be something intrinsically wrong with the student that has caused them to fail (Sugai & Horner, 2009).

Most of the literature on SWPBIS is written by Sugai and other co-researchers; they have provided most of the blueprint and training materials that have been gathered from their research on SWPBIS through studies they have conducted over the past 15 years. Sugai and co-researchers have been able to demonstrate that their methods use evidence-based behavioral

interventions and stress the importance of validity through data collection and implementing

programs with fidelity. The researcher has found a lot of promising literature as it relates to

SWPBIS but feels somewhat apprehensive that SWPBIS is based on "behavior and biomedical

sciences that can be applied to address problem behaviors in schools" (Office of Special

Education Programs, Center on Positive Behavioral Interventions and Support [OSEP, CPBIS],

2004, p. 13).

SWPBIS Efficacy

Implementing a continuum such as SWPBIS, which emerged from research in special

education supports for students with intense behaviors, provides schools with the necessary

supports for all students to engage in the expected positive behaviors across the school setting

(Filter, Sytsma, & McIntosh, 2016). SWPBIS is filled with many opportunities so that teachers

and students can experience positive interactions with one another. When the numbers of

challenging behaviors decrease due to the implementation of SWPBIS, the stressors that teachers

experience with classroom management also decreases, which increases teachers' self-efficacy

(Ross et al., 2012). In addition to the use of effective classroom management practices, teachers'

ability to manage their classrooms can be greatly impacted by the implementation of SWPBIS

when team skills, collaboration, and positive relationships are developed with students (Ross et

al., 2012). Successful implementation of SWPBIS allows for the delivery of more effective and

efficient behavior supports to students, reducing the amount of emotional resources required of

individual teachers while increasing the amount of reinforcement for teachers' emotional effort

(Ross et al., 2012). Teachers usually respond to negative behaviors by utilizing negative

punishment. That type of reaction may heighten compliance and decrease inappropriate

behaviors for a short period of time but SWPBIS will more than likely sustain the reduction of inappropriate behavior (Hill & Flores, 2013).

SWPBIS is a multi-level approach of tiered interventions that address effective practices of teaching individual skills, as well as creating a positive school culture (Ross et al., 2012). Students learn to demonstrate prosocial behaviors in all settings in the school building (Lewis & Sugai, 1999; Sugai & Horner, 2006). The implementation of SWPBIS offers many opportunities for teachers to have a positive impact on their students. When students are recognized for meeting the behavior expectations, positive interaction occurs between teachers and students (McIntosh, Filter, Bennett, Ryan, & Sugai, 2010). When problem behaviors are reduced, the implementation of SWPBIS decreases potential stress for teachers (McIntosh et al., 2010).

Key Elements of SWPBIS

Change in behavior support practices from an overreliance on punishment to comprehensive, positive, and preventive approaches is a challenge that requires requiring much support (Muscott, Mann, & LeBrun, 2008). The implementation of SWPBIS is based on a five-stage model. Stage one is known as the awareness stage where administrators collaborate with team leaders to determine if the program is suitable for the particular school environment before getting the buy in from the school staff; stage two is the orientation stage where faculty and building administrators gather information to make an informed decision to determine if the implementation of SWPBIS would be effective in addressing the priorities and needs of the school; stage three addresses readiness by creating the universal leadership team to oversee the implementation of SWPBIS and the initial training and technical assistance; stage four is where the implementation of SWPBIS typically begins during the fall of the academic school year; and stage five targets the sustainability of SWPBIS by ensuring ongoing training takes place through

coaching and consistently implementing processes, action plans, and getting faculty buy in and input (Muscott et al., 2008).

SWPBIS Implementation

Response to Intervention (RTI), an approach to academic and behavioral intervention, is used in conjunction with SWPBIS to ensure students receive academic and behavioral intervention as a way of being proactive as opposed to being reactive (Hill & Flores, 2013). SWPBIS fosters professional behaviors and reduces attrition as shown by increased rates of attendance with the overall population of primary and secondary students (Colvin, 2007). Implementing SWPBIS is a step in helping to improve upon school climate, student learning, and social behavior (Ross, Romer, & Horner, 2012).

Another key element that is of great importance to SWPBIS is the ability to consistently implement guiding principles that determine a set of rules and behavior expectations to which all students and staff adhere. Implementing a program-wide SWPBIS curricular helps to instill positive climates through staff development (Hill & Flores, 2014). SWPBIS is a proactive approach to school-wide discipline, usually applied at the student level, and designed to be implemented with all students by the adults within the school (Hill & Flores, 2014).

Molloy et al., (2013) found that the following demonstrates how implementing SWPBIS transforms school environments by establishing clear school rules:

> The "SWPBIS curricula," can be adopted to meet each unique need emphasizing
> continuous use of student outcome data to make school policy decisions. The
> implementation of SWPBIS promotes a proactive approach to defining and teaching a
> continuum of positive behavior support for all students. Randomized controlled trials
> have demonstrated positive effects of SWPBIS on perceptions of school safety (p. 594)

Once the commitment has been made to implement SWPBIS, the administration forms a Universal Leadership Team (ULT) to guide the development of the program (Muscott, Mann, & LeBrun, 2008). Team members need to be carefully selected since they will be the representatives for their stakeholder groups, and stakeholder groups in turn must be confident about their team representatives. Team members include an administrator, general education teacher, special education teacher, a person with a behavioral background, and if possible, a parent. Other members such as paraprofessionals, community members, custodians, and bus drivers can also be a part of the team. UTL members participate in different levels of training so that they can coach the faculty and staff to implement SWPBIS with fidelity (Muscott et al., 2008).

Training modules are developed to support schools through the process of developing a team that would function effectively. The training also addresses the six school-wide discipline features (Muscott et al., 2008):

1. Statement of purpose

2. Defined expectations

3. Procedures for teaching expectations and behaviors

4. Procedures for encouraging expected behaviors

5. Procedures for discouraging behaviors

6. Procedures for monitoring and record keeping

Figure 1 shows the three-tier continuum of support developed by Simonsen, Sugai, and Negron (2008).

SWPBIS Practices

Although SWPBIS is an extension of applied behavior analysis, SWPBIS does not have an exclusive and concrete focus on changing a student's inappropriate behavior in a clinical setting through expertise of a clinician using a functional analysis ("Gray literature," 1999);
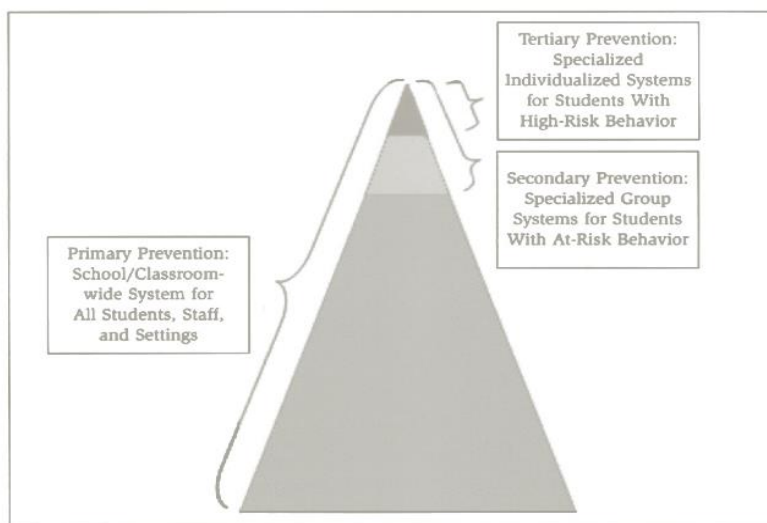
Figure 1. The three-tier continuum of support.

SWPBIS emphasizes a lifestyle focus in national school settings implemented by teachers, families, and others using assessment and support procedures (Carr et al., 1999).

Management styles have drastically changed over the last 36 years (Safran & Oswald, 2003). School districts have strived to implement effective classroom management and school-wide supports are endorsed to improve school culture and build safer environments for all students. "Schools implementing SWPBIS focus on building students' academic skills along with their social competencies" (Coffey & Horner, 2012, p. 410).

With the goal of creating a safer environment, SWPBIS has expanded to include greater numbers of students in general education settings as mandated in the Individuals with Disabilities Education Act (IDEA) of 1997 (Safran & Oswald, 2003). IDEA requires that local

education agencies use SWPBIS for all students, regardless of whether they have been identified for special education services (Kennedy et al., 2001). A SWPBIS program is operational with three components (Carr et al., 2002). Figure 2 provides a visual of the two components in terms of the support provided. SWPBIS rapidly became a valuable approach to convey an approach portrayed by (a) an accentuation on instructional strategies and an avoidance of interventions that included torment or slander, (b) a continued emphasis on supporting perceptible and quantifiable conduct, and (c) a request that all interventions be in view of a comprehension of and consciousness for a person's life conditions, inclinations, and objectives (Dunlap, Kincaid, Horner, Knoster, & Bradshaw, 2014).

SWPBIS provides the following three components: universal support, group support, and individual support. Universal supports are provided to all students, whereas the other two components are provided to a decreasing number of students (Carr et al., 2002). Students that usually fall into Tier 2 and Tier 3 are decreasing in numbers, students at the Tier 2 level usually need some level of support that can be provided in small groups, and students on Tier 3 need more intense intervention on a one-on-one basis (Albrecht et al., 2015).

Students with EBD tend to outperform their peers at the kindergarten level, but their academic achievement is severely impacted by the time they reach grade five (Gelber et al., 2015). It is not uncommon for students with EBD disabilities to encounter difficulties during their school experience that lead to post-school difficulties, such as academic achievement significantly below their peers, higher dropout rates, lower enrollment in postsecondary education, and higher involvement in the criminal justice system (Gelber et al., 2015). Because of these findings, student with EBD disabilities are more likely to be placed in alternative settings (Gelber et al., 2015).
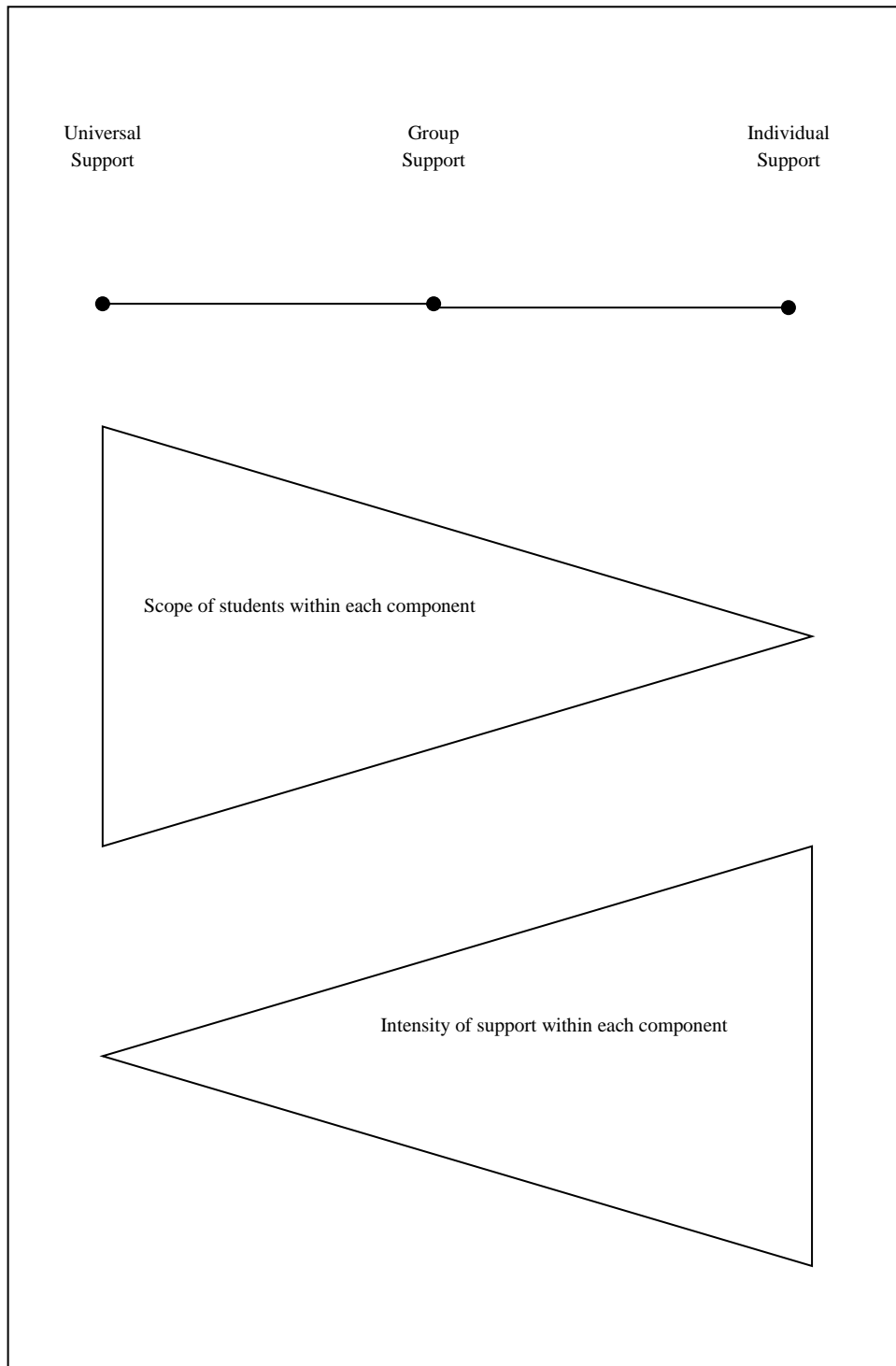
Universal
Support

Group
Support

Individual
Support

Scope of students within each component

Intensity of support within each component

Figure 2. Continua of scope and intensity of support in school-wide PBS.

The primary tier, also known as Tier 1, is intended to support all students and staff building wide (Simone et al., 2008). At the primary support level, a matrix is developed with general rules and procedures that can be applied and followed by everyone in the building. For the general rules and procedures to be implemented with fidelity, each teacher spends time teaching the school-wide rules and procedures and acknowledges students who demonstrate the expected behaviors with incentives as determined by the SWPBIS committee (Hill & Flores, 2013).

At the secondary level of support, also referred to as Tier 2, about 15-20% of students are identified at this level (Hill & Flores 2013). The universal research-based intervention that is usually implemented at this level is the Check-in/Check-out system (Collins, Gresham, & Dart, 2016). The student checks in at the beginning of the school day with an adult (not necessarily the classroom teacher), and the adult reviews the behavior expectations with the student and ensures that they are prepared with the instructional materials. The student travels with a Check-in/Check-out card so that his or her classroom teacher can do check points at various parts of the day. At the end of the school day, the classroom teacher reviews the day with the student and briefs him or her on how they did throughout the day based on the check point scores given throughout the day.

At the tertiary level of support, also referred to as Tier 3, support includes conducting functional behavior assessments (FBA) and developing behavior intervention plans (BIP) (Hill & Flores, 2013). Just as implementations and interventions are driven by data to practice school-wide positive behavior intervention supports (SWPBIS), also the same occurs to develop a BIP that addresses the behavior of concern. Appendix B is a sample matrix of expectations within routines and settings.

SWPBIS Sustainability

Slavin et al. (2010) indicated that education research has made remarkable reviews in characterizing practices that are evidence-based with an end goal to enhance students' academic and social outcomes. Using evidence-based practices with fidelity, such as SWPBIS, proves to be more important now than ever to heighten the success between students with disabilities and their peers (Coffey & Horner, 2012). Students, regardless of their ability or disability, need to be afforded ample opportunities to succeed academically and socially.

Coffey and Horner (2012) found that an examination of the literature on sustainability of educational practices yields many conceptual models and recommendations that emphasize the necessary variables that are critical in heightening all students' success with SWPBIS practices:

Utilization of any practices ought to be share enthusiasm among state and local district offices, where no less than 80% of staff buy-in happens. Besides, the lead administrator is a basic player in guaranteeing an understanding is required that outlines the important part and how they will be actualized. In conclusion, having an information set up to gather and dissect data is similarly imperative to the maintainability of SWPBIS (Coffey & Horner, 2012).

Students with EBD

As determined by a study conducted by Pinkelman et al. (2015), it is important to consider the importance of implementing evidence-based practices to improve positive outcomes for students, especially among students with disabilities, or who are at risks for poor academics and social growth. Not making the commitment to do so particularly for students with EBD is concerning (Pinkelman et al., 2015). Before eligibility for EBD can be established, school-age students must first meet the federal guidelines established by IDEA of identified and persistent

difficulties in one or more areas that affects the student's educational performance: learning that cannot be aligned to other factors (i.e. learning disability), relationship with others, excessive and recurrent discontent or depression or excessive fearfulness (Kern, 2008). "It is unclear exactly what behaviors characterize an emotional or behavioral disorder" (Kern, 2008, p. 1).

The investigation of risk factors is a piece of a relatively new discipline of formative psychopathology that speaks to a development toward grasping the causes and determinants, course, and treatment of adolescence disorders such as EBD (Nelson, Stage, Duppong-Hurley, Snorts, & Epstein, 2007). Chance elements are those factors that when present in a student, improve the probability that the student will in this manner indicate side effects of EBD (Nelson et al., 2007, p. 368). Researchers found that empirical evidence suggests that this process likely operates in the following manner: (a) children and youth are exposed to a host of risk factors over time (e.g., family problems, child neglect/abuse); (b) risk factors are associated with the development of maladaptive behaviors (e.g., restlessness, over activity, aggression); (c) short-term outcomes include truancy, peer and teacher rejection, low academic achievement, and school discipline contracts and referrals; and (d) these short-term outcomes, in turn, are predictive of much more serious, long-term outcomes, such as EBD, school failure, and dropout (Cicchetti & Nurcombe, 1993; Nelson et al., 2007). More studies are necessary to identify ways to help students with EBD succeed in school so that they can be inclusive in every manner throughout the school day (Breeman et al., 2016).

In 2008, Kern found that when looking at the definition of EBD, little or no proof of some of the real problems that students with EBD encounter, makes it difficult to meet the needs of students with EBD. The researcher also found that the challenge of meeting the needs of students with emotional challenges is unlike the challenges of meeting the needs of students with

learning disabilities. Additionally, Kern (2008) concluded that it is far less challenging to identify a learning behavior than it is to identify emotional behavior. It is not enough to give staff the tools for identifying students with behavior challenges that are consistent with multiple diagnostic features; staff members also need to have a collection of evidence-based interventions to address the respective problems (Kern, 2008).

As noted by McCurdy et al. (2016), the national statistics from a study conducted by OSEP in 2011 showed that about 405,000 students receive special education services under the category of EBD, and that approximately 13% were educated in self-contained schools. McCurdy et al. concluded that it is for the most part expected that these students require more particular and serious intervention. Given the positive results related with SWPBIS, the subject of what impact, assuming any, the approach may hold for these more particular instructive situations remain (McCurdy et al., 2016). Unfortunately, the outcome data for students with EBD concerns, even the students who get school-based interventions, unmistakably demonstrate that interventions are not sufficiently settling the students' concerns (Farmer, 2016).

The challenge of appropriately educating students with exceptionalities has been a struggle for teachers who teach students with EBD (Smith et al., 2011). Students with EBD who are served under the IDEA confront dismal results both while at school and after leaving the instructional system (Smith et al., 2011). The number of students with emotional behavior disorders (EBD) who spend a great amount (80%) of their time in the general education classroom is less than half (37.3%) when compared to the number of students with other exceptionalities (56.84%); additionally, students with emotional behavior disorders are more likely to spend time in a residential treatment facility (21.12% vs. 0.41%) when compared to other students with varying disabilities (Smith et al., 2011). Taking into consideration the

disproportionality, it is no surprise that disciplinary actions and expulsion are inevitable for students with EBD (Smith et al., 2011).

Another concern for students with EBD is the threat of them not reaching their academic goals. When students with EBD become disruptive and/or combative in the learning environment, it can become rather challenging to teach and instruct. Smith et al. (2011) found that the prevalence of underachievement in reading for students with EBD were very concerning, because the percentage ranged from 31% to 81% with reading deficits ranging from 0.53 grade levels to more than two grade levels behind same-age peers without disabilities.

Students with EBD are often placed in restrictive educational settings, coupled with high frequency of suspensions and weak academic performances (Wagner & Davis, 2006). Due to the challenges faced by students with EBD ranging in ages from 14-21, only 20% of them received high school diplomas and enrolled in postsecondary education such as trade schools, vocational training centers, or community colleges (Wagner & Davis, 2006).

Summary

Students with EBD are more probable than are students with different disabilities to get their educations in more prohibitive settings, including self-contained classrooms (McCurdy et al., 2016). Research examining the effectiveness of these settings to move forward students' skill performance has been disillusioning, and after some time, students in the self-contained classes gain limited scholarly ground and show almost no change in prosocial skill development (McCurdy et al., 2016). Additionally, the researchers found no significant reductions in externalizing practices and disciplinary contacts. In his study, Farmer (2016) warns us that this conflict continues but offers up a message and a path. The message is that it is dependent upon

us as a group of professionals to address worries about trashing and relating misperceptions, and to elucidate for both ourselves and general population how what we do has any kind of effect.

SWPBIS is a systems level approach for making a more positive school culture. To date, the exploratory research around SWPBIS has been limited to examining the utilization of SWPBIS in school districts (McCurdy et al., 2016). Studies that survey the impacts of SWPBIS on results at the school level have been restricted in degree and thoroughness. SWPBIS has been related with positive results in the areas of attendance, conduct, and sometimes academics; in any case, a lot of this examination has been led at the rudimentary and center of school levels (Freeman et al., 2016). The use of SWPBIS at the school level has been appeared to take additional time and may require some alterations of the SWPBIS system to fit the one of a kind school setting (Freeman et al. 2016).

As reported by Horner and Sugai (2015), the undertaking of ABA is that our comprehension of human conduct will have coordinate effect on making improvement in social frameworks. Horner and Sugai further reported that the difficulties confronted in schools, families and work places, and groups require better application of behavioral theory. Expansive SWPBIS is one case of effective execution of behavioral theory to address real social concern, as stated by the researchers. It is an example that is yet developing, yet with more than 21,000 schools in the USA effectively occupied with executing SWPBIS, and a developing assortment of grants supporting the effect of SWPBIS on student conduct, it is advantageous to consider lessons learned (Horner & Sugai, 2015).

SWPBIS conceptual framework presented in this study is a combination of social cognitive theory and ABA that aim to inform the empirical school-wide interventions model of SWPBIS on students with EBD. As an everyday curriculum for use in schools, SWPBIS is

designed to help administrators and teachers implement effective and sustainable change school-wide. After reviewing the literature that supports SWPBIS and students with EBD, the methodology will be presented in Chapter Three.

CHAPTER THREE: METHODS

Overview

Chapter Three included a discussion of the study's design, research questions and hypotheses, participants and setting, procedures, and data analysis. With the discussion is a restatement of the problem and purpose, a description of the materials used, and the methodology and procedures. This dissertation study was designed to begin filling in the gap of limited research on the adaptive behavior scores of elementary students with Emotional Behavior Disorder (EBD). Second, this study was conducted to determine the adaptive scores of students with EBD in School-wide Positive Behavior Supports (SWPBIS) elementary schools and non-SWPBIS elementary schools. Third, this study included participants from elementary schools located in a suburban school district. Fourth, this study examined the effect of SWPBIS on the adaptive scores of elementary students with EBD in SWPBIS and non-SWPBIS elementary schools. Finally, this study also utilized the TOCA-C instrument to collect the data for analysis of the outcome of the study.

Design

The researcher used a quantitative, casual-comparative research design to determine the effect that School-wide Positive Behavior Intervention Supports (SWPBIS) had on the adaptive behavior scores of students with emotional behavior disorders (EBD) in elementary schools. Given that the purpose of this study was to determine the effect that SWPBIS had on adaptive scores of students with EBD, quantitative research methods were employed to factor structure of the TOCA-C instrument. A casual-comparative design was used because the researcher did not manipulate the independent variables (Gall, Gall, & Borg, 2007). A causal-comparative design is a kind of non-experimental examination in which researchers try to distinguish cause-and-

effect relationships by framing groups of people in whom the independent variable is available, missing, or displayed at several levels, and after that, deciding if the groups contrast on the dependent variable (Gall et al., 2007).

While causal comparative research analyzes the connection between groups, causal comparative studies do not control factors, so they do not enable the researcher to decide causality; relatively, they enable the researcher to analyze conceivable circumstances and result connections (Johnson & Christensen, 2013). In causal-comparative research, dependent variables must be able to take on at least two different values (Gall et al., 2007). The researcher utilized research assistants to collect data using the *Teacher Observation Classroom Adaptive-Checklist* (TOCA-C), to compare the adaptive behavior scores of students with EBD in SWPBIS and non-SWPBIS elementary school. In a casual-comparative study, Bradshaw et al. (2012) investigated the significant effects of SWPBIS on 12,344 elementary students' adaptive behavior.

The independent variables for the study were the 09 elementary schools that implemented SWPBIS and the 11 elementary schools that did not implement SWPBIS (non-SWPBIS). The overall adaptive behavior scores were the dependent variables for this study and were measured using the TOCA-C. The researcher also used computed Cronbach alpha coefficients to determine the internal consistency (a measure of reliability) of the instrument. The Cronbach alpha coefficient represents the multivariate analysis of variance among the specific items on a subscale (Green & Salkind, 2011).

Research Question(s)

RQ1: Is there a difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

RQ2: Is there a difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

RQ3: Is there a difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

RQ4: Is there a difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

Hypothesis(es)

The null hypotheses for this study are:

$H_0$1: There is not a statistically significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

$H_0$2: There is not a statistically significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

$H_0$3: There is not a statistically significant difference between the *disruptive behavior*

scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

H_04: There is not a statistically significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

Participants and Setting

The elementary schools for this study are part of a suburban school district outside a metropolitan city in central Georgia. The nine SWPBIS elementary schools employ a SWPBIS program for all students, including students with Emotional Behavior Disorders (EBD). SWPBIS uses universal prevention strategies that do not follow a course curriculum, but the goal is to change the school's structure framework to apply improved procedures and systems to direct data-driven decisions related to students' challenging behaviors and academics (Bradshaw et al., 2012). SWPBIS applies behavioral, social learning, and organizational principles to an entire student body consistently across all school contexts (Bradshaw et al., 2012). Schools implement a set of positive statements that promotes the behaviors expected of students which are modeled and taught to the students by the faculty; the goal is to avoid disruptive behaviors and enhance the school's climate by employing a three-tiered prevention framework in which two levels of specified programs are applied to mirror the universal school-wide components (Bradshaw et al., 2012).

The participants from 20 elementary schools for the study were drawn from a convenience sample based on the researcher's professional working relationship with the school district. In a casual-comparative study, the researcher selects two groups of participants, also called comparison groups in which one group possesses a characteristic that the other group does

not (Gay, Mills, & Airasian, 2011). The participants for this study were drawn from a convenience sample of male and female elementary students with Emotional Behavior Disorder (EBD) and attended a SWPBIS elementary school, or a non-SWPBIS elementary school. The participants were easily accessible due to the researcher's working relationship with the school district. The students were enrolled in a suburban school district outside of a metropolitan city in central Georgia. The study was introduced to the research assistants (teachers) using a formal recruitment letter, which was distributed by the school building administrator for each elementary school.

A total of 100 teachers from the 20 elementary schools in a school district outside a metropolitan city located in Georgia were recruited to assist in the study by completing the TOCA-C on a minimum of one student each ($n = 100$) from each of the 20 elementary schools. The research assistants (teachers) completed the TOCA-C during the spring semester of the 2017-2018 school year. The two groups consisted of 09 SWPBIS elementary schools and 11 non-SWPBIS elementary schools. For this study, the number of participants sampled were 100 students which according to Gall et al. (2007) exceeded the required minimum for a medium effect size with statistical power of .7 at the .05 alpha level. The TOCA-C was completed on elementary students in grades kindergarten through fifth. The sample of elementary participants consisted of 01 kindergarten participant, 04 first grade participants, 14 second grade participants, 16 third grade participants, 29 fourth grade participants and 14 fifth grade participants. The largest group of elementary students were in the fourth grade. The sample's demographic information was discussed. The returned sample of elementary participants consisted of 65 males and 13 females. The ethnicity of the participants consisted of 22 whites, 52 blacks, 01 Hispanic, 01 Asian, and 02 others.

The SWPBIS elementary school group consisted of 36 participants. The average grades of the participants were the fourth grade. The group demographic information was discussed. The non-SWPBIS elementary school group consisted of 42 participants. The average grades of the participants were the fourth grade.

Instrumentation

The instrument that was used in the study (see Appendix C) was the Teacher Observation of Classroom Adaptation-Checklist (TOCA-C). The characteristics of the TOCA-C were divided into three subcategories: Concentration Problems, Disruptive Behavior, and Prosocial Behavior. There following 21 areas were observed and rated in the TOCA-C are as follows: concentrates, is friendly, pays attention, breaks rules, is liked by classmates, doesn't get along with others, works hard, harms others, shows empathy and compassion for others' feelings, gets angry when provoked by other children, stays on task, yells at others, is easily distracted, is rejected by classmates, fights, lies, has many friends, harms property, completes assignments, teases classmates and learns up to ability. Each area received a rating of never, rarely sometimes, often, very often, or almost always.

Dr. Catherine Bradshaw, the Deputy Director of Johns Hopkins Center for the prevention of Youth Violence, gave the researcher permission to use the TOCA-C instrument in this study (see Appendix E). She is also the Co-Director at Johns Hopkins Center for Prevention and Early Intervention. The TOCA-C instrument was completed in the spring semester of the 2017-2018 school year. The researcher did not provide training to the teachers on how to complete the TOCA-C because explicit directions were provided to the research assistants who completed the survey (see Appendix F).

The purpose of the TOCA-C instrument was to have the research assistants measure each student's level of overall adaptive behaviors across three subcategories. The first section of the survey asked respondents to rate, on a scale of one to six, *concentration problems*. The second section asked respondents to rate disruptive behavior on a scale of one to six, *disruptive behaviors*. The third section asked respondents to rate on a scale of one to six, *prosocial behaviors*. The TOCA-C was designed more than 38 years ago. The original TOCA-C was developed by the Woodlawn Research Center to assess students' social adaptation so that teachers could rate their students' classroom behaviors. Various versions of the instrument have been used in large-scale research trials—FAST Tracks and Conduct Problems (Koth et al., 2009).

The instrument has been used in numerous studies (e.g. Koth et al., 2009; Pas et al., 2011; Siever, 2008). The construct validity of the instrument includes three factors: Concentration Problem, Disruptive Behavior, and Prosocial Behavior. "Concentration Problems and Disruptive Behavior reflect more maladaptive behaviors, and the Prosocial Behavior assesses positive behavior" (Koth et al., 2009, p. 18). The TOCA-C consists of 21 questions. The Concentration Problem, factor 1, consists of seven questions. The Disruptive Behavior, factor 2, consists of nine questions, and the Prosocial Behavior, factor 3, consists of five questions. The research assistants were asked to respond to each question in the instrument using a six-point Likert scale ranging from Never to Almost Never. Dispensing the Teacher Observation Classroom Adaptive-Checklist (TOCA-C) attained the data presented in this chapter.

The instrument has 21 questions and three subscales. The first subscale is the *Concentration Problem Subscale,* which consists of seven items: concentrates, pays attention, works hard, stays on task, is easily distracted, completes assignments, and learns up to ability.

The second subscale is the *Disruptive Behavior Subscale*, which is comprised of nine items: breaks rules, does not get along with others, harms others, gets angry when provoked by other children, yells at others, fights, lies, harms property, and teases classmates. The third subscale, the *Prosocial Behavior Subscale*, includes the following five items: is friendly, is liked by classmates, shows empathy and compassion for others' feelings, is rejected by classmates, and has many friends. The TOCA-C is a nonclinical measure of students' conduct that is completed by teachers. Created more than 30 years back, different variants of the TOCA have been utilized as a part of expansive scale explore trials to survey the effect of school-construct preventative interventions considering teachers' appraisals of students' conduct (Bradshaw, Wassdorp, & Leaf, 2015).

The scoring procedures for the instrument and all sub sections were discussed. The combined possible score on the TOCA-C ranges from 21 to 126. The *Concentration Problems Subscale* has seven items with scores ranging from seven to 42. The *Disruptive Behavior Subscale* has nine items with scores ranging from nine to 54. The *Prosocial Behavior Subscale* has five items with scores ranging from five to 30. A score of 21 points is the lowest possible score meaning good adaptive behavior, and a score of 125 points on the TOCA-C meaning greater maladaptive behaviors (Bradshaw et al., 2015). High scores on the *Disruptive Behavior Subscale* in elementary schools have been shown to be a strong forecaster of violence among adolescents and criminal behavior in young adults (Koth et al., 2009). The psychometric properties of the TOCA-C have been well documented, including studies showing it has high test and retest reliability (Bradshaw et al., 2015).

The data were analyzed to compare the scores of the treatment schools and the non-treatment schools and their implementation of school-wide positive behavior intervention

supports for students with emotional behavior disorders. To assess reliability, the estimates of internal consistency reliability were computed using standardized Cronbach's Alpha coefficients, "a general formula that can be used when items on a measure are not scored dichotomously" (Gall et al., 2007, p. 202). The predictive validity of the Teacher Observation of Classroom Adaptation-Checklist was also being investigated. Kourkounasiou and Skordilis (2014) conducted a study that examined the validity and reliability of the TOCA-C in a group sample of students with and without disabilities and found that the exploratory factor analysis revealed that 21 items in three factors explained .75% of the total variance. Many other studies have investigated the relationship between various types and sources of evaluations using the TOCA-C and have for the most part indicated low to direct connections between various raters and low connections with perceptions of student conduct (Pas & Bradshaw, 2013). Teacher evaluations of student behavior practices by and large have appeared to have more prominent concurrent legitimacy with student evaluations and school results than parent appraisals (Pas & Bradshaw, 2013).

Pas and Bradshaw (2013) sought to look at the degree to which teacher evaluations of student behavior practices differed, after an element of teacher experience and view of setting, that measured simultaneously with the baseline assessment of student behavior practices. They examined teacher evaluations of the student behavior practices over a few domains, including concentration problems, emotion dysregulation, and disruptive behavior. The teachers in favorable classes had lower rating of concentration problems, such as, teachers characterized by negative perceptions who had higher rates of disruptive behaviors, and male teachers who had higher ratings of emotion dysregulation than the certified teachers who had lower ratings of dysregulation (Pas & Bradshaw, 2013).

Procedures

Before distributing the questionnaires to the teacher, a research approval packet was submitted to the IRB (Institutional Review Board) for approval to conduct the study (see Appendix G). Upon receiving IRB approval, TOCA-C instruments were hand delivered to the schools to be reviewed by the building administrators. Prior to the TOCA-C instrument being distributed to the teachers, the administrator at each school distributed Participant Consent Forms to the participating teachers (see Appendix H).

Twenty classroom teachers from kindergarten through fifth grade in 20 elementary schools were recruited as research assistants to complete the TOCA-C. Every teacher that were recruited as a research assistant, received a recruitment letter. The teachers were asked to rate students in their classes who have been identified as students with EBD according to their individual education program (IEP). The research assistants completed the TOCA-C on each student's behavior to measure the level of students with EBD adaptive behavior in the classroom from teachers' perspective. The students' identities or names were never revealed to the researcher and were kept completely confidential. The Recruitment Letter explained the purpose of the study and informed the research assistants that his or her participation was voluntary. The recruitment letter also explained what the participants were asked to do and the benefits to the researcher conducting the study. Participation in the study was voluntary. The research assistants had the choice of refusing to participate or stop taking part at any time without giving any reason and without penalty or loss of benefits to which they were otherwise entitled. The research assistants could have asked to have all the individually-identifiable information about he or she returned to the research assistant, removed from the research records, or destroyed.

After the instruments were distributed to the teachers, the researcher requested that the research assistants complete the instruments independently on all their students with EBD. Independently meant that the teachers were asked not to collaborate with their colleagues when completing the instruments. Research assistants (teachers) were asked to complete the instruments based on their independent observations of the students' behavioral performances while the students were in that teacher's classroom. The teachers completed the instruments during their planning time when students were not in the classroom.

Prior to completing the instrument, research assistants were asked to indicate on the survey whether they had known the student for at least eight school days, by checking yes or no. If a teacher did not work with a student for at least eight days, the school administrator instructed the research assistant not to complete the instrument to maintain fidelity of the instrument, as the TOCA-C mandated that a teacher worked with the student for at least eight days within three weeks. The teachers were asked by the school administrator to complete the instruments within a week of receiving them. Completion of the instruments took place in the Spring of the 2017-2018 school year, between the months of January and March. The teachers required 15 to 20 minutes to complete each instrument. A total of 100 teachers received the packet.

Each packet contained a copy of the *Teacher Observation Classroom of Adaptation-Checklist* (TOCA-C) instrument, the TOCA-C scoring sheet, participant cover page, and the research assistant recruitment letter (Appendices A, C, G, and H). At the end of the weeks' time frame, the school secretary collected the instrument from each teacher that received the instrument. The completed instruments were placed in a sealed envelope prior to the secretary collecting them. The researcher visited each school to physically collect the sealed envelopes from the secretary or administrator at each elementary school. The researcher checked each

questionnaire to ensure that they were completed. Upon checking the forms for completeness, the researcher developed data sets in the Statistical Package for the Social Sciences (SPSS)© to be analyzed (see Appendix D for a complete list of the procedures).

Data Analysis

The data for each participant consisted of the information derived from the TOCA-C, comparing the mean scores of the schools that implemented SWPBIS and the schools that did not implement SWPBIS. A MANOVA was used to compare the group means on multiple dependent variables. Statistical difference between the groups receiving the treatment and those who did not receive the treatment were based on Wilks' Lambda with an alpha of .05. Effect size were measured using Partial Eta Squared.

In this study, the researcher used the findings to determine if the researcher should reject or fail to reject the null hypotheses and examined the mean levels of the *overall adaptive behavior scores*, *concentration problem scores*, *disruptive behavior scores*, and *prosocial behavior scores* between the two groups of elementary schools that either did or did not implement School-wide Positive Behavior Intervention Supports. A one-way multivariate analysis of variance (MANOVA) was conducted to determine the effect on four dependent variables (the overall adaptive behavior scores and disruptive behavior, concentration problems, and prosocial behavior). According to Gay et al. (2011) MANOVA is a statistical technique for determining whether groups differ on more than one dependent variable. Adaptive behavior scores were obtained by summing the items from the TOCA-C to receive an overall adaptive behavior score. Each of the four dependent variables were examined with a MANOVA to assess whether the individual subscales and the overall scores were predicted by the implementation or no implementation of SWPBIS.

For the MANOVA statistical analysis, data screening was addressed. The data screening included a box and whisker plot for each group and examining histograms of each data set for normality of distribution and creating boxplots to test for extreme outliers (Green & Salkind, 2011). The multivariate test for homogeneity of Variance-Covariance matrices, Box's M Test evaluated whether the variances and covariance among the dependent variables were the same for all levels of a factor (Green & Salkind, 2011). For each identified statistical analysis technique, all assumption tests and how they were tested were addressed. For level of measurement, the dependent variables were measured at the interval or ratio level; the researcher used independent observations to test if observations within each variable were independent; random sampling assessed that the sample was a random sample of the population; normality assumed that the population distributions were normal using histogram and Kolmogorov-Smirnov; and variance and covariance (Green & Salkind, 2011). Scatterplots were created to test for linearity if the researcher's data failed the assumptions of variance and co-variance. Assumption Variance-Covariance matrices were tested in SPSS using Box's M test of equality of covariance (Green & Salkind, 2011). The significance level of *p<.05* were used as an indicator of rejecting the null hypotheses, a standard which is typical of educational research (Gall, Gall, & Borg, 2007).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative, causal-comparative study was to investigate the effectiveness of School-wide Positive Behavior Intervention Supports (SWPBIS) when implemented with elementary students with Emotional Behavior Disorders (EBD) in elementary schools. Elementary teachers participated in the study by completing the Teacher Observation Classroom Adaptive-Checklist (TOCA-C) for 200 elementary school students with EBD who attended 20 elementary schools located in a large suburban school district outside of a metropolitan city in Georgia. The dependent variable was overall adaptive behavior scores of students who were rated by their classroom teacher using the TOCA-C. There were three subcategories of the dependent variable: Concentration Problems (CP), Disruptive Behaviors (DB), and Prosocial Behaviors (PB). The independent variable was SWPBIS status. The treatment schools were those schools where SWPBIS were implemented, and the non-treatment schools were those schools where SWPBIS were not implemented. Four research questions and four related hypotheses were created for investigation.

Research Question(s)

RQ1: Is there a difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

RQ2: Is there a difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

RQ3: Is there a difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

RQ4: Is there a difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?

Null Hypothesis(es)

$H_0$1: There is not a statistically significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

$H_0$2: There is not a statistically significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

$H_0$3: There is not a statistically significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

$H_0$4: There is not a statistically significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.

Chapter Four is organized by a discussion of the sample demographics, reliability analysis, descriptive statistics, data screening, research question/hypothesis testing, and conclusions. Data were analyzed with SPSS 23 for Windows. A one-way MANOVA was

conducted to answer the research questions and hypotheses. The following provides a discussion

of the sample demographics.

Descriptive Statistics

The sample consisted of 78 students; 46.2% ($n = 36$) had school-wide positive behavior

intervention supports and 53.8% ($n = 42$) did not attend an elementary school with positive

behavior intervention supports. Regarding gender, 83.3% ($n = 65$) were males and 16.7% ($n = $

13) were females. Regarding ethnicity, 66.7% ($n = 52$) were Black/African American, 28.2% (n

$= 22$) were White/Caucasian, 1.3% Hispanic ($n = 1$), 1.3% Asian ($n = 1$), and 2.6% ($n = 2$) were

categorized as other. Race/Ethnicity is presented in Table 1.

Table 1

Race/Ethnicity

Race/Ethnicity	*n*	*%*
White/Caucasian	22	28.2
Black/African American	52	66.7
Hispanic	1	1.3
Asian	1	1.3
Others	2	2.6
Total	78	100.0

The largest groups of elementary students were in the fourth grade (37.2%, $n = 29$), third

grade (20.5%, $n = 16$), second (17.9%, $n = 14$) and fifth grades (17.9%, $n = 14$). This accounted

for 94% ($n = 73$) of the sample. Student grade is presented in Table 2.

Table 2

Grade	*n*	*%*	*Cumulative %*
Kindergarten	1	1.3	1.3
First	4	5.1	6.4
Second	14	17.9	24.4
Third	16	20.5	44.9
Fourth	29	37.2	82.1
Fifth	14	17.9	100.0
Total	78	100.0	

Descriptive Statistics

The TOCA-C is a Likert-type instrument with scores ranging from 1 (Never) to 6 (Almost Always). Scores for each subscale and the overall adaptive behavior were computed by calculating the mean for each variable. A high score on the subscales means a high degree of maladaptive behaviors. For concentration problems, for instance, scores ranged from 1.17 to 5.33 ($M = 3.82$, $SD = 0.92$). The mean score of 3.82 can be rounded up to 4, which corresponds to a classification label of "often." For disruptive behavior, the scores ranged from 1 to 5 ($M = 3.13$, $SD = 0.90$). A mean score of 3.13 corresponds to a classification label of "sometimes." In retrospect, the items that were reverse-coded were for the prosocial behavior subscale. This means that a high score on this dimension reflects a high degree of anti-social behavior. Scores for this dimension ranged from 1.60 to 5.60 ($M = 3.32$, $SD = 0.87$), which indicate that on the average these behaviors were manifested to a moderate degree since 3.32 is almost half-way between 3 ("sometimes") and 4 ("often"). Descriptive statistics are presented in Table 3.

Table 3

Descriptive Statistics

Variable	*Minimum*	*Maximum*	*M*	*SD*
Concentration Problems	1.17	5.33	3.82	0.92
Disruptive Behavior	1.00	5.00	3.13	0.90
Prosocial Behavior	1.60	5.60	3.32	0.87
Overall Adaptive Behavior	1.71	4.90	3.42	0.69

Results

Instrument Reliability

Instrument reliability for the sample was tested with Cronbach's alpha. Reliability for the

three subscales ranged from acceptable (α = .79) for prosocial behavior to excellent (α = .92) for

concentration problems with an overall internal consistency of .68. Reliability coefficients are

presented in Table 4.

Table 4

Reliability Coefficients

Construct	N of Items	Cronbach's alpha	Interpretation
Concentration Problems	7	.92	Excellent
Disruptive Behavior	9	.869	Good
Prosocial Behavior	5	.794	Acceptable
Overall Adaptive Behavior	21	.68	Questionable

Note. Interpretation of reliability coefficients is based on generally accepted criteria (DeVellis,

2012).

The overall internal consistency of .68 was a cause of concern (DeVellis, 2012).

Therefore, an inter-item analysis was conducted on the data. The inter-item analysis revealed that

five items on the TOCA-C were negatively correlated with the other items, which suggested that

they should be reverse-scored. The initial inter-item analysis results are presented below in Table

5.

Table 5

Inter-Item Analysis of TOCA-C

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Concentrates	69.90	77.60	.440	.653
Is friendly*	69.71	91.35	-.289*	.716
Pays attention	69.85	78.08	.391	.657
Breaks Rules	69.85	72.96	.614	.632
Is liked by classmate*	69.68	93.78	-.368*	.728
Doesn't get alone with others	70.33	78.30	.339	.660
Works hard	69.71	75.54	.506	.645
Harms others	71.40	75.31	.551	.642
Shows empathy and compassion for others' feelings*	70.46	91.60	-.291*	.718
Gets angry when provoked by other Children	69.17	74.84	.365	.655
Stays on task	69.53	77.45	.423	.654
Yells at others	70.05	70.10	.528	.632
Is rejected by classmates*	69.09	95.25	-.437*	.732
Is easily distracted	69.31	76.11	.423	.651
Fights	71.19	76.73	.412	.653
Lies	70.21	76.27	.332	.659
Has many friends*	70.29	90.39	-.243*	.713
Harms property	70.73	72.36	.587	.632
Completes assignments	69.77	77.71	.369	.657
Teases classmates	70.60	76.89	.374	.656
Learns up to ability	69.71	74.11	.502	.642

Note. Items are negatively correlated.

After reverse-coding the identified items (Items 2, 5, 9, 14, and 17) the overall internal consistency of TOCA-C increased from questionable ($\alpha = 68$) to excellent ($\alpha = 90$). An inter-item analysis was conducted again on the data. The improved results are presented in Table 6.

Table 6

Inter-Item Analysis of TOCA-C After Reverse-Coding

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Concentrates	68.10	191.60	.583	.891
Is friendly	68.55	192.12	.503	.892
Pays attention	68.05	191.43	.562	.891
Breaks Rules	68.05	185.32	.706	.887
Is liked by classmate	68.58	186.64	.606	.890
Doesn't get alone with others	68.54	192.28	.484	.893
works hard	67.91	188.03	.650	.889
Harms others	69.60	191.98	.543	.892
Shows empathy and compassion for others' feelings	67.79	192.55	.457	.894
Gets angry when provoked by other Children	67.37	191.51	.369	.897
Stays on task	67.73	192.15	.533	.892
Yells at others	68.26	181.39	.592	.890
Is rejected by classmates	69.17	188.48	.574	.890
Is easily distracted	67.51	194.56	.384	.896
Fights	69.40	192.66	.463	.893
Lies	68.41	191.65	.391	.896
Has many friends	67.96	192.35	.482	.893
Harms property	68.94	188.01	.562	.891
Completes assignments	67.97	191.87	.496	.893
Teases classmates	68.81	193.90	.395	.895
Learns up to ability	67.91	188.63	.546	.891

After reverse-coding the items, it was determined that the reliability for the subscales remained the same. Reliability for the three subscales ranged from acceptable ($\alpha = .79$) for prosocial behavior to excellent ($\alpha = .92$) for concentration problems. Reliability coefficients for the subscales after reverse-scoring the items are presented in Table 7.

Table 7

Reliability Coefficients of Subscales and Overall Items After Reverse-Coding

Construct	N of Items	Cronbach's alpha	Interpretation
Concentration Problems	7	.92	Excellent
Disruptive Behavior	9	.869	Good
Prosocial Behavior	5	.794	Acceptable
Overall Adaptive Behavior	21	.897	Excellent

Note. Interpretation of reliability coefficients is based on generally accepted criteria (DeVellis, 2012).

Data Screening

The data were screened for normality with the Kolmogorov-Smirnov Test of Normality and illustrated with histograms. Box and whisker plots were used to test for extreme outliers. A significant result from the Kolmogorov-Smirnov Test ($p < .05$) indicated a significant departure from normality. The distributions were generally within normal limits except for concentration problems for Non-SWPBIS schools. Normality test results are presented in Table 8.

Table 8

Kolmogorov-Smirnov Test of Normality

Variable	SWPBIS Status	Kolmogorov-Smirnov		
		Statistic	*df*	*p*
Concentration Problems	SWPBIS Elementary School	.102	36	.200
	Non-SWPBIS Elementary School	.157	42	.010*
Disruptive Behavior	SWPBIS Elementary School	.080	36	.200
	Non-SWPBIS Elementary School	.089	42	.200
Prosocial Behavior	SWPBIS Elementary School	.114	36	.200
	Non-SWPBIS Elementary School	.108	42	.200
Overall Adaptive Behavior	SWPBIS Elementary School	.087	36	.200
	Non-SWPBIS Elementary School	.081	42	.200

Note. *p < .05.

For concentration problems, the distribution was normal for the SWPBIS Elementary School, ($p = .20$). However, for non-SWPBIS Elementary School, the distribution was a significant departure from normality ($p = .01$). The histograms for concentration problems by group is presented in Figure 3.
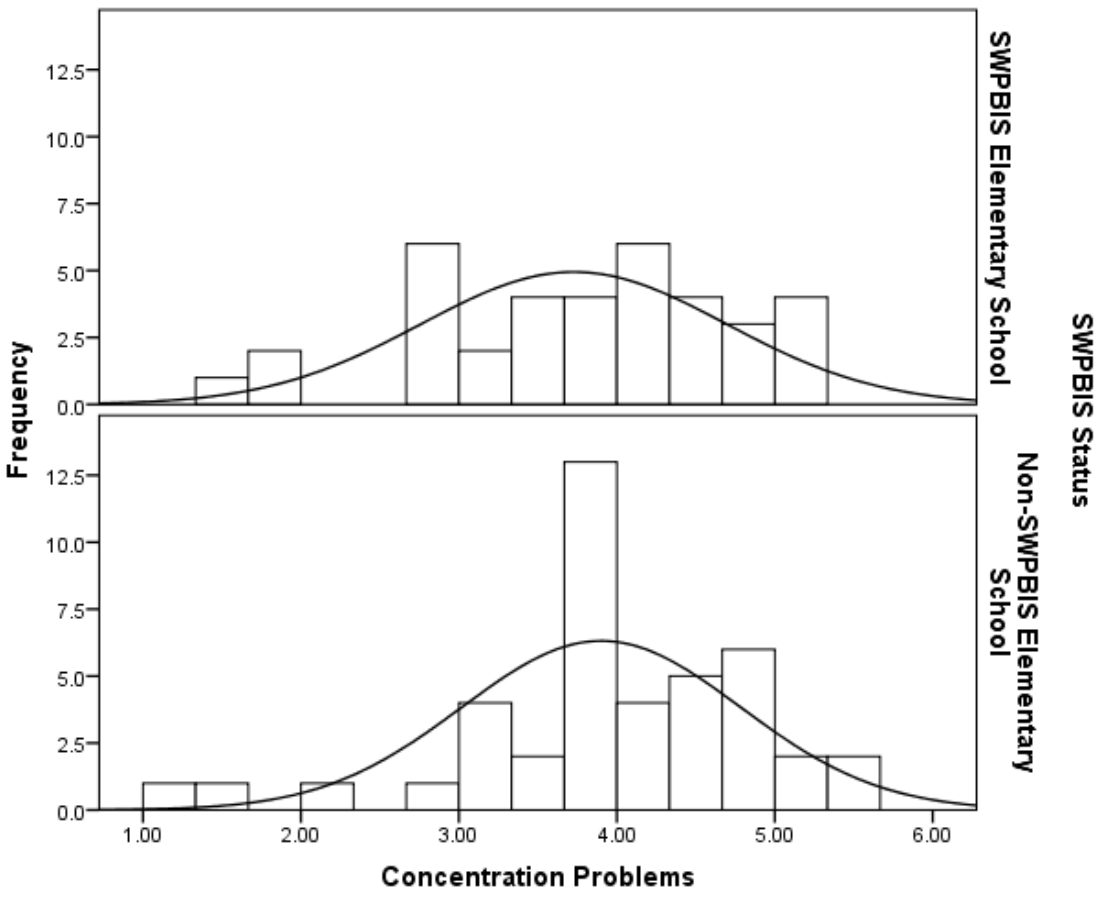

Figure 3. Histograms for Concentration Problems by Group

A box and whisker plot revealed several extreme outliers. For example, cases 43, 40, and 16 were designated as outliers (≤ 2.3). The box and whisker plot for concentration problems by group is presented in Figure 4.
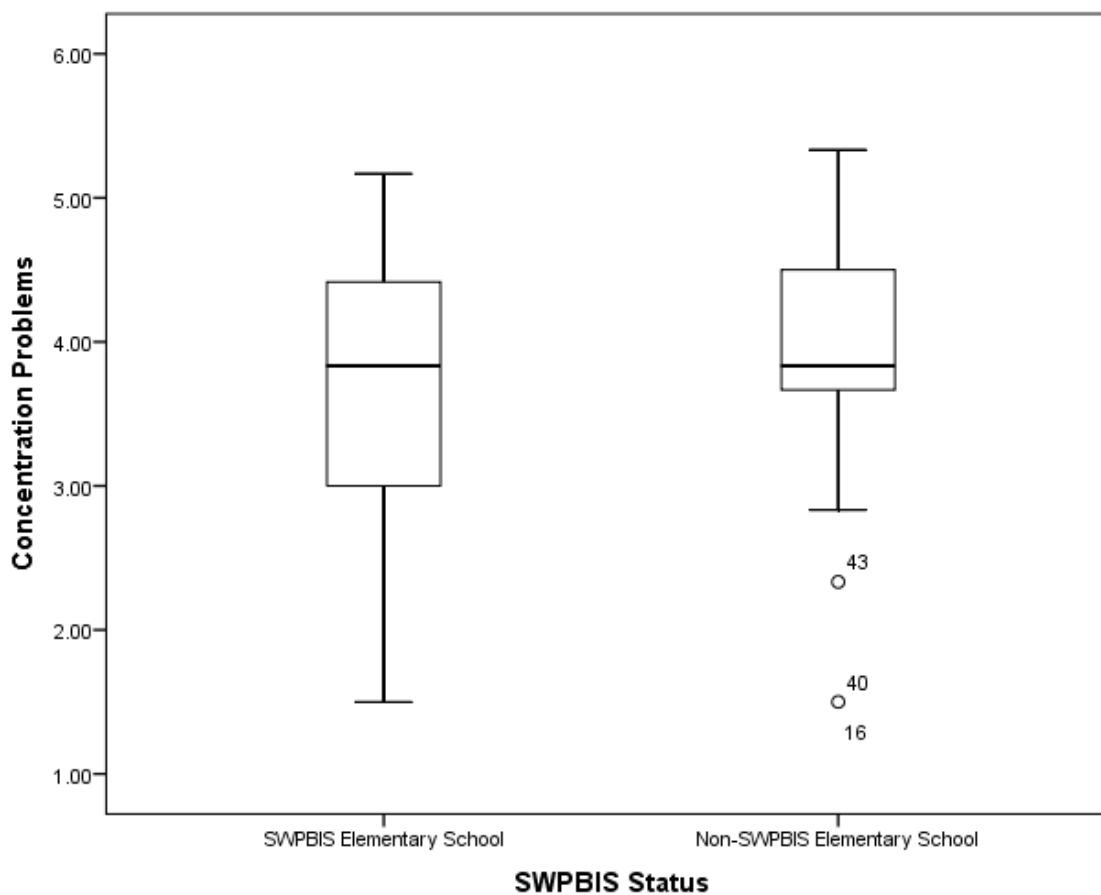

Figure 4. Box and Whisker Plot for Concentration Problems by Group

For disruptive behavior, the distribution was normal for the SWPBIS Elementary School, ($p = .20$). For non-SWPBIS Elementary School, the distribution was also normal ($p = .20$). The histograms for concentration problems by group is presented in Figure 5.
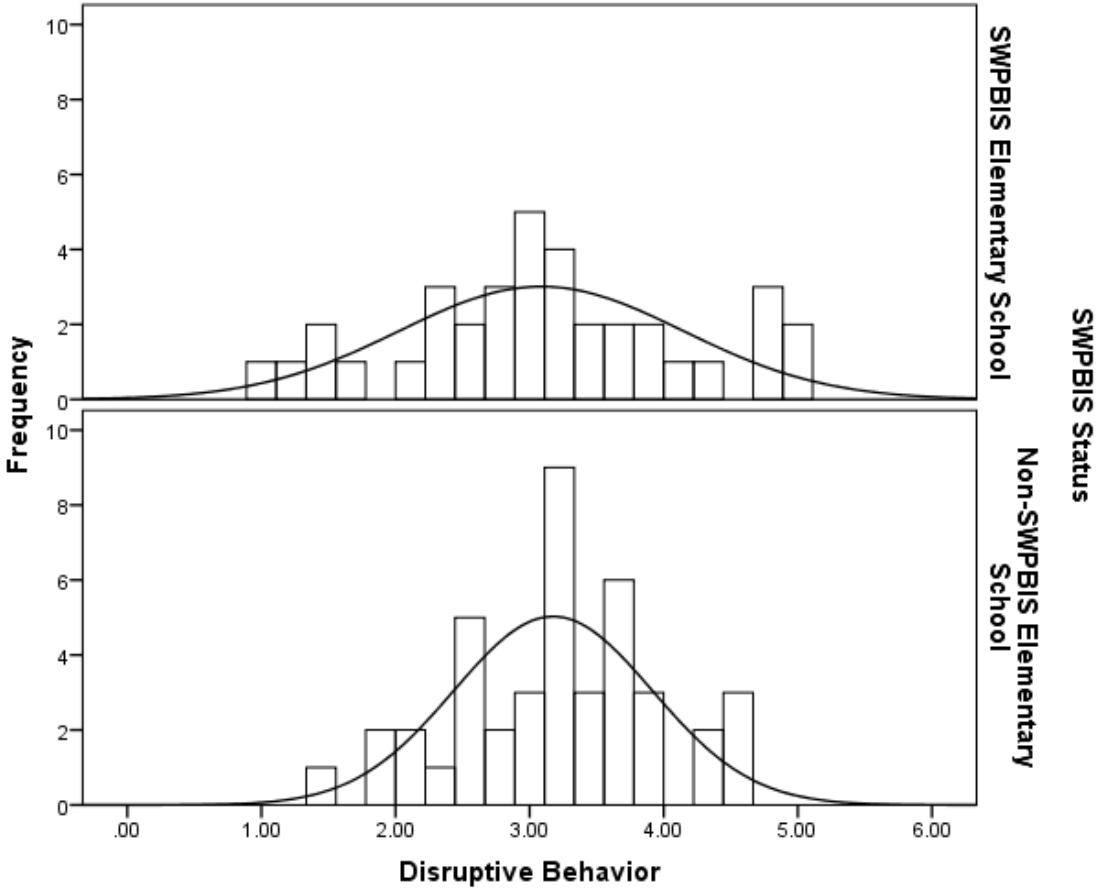
Figure 5. Histograms for Disruptive Behavior by Group

A box and whisker plot revealed no extreme outliers. Box and whisker plots reveal information about the shape of the distributions. If a distribution is symmetric, for instance, observations will be evenly split at the median, which is indicated by the horizontal lines inside the boxes. The box and whisker plot for disruptive behavior by group is presented in Figure 6.
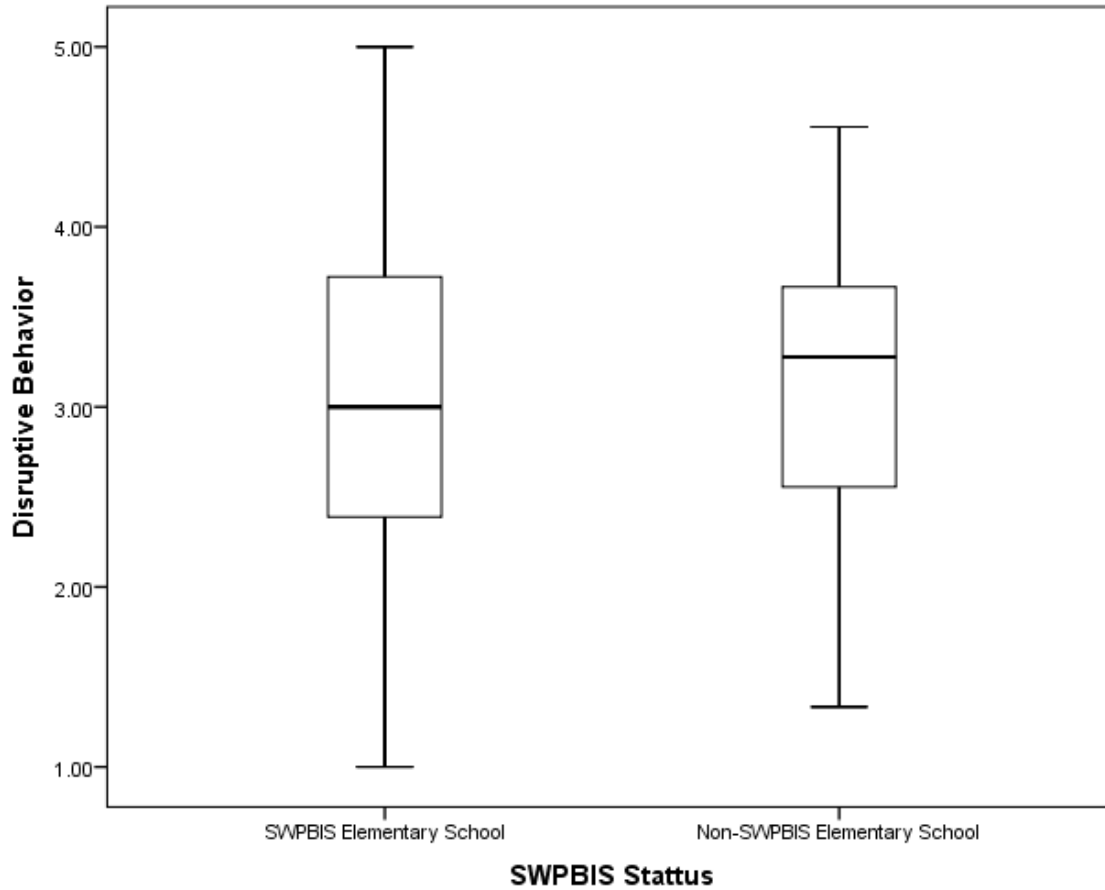
Figure 6. Box and Whisker Plots for Disruptive Behavior by Group

For prosocial behavior, the distribution was normal for the SWPBIS Elementary School, ($p = .20$). For non-SWPBIS Elementary School, the distribution was also normal ($p = .20$). The histograms for prosocial behavior by group is presented in Figure 7.
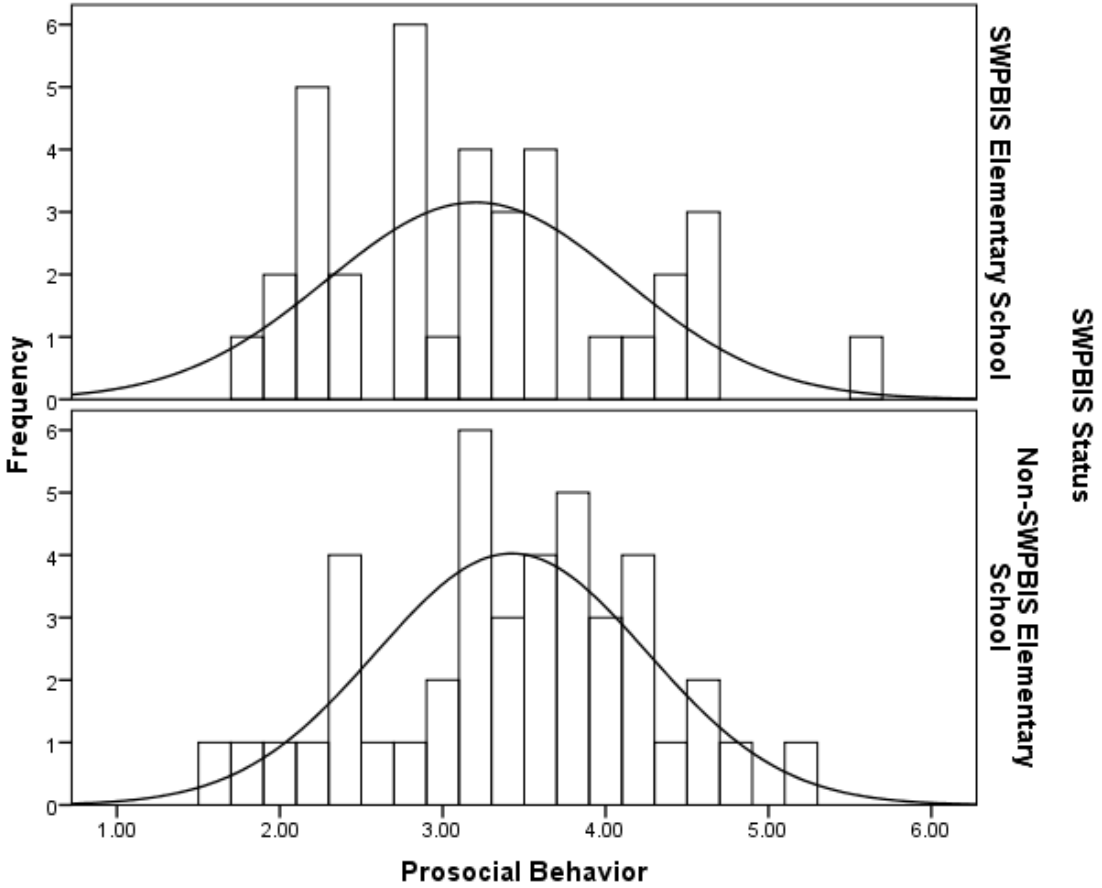
Figure 7. Histograms for Prosocial Behavior by Group

      A box and whisker plot revealed one outlier. Specifically, case 21 for the SWPBIS

Elementary School had an outlier ($\geq$ 5.6). The box and whisker plot for prosocial behavior by
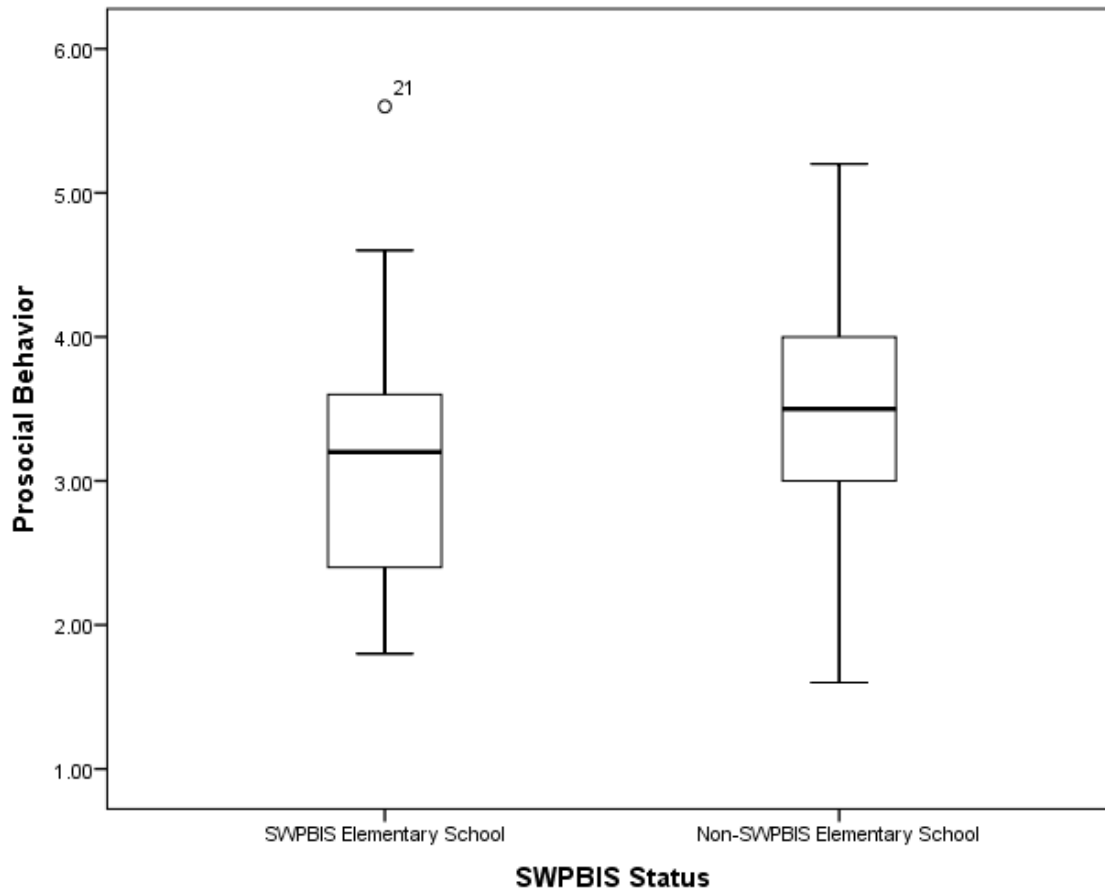
group is presented in Figure 8.

Figure 8. Box and Whisker Plots for Prosocial Behavior by Group

For overall adaptive behavior, the distribution was normal for the SWPBIS Elementary School, ($p = .20$). For non-SWPBIS Elementary School, the distribution was also normal ($p = .20$). The histograms for overall adaptive behavior by group is presented in Figure 9.
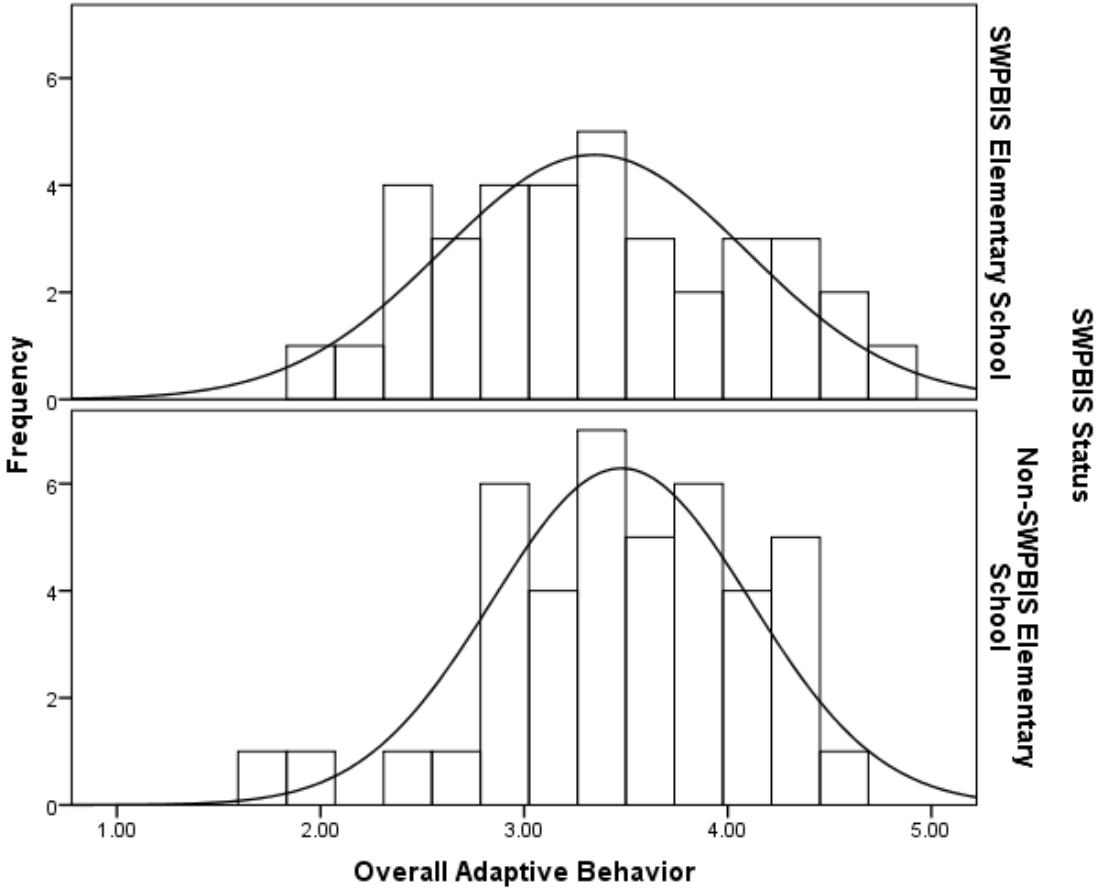
Figure 9. Histograms for Overall Adaptive Behavior by Group

      A box and whisker plot revealed one outlier. Specifically, case 16 for the non-SWPBIS

Elementary School had an outlier ($\leq$ 1.7). The box and whisker plot for overall adaptive behavior
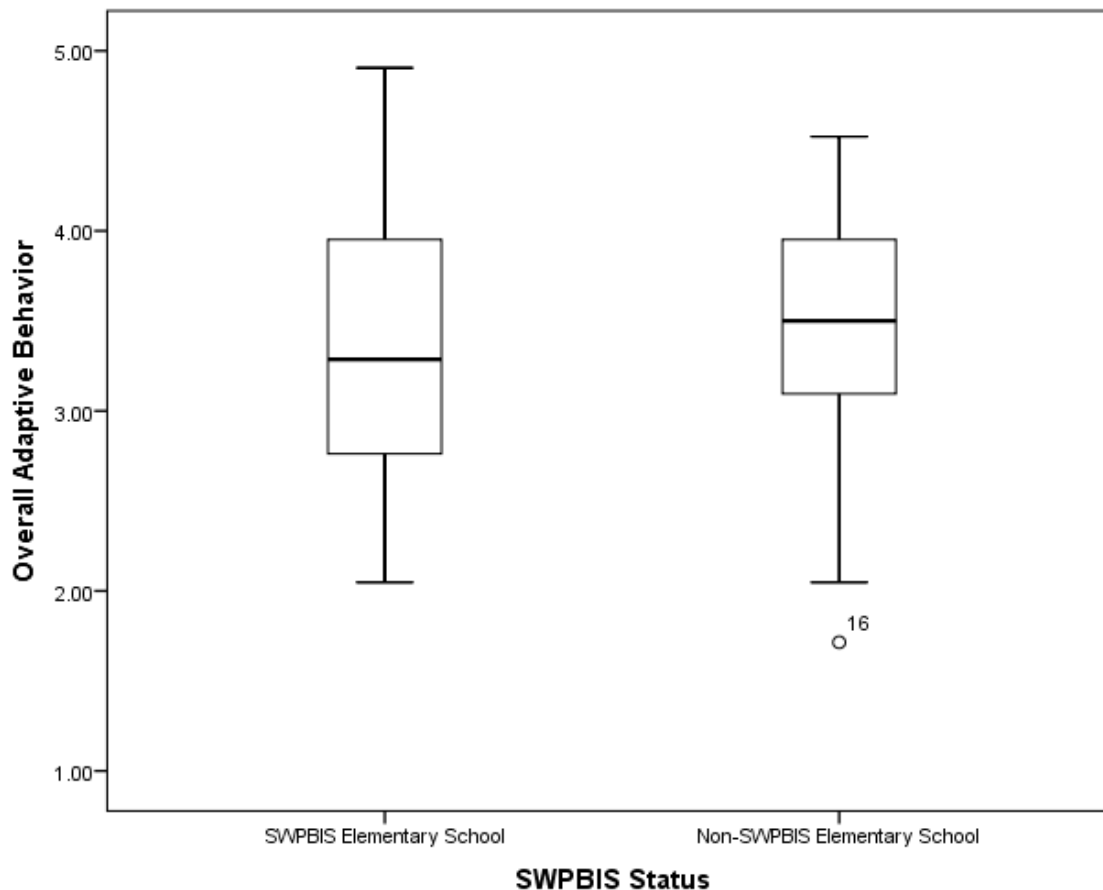
by group is presented in Figure 10.

Figure 10. Box and Whisker Plots for Overall Adaptive Behavior by Group

A total of five statistical outliers were removed. Specifically, the outliers removed were for concentration problems for the non-SWPBIS Elementary school. This left 73 cases. After removing the outliers, the Kolmogorov Test of Normality was conducted again on the data and indicated that the distribution was normal (p = .053).

The multivariate test for homogeneity of covariance matrices, *Box's M* Test evaluated whether the variances among the dependent variables were the same for all levels of the independent variables. A significant p-value means that the assumption for homogeneity of covariance has been violated. However, *Box's M* (8.50) was not statistically significant, p = .631. Therefore, the assumption was not violated. See Table 9.

Table 9

Box's M Test of Equality of Covariance Matrices

Box's M	8.50
F	0.80
df1	10
df2	22124.13
p	.631

The dependent variables were assessed for multicollinearity using the Pearson Product

Moment Correlation (Pearson r). The threshold for determining whether multicollinearity was

present was r > .70 (Crossley, Subtirelu, & Salsbury, 2013). Significant intercorrelations were

observed among five out of six dependent variables at the $p < .001$ level. Multicollinearity was

observed between overall adaptive behavior and disruptive behavior, $r(71) = .84, p < .001$; two-

tailed. Multicollinearity was also observed between overall adaptive behavior and prosocial

behavior, $r(71) = .77, p < .001$, two-tailed. Therefore, the subsequent MANOVA results should

be interpreted with caution. The correlation matrix is presented in Table 10.

Table 10

Correlation Matrix

Variable	Concentration Problems	Disruptive Behavior	Prosocial Behavior	Overall Adaptive Behavior
Concentration Problems	—			
Disruptive Behavior	.220	—		
Prosocial Behavior	.414***	.488***	—	
Overall Adaptive Behavior	.641***	.844***	.771***	—

*Note. N = 73, ***p < .001; two-tailed.*

Levene's Test of Equality of Error Variances was conducted on the data. If Levene's $p >$ .05, then there is equality of variance. Equality of variance was observed in all dependent variables except for disruptive behavior ($p = .018$). Therefore, the univariate result for disruptive behavior should be interpreted with caution. Levene's Test of Equality of Error Variances is presented in Table 11.

Table 11

Levene's Test of Equality of Error Variance

Variable	F	$df1$	$df2$	p
Concentration Problems	0.88	1	71	.351
Disruptive Behavior	5.84	1	71	.018
Prosocial Behavior	0.91	1	71	.344
Overall Adaptive Behavior	2.68	1	71	.106

There was no statistically significant difference between the groups on the combined dependent variable adaptive behavior, $F(4, 68) = 1.25$, $p = .30$; Wilks' $\Lambda = .93$; partial $\eta^2 = .07$, observed power = .37. Multivariate tests results are presented in Table 12.

Table 12

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	p	Partial Eta Squared	Observed Power
Intercept	Pillai's Trace	.97	636.79	4.00	68.00	.000	.97	1.00
	Wilks' Lambda	.03	636.79	4.00	68.00	.000	.97	1.00
	Hotelling's Trace	37.46	636.79	4.00	68.00	.000	.97	1.00
	Roy's Largest Root	37.46	636.79	4.00	68.00	.000	.97	1.00
SWPBIS	Pillai's Trace	.07	1.25	4.00	68.00	.300	.07	.37
	Wilks' Lambda	.93	1.25	4.00	68.00	.300	.07	.37
	Hotelling's Trace	.07	1.25	4.00	68.00	.300	.07	.37
	Roy's Largest Root	.07	1.25	4.00	68.00	.300	.07	.37

Group Means for the MANOVA are presented in Table 13.

Table 13

Group Means for the MANOVA

Variable	SWPBIS Status	*M*	*SD*	*n*
Concentration Problems	SWPBIS Elementary School	3.91	0.77	33
	Non-SWPBIS Elementary School	4.03	0.68	40
	Total	3.98	0.72	73
Disruptive Behavior	SWPBIS Elementary School	3.10	1.11	33
	Non-SWPBIS Elementary School	3.20	0.73	40
	Total	3.15	0.91	73
Prosocial Behavior	SWPBIS Elementary School	3.26	0.92	33
	Non-SWPBIS Elementary School	3.49	0.79	40
	Total	3.39	0.85	73
Overall Adaptive Behavior	SWPBIS Elementary School	3.42	0.73	33
	Non-SWPBIS Elementary School	3.55	0.56	40
	Total	3.49	0.64	73

The MANOVA Summary Table is presented in Table 14.

Table 14

MANOVA Summary Table

Source	Dependent Variable	*df*	*Mean Square*	*F*	*p*	Partial η^2	*Observed Power*
SWPBIS	Concentration Problems	1	.239	0.46	.500	.006	.10
	Disruptive Behavior	1	.167	0.20	.657	.003	.07
	Prosocial Behavior	1	.993	1.38	.244	.019	.21
	Overall Adaptive Behavior	1	.275	0.67	.415	.009	.13
Error	Concentration Problems	71	.521				
	Disruptive Behavior	71	.843				
	Prosocial Behavior	71	.718				
	Overall Adaptive Behavior	71	.409				
Total	Concentration Problems	72					
	Disruptive Behavior	72					
	Prosocial Behavior	72					
	Overall Adaptive Behavior	72					

Since the multivariate effect was not statistically significant, this means that none of the univariate effects, which will be referenced to answer the research questions and hypotheses, are significant.

Results for Null Hypothesis One

The first research question asked, "Is there a difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?" There was no significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school ($M = 3.42$, $SD = 0.73$) and a non-SWPBIS elementary school ($M = 3.55$, $SD = 0.56$) as shown by the TOCA-C, $F(1, 71) = 0.67$, $p = .415$; partial $\eta^2 = .009$, observed power = .13.

Null Hypothesis One stated that there is not a statistically significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C. There was no significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school ($M = 3.42$, $SD = 0.73$) and a non-SWPBIS elementary school ($M = 3.55$, $SD = 0.56$) as shown by the TOCA-C, $F(1, 71) = 0.67$, $p = .415$. Therefore, the null hypothesis was not rejected.

Results for Null Hypothesis Two

Research Question Two asked, "Is there a difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?" There was no significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school ($M = 3.91$, $SD = 0.77$)

and a non-SWPBIS elementary school ($M = 4.03$, $SD = 0.68$) as shown by the TOCA-C, $F(1,$ $71) = 0.46$, $p = .50$; partial $\eta^2 = .006$, observed power = .10.

Null Hypothesis Two stated that there is not a statistically significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C. There was no significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school ($M = 3.91$, $SD = 0.77$) and a non-SWPBIS elementary school ($M = 4.03$, $SD = 0.68$) as shown by the TOCA-C, $F(1, 71) = 0.46$, $p = .50$. Therefore, the null hypothesis was not rejected.

Results for Null Hypothesis Three

Research Question Three asked, "Is there a difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?" There was no significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school ($M = 3.10$, $SD = 1.11$) and a non-SWPBIS elementary school ($M = 3.20$, $SD = 0.73$) as shown by the TOCA-C, $F(1,$ $71) = 0.20$, $p = .657$; partial $\eta^2 = .003$, observed power = .07.

Null Hypothesis Three stated that there is not a statistically significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C. There was no significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school

($M = 3.10$, $SD = 1.11$) and a non-SWPBIS elementary school ($M = 3.20$, $SD = 0.73$) as shown by the TOCA-C, $F(1, 71) = 0.20$, $p = .657$. Therefore, the null hypothesis was not rejected.

Results for Null Hypothesis Four

Research Question Four asked, "Is there a difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?" There was no significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school ($M = 3.26$, $SD = 0.92$) and a non-SWPBIS elementary school ($M = 3.49$, $SD = 0.79$) as shown by the TOCA-C, $F(1, 71) = 1.38$, $p = .244$; partial $\eta^2 = .019$, observed power $= .21$.

Null Hypothesis Four stated that there is not a statistically significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C. There was no significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school ($M = 3.26$, $SD = 0.92$) and a non-SWPBIS elementary school ($M = 3.49$, $SD = 0.79$) as shown by the TOCA-C, $F(1, 71) = 1.38$, $p = .244$. Therefore, the null hypothesis was not rejected. A summary of the hypotheses and outcomes are presented in Table 15.

Table 15

Hypothesis Summary and Outcomes

Hypothesis	Significance	Outcome
$H_0 1$: There is not a statistically significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.	$p = .415$	Failed to reject the null.
$H_0 2$: There is not a statistically significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.	$p = .50$	Failed to reject the null.
$H_0 3$: There is not a statistically significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.	$p = .657$	Failed to reject the null.
$H_0 4$: There is not a statistically significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.	$p = .244$	Failed to reject the null.

Summary

Four research questions and related hypotheses were originated for investigation. Although results trended in the direction that maladaptive behavior scores of elementary students with emotional behavior disorders who attended a SWPBIS elementary school were lower than scores of elementary students with emotional behavior disorders who attended a non-SWPBIS elementary school as shown by the TOCA-C, the differences were not statistically significant. Specifically, it was determined that there was no significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C. There was no significant difference between the *concentration problem* scores of elementary

students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school. There was no significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school. There was no significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C. Implications and recommendations will be discussed in Chapter Five.

CHAPTER FIVE: CONCLUSIONS

Overview

Students with unique abilities and disabilities alike are deserving of adequate opportunities to experience both academic and social success. Slavin et al. (2010) asserted that educational research has made tremendous strides in identifying the practices that are evidence-based and possess an end goal of sustaining students' academic and social outcomes. Such programs, including SWPBIS, when used with fidelity, prove more important now than ever before as an effort to increase the success between students with disabilities in comparison to that of their peers (Coffey & Horner, 2012). Safran and Oswald (2003) identified the increase in aggressive behaviors among students in many schools throughout the United States as reaching a dangerous level. Consequently, support programs such as SWPBIS that seek to prevent and manage problematic behaviors, through utilization of educational approaches that further develop individuals' behavioral inventory, are established to promote academic and behavioral success (McIntosh et al., 2014).

The support program SWPBIS encompasses data-based assessment, empirically validated intervention strategies, a system of change which promotes both utilization and sustainability and methods for reinforcement of responsiveness to consumers' preference and community relevance (Dunlap et al., 2008). As students' prosocial behaviors are developed, children overcome social obstacles; however, to do so, children must experience a social climate within the school setting (Albrecht et al., 2015). Albrecht et al. (2005) further asserts that SWPBIS fosters a necessary school climate within schools. Failure to implement such evidenced-based programs, that promote positive outcomes among all students, including those with disabilities, is most concerning (Pinkelma et al., 2015).

The purpose of the quantitative, causal-comparative research study was to determine the effectiveness of the implementation of SWPBIS within elementary schools for students with EBD. Further, the research study was conducted to determine if a difference exists in the adaptive scores of elementary students with EBD who attend elementary schools with SWPBIS in comparison to those who attend non-SWPBIS elementary schools. Elementary teachers comprised the convenience sample of 100 research assistants, through the completion of the TOCA-C for 200 elementary students with EBD that attend 20 elementary schools within a large suburban school district in the state of Georgia. Additionally, the research study determined the impact of SWPBIS regarding a reduction in poor adaptive scores amid students with EBD, and further determined if reduced adaptive scores decreased the occurrence of disruptive and violent behaviors. Therefore, the researcher conducted the quantitative research study to determine the efficacy of SWPBIS upon the adaptive behavior scores of elementary students with EBD.

Discussion

The results of the research study indicate that despite the maladaptive behavior scores of elementary students with EBD who attended a SWPBIS elementary school scoring lower than the scores of elementary students with EBD who attended a non-SWPBIS school, the TOCA-C determined that the difference in scores was not statistically significant. In conjunction with these findings, there was enough evidence to accept the null hypothesis for research question one. Research Question One asked, "Is there a difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?". There was no significant difference among overall adaptive behavior scores of elementary students with EBD who attended schools with SWPBIS ($M = 3.42$, $SD = 0.73$) and those who attended a

non-SWPBIS school (M = 3.55, SD = 0.56) as determined by the TOCA-C, F (1, 71) = 0.67, p = .415: partial $n2$ = .099, observed power = .13. Consequently, the researcher accepted the null hypothesis one. Null Hypothesis One stated, **"**There is not a statistically significant difference between the *overall adaptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.", the results of the MANOVA indicated F (1, 71) = 0.67, p = .415. Additionally, there was enough evidence found to accept the null hypothesis for research question two. Research Question Two asked, "Is there a difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?". There was no significant difference amid the concentration problem scores of elementary students with EBD who attended schools with SWPBIS (M = 3.91, SD = 0.77) and those who attended a non-SWPBIS school (M = 4.03, SD = 0.68) as determined by the TOCA-C, F (1, 71) = 0.46, p = .50; partial $n2$ = .006, observed power = .10. Therefore, the researcher accepted the null hypothesis two. Null Hypothesis Two stated, "There is not a statistically significant difference between the *concentration problem* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.", the results of the MANOVA indicated F(1, 71) = 0.46, p = .50. The researcher also determined there existed enough evidence to accept the null hypothesis for research question three. Research Question Three asked, "Is there a difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?". There was no significant difference between the disruptive behavior scores of elementary students with

EBD who attended schools with SWPBIS (M = 3.10, SD = 1.11) and those who attended a non-SWPBIS school (M = 3.20, SD = 0.73) as determined by the TOCA-C, $F(1, 71) = 0.20$, $p = .657$; partial $n2 = .003$, observed power = .07. Therefore, the researcher accepted the null hypothesis three. Null Hypothesis Three stated, "There is not a statistically significant difference between the *disruptive behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C"., the results of the MANOVA indicated $F(1, 71) = 0.20$, $p = .657$. Lastly, the researcher determined there was enough evidence to accept the null hypothesis for research question four. Research Question Four asked, **"**Is there a difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C?". There was no significant difference between the *prosocial behavior scores* of elementary students with EBD who attended schools with SWPBIS (M = 3.26, SD = 0.92) and those who attended a non-SWPBIS school (M = 3.49, SD = 0.79) as determined by the TOCA-C, $F(1, 71) = 1.38$, $p = .244$; partial $n2 = .019$, observed power = .21. Therefore, the researcher accepted the null hypothesis four. Null Hypothesis Four stated, "There is not a statistically significant difference between the *prosocial behavior* scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the TOCA-C.", the results of the MANOVA indicated $F(1, 71) = 1.38$, $p = .244$.

The TOCA-C instrument reliability was tested with use of Cronbach's alpha. Reliability for each of the three subscales ranged from acceptable (a = .79) regarding prosocial behavior to excellent (a = .92) regarding concentration problems with a determined overall internal consistency of .68. Consequently, the researcher performed an inter-item analysis to further

evaluate the data. The analysis determined that five items included within the TOCA-C were negatively correlated with the remaining items on the instrument, therefore a reverse-scoring method was imposed. The conclusion of the analysis of the reverse-coding identified an overall internal consistency which increased from questionable (a = .68) to that of excellent (a = .90) for the five identified items. Additionally, reverse-coding determined that the overall internal reliability of the three subscales remained the same.

The quantitative, causal-comparative research study aimed to identify the impact that SWPBIS had upon adaptive behavior scores of students with EBD in elementary schools. The results of the research study indicate that although the maladaptive behavior scores of students with EBD who attended elementary schools with SWPBIS were lower than the maladaptive behavior scores of EBD students in elementary schools without SWPBIS, the difference in scores was identified as statistically insignificant.

Additional study regarding the benefits of support programs including SWPBIS is critical as SWPBIS is extensively recommended as a successful intervention that aids students with behavioral challenges in the acquisition of social skills (Swoszowski, Jolivette, & Fredrick, 2013). SWPBIS encompasses a three-tier behavioral structure that is pre-emptive in addressing student's defiant behaviors (Swoszowski et al., 2013). At the initial level, which is tier one, the development and instruction of rules coupled with the implementation of incentives for desirable behaviors are what fosters 80% of students' display of appropriate behaviors (Lewis & Sugai, 1999; Sugai & Horner, 2002, 2006).

Conclusions

The quantitative, causal comparative research study sought to determine the effectiveness of SWPBIS within elementary schools among students with EBD in comparison to elementary schools without SWPBIS for students with EBD. An alternative to the usual disciplinary practices is the use of a SWPBIS curriculum, a precautionary and support-based arrangement of improving student behavior that has been experiencing continuous adaptation for more than 20 years (Filter, Sytsma, & McIntosh, 2016). When SWPBIS are successfully implemented, unique challenges can be addressed, and standardization therefore leads to the principle of inclusion (Carr et al., 2002). It is of critical importance that teachers and students alike possess the means that assist in teaching and learning the required behaviors; consequently, direct teaching of at least three to five positive behavior expectations to all students is imperative (Burke et al., 2012). Students with EBD, at times referred to as an excluded group, must be mainstreamed as youths are often seen as the most important group to be regulated to foster the society that the community most desires (Wasshede, 2015).

The overall findings of the research study indicate a movement toward decreased maladaptive behavior scores, among students with EBD who attended an elementary school with SWPBIS when assessed in comparison to scores of EBD students who attended an elementary school without SWPBIS. Despite these findings, the overall result of the study produced outcomes that were determined to be statistically insignificant. Consequently, further study must be conducted to determine the level of effectiveness of support programs, such as SWPBIS, for students with EBD.

Implications

The overall theoretical implications of this research study encompass a contribution to the limited, existing literature regarding the impact of SWPBIS upon students with EBD within elementary school settings. The researcher concluded that despite the visible trend in the results of maladaptive behavior scores of elementary students with EBD who attended schools with SWPBIS scoring less than those elementary students with EBD who attended non-SWPBIS schools, the overall difference in scores was not determined to be of statistical significance. Therefore, no substantial difference in *overall adaptive behavior* scores, *concentration problem* scores, *disruptive behavior* scores nor *prosocial behavior* scores exists for those elementary students with EBD who attended schools with SWPBIS. This limited research study however, cannot determine the universal impact of SWPBIS within schools in which students with EBD are in attendance. Additional research should be conducted to further close the expansive gap in research related to the effect SWPBIS programs impose upon elementary students with EBD.

The research study further implies a need for classroom practices that enhance students' behavioral success while decreasing maladaptive behaviors. Solution focused objectives aimed to improve student attendance, participation and engagement in classroom activities and building positive relationships between teachers and all students is critical and contributes to improved behavioral outcomes. The research study results in scores that represent a decline in maladaptive behaviors among elementary students with EBD in elementary school settings with SWPBIS, therefore additional study aimed to determine successful instructional strategies and relationship building activities that enhance the implementation of programs of support such as SWPBIS will further close the existing gap in research and enhance teachers' ability to serve the needs of EBD students in elementary schools. Future researchers must build upon the existing results to

identify strategies within the classroom setting that align with SWPBIS standards to adequately

support the disenfranchised, EBD population of elementary students (Wasshede, 2015). The

classroom environment because of such practices would further nurture the unique needs of

students with EBD and consequently, promote growth and development through the

implementation of SWPBIS with fidelity and consistency (Coffey & Horner, 2012).

Limitations

The research study was conducted in the state of Georgia within a single school district.

Although 20 elementary schools from which 100 teachers comprised the overall convenience

sample, were included within the research study, this geographic location serves as a limitation

to the study. Further, the researcher is a vested educator within the school district and is

therefore closely connected with educators that are employed within the district at large.

Consequently, the researcher's involvement may be identified as a limitation within the study.

Additionally, the head principals, serving within each of the 20 elementary schools, issued a

letter to teachers to elicit involvement. The receipt of a letter from the supervisor within each

school may have served to influence teacher involvement.

The utilization of the TOCA-C instrument also serves to limit the study as such factors

related to time of year of completion of the TOCA-C as well as demographic information related

to students that may serve as contributing factors that influenced teacher responses. The

instrument reliability was tested with use of Cronbach's alpha. Because of the researcher's

determination that the overall internal consistency was .68, an inter-item analysis to further

evaluate the data was conducted.

Recommendations for Future Research

Additional research must be conducted related to the overall impact of SWPBIS in comparison to schools with non-SWPBIS regarding the outcomes the program imposes upon elementary students with EBD. There is limited research regarding this specific topic of study, yet due to the number of elementary learners that have EBD it is of critical importance that programs of support are in place. Of the 20 schools within the study, half provide a SWPBIS program that aims to serve the students at large. However, findings were statistically insignificant regarding the impact the SWPBIS program elicits among elementary students with EBD. The research must not conclude with this limited study. Increased sample sizes, expansion of the geographical location and increased numbers of schools must be established within additional research studies to best determine the overall impact of SWPBIS upon elementary students with EBD. Further research should aim to analyze teacher responses on the TOCA-C instrument at varying times of the school year to avoid any contributing factors related to time of year that may influence teacher replies.

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APPENDIX A

Linkages of Student Competencies with Theory of Diffusion of Innovations

Student Competency	Key Concept	Step in Innovation-Decision Process
Articulate how evidence-based practice can affect positive patient outcomes.	Innovation, social system	Knowledge
Recognize clinical problems that can be addressed through evidence-based practice.	Social system, innovation. communication, time	Knowledge
Conduct an advanced search of the literature.	Innovation, communication, time	Knowledge
Analyze components of the research articles.	Innovation, communication, time	Persuasion
Evaluate the strength of research findings.	Innovation, communication, time	Persuasion
Synthesize evidence to determine best practice.	Innovation, time	Decision
Write an evidence-based practice policy.	Innovation, time	Implementation
Create an implementation plan for Changing practice.	Communication, social system	Implementation, confirmation
Disseminate information through Oral and poster presentation.	Communication, social system, time, communication, social system	Implementation
Appreciate how collaboration Serves the community.	Communication, social system	Confirmation

Student Competency	Key Concept	Step in Innovation-Decision Process
Develop group process skills: collaboration, leadership, negotiation, and time management.	Social system, communication, time	Knowledge, persuasion, decision, Implementation, confirmation
Develop group process skills: collaboration, leadership, negotiation, and time management.	Social system, communication, time	Knowledge, persuasion, decision, implementation, confirmation

Note: Adapted from "Use of the Innovation-Decision Process Teaching Strategy to Promote Evidence-Based Practices, "by N.A. Schmidt and J.M. Brown, *Journal of Professional Nursing 23*(3), p. 155. Copyright 2007

Source: Schmidt and Brown, 2007.

APPENDIX B

Sample Matrix of Expectations within Routines and Settings

	Hallway/Stairway	**All Classrooms**	**Café**	**Bathrooms** **Water Fountains**
PRIDE	□ Keep hands, feet and objects to yourself □ Use a quiet voice	□ Keep hands, feet and objects to yourself □ Use a quiet voice □ Enter room quietly □ Be considerate of other people's belongings □ Be an active listener	□ Keep hands, feet and objects to yourself □ Use a quiet voice □ Enter and exit in an orderly manner □ Be considerate of other people's belongings □ Stand in line as directed	□ Keep hands, feet and objects to yourself □ Use a quiet voice □ Allow others their privacy □ Wait your turn at the sink or fountain □ Take care of school property
	Bus/Bus Stop/ Walkers	**Locker Room**	**Auditorium**	**Media Center**
	□ Keep hands, feet and objects to yourself □ Use a quiet voice □ Be considerate of the bus driver and the bus □ Wait patiently to get on or off the bus □ Share your seat	□ Keep hands, feet and objects to yourself □ Use a quiet voice □ Be considerate of other people's belongings	□ Keep hands, feet and objects to yourself □ Use a quiet voice □ Stay seated until Directed otherwise □ Respond to the speaker Appropriately □ Listen with eyes on Speaker	□ Keep hands, feet and objects to yourself □ Use a quiet voice □ Enter room quietly □ Use media center materials and equipment appropriately
	Hallway/Stairway	**All Classrooms**	**Café**	**Bathrooms** **Water Fountains**
RESPONSIBILITY	□ Walk facing forward, staying to the right □ Follow rules without adult reminders □ Walk directly to destination using appropriate route □ Have hall passes available □ Report all unsafe **behavior and vandalism**	□ Respond to quiet signal immediately □ Be on time and be prepared □ Follow classroom procedures □ Report all unsafe behavior and vandalism	□ Sit in designated areas □ Respond to quiet signal Immediately □ Report all unsafe behavior and vandalism	□ Walk directly to destination using appropriate route □ Report all unsafe behavior and vandalism □ Wash and dry hands □ Return to class immediately

Table 2 (continued)

	Bus/Bus Stop/ Walkers	Locker Room	Auditorium	Media Center
RESPONSIBILITY (continued)	□ Have belongings ready to enter and exit □ Remain seated at all Times □ Report all unsafe behavior and vandalism □ Follow bus rules at all Times □ Get on and off bus at correct stop □ Stay off private Property	□ Be prepared for gym class □ Respond to quiet signal immediately □ Report all unsafe behavior and vandalism	□ Respond to quite signal Immediately □ Sit in designated areas □ Enter and exit in an orderly manner □ Be prompt □ Report all unsafe and behavior and vandalism	□ Respond to quiet signal immediately □ Follow media center procedures □ Report all unsafe behavior and vandalism □ Return materials on Time

	Hallway/Stairway	All Classrooms	Café	Bathrooms Water Fountains
RESPECT	□ Use polite language □ Keep hallways and stairways clean	□ Use polite language □ Do your own work □ Do your best work at all times □ Keep work areas clean	□ Use polite language □ Keep table and floor clean and place trash into barrels □ Leave area as you found It or better	□ Use polite langauge □ Keep area clean □ Throw paper towels in trash cans □ Flush appropriately □ Keep water fountains Clean
	Bus/Bus Stop/ Walkers	**Locker Room**	**Auditorium**	**Media Center**
	□ Use polite language □ Throw trash in waste Basket	□ Use polite language □ Leave area as you found it or better	□ Use polite langauge □ Treat speaker as a welcome guest □ Treat furniture Appropriately □ Leave area as you found it or better	□ Use polite language □ Keep your work area Clean □ Leave area as you found it or better

Source: Simone, Sugar, and Negron (2008).

APPENDIX C

Permission to Use the TOCA-C Instrument

Marva Howard ████████████████ August 10, 2014 9:10 AM To: ████████████
████████████ Cc: ████████████ ████████████ Re: TOCA Instrument

Good day Dr. ██████,

Thank you so much for taking the time to respond, as well as thank you for the permission granted.

Best regards,

Marva Howard

On Aug 10, 2014, at 7:57 AM, ████████████ ████████████ wrote:

Hi Marva:

Sorry for the delay in responding. Yes, you have our permission to use the TOCA in your study. Attached is a copy of the paper, which includes a copy of the TOCA-Checklist.

Best of luck with your research.

Sincerely,

██████

_____

████████████, Ph.D., M.Ed. Deputy Director, Johns Hopkins Center for the Prevention of Youth Violence Co-Director, Johns Hopkins Center for Prevention and Early Intervention
Johns Hopkins Bloomberg School of Public Health
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From: ████████████ [mailto████████████] Sent: Friday, June 20, 2014 9:22 AM To:
████████████ Cc: ████████████████████ Subject: TOCA Instrument

Good day Dr. Bradshaw,

I am a doctoral student at Liberty University. For my dissertation, I am conducting a study on the effects of school-wide positive behavior intervention supports on students with emotional behavior disorders. I have utilized your peer-reviewed journal as a literature review for the TOCA instrument, and I would like to use the instrument in my study.

I have conducted a search to determine where I can obtain permission to use the instrument, but I have not located a source. Is it possible you can point me in the direction of where you obtained permission to utilize the instrument for your study? Your assistance will be greatly appreciated. Thank you in advance for any information that will be helpful.

Sincerely,

Marva Howard

Candidate for the Doctor of Education Degree

Liberty University

<Koth_MECD_TOCAC_2009.pdf>

APPENDIX D

Procedures for Teachers Completing the TOCA-C

1. No training is required to administer the questionnaires, because Appendix C supplies the instructions for completing the Teacher Observation Classroom Adaptive-Checklist (TOCA-C).

2. Teachers will be selected because they have students with emotional behavior disorders assigned to their classroom.

3. Before completing the TOCA-C, the teachers will be asked to sign a consent form to participate in the study.

4. The researcher will prepare packets of the instruments for each of the 28 elementary schools.

5. The TOCA-Cs will be placed in an 8x11 envelope and labeled with the teacher participants' names for each of the 28 elementary schools.

6. The researcher will ensure sufficient number of instruments are provided for each school. Each TOCA-C will have a unique identifier for each student that the instrument is being completed on.

7. The researcher will hand deliver the TOCA-C packets by personally transporting the packets to each of the 28 elementary schools.

8. The researcher will deliver the packets directly to the principal of each of the 28 elementary schools.

9. The principal will direct the school secretary to hand deliver each packet to the participating teachers before the beginning of the school day.

10. The school secretary will inform the teachers that he or she will return to personally collect the TOCA-Cs at the end of the one-week time frame to complete the instrument.

11. The teachers will return the TOCA-Cs in the same envelope in which they received the TOCA-Cs; the packets will be collected directly by the school secretary.

12. After the school secretary has collected the TOCA-Cs, he or she will ensure the envelopes are sealed.

13. The school secretary will return the TOCA-C packets to each of the 28 schools' principal.

14. The principal will ensure that the TOCA-C packets are placed in a secured area where only the principal has access.

15. The researcher will physically return to each of the 28 schools to personally collect the TOCA-C packets from each principal.

16. The researcher will ensure that all packets are collected from each of the 28 schools.

17. Upon collecting the TOCA-C packets from each of the 28 elementary schools, the researcher will divide the TOCA-Cs into two groups, the treatment group and the non-treatment group.

18. The researcher will inspect all TOCA-Cs for completeness.

19. If the instrument for each student is not fully completed, it will be removed from the data set.

20. After checking each TOCA-C for completeness, the researcher will prepare the data sets in SPSS©.

APPENDIX E

Participant Cover Page for TOCA-C Questionnaire

Assessing the Adaptive Behavior Scores of Students with Emotional Behavior Disorders

Name of school: _____   Date: _____

District: _____   State: _____

Person Completing the Survey (Circle One):

      Homeroom Teacher   Special Educator   Art Teacher

      P. E. Teacher   Music Teacher

1. Please read the directions on the TOCA-C instrument and the Scoring Sheet thoroughly before completing the TOCA-C instrument.

2. Complete the survey independently.

3. Schedule 15 – 20 minutes to complete each instrument.

4. Base your rating on your individual experience with the student in the school.

5. When rating the students, do not make assumptions. Base your rating on what you know for sure about the student because of your personal experiences as the child's teacher.

6. Return your completed survey to _____ by _____.

APPENDIX F

January 26, 2018

Elementary School Teacher

█████████████

Dear Elementary School Teacher:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a Doctor of Education degree. The purpose of my research is to investigate if the implementation of School-wide Positive Behavior Intervention Supports (SWPBIS) lowers adaptive scores of elementary students with Emotional Behavior Disorders (EBD). The question that I am posing is: Is there a difference in the overall adaptive behavior scores, concentration problem scores, disruptive behavior scores, and prosocial behavior scores of elementary students with emotional behavior disorders who attend a SWPBIS elementary school and a non-SWPBIS elementary school as shown by the Teacher Observation Classroom Adaptive-Checklist (TOCA-C)? I am writing to invite you to assist me with my study.

If you are willing to participate, you will be asked to complete a TOCA-C instrument for each child that you teach, who has been found to be a student with an emotional behavior disorder. You will be asked to complete the instrument independently during your planning or free time at school. You will need approximately 15-30 minutes to complete the instrument. After completing the instrument, you will place it in a sealed envelope, which will be collected by the school's administrative assistant. The administrative assistant will return all sealed envelopes to the principal, and I will retrieve the sealed envelopes from the principal. Student identities will be completely anonymous, and no personal, identifying information will be collected.

To participate, please contact the researcher who will notify your school's principal, collect your packet, and then complete the anonymous TOCA-C instrument for each applicable student.

Sincerely,

Marva I. Clarke-Howard
Doctoral Student

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, Liberty University, ███████████████████████████████ ███████████; irb███████

APPENDIX G

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

January 25, 2018

███████████████████████

IRB Exemption 2986.012518: The Effects of School-Wide Positive Behavior Intervention Supports on Students with Emotional Behavior Disorders in Elementary Schools

Dear ██████████████████,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

> (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
> (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at ████████████.

Sincerely,

████████████████████

Administrative Chair of Institutional Research
The Graduate School

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