8-2023

Secondary Educator and Administrator Perceptions of Positive Behavior Interventions and Supports and Student Academic Achievement

Cynthia Everitt
East Tennessee State University

Secondary Educator and Administrator Perceptions of Positive Behavior Interventions and Supports and Student Academic Achievement

---

A dissertation

presented to

the faculty of the Department of Educational Leadership & Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership, School Leadership

---

by

Cynthia L. Everitt-Day

August 2023

Dr. William Flora, Chair

Dr. Stephanie Barham

Dr. Terence Hicks

Dr. Pamela Scott

Keywords: PBIS, perceptions, academic achievement

ABSTRACT

Secondary Educator and Administrator Perceptions of Positive Behavior Interventions and Supports and Student Academic Achievement

by

Cynthia L. Everitt-Day

This qualitative study addresses secondary educator perceptions of Positive Behavioral Interventions and Supports (PBIS) and student academic achievement. PBIS is a proactive approach with a multitiered framework. When used properly, PBIS can be a tool for school faculty to establish behavioral expectations and procedures, prevent disruptive behavior, and improve the school climate and culture. This phenomenological study was conducted using two secondary schools in West Virginia. Participants were identified and chosen through purposive sampling techniques according to their years of experience teaching and utilizing PBIS interventions.

The data for this study included unstructured, open-ended interviews based on three research questions. The questions addressed secondary educator and administrator perceptions of PBIS and high school student achievement, interventions associated with student achievement, and how the program could be adapted to provide increased student academic support. Interviews were transcribed and data were organized by topics and themes coded into various categories. Triangulation, member checks, and rich descriptions supported the credibility of the analysis.

The results revealed that five categories emerged, which included: (1) PBIS influences student work ethic, (2) positive reinforcement of high expectations, (3) Student Assistance Team, (4) Advisory, and (5) consistency.

DEDICATION

First and foremost, I thank God for all His immense blessings that have helped me in each step of my progress toward successfully completing my research. This research study is dedicated to my family and friends, with extra gratitude to my loving parents, Timothy and Diane Everitt. Thank you for loving me unconditionally and always supporting and encouraging me. You gave me my roots to know where home is and my wings to fly. Thank you to my husband, Shawn, who encouraged me during the many challenges and pushed me to finish what I started. A special thank you to my study buddy Jake, who has crossed the rainbow bridge. We did it! Lastly, I am dedicating this research study to those that are no longer of this world, whose memories continue to live forever in my heart. I hope I've made you proud as you are looking down.

ACKNOWLEDGEMENTS

I want to acknowledge and thank the members of my committee, Dr. William Flora, Dr. Stephanie Barham, Dr. Terence Hicks, and Dr. Pamela Scott.. I appreciate your willingness to serve on the dissertation committee, your time, and your input throughout the process. Also, Dr. Flora, thank you for motivating me as a student at ETSU. You will never know how much I appreciate your guidance and support from the very beginning.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1. Introduction

Positive Behavioral Interventions and Supports (PBIS) is a multitiered framework for educators and administrators who are trying to develop an efficient and effective positive school climate and culture (Flannery et al., 2014). PBIS is used for the development of schoolwide plans, which include positive behavioral expectations, incentives to students who meet the expectations, and a consistent strategy for managing student behavior (Bradshaw et al., 2008). Additional interventions and supports are provided to students who repeatedly do not follow the expectations. School administrators and educators must collect data on and track student behavior to evaluate outcomes and make decisions regarding student needs and school practices (Flannery et al., 2014).

PBIS is considered a proactive approach that, when used properly, can be a tool for school administrators and educators to establish behavioral expectations and procedures at the beginning of each school year. Moreover, expectations and procedures are retaught throughout the school year to ensure student mastery in understanding and skill development. Other discipline approaches address student behavior after it has occurred; PBIS aims to prevent disruptive behavior and improve the organizational health, climate, and culture within a school building (Flannery et al., 2014). "The program draws upon behavioral, social learning, and organizational behavioral principles, which were traditionally used with individual students, and extends and applies them to the entire student body consistently across all school contexts" (Bradshaw et al., 2008, p. 463).

The PBIS framework includes three tiers, or levels of interventions (see Figure 1). Tier I involves the entire student population and is designed to prevent the development of problem behaviors (Anderson & Borgmeier, 2010). Tier I interventions of the PBIS framework, including

reteaching behavioral expectations and procedures, verbal warnings, and conferences with the educator, are expected to be successful for 80 to 90 percent of students (Spencer, 2015). Moreover, a reinforcement program or incentive is used to promote the occurrence of positive behavior, while a range of consistent consequences are used for inappropriate behavior (Anderson & Borgmeier, 2010).

Figure 1

A Graphic Representation of Tier I, II, and III Interventions (Anderson & Borgmeier, 2010)

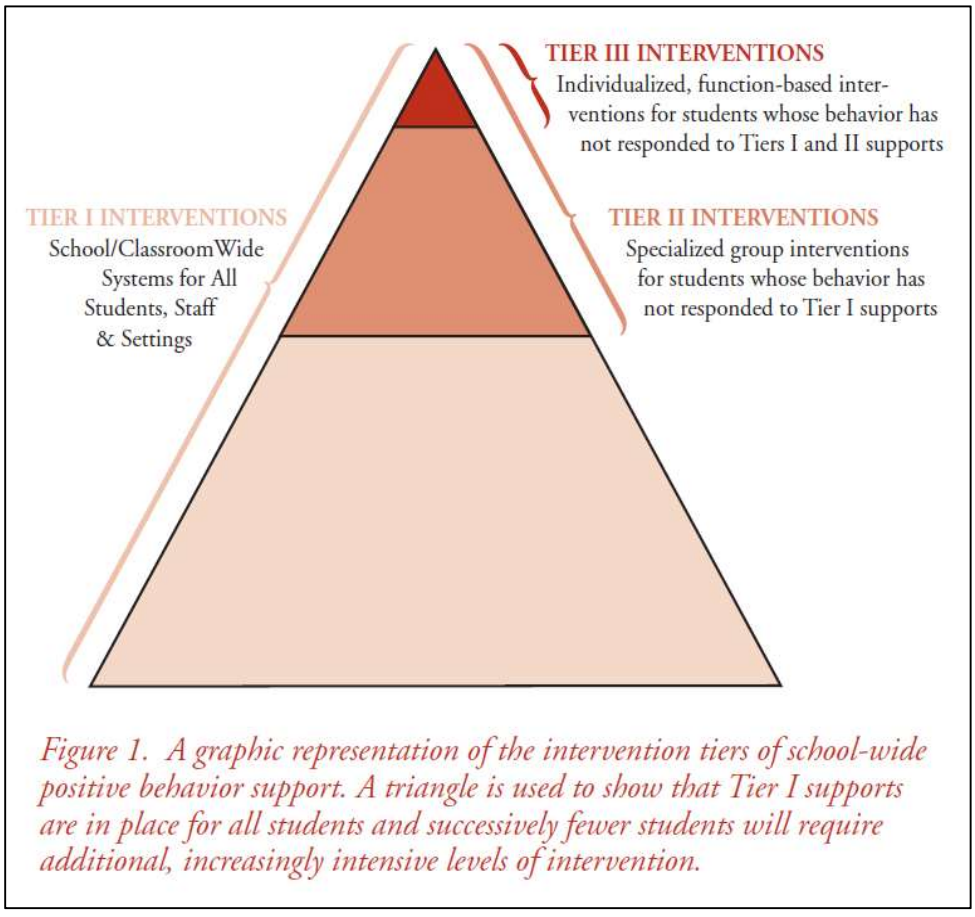

Figure 1. A graphic representation of the intervention tiers of school-wide positive behavior support. A triangle is used to show that Tier I supports are in place for all students and successively fewer students will require additional, increasingly intensive levels of intervention.

Students who are not responsive to Tier I, receive Tier II interventions and supports. Students receiving Tier II interventions have been recognized to be disruptive within the learning environment, and they have not responded positively to the Tier I interventions (Anderson &

Borgmeier, 2010). About five to ten percent of the student population will need Tier II interventions (Spencer, 2015). Students receiving Tier II, continue to receive Tier I interventions, while higher levels of structure and guidance are provided (Anderson & Borgmeier, 2010). Examples of Tier II interventions and supports include participation in skills groups, check-in check-out with a specific educator or staff member, behavior contract, weekly behavior checklist, etc.

Tier III interventions and supports are provided to the one percent to five percent of students whose behavior is not responsive to Tier I and Tier II interventions (Spencer, 2015). Tier III supports are individualized and require the completion of a functional behavior assessment to guide the development of the personalized interventions (Anderson & Borgmeier, 2010). Tier III interventions consist of strategies to prevent problem behaviors, and instructional strategies to teach desired behaviors (Anderson & Borgmeier, 2010). Research has shown the promising effects of the PBIS model. For example, PBIS "…has been shown to lead to sustained changes in schools' internal discipline practices and systems" (Bradshaw et al., 2010, p. 134).

School stakeholders that have implemented PBIS have reported positive outcomes, such as improved school climate, improved achievement, a reduction in discipline offenses, and decreased suspensions (Flannery et al., 2014). Few studies exist to show the impact of PBIS on high school student achievement. Many of the studies conducted have used elementary and middle school data to demonstrate whether PBIS has an effect on student achievement. To better understand the effects of PBIS on student achievement, this research study will be conducted to examine the impact of PBIS on student achievement for high school students. The study will compare the independent variable PBIS to the dependent variable student achievement.

Statement of the Problem

There is a need to extend the body of research associated with PBIS at the secondary level. Estrapala et al. (2021) noted that a majority of research did not include secondary school academic data even though one of the primary goals of PBIS is to improve academics. Further research is needed to explore the full effects of PBIS from the perceptions of school stakeholders in the high school setting.

Purpose of the Study

The purpose of this phenomenological research study was to investigate perceptions of secondary educators and administrators of PBIS to facilitate high school student achievement in two high schools in the state of West Virginia.

Research Questions

The central research question is: what are the perceptions of secondary educators and administrators of Positive Behavior Interventions and Supports to facilitate high school student achievement? This study addresses the following research questions:

1. What are secondary educators and administrator perceptions of the Positive Behavior Interventions and Supports program and high school student achievement?
2. Which specific interventions in Positive Behavior Interventions and Supports program are most associated with student achievement?
3. What are the secondary educator perceptions of how the Positive Behavior Interventions and Supports program could be adapted to provide increased student academic support?

Significance of the Study

This research study is significant as it helps to strengthen the body of knowledge surrounding PBIS. This study directly addresses the need for additional scholarly research on

PBIS facilitating secondary school student achievement. This study not only examines the perceptions of educators and administrators of PBIS and student achievement, but also explores beliefs surrounding interventions and supports most associated with student achievement. This information could be helpful in the development of professional growth opportunities for secondary schoolholders as they adopt and implement PBIS.

Definition of Terms

The following terms are defined below to understand the purpose of this study.

1. Office discipline referral: Documentation of an event that is submitted to the school administrator when a staff member observes a student violating a school rule (Pas et al., 2011). Then, the school administrator determines the consequence of the student's actions (Pas et al., 2011).
2. PBIS: A three-tiered framework of behavior interventions and supports with the goal of systematically preventing and correcting problem behaviors while promoting a positive school climate and culture for all students (Bruhn et al., 2021).
3. Tiered Fidelity Inventory (TFI): A tool used to provide a valid, reliable, and efficient measure of the extent to which a school is implementing PBIS (Algozzine et al., 2019). The TFI can be used for initial implementation of PBIS, as a guide for implementation of all Tiers, or as an index for sustained implementation (Algozzine et al., 2019).
4. Implementation fidelity: The extent to which a program is implemented (Bradshaw et al., 2009). Indicators of implementation fidelity include program adherence, quality of program delivery, and participant responsiveness (Bradshaw et al., 2009).

Limitations and Delimitations

Limitations of a study are restrictions outside the control of the researcher (Mertler & Charles, 2011). This study uses unstructured, open ended interviews to gain knowledge of the perceptions of administrators and educators of PBIS and student academic achievement. According to Klenke (2016) the outcome of unstructured interviews aims to dive beyond the surface responses to obtain true meanings that the participants give to their experiences. Lastly, there are greater opportunities for interviewer bias to intervene (Klenke, 2016).

Delimitations of a study are boundaries that the researcher places on the study and chooses to or not to investigate (Mertler & Charles, 2011). For example, this study was delimited to administrators and educators in West Virginia. Moreover, educators that have less than three years vested in the school will not be represented.

Summary of the Study

The focus of the research effort originates from the central research question, "What are the perceptions of secondary educators and administrators of Positive Behavior Interventions and Supports to facilitate high school student achievement?" The participants from two high schools in West Virginia provided thick and rich descriptions of their experiences. This study includes five chapters. Chapter 1 establishes the need and basis for this research study by including an introduction to the study, a statement of the purpose of the study, the research questions, the significance of the study, definitions of relevant terms, and the limitations and delimitations of the study. Chapter 2 is an extensive review of the scholarly literature surrounding the research question that is broken down into themes that help to support the study. Chapter 3 is a presentation of the research methodology and design. Chapter 4 gives the research findings of the

study, interpretation of the data, and the coding of the descriptive data. Chapter 5 is a summary of the findings, conclusions, implications for practice, and recommendations for further research.

Chapter 2. Literature Review

The following information is a review of current literature and research surrounding PBIS. This information will be utilized to establish a foundation for understanding the current research study. PBIS as a framework has been adopted by pre-kindergarten through twelfth grade rural, suburban, and urban schools across the United States (Baker & Ryan, 2014). In addition, it can be observed in learning centers, charter schools, special education programs, and juvenile justice centers (Baker & Ryan, 2014). Stakeholders interested in improving behavioral and academic outcomes for all students can implement the PBIS framework. Stakeholders include district-level administrators, educators, parents, students, and community members. Involving stakeholders in the planning, training, and implementation of PBIS is significant to the success of the program (McDaniel et al., 2018).

Students face behavioral, academic, and social-emotional challenges during their secondary school years. "Current statistics about the behavioral, academic, and social-emotional challenges faced by adolescents, and the impact on society through incarceration and dropout, have prompted high schools to direct their attention toward keeping students engaged and reducing high-risk behavioral challenges" (Flannery et al., 2014, p. 111). High school staff members are more likely to handle problematic behaviors through punitive disciplinary measures when behavioral challenges occur (Elrod et al., 2022). This method of disciplinary action increases student disengagement (Flannery et al., 2014). Disciplinary actions, specifically suspensions and expulsions, are linked to poor outcomes for students, such as reduced school connectedness, increased dropout rates, and entry into the juvenile justice system (Flannery et al., 2014). Students with behavior problems disrupt classroom instruction and perform poorly academically (Garwood et al., 2017).

To decrease problem behaviors and school exclusionary practices, it is recommended that schools focus on a prevention-oriented approach. Positive Behavioral Intervent, a multitiered support system, is an alternative to punitive discipline focusing on prevention rather than punishment by consistently promoting positive student behaviors and supporting students (Elrod et al., 2022). Secondary schools are adopting PBIS to improve school climate, promote positive student behaviors, and decrease problem behaviors by creating a positive learning environment for all students (Estrapala et al., 2021).

Theoretical Framework

Many theoretical models are used to explain and understand human behavior and learning. Educators must understand all students' diverse learning and behavioral support needs (Wheeler & Richey, 2019). These needs and skills are critical to student success. Teaching and reinforcing the use of appropriate behaviors is essential for student engagement and learning, and the success of the PBIS framework (Wheeler & Richey, 2019).

Social Learning Model

Albert Bandura acknowledges the cognitive influences on student behavior in the social learning model (Wheeler & Richey, 2019). According to Bandura, learning takes place in a social setting through observation, but it also involves the cognitive processes (Horsburgh & Ippolito, 2018). In other words, students internalize and make sense of what they see in order to reproduce the behaviors. "The social learning model attempts to merge the cognitive and behavioral models and expands the view of each toward a more comprehensive understanding of behavior" (Wheeler & Richey, 2019, pg.16).

Within this model there is a distinction between observation and enactive learning. Observational learning is when students learn vicariously by observing others, while enactive

learning is learning by doing and experiencing the consequences of the action (Woolfolk, 2019). Positive or negative consequences can strengthen or weaken student behavior. Students' interpretation of the consequences creates expectations and influences their motivation and shapes their beliefs (Woolfolk, 2019).

Four different stages are involved in the social learning model. The first stage is attention, where the student needs to see the behavior that others want them to reproduce (Horsburgh & Ippolito, 2018). Second, the student internalizes and retains what they have seen. The second stage involves cognitive processes where the student mentally rehearses the behavior that will be reproduced (Horsburgh & Ippolito, 2018). Third, the student needs the opportunity to reproduce the behavior learned in the first and second stages (Horsburgh & Ippolito, 2018). Lastly, the student needs to be motivated through direct reinforcement, vicarious reinforcement, and self-reinforcement (Horsburgh & Ippolito, 2018).

Within the social learning model, Bandura addresses how students develop social, emotional, cognitive, and behavioral capabilities. Furthermore, Bandura addresses how students regulate their own lives and what motivates them. A large emphasis is placed on the role of others serving as models to students and thinking, believing, expecting, anticipating, self-regulating, and making comparisons and judgments (Woolfolk, 2019)

Applied Behavioral Analysis

Applied behavior analysis is the application of behavioral learning principles to change student behavior (Woolfolk, 2019). Within the model, behavior is viewed from a functional perspective that is measurable and observable. The relationship between events and behavior is emphasized. Past events related to problematic behavior are highlighted, and attempts are made to identify functional relationships that explain the behavior. PBIS can be viewed as a shift in how

behavioral theory, principles, and practices are applied to help individuals with challenging behavior (Wheeler, 2019). Using behavior-analytic assessments strategies to address challenging behavior is emphasized when utilizing the PBIS program.

Factors in a student's environment that influence their behaviors are examined in the applied behavior analysis (Wheeler & Richey, 2019). This type of examination allows the environment to be modified so that the student can be more successful (Casey & Carter, 2016). Moreover, research-based teaching strategies that are replicable and specific to the individual needs of the learner are implemented (Wheeler, 2019). Baseline measurement of the student's behavior that needs to be modified is collected (Woolfolk, 2019). Next, what might be maintaining the inappropriate student behavior is analyzed, interventions based on behavioral principles to change the behavior are applied, and any changes that occur are measured (Woolfolk, 2019). When a student behaves in an unacceptable manner and the methods of correction do not work, the student's behavior can be explained as innate deficiencies on the part of the student; deficiencies due to the parent, family, or home environment; or deficiencies in the immediate environment (Casey & Carter, 2016).

Applications of applied behavior analysis are evident across many areas and are recognized as an evidence-based practice in developing educational and behavioral interventions for children (Wheeler, 2019). Many view PBIS as an enhancement of applied behavior analysis. PBIS has evolved into an evidence-based practice for addressing the prevention and remediation of challenging behaviors (Wheeler, 2019). The use of PBIS in schools has its basis in federal legislation. "The 2004 amendments to IDEA provide for both positive behavioral intervention and support and functional behavior assessment (FBA) for children with disabilities and for whom behavior issues impede success in educational settings" (Wheeler, 2009, p. 62). However, PBIS is

used for all children in a variety of educational settings. Schoolwide PBIS represents an example of universal supports and interventions intended for all students in order to provide a positive learning environment (Wheeler, 2009).

PBIS Overview

PBIS is an organizing framework utilized by school stakeholders to determine what type of learning environment they want to create and what that means in terms of student behavior (Barker & Ryan, 2014). The reasoning behind school stakeholders implementing PBIS is to improve preventive practices and student supports to impact meaningful student and school outcomes, such as academic success, positive school climate, supportive relationships between peers and adults, etc. (Nese et al., 2023). Barker and Ryan (2014) describe PBIS: "PBIS is grounded in a continuum of evidence-based interventions that are used consistently throughout the school to prevent problematic behavior, to teach pro-social skills, and to reinforce new skills" (p. 9). Similarly, Flannery et al. (2014) describe PBIS as "…a multitiered system of support, aligned with response to intervention, in which the school focuses on developing a predictable, efficient, and effective school climate..." (p. 112).

The PBIS framework is implemented in stages and includes practices embedded in a three-tiered support system for students (Barker & Ryan, 2014). Educators and administrators use specific techniques and procedures. For example, students are taught expected behaviors and provided support for success on a prevention-oriented basis (Flannery et al., 2014). The expected school behaviors are modeled for students, and students are given time for practice, feedback, and reinforcement (Barker & Ryan, 2014; Pas et al., 2019). Educators acknowledge students meeting behavioral expectations and educators are provided with a continuum of proactive strategies to respond to unwanted behaviors (Nese et al., 2023).

The significance of data, systems, and practices are emphasized as interconnected elements in the PBIS framework. Frequent and accurate data collection and analysis are emphasized in the PBIS framework (Gage et al., 2019). This leads to data-based decision-making. Datum provides evidence to evaluate outcomes, monitor implementation fidelity to ensure the framework is on track to success, the delivery of ongoing professional development that the PBIS team needs to provide, and make decisions regarding student needs and school practices (Barker & Ryan, 2014; Flannery et al., 2014; Pas et al., 2019). When data, systems, and practices are viewed as interconnected elements, support can be provided to all students and intensive support can be provided to the students who do not respond (Pas et al., 2019).

Behavior, attendance and discipline data are used to identify secondary students that are at risk for disengagement, academic failure, and dropout. Combining behavioral indicators with school climate perceptions can be useful to identify secondary students that are at-risk and to promote and support college and career readiness (Rifenbark et al., 2023). School climate is measured through student perceptions of fairness of school expectations, their safety while attending school, and the quality of relationships with their administrators and educators (Rifenbark et al., 2023). Evidence suggests that secondary student perceptions of school climate decline at the secondary level, even though positive perceptions of school climate are related to improved academic performance (Jones & Shindley, 2016).

Moreover, students need to attend school in order to engage in and be exposed to learning. Office discipline referrals are behavioral indicators. Students with high rates of problem behavior are considered at-risk and are associated with increased dropout rates (Rifenbark et al., 2023). Efforts to improve behavior, attendance, and school climate are critical for at-risk secondary students and dropout prevention efforts (Rifenbark et al., 2023). Dropping out has serious

individual and social consequences, and students that drop out are more likely to depend on social assistance or be unemployed during adulthood (Thouin et al., 2020). Moreover, these efforts are more significant for students with disabilities because the types of jobs, salaries, and opportunities for career advancements have been reported as lower (Trainor et al., 2013). Youth with disabilities are at a distinct disadvantage as they strive for independence and self-sufficiency in adulthood (Rifenbark et al., 2023). Overall, it is critical for school stakeholders to implement approaches to work with at-risk students. Within the context of a three-tiered model, such as PBIS, interventions that are designed to support students' academic achievement, attendance, and successful social behavior through data-driven decision making (Stormont et al., 2012). This is changing the ways school operate and has a large impact on at-risk students (Stormont et al., 2012).

The PBIS framework is organized into three tiers which contain interventions and supports that are appropriate for interventions needed at each tier. (Pas et al., 2019). Primary or Tier 1 are universal tier supports that are preventative and provided to all students. These include 1) defining three to five positively stated behavioral expectations; 2) providing instruction of the expectations by modeling, practicing, and providing feedback; 3) frequently acknowledging appropriate behaviors; and 4) developing a continuum of consequences for students that do not meet expectations that can be implemented consistently, and designate behaviors handled by educators versus administrators (Gage et al., 2019). When students receive Tier 2, secondary, or Tier 3, tertiary, interventions, they continue to receive the universal support system, Tier 1 interventions.

Bohanon et al. (2009) studied the integration of primary, secondary, and tertiary interventions through PBIS. The researchers focused on schoolwide interventions and supports

associated with creating a climate and culture that improves school expectations and positive interactions between educators and students (Bohanon et al., 2009). The implementation of PBIS was related to improvements in student behavior, school climate and culture, student achievement and graduation rates, which increases the likelihood that students will have improved post-secondary outcomes (Bohanon et al., 2009).

Tier 1 Interventions—Universal Tier Supports

Tier 1 interventions and supports represent the schoolwide behavioral initiatives; this is the primary level of prevention (Barker & Ryan, 2014). These interventions and supports shift the school's focus toward a proactive and positive approach that includes behavior management and ensuring consistent implementation throughout all school settings (Pas et al., 2019). Eighty percent of students will be successful with Tier 1 interventions, including setting schoolwide expectations and interventions for student behavior (Barker & Ryan, 2014). In addition, students who receive Tier 1 interventions have zero to one office discipline referral (Barker & Ryan, 2014).

By implementing the universal tier supports, the expectation is that students will engage in fewer disruptions and receive fewer classroom removals (Pas et al., 2019). Therefore, students will experience increased time for instruction and learning, which will lead to improved academic performance (Pas et al., 2019). Among the three tiers of PBIS, Tier 1 has produced the broadest impact. It requires a significant number of staff, targets the entire student population, and focuses on supporting all students (McDaniel et al., 2017).

Estrapala et al. (2021) systemically reviewed research studies on high school Tier 1 implementation. Tier 1 components found included schoolwide expectations, acknowledgement system, behavior response system, and stakeholder involvement. Researchers found reductions in

office discipline referrals across all studies that involved school stakeholders implementing Tier 1 support (Estrapala et al., 2021). Malloy et al. (2018), indicated that in a high school where staff began implementing Tier 1 interventions and supports, the number of office discipline referrals, out-of-school suspensions, and dropout rates were reduced during the first year of PBIS implementation. Similarly, within alternative education settings, it was found seclusions and the need to restrain students decreased following Tier 1 implementation (Grasley-Boy et al., 2021). Furthermore, there was a continued decrease over multiple years by continuing to utilize Tier 1 interventions and PBIS strategies to prevent behavioral escalation (Grasley-Boy et al., 2021). According to Noltemeyer et al. (2019), "Overall, the results suggest higher Tier 1 PBIS implementation is significantly associated with positive student outcomes in this sample, especially those related to student behavior" (p. 83).

Furthermore, researchers added that as classroom behavior improves over time with Tier 1 implementation, students have more opportunities to be actively engaged and receive effective instruction (Noltemeyer et al., 2019). More instructional time contributes to more positive academic outcomes in the future (Noltemeyer et al., 2019). For example, in the studies involving alternative education with Tier 1 implementation, academic achievement changes were observed in small groups of students enrolled in the alternative education setting for multiyear studies (Grasley-Boy et al., 2021)

Tier 2 Interventions—Secondary Tier Supports

Tier 2 interventions and supports are for students who need more assistance over and above the schoolwide interventions (Barker & Ryan, 2014). Tier 2 interventions are designed for fifteen percent of students who have received two to five office discipline referrals for behavioral issues (Barker & Ryan, 2014). The purpose of these interventions and supports is to address

social, emotional, and behavioral needs with efficient, targeted interventions (Bruhn & McDaniel, 2021). Examples of Tier 2 interventions include small group social skills instruction or a Check-In Check-Out system (Barker & Ryan, 2014; Gage et al., 2019). All Tier 2 interventions incorporate reteaching of schoolwide expectations and providing additional opportunities for practice and feedback with Tier 1 acknowledgment practices (Bruhn & McDaniel, 2021).

Tier 2 interventions must be implemented consistently and accurately for students to benefit. Moreover, administrators and educators can adapt Tier 2 interventions based on data collected during progress monitoring (Bruhn & McDaniel, 2021). In a study conducted by Nese et al. (2023), educators were surveyed to determine the most common Tier 2 interventions. The most frequently reported ones were Check-In Check-Out, group counseling, and social, emotional, behavioral groups (Nese et al., 2023).

Malloy et al. (2018) found that when administrators and educators utilized Tier 2 interventions, the number of office discipline referrals, suspensions, and unexcused absences decreased. Moreover, credits earned by students increased in a high school where administrators and educators implemented all three tiers of PBIS interventions and supports (Malloy et al., 2018). Implementation of the Tier 2 supports and interventions were associated with improved student attendance and behavioral outcomes (Malloy et al., 2018). McDaniel et al. (2022) found that educators and administrators implementing Tier 2 interventions with higher fidelity were associated with lower office discipline referrals and in-school suspension. Moreover, the researchers believe that Tier 2 interventions addressed habitual, less-intensive behaviors, such as disruption and inappropriate language (McDaniel et al., 2022). Researchers noted that the Tier 2 interventions had a positive effect on student behavior, which was a major risk factor related to high school failure and dropout (Malloy et al., 2018). Students showed improved school

attendance, "...suggesting that the increase in positive adult attention may have a favorable impact on student motivation to attend school" (Malloy et al., 2018, p. 238).

Overall, the research demonstrated that Tier 2 interventions can improve student behavior and engagement, which also reduces the risk of dropout. When the Tier 2 interventions are based on function of behavior and the student plans are designed around proactive, positive interactions, the impact is even more significant (Malloy et al., 2018). An intervention, such as Check-In Check-Out, resulted in immediate improvement for students as soon as they were enrolled and consistent improvement over time (Malloy et al., 2018).

Check-In Check-Out is a popular intervention used for students receiving Tier 2 interventions. Students are provided with a dedicated staff member or "coach." There are six primary components to the Check-In Check-Out intervention: (1) goal setting, (2) progress monitoring and data-based decision making, (3) relationship building, (4) social skills and problem-solving, (5) home and school collaboration, and (6) tiered support (McDaniel et al., 2016). Boden et al. (2018) studied the effectiveness of Check-In Check-Out with high school students completing vocational training to learn appropriate work behavior. The students had individualized behavior goals and wanted to integrate successfully into the community after graduation (Boden et al., 2018). The daily check-in emphasized positive interactions and relationship-building between students and educators, which decreased off-task behavior (Boden et al., 2018). Additionally, McDaniel et al. (2016) found that the Check-In Check-Out intervention was an appropriate, responsive intervention for improving behavior which led to more time on tasks and improved academic achievement.

Tier 3 Interventions—Tertiary Tier Supports

Tier 3 interventions reflect the most intensive interventions and support for the five percent of students with the highest level of need (Barker & Ryan, 2014). Typically, Tier 3 interventions are the result of students undergoing a functional behavior assessment and behavior intervention plan (Gage et al., 2019). The students at Tier 3 require one-on-one interventions to successfully engage in expected school behaviors (Barker & Ryan, 2014).

In a study conducted by Nese et al (2023), educators were surveyed to determine the most frequently utilized Tier 3 interventions. The study found that behavior support plans, individualized counseling, safety plans, and individualized point cards were the most common Tier 3 interventions (Nese et al., 2023). Tier 3 interventions are costly in terms of time and resources. This is especially true of schools with a large number of students. Individual and group interventions and supports can require educators to spend time with several students per day in order to provide individual feedback and praise (Kilgus & Eklund, 2016). Therefore, Kilgus & Eklund (2016) argue the use of schoolwide and classwide interventions whenever possible in order to concurrently influence numerous students to preserve time and resources.

Robertson et al. (2020) examined educators' experiences with behavior support plans. Research supports the use of behavior support plans for students with persistent disruptive behavior (Robertson et al., 2020). Educators reported encountering minor barriers that included inconsistent implementation, inadequate resources, and lack of training (Robertson et al., 2020). Malloy et al. (2018) noted that Tier 3 interventions that are implemented are time intensive, but effective for the highest need students (Malloy et al., 2018). Overall, Tier 3 interventions improved overall academic performance, as indicated by significant improvement in GPA, among some of the most challenged students (Malloy et al., 2018). According to Malloy et al. (2018),

"The case study demonstrates that it is possible to organize school resources, particularly staff time, to provide interventions at all three tiers, including an intensive intervention for the most at-risk high school students" (p. 238). Overall, the research explains the overall importance of using evidence-based multitiered practices to improve academic and behavioral outcomes for all students.

Student Assistance Team

School stakeholders utilizing the PBIS framework can create a secure and productive learning environment that is responsive to all students' needs (Bruhn et al., 2014). In addition to the various supports and interventions implemented at each tier of the PBIS framework, the successful and sustained implementation of PBIS requires a focus on organizational systems (Nese et al., 2023). The most common organizational system includes a coordinated teaming process for supporting the implementation of student interventions and supports. Individual student assistance teams consist of various stakeholders like a classroom educator, family member, school counselor, and related service personnel (Nese et al., 2023). A student assistance team has the goal of carefully monitoring the progress of students who are receiving more intensive interventions and supports (Stormont et al., 2012). The team drives the process of establishing the key features of the tiered interventions and supports and educating other educators and staff members (Stormont et al., 2012). Moreover, the team ensures that the interventions and supports are implemented correctly and with fidelity (Stormont et al., 2012).

Data is used to determine the level of support needed for each student within the three tiers. Within the advanced tiers of PBIS, individual student data is collected and assessed. The team is responsible for the design, implementation, and progress monitoring of the individualized student support plan that contains specific interventions and supports for the student based on the

student's behavioral and academic data (Stormont et al., 2012; Nese et al., 2023). Additional data is collected to assist the team in identifying areas of improvement and modifying the student support plan (Nese et al., 2023). According to Stoehr and Isernhagen (2011), "The [student assistance team] process is grounded in the widely-held belief that accommodations, interventions, and instructional strategies tailored to a student's specific need will help that student become more academically and behaviorally successful" (p. 53). Overall, according to Lee and Jamison (2003), student assistance teams that are given professional development in problem-solving and functional behavioral assessment procedures can correctly select interventions, especially when using a team-based approach.

Little research could be found on the impact of student assistance teams. However, Debnam et al. (2012) indicated that most schools have student assistance teams in place to address student behavior concerns and actively use interventions linked to the schoolwide expectations. However, Debnam et al. (2012) suggested that schools have a defined system for collecting and sharing information about student needs during team meetings. Furthermore, a process is needed for identifying, implementing, and evaluating interventions selected for students (Debnam et al., 2012). In addition, it is significant that student assistance teams report findings to school stakeholders, such as educators and families, and publically acknowledge any improvement that students are making in specific areas (Stormont et al., 2012).

Sadler and Sugai (2009) called attention to how the PBIS process affected special education evaluation and eligibility practices. In the study, the elementary schools developed collaborative teams utilizing the PBIS student assistance team practices. The fully integrated collaborative teams were led by a group of general and special educators (Sadler & Sugai, 2009). The team members shared resources and monitored the progress of all students (Sadler & Sugai,

2009). Sadler and Sugai (2009) stated, “In many cases, these teams successfully blurred traditional lines between general and special education resources and processes” (p. 43). Moreover, with each year of PBIS implementation, collaboration between general educators and special education educators at both district and school levels improved (Sadler & Sugai, 2009).

Similarly, Stoehr and Isernhagen (2011) found that educators were satisfied with the student assistance team process and the level of administrator support received (Stoehr & Isernhagen, 2011). Recommendations included decreasing the time between the initial referral of a student and the first meeting of the student assistance team (Stoehr & Isernhagen, 2011). Furthermore, the researchers recommended open communication with the educators concerning the development of the student plan (Stoehr & Isernhagen, 2011). Lastly, educators felt the student assistance team process was helpful to students with academic and behavioral problems, but it had the potential to be a valuable intervention for at-risk students (Stoehr & Isernhagen, 2011).

Implementation Fidelity

Implementation fidelity is the extent and accuracy to which school stakeholders follow the PBIS framework and how well the model is used with integrity (Baker & Ryan, 2014). Fidelity also includes how consistently staff and students are utilizing the PBIS framework. The extent of fidelity can predict the outcomes and sustainability of the implemented PBIS program (Nese et al., 2016). Yeung et al. (2016) discussed the significance of implementation fidelity at the classroom level in order to sustain positive outcomes. Attendance, behavior, and academic outcomes are important indicators of school effectiveness and student outcomes (Freeman et al., 2016). In addition to positive outcomes for students, PBIS is related to increased staff morale, collegiality, educator efficacy, and job satisfaction (McIntosh et al., 2016).

PBIS implementation fidelity scores are the highest in schools that (a) implement for a more significant number of years and (b) have more certified educators working in the building (Pas et al., 2019). Furthermore, when support, such as ongoing training, access to coaching, and coordination of activities and data collection, is provided by state and local district stakeholders, it will lower PBIS program abandonment rates (Nese et al., 2016). Furthermore, Nas et al. (2016) reported that two-thirds of abandoning and sustaining schools were not implementing PBIS adequately by the end of the first year of implementation. Other factors leading to the early abandonment and not implementing PBIS with fidelity included being located in a city and being labeled as a Title I school (Pas et al., 2016).

Research has shown that administrators have a powerful influence (Pinkelman et al., 2015). Administrators play a significant role in the adoption, implementation, sustainability, and effectiveness of interventions (Pinkelman et al., 2015). Therefore, PBIS training emphasizes the importance of administrators in the process of planning and implementation. Researchers have suggested that the unique contextual features in high schools make the adoption of PBIS more complex than at lower grade levels. Therefore, the adoption and implementation at the high school level may require a longer length of time and adaptations in the framework to meet the needs of high schools (Freeman et al., 2016). In addition, according to Freeman et al. (2016) high school students are more motivated by peer acceptance than adult influence, increasing the need for student input.

It is significant to know which factors enhance the implementation and sustainability of PBIS to promote its implementation fidelity within the secondary school level (McDaniel et al., 2018). Estrapala et al. (2021), discussed a study that reported social validity information. “Social validity refers to acceptability, significance, and appropriateness of intervention goals,

procedures, and effects" (Estrapala et al., 2021, p. 289). The study reported high rates of educator and staff turnover, lack of time, and lack of organizational and staff commitment as the major factors contributing to secondary schools stopping the implementation of PBIS (Estrapala et al., 2021). Vancel et al. (2016) noted that social validity influences implementation fidelity. There is a positive correlation between a school's social validity rating and implementation fidelity scores. For example, schools with a higher social validity implemented with higher fidelity and had higher perceived positive outcomes (Vancel et al., 2016). McDaniel et al., (2018) summarized that administrator support is strongly related to the successful implementation of PBIS. Furthermore, McDaniel et al. (2018) reported PBIS readiness, such as foundational skills, buy-in, assets, and support for PBIS implementation, as significant factors that enhance PBIS implementation and sustainability.

Scaletta and Hughes (2021) focused on the practices and processes school leaders indicated led to the successful implementation of the PBIS framework. Results from the study revealed that successful PBIS implementation was promoted by establishing distributed leadership that utilized educators who were leaders, providing training and professional development to all staff, and establishing buy-in and engaging stakeholders in PBIS fidelity (Scaletta & Hughes, 2021). Similarly, Bohanon and Wu (2014) examined the effect of supporting secondary school staff buy-in. A needs assessment was conducted, and professional development was created based on the results (Bohanon & Wu, 2014). The results of the study showed that the schools that received professional development improved in fidelity and showed a significant improvement in the number of office discipline referrals (Bohanon & Wu, 2014). Schools that did not receive a needs assessment and focused professional development decreased in implementation fidelity (Bohanon & Wu, 2014). Lastly, implementation of PBIS with fidelity was

more sustainable when PBIS was promoted by educators and school staff rather than administrators (Scaletta & Hughes, 2021). School leader support is critical to the sustained and impactful implementation of PBIS, but when leaders are non-supportive, there is a greater likelihood that PBIS practices would not result in sustainable implementation (Scaletta & Hughes, 2021). Overall, research has demonstrated that the addition of needs assessment and focused professional development would improve the performance of school stakeholders implementing PBIS (Bohanon & Wu, 2014).

Freeman et al. (2019) examined the relationship between PBIS implementation fidelity and student behavior, attendance, and academic achievement at high schools. Researchers found that high school stakholders implementing PBIS with fidelity may see improvements in student outcomes beyond reductions in office discipline referrals (Freeman et al., 2019). High schools that were implemented with higher fidelity have fewer absences, unexcused tardies, office discipline referrals, and suspensions (Freeman et al., 2019). Similarly, Kim et al. (2018) examined the relationships between implementation fidelity and student outcomes over longer periods of time. The study confirmed the associations between implementation fidelity and student outcomes from a large-scale sample of stakeholders from multiple schools implementing PBIS with a range of fidelity. Schools showed a decline in office discipline referrals and out-of-school suspensions over a three-year period, and higher achievement in mathematics with the implementation of three or more years (Kim et al., 2018). Overall, researchers recommend that secondary school stakeholders that are implementing PBIS should collect and review attendance and academic data in addition to behavioral data to guide their practice and evaluate outcomes (Freeman et al., 2019).

Houchens et al. (2017) evaluated student academic achievement within PBIS schools with varying levels of implementation fidelity. The study found that high fidelity PBIS implementation promoted positive educator perceptions of teaching conditions (Houchens et al., 2017). Moreover, high and medium fidelity schools had significantly higher overall academic achievement scores on statewide achievement tests (Houchens et al., 2017). When Tier 1 interventions and support were implemented with fidelity, Childs et al. (2010) found that it was associated with improved student outcomes (Childs et al., 2010). Additionally, researchers found that fidelity scores predicted student academic achievement when controlling for years of PBIS implementation and school demographic variables (Houchens et al., 2017).

Tiered Fidelity Inventory

The Tiered Fidelity Inventory (TFI) is a tool used to provide a valid, reliable, and efficient measure of the extent to which PBIS is implemented within a school (Algozzine et al., 2019). The PBIS framework emphasizes frequent and accurate data collection and analysis (Gage et al., 2019). The TFI is one of the most frequently used measures of data collection and one that is required in most states that have implemented PBIS (James et al., 2019). The TFI is based on features and items of existing fidelity measures, such as SET, BoQ, TIC, SAS, etc. (Algozzine et al., 2019). According to Algozzine et al. (2019), "The purpose of the TFI is to provide one efficient yet valid and reliable instrument that can be used over time to guide both implementation and sustained use…" (p. 3).

The TFI can be used for initial implementation of PBIS, as a guide for implementation of all Tiers, or as an index for sustained implementation (Algozzine et al., 2019). The TFI was created with Tier I, Tier II, and Tier III subscales. Completing the TFI produces scale and subscale scores indicating the extent to which Tier 1, Tier 2, and Tier 3 core features are in place.

The Tiers and each of their features are listed in the Three Tiers and Subscales of PBIS TFI Table in Appendix A.

Scoring criteria is based on a Likert scale that reflects the degrees of implementation. Teams utilize the TFI rubric to access the level of impact: 0 = not implemented, 1 = partially implemented, and 2 = fully implemented. Faculty members rank their implementation progress within each component based on data collected. The results produced through the TFI can guide PBIS planning and support (Algozzine et al., 2019).

McIntosh et al. (2017) evaluated the psychometric properties of the TFI in a content validity study, a usability and reliability study, and a large-scale validation study. The results of the study showed strong construct validity for assessing fidelity at all three tiers, high usability for action planning, and strong relations with existing PBIS fidelity measures (McIntosh et al., 2017). Researchers recommended that the TFI be completed as a school team with an external coach for more valid scores. (McIntosh et al., 2017). Lastly, the research found the TFI's usability to be easy and straightforward to complete and score and that it assessed important aspects of all three tiers (McIntosh et al., 2017). Overall, according to James et al. (2019), "…the TFI has strong construct validity, internal reliability, and test-retest reliability (p. 1515).

Academic Achievement

PBIS is designed to create a learning environment that decreases problematic behaviors and allows educators to have more time for effective student instruction (Oyen & Wollersheim-Shervey, 2019). As a result, educators have more time to teach curriculum to students that are engaged in learning. Oyer and Wollersheim-Shervey (2019) noted that early research found that when school stakeholders implemented PBIS, it resulted in educators reporting students' increased attention to academic work. Moreover, according to Horner et al. (2009), "...improving

the social behavior of students combined with effective curriculum and instruction is expected to result in better academic outcomes" (p. 140). Limited information is available on improvements in academic achievement for secondary school stakeholders implementing PBIS (Estrapala et al., 2022). Therefore, research associated with academic achievement at elementary, middle, and secondary grade levels is discussed.

Much research shows that PBIS is related to increases in academic achievement through positive changes in student work habits and social growth (Kelm et al., 2014). For example, Horner et al. (2009) found that PBIS was associated with an increase in third grade reading performance. The elementary schools in the study were provided with professional development to implement PBIS with fidelity over a three-year period (Horner et al., 2009). The results provided statistically significant documentation that when stakeholders implement PBIS with fidelity, the schools are perceived as safer environments (Horner et al., 2009). Moreover, the proportion of third grade students meeting or exceeding state reading assessment standards improved over the three years (Horner et al., 2009). Researchers found that improving the behavior of students through PBIS interventions, and utilizing effective curriculum and research-based instructional strategies, resulted in better academic outcomes (Putnam et al., 2006)

At the middle school level, Nocera et al. (2014) studied a low-performing school that implemented PBIS as part of a comprehensive school improvement process after five consecutive years of failing to meet adequate academic progress. The middle school utilized data-driven decision making and data teams. A review of state test proficiency data showed a 25% increase in reading scores and an 11% increase in math scores over a three-year period (Nocera et al., 2014). The school had made enough academic gains to be removed from the state list of schools needing improvement. During interviews, educators indicated that students found the reward system to be

highly motivating within the learning environment (Nocera et al., 2014). PBIS interventions and strategies have a large impact on at-risk students that are typically dealt with by punitive disciplinary interventions (Hill & Brown, 2013). When PBIS is successfully implemented by school stakeholders, and schoolwide systematic change is developed to support the inclusion of the at-risk students, PBIS implementation can lead to the retention of all at-risk students and improved academic performance for all students (Hill & Brown, 2013).

It was determined by McCrary et al. (2012) that PBIS is an approach that can be effective in rural school settings to promote student engagement in the learning process, especially with students with behavioral and emotional issues. When children are disengaged with the learning process, they receive less instruction, less positive feedback, enjoy and attend school less, and drop out-of-school at higher rates (McCrary et al., 2012). The researchers stated, "The implementation of SWPBS in the four rural schools reported in this study demonstrated that by engaging school personnel in providing positive behavioral supports, students spent less time in restrictive environments (i.e., in-school suspension, alternative school) and more time in their assigned classrooms" (McCrary et al., 2012, p. 6). Similarly, Lane et al. (2007) found that middle and high school students with behavioral and emotional issues responded to PBIS interventions. The researchers found that all students showed an increase in GPA with many showing moderate improvement in their GPA during the first year of PBIS implementation (Lane et al., 2007). Students with internalizing behavior, such as avoiding or withdrawing from social situations, were the most responsive group and significantly improved their GPA (Lane et al., 2007).

Oyen and Wollersheim-Shervey (2019) examined which critical features of PBIS had the most significant impact on student achievement. Expectations taught and district-level support was related to total achievement in math and English after researchers controlled for other

features of PBIS (Oyen & Wollersheim-Shervey, 2019). Oyen and Wollersheim-Shervey (2019) summarize PBIS and student achievement:

> PBIS proposes to increase student achievement by creating a more positive school climate where students are more likely to attend school, teachers have more minutes to teach due to a more positive learning environment, and teachers are more likely to have students engaged in instruction. (p. 398)

Overall, this can lead to a more suitable environment for instruction, which may improve academic outcomes. Furthermore, prioritizing the critical features of PBIS can have the most considerable impact on students (Oyen & Wollersheim-Shervey, 2019).

Researchers have suggested that PBIS implementation may be indirectly related to academic achievement through attendance and behavioral outcomes. Therefore, it is recommended that educators directly teach and reinforce behaviors which support academic achievement (Freeman et al., 2019). Lassen et al. (2006) examined the relationship between the decrease of office discipline referrals due to PBIS implementation and student academic achievement. The results of the study demonstrated a significant relationship between student problem behavior and academic performance (Lassen et al., 2006). The schools had a significant decrease in office discipline referrals and suspensions and an increase in student standardized math and reading scores (Lassen et al., 2006). The results of the research indicated that each office discipline referral and suspension led to lost instruction time for the student (Lassen et al., 2006). By reducing office discipline referrals and suspensions, Lassen et al. (2006) stated "...a school is likely to produce a number of positive effects and results in overall improved functioning and performance" (p. 709).

Gietz and McIntosh (2014) found that student perceptions of their school environment and their relationship with academic achievement were significantly associated with academic achievement. “Improving student perceptions by implementing positive changes to the school environment can have substantial positive effects on student achievement” (Gietz & McIntosh, 2014). The study indicated that the most effective behavior interventions to enhance academic outcomes included teaching expectations, reducing bullying, and increasing safety (Gietz & McIntosh, 2014). Researchers named PBIS as an intervention that aims to teach expectations for behavior, monitors and encourages positive behaviors, prevents problems behaviors, and can provide a solid foundation for both social and academic success (Gietz & McIntosh, 2014). The results of the study support teaching socially responsible behavior in the classroom as a way to increase positive student behavior and to improve student academic achievement.

Limited information is available on improvements in academic achievement for secondary school stakeholders implementing PBIS (Estrapala et al., 2022). Literature has not been consistently effective at promoting academic achievement. Implementing PBIS with fidelity may lead to the indirect effect of academic achievement (James et al., 2019). A more extended implementation period may be required for academic achievement outcomes to emerge (James et al., 2019). Other researchers have hypothesized that more time is needed for the academic effects to manifest. Researchers stated that academic outcomes might be an indirect effect of implementing PBIS with fidelity (James et al., 2019). Therefore, it requires a more extended implementation period. For example, James et al. (2019) conducted a study that examined the relationship between PBIS fidelity level and changes in academic achievement outcomes. The researchers noted that PBIS was ineffective in promoting academic achievement but explained

that this was because the relationship was examined over a short, two-year period (James et al., 2019).

The links between PBIS, academics, attendance, and behavior across secondary schools were examined by Freeman et al. (2016) over one year. The study did not find any relationship between PBIS and academic performance. Freeman et al. (2016) explained that PBIS is not expected to affect academic performance within the first year of implementation. A similar study by Houchens et al. (2017) noted no significant differences in student achievement levels between PBIS and non-PBIS schools. The analysis revealed that student academic outcomes were significantly higher in schools that implemented PBIS with high and medium fidelity than low-fidelity PBIS schools (Houchens et al., 2017).

Studies conducted with secondary schools that implemented PBIS with fidelity had more promising results. Kelm et al. (2014) analyzed the relationship between implementing PBIS and student academic and behavioral outcomes at the elementary and middle school levels. Results showed a 44% increase in reading, a 56% increase in writing, and a 25% in math over a one-year period (Kelm et al., 2014). The school's academic achievement was higher than the district's average for all grade levels and subjects (Kelm et al., 2014). The study indicated that when PBIS is implemented with high fidelity it is related to improvement in student academics (Kelm et al., 2014). Additionally, Houchens et al. (2017), found that student academic outcomes were significantly higher at PBIS schools that implemented with high and medium fidelity.

Childs et al. (2010) described Florida's Positive Behavior Support Project data, which indicated that implementing Tier 1 with fidelity was associated with improved student outcomes, specifically a 1% increase in student reading scores. Similarly, Bradshaw et al. (2010) indicated that schools trained in PBIS observed an improvement on three of the four academic achievement

tests compared to the untrained schools. Likewise, Muscott et al. (2008) presented outcomes for the first cohort of schools in New Hampshire that were involved in implementing PBIS. Implementation was associated with academic gains in math for most schools that implemented with fidelity (Muscott et al., 2008).

Studies conducted over a more extended period were encouraging. For example, a study conducted over nine years by Madigan et al. (2016) evaluated the long-term impact of PBIS on student achievement. The researchers found that implementation of PBIS was significantly associated with increased student academic achievement (Madigan et al., 2016). Furthermore, the rate of change for students' academic achievement was four times greater than the control school (Madigan et al., 2016). Comparably, Gage et al. (2017) examined the effect of PBIS implemented with fidelity on academic achievement data over ten years. The results indicated that school stakeholders implementing PBIS with fidelity had statistically significantly more students at or above grade-level benchmarks in reading and mathematics (Gage et al., 2017). Equally, Pas et al. (2019) conducted a study over six years. Schools trained in PBIS demonstrated statistically significant improvements greater than schools not trained in PBIS. Elementary and secondary schools noticed an improvement in academics. The effect sizes for academic proficiency were medium to large for reading and ranged from small to large for math in elementary schools (Pas et al., 2019). In secondary schools, effect sizes for math were medium and large for reading proficiency (Pas et al., 2019). Similarly, Sadler and Sugai (2009) conducted a ten-year study with all grade levels. The district experienced an increase in the percentage of students on track for early reading benchmarks and an improvement in special education evaluation of learning disabilities (Sadler & Sugai, 2009).

Increased student achievement can be attributed to several factors. When behavior problems are effectively addressed or prevented before they result in a suspension or expulsion, this will lead to increased time in school for students, which can affect student achievement (Bazelon Center for Mental Health Law, 2010). Sadler and Sugai (2009) found student behavior and academic performance data to be related. Students' average number of office discipline referrals and their average scores on the state reading assessment suggested that students with zero to one office discipline referral were more likely to earn higher scores on the reading assessment (Sadler & Sugai, 2009). For example, fifth grade students scored eight points higher than their peers who had received six or more office discipline referrals (Sadler & Sugai, 2009). Moreover, tenth grade students scored an average of nine points higher (Sadler & Sugai, 2009). This suggests that if classroom behavior improves there will be more time for teaching and learning (Bazelon Center for Mental Health Law, 2010). A positive and orderly environment that does not have frequent disruptions will lead to greater student and academic engagement (Bazelon Center for Mental Health Law, 2010). In general, PBIS reduces discipline problems, suspensions, and expulsions. It improves the school's overall academic outcomes because it creates a climate that is conducive to learning (Bazelon Center for Mental Health Law, 2010).

Overall, PBIS can lead to student academic achievement through the systems and practices used to create motivation, engagement, positive relationships, and a positive school climate. The PBIS framework can create a climate that promotes setting and achieving social, behavior, and academic goals in a positive supportive environment. According to Petrasek et al. (2022), "Student success is facilitated in an environment, undergirded by supportive and positive relationships, where the social norms and supports are oriented more clearly toward a shared culture of social, academic, and behavioral success."

Student On-Task Behavior

Classroom engagement and on-task student behavior can allow an educator to deliver instruction and improve the learning environment for all students (Speight & Kucharczyk, 2021). Alter et al. (2013), identified off-task behavior as the most frequently occurring problematic behavior. “It is possible that off-task student behavior may be best typified as gateway behavior that leads to other challenging behaviors” (Alter et al., 2013, p. 64). When students are off task, they engage in other behaviors, such as verbal disruptions, which leads to a loss of instructional time and increased frustration among educators (Alter et al., 2013). In traditional classroom settings when levels of on-task behaviors are low, educator integration of PBIS can facilitate improvement in student engagement (Speight & Kucharczyk, 2021). Developing clear routines for students, teaching expected behaviors, acknowledging behavior, and providing reinforcement or praise are all examples of strategies used to increase on-task student behavior and student engagement.

Behavior specific praise, a strategy utilized in PBIS, demonstrated a very large effect on increasing desired academic and social behaviors, such as increasing on-task behavior, punctuality, and appropriate behaviors (Royer et al., 2019). In a study conducted by Speight et al. (2020), a PBIS classroom-level behavior management system was implemented to determine changes in on-task behavior of adolescent students and the effects of educator behavior-specific praise statements and reprimands (Speight et al., 2020). Findings indicated a relationship between the intervention of behavior specific praise and increases in on-task student behavior (Speight et al., 2020). Moreover, elevated levels of satisfaction were indicated by students and educators (Speight et al., 2020). Similarly, Royer et al. (2019) found that on-task student behavior increased, inappropriate behaviors decreased, and student tardiness was reduced when educators

utilized behavior-specific praise. When students receive praise, it should be contingent on their behavior, specific, sincere, varied, and credible (Markelz et al., 2021). Educators should say or write the specific behavior the student exhibited and how the student met the expectation (Markelz et al., 2021). “Specifically, praising effort instead of ability may help students attend to the method of tasks and be motivated by the opportunities and potential hard work may bring” (Royer et al., 2019). This can be utilized within PBIS as a way educators recognize students who meet the schoolwide expectations, reinforce desired behaviors, and remind struggling students of the expectations (Royer et al., 2019).

Any effort to enhance praise as a classroom management strategy and positively affect student behaviors is a worthwhile endeavor (Markelz et al., 2021). Cook et al. (2017), evaluated the impact of educators’ ratios of positive to negative interactions with their students by increasing specific praise, approval statements, and positive non-verbal gestures. All interactions used in the study can be found in the interventions and strategies of PBIS. Intervention classrooms presented significant reductions in student behaviors not related to the task and disruptive to the learning environment (Cook et al., 2017). Furthermore, intervention classrooms showed an increase in instances of the students paying attention to the instruction and working on the academic task (Cook et al., 2017). Cook et al. (2017) explains the impact this had on instruction, “...students in the intervention group increased their academic engagement by an average of 22%, which corresponds to an extra 13.2 min of academic engagement per instructional hour or an additional hour over the course of a 5-hr instructional day” (p. 74).

Xie et al. (2022), explained how students who perceive themselves as proficient adopt self-determination for performing academic activities and tasks. Perceptions of proficiency are the results of feedback, communication, praise, and rewards related to the student's ability levels (Xie

et al., 2022). Similarly, in a study by Davis et al. (2014), students were taught how to self-monitor on-task classroom behavior without additional reinforcement and with reinforcement, such as educator praise. “Findings suggest that only the self-monitor plus reinforcement intervention had a marked effect on on-task behavior” (Davis et al., 2014). In summary, researchers have demonstrated that the use of PBIS interventions is an effective strategy for decreasing inappropriate student behavior. Furthermore, it maximizes academic engagement, increases on-task student behavior and student learning.

Engagement of all stakeholders, including families, is a core feature of PBIS especially since engagement can increase the efficiency and effectiveness of behavioral supports (Fefer et al., 2020). Family involvement is critical to support the effectiveness of PBIS interventions (Stormont et al., 2012). A study by Fefer et al. (2020) evaluated behavioral approaches to enhance communication between educators and parents and improve student on-task classroom behavior. Results found that positive parent contact improved on-task classroom behavior, and communication between educators and parents was enhanced (Fefer et al., 2020).

Several findings support the use of praise and feedback, which can have an effect on student on-task behavior. Moreover, it can impact student motivation. "Students’ reasons for engagement, or why they want to ‘do’ an academic task, could either be internally or externally motivated” (Koenka et al., 2021). Koenka et al. (2021) found that students who received comments rather than only a grade on assessments experienced higher internal motivation, which led to an increase in on-task student behavior. This translated into mastery of learning standards and student achievement. An increase in on-task student behavior was also seen in a study by Faul et al. (2012) where educators utilized a verbal prompt at the beginning of class that reminded students of classroom expectations, a strategy used in PBIS. The researchers found a clear

decrease in off-task behaviors and an increase in on-task behavior in class when the verbal prompt was used (Faul et al., 2012). Faul et al. (2012) stated, “In this study, the prompt was specific and linked directly to the positively stated schoolwide expectations, and prompting resulted in decreased off-task behavior for study participants” (p. 53). Researchers recommended that educators provide a brief prompt to remind students how to behave appropriately before class starts and pair the prompts with other effective classroom management strategies, such as reinforcement (Faul et al., 2012).

According to Petrasek et al. (2022), “Using PBIS processes, teachers can cue, prompt, rehearse, reinforce, and engage social supports to reinforce motivation and engagement for school success.” Freeman et al. (2019) suggested that the relationship between PBIS and academic performance may be an indirect one that results from mediating attendance and behavioral outcomes. Moreover, if students know they will be acknowledged and rewarded for good behavior, then they are more likely to continue those behaviors (Wadesango, 2022).

Behavior

Preventing classroom behavior issues is a pressing concern in education. Implementing PBIS can help to decrease problem behaviors and increase positive behaviors, especially since PBIS principles are rooted in effective classroom management (Elrod et al., 2022). Classroom management strategies, such as establishing clear behavior expectations, recognizing students for and reinforcing prosocial behavior, building trust and relationships between educators and students, and responding to inappropriate behaviors with guidance and redirection are common PBIS strategies for improving student behavior. PBIS is an alternative to punitive discipline that focuses on prevention rather than punishment by promoting positive behaviors and supporting students with interventions (Elrod et al., 2022). Classroom management and preventing disruptive

behaviors are commonly discussed themes when reviewing the literature. All studies measuring office discipline referrals and in and out-of-school suspensions reported improvements after school stakeholders implemented PBIS.

Bradshaw et al. (2012) conducted research on how implementing PBIS would result in students having better emotion regulation and prosocial behaviors. The results of the research indicated that students in PBIS schools displayed lower levels of disruptive behaviors and concentration problems (Bradshaw et al., 2012). Researchers also observed significant intervention effects on children receiving office discipline referrals (Bradshaw et al., 2012). When educators and administrators consistently promote positive behaviors and support students with interventions utilizing data, disciplinary infractions are expected to decrease (Elrod et al., 2022). The results of the research by Bradshaw et al. (2012) demonstrated the impact of PBIS on early-onset behaviors and social-emotional problems.

In a similar study, Gage et al. (2018) explored the effects of PBIS Tier 1 interventions and supports on school suspensions and behavioral incidents in elementary and intermediate schools. Results showed a significant decrease in suspensions when school stakeholders implemented PBIS (Gage et al., 2018). Furthermore, school stakeholders implementing PBIS with fidelity had fewer out-of-school suspensions and disciplinary incidents than schools with no PBIS professional development and less implementation fidelity (Gage et al., 2018). This suggests that PBIS implementation fidelity has a direct relationship with behavioral incidents and suspension. In other words, the more components of Tier 1 that a school implements, the more impact on behavioral incidents and the less possibility a student will receive suspension (Malloy et al., 2018). Overall, these findings suggest that PBIS is an effective model for reducing disciplinary exclusions and incidents.

Other researchers have found that behavioral problems decrease as a result of PBIS implementation and implementing PBIS for an extended period of time has led to improvements in fidelity scores (Elrod et al., 2022). Pas et al. (2019) conducted a study over six years. Schools trained in PBIS demonstrated statistically significant improvements compared to schools not trained in PBIS. In addition, elementary and high schools saw a statistically significant improvement in suspensions with a considerable improvement in truancy in secondary schools. Bradshaw et al. (2010) noted that schools trained in PBIS were able to implement the program with fidelity. This led to a significant reduction in the percentage of students with major and minor office discipline referrals and suspensions rates (Bradshaw et al., 2010). Similarly, Muscott et al. (2008) presented outcomes for the first cohort of schools in New Hampshire involved in implementing PBIS as part of a statewide system change. An overwhelming majority of the school stakeholders implemented PBIS with fidelity within the first two years. The implementation resulted in a reduction of 6,010 office discipline referrals and 1,032 suspensions, with middle and high schools experiencing the most benefit (Muscott et al., 2008).

Researchers have found an association between decreased office discipline referrals and PBIS implementation. A study by Vincent and Tobin (2011) discussed PBIS implementation at the whole school level, classroom level, non-classroom level, and individual student level. PBIS implementation in the classroom appeared to be related to decreased office discipline referrals and classroom exclusions in high schools (Vincent & Tobin, 2011). Similarly, a decrease in office discipline referrals over a three-year period was also seen in a study by Bohanon et al. (2006). Furthermore, there was a decrease in the proportion of students who required Tier 2 and Tier 3 interventions and supports (Bohanon et al., 2006). Flannery et al. (2014) examined the effects of PBIS on individual student problem behaviors for three years. Results showed a statistically

significant decrease in office discipline referrals in schools that implemented PBIS compared to schools that did not implement PBIS (Flannery et al., 2014). Overall, the researchers' findings indicated that PBIS in the high school setting is an important process for improving outcomes for educators and students. Additionally, researchers found that as the fidelity of implementation of PBIS increased, office discipline referrals significantly decreased (Flannery, 2014).

Researchers have suggested that there is a simultaneous relationship between PBIS fidelity, school climate, school behavior, and academic achievement. Bruhn et al. (2021) found high schools increased their graduation rates and decreased their number of office discipline referrals and out-of-school suspensions after implementing PBIS Tier 1 interventions. Furthermore, Bruhn et al. (2021) reported the school climate, safety, and relationships between students and their peers, educators, and school staff were better. Freeman et al. (2016) examined the relationship between PBIS and academics, attendance, and behavior across high schools that implemented and maintained PBIS with fidelity. The study found a reduction in office discipline referrals and an increase in attendance rates (Freeman et al., 2016). The relationship between high school level outcomes and PBIS was also analyzed in a large sample of high schools (Freeman et al., 2015). PBIS had a statistically significant positive effect on attendance at the high school level (Freeman et al., 2015). In addition, the positive impact on attendance is directly associated with decreased dropout rates for schools that implemented PBIS with fidelity for a more extended period (Freeman et al., 2015).

According to Bradshaw et al. (2010), a rural middle school had a 42% reduction in office discipline referrals, while an urban elementary school observed a reduction in discipline problems and improvement in academic achievement after the implementation of PBIS. Luiselli et al. (2002), studied a middle school that implemented PBIS over a four-year period. They found that

school attendance increased, and students maintained higher grades after PBIS was implemented. Similarly, Johnson et al. (2013) provided evidence of reductions in behavioral incidents and improvements in school attendance. Moreover, increases in career and technical industry certifications were seen following the implementation of PBIS (Johnson et al., 2013). “PBIS is a viable approach for improving school behavior and offers a framework for practices that may improve behaviors directly related to academic performance” (Johnson et al., 2013, p. 141). Lastly, the study reported the impact of increased perceptions of safety by staff (Johnson et al., 2013).

More special education services are being required in schools due to the steadily increasing number of students with aggressive, disruptive, and antisocial behaviors (Barrett et al., 2008). A study by Grasley-Boy et al. (2019) investigated discipline data from California. Results found statistically significant fewer out-of-school suspensions and days missed due to out-of-school suspensions when school administrators and educators implemented PBIS with fidelity (Grasley-Boy et al., 2019). Furthermore, students with disabilities were statistically significantly less likely to be sent to an alternative setting due to behavior in schools where PBIS was implemented with fidelity (Grasley-Boy et al., 2019). Simonsen et al. (2022), conducted research that further investigated the relationship between PBIS exposure and fidelity and exclusionary discipline, such as out-of-school suspension and in-school suspension, for students with disabilities. The study found that students with disabilities were less likely to experience in-school suspension in schools that were exposed to PBIS. Schools that implemented Tier 1 PBIS with fidelity, were less likely to utilize out-of-school suspension and in-school suspension with students with disabilities (Simonsen et al., 2022). The findings demonstrated the positive effects that implementing PBIS with fidelity can have on students, including students with disabilities

(Grasley-Boy et al., 2019). Researchers suggest that school stakeholders implement support within the PBIS framework to create safe, positive, and predictable environments for all students, including those with disabilities (Simonsen et al., 2022).

A low-performing middle school implemented PBIS as part of a comprehensive school improvement process that involved academic and behavioral goals (Nocera et al., 2014). There was a reduction in the number of discipline infractions. Infractions for problem behavior declined an average of 40% over two years (Nocera et al., 2014). The improvement plan goal of reducing overall suspension rate by 15% was exceeded (Nocera et al., 2014). Spaulding et al. (2010) highlighted patterns in terms of location and time of day of discipline referrals and consequences for students. For example, tardiness and skipping were the most common office discipline referrals for high school students, with the most significant percentage of office discipline referrals occurring in the classroom (Spaulding et al., 2010). The analysis showed that over 88% of elementary grade students had less than one office discipline referral for the academic year, 72% for middle schools, and 67% for high schools (Spaulding et al., 2010). Educators indicated that the PBIS promoted a consistent discipline approach (Nocera et al., 2014). Furthermore, educators felt that it encouraged a positive, preventative approach that allowed educators and students to work together at the earliest sign of problem behavior before the situation escalated (Nocera et al., 2014). Lastly, McIntosh et al. (2021) examined the effects of PBIS on school discipline. The researchers provided professional development to implement PBIS, then, an analysis was completed that showed a significant decrease in school discipline and the number of office discipline referrals.

School Climate and Culture

School climate is significant for students' needs for support, safety, and autonomy. School climate improvement is seen as an asset-based approach to addressing problems like substance use and violence in secondary schools (Voight & Nation, 2016). These problems will be less likely to occur in schools with a positive school climate that are safe and supportive. "School climate refers to the school physical and social environment and is typically operationalized as the aggregation of individual student and staff behaviors and perceptions" (Voight & Nation, 2016, p. 174). Students that receive suspensions generally have worse perceptions of school climate and a negative attitude toward school compared to their peers without a record of discipline incidents (Huang & Anyon, 2020). Therefore, the reduction in discipline incidents through PBIS is significant to the climate and culture of a school.

Multiple studies have shown that schools with higher climate ratings have safer learning environments, better academic and behavior outcomes, and increased levels of student engagement (Elrod et al., 2022). For example, Bruhn et al. (2021) described a high school's approach to implementing Tier 1 interventions. Within the first year of implementation, students noticed changes in the school and reported that the school climate, safety, and relationships with peers, educators, and other school staff were better (Bruhn et al., 2021). The high school decreased its number of office discipline referrals and out-of-school suspensions and maintained its number of in-school suspensions (Bruhn et al., 2021). Furthermore, the high school increased their graduation rate (Bruhn et al., 2021).

Bradshaw et al. (2008) researched the effect of PBIS on organizational health of a school (Bradshaw et al., 2008). Educators and administrators showed significant improvements in several aspects of their school's organizational health. "Training in PBIS appears to have made

the school a more friendly, positive, and collaborative work environment for staff" (Bradshaw et al., 2008, p. 459). The researcher indicated that the positive increase in staff perceptions was the result of improved behavior management, which provided more opportunities to focus on academics and a greater focus on positive student behaviors (Bradshaw et al., 2008). Similarly, Houchens et al. (2017) analyzed educator perceptions of their school climate and culture between PBIS and non-PBIS schools, and schools varying in PBIS implementation fidelity. Researchers found that educators in PBIS schools reported higher student and faculty understanding of behavioral expectations (Houchens et al., 2017). Moreover, a climate and culture of professional trust and respect existed (Houchens et al., 2017).

A positive school climate is one in which all stakeholders feel safe and supported, experience positive relationships with one another, and share in the decision-making process (Elrod et al., 2022). Kelm et al. (2014) found that students' perceptions of safety increased and the feeling of being bullied decreased over the two years of PBIS being implemented. The results of the case study showed that the changes in school practices and student outcomes from the implementation of PBIS were associated with student perceptions of school climate (Kelm et al., 2014). Students stated that they understood what was expected of them at school (Kelm et al., 2014). Reactions from educators, staff, and parents indicated an overall appreciation for the PBIS approach (Kelm et al., 2014). Researchers hypothesized that the increase in communication among staff, parents, and students regarding PBIS and its outcomes may have increased their understanding and acceptance of the program and its approach (Kelm et al., 2014). Moreover, researchers believed that the staff were more willing to implement and utilize the PBIS program because data highlighting the relationship between PBIS and its positive outcomes was presented at monthly staff meetings (Kelm et al., 2014).

Närhi et al. (2017) completed a randomized study implementing interventions that included educators using clear behavioral expectations, behavior-specific praise, positive feedback, etc. (Närhi et al., 2017). Researchers found that the classrooms receiving the interventions had a medium to large improvement in the classroom climate (Närhi et al., 2017). Moreover, the climate of the classes remained at a constant level during post-intervention measures (Närhi et al., 2017). Christofferson and Callahan (2015) also indicated that the implementation of PBIS improved school climate. PBIS provided administrators, staff members, and students with a proactive measure to address student behavior and classroom disruptions. The overall perception of the students, staff, and parents showed a positive increase between the first two years of PBIS implementation (Christofferson & Callahan, 2015). In a similar study focusing on perceptions of secondary school staff members, Lawrence et al. (2022) found that all staff members favorably described their school climate and culture after PBIS implementation. The school climate was described as positive, friendly, welcoming, and motivating (Lawrence et al., 2022). Furthermore, staff members noted that discipline practices and acknowledging positive student behavior improved with PBIS implementation (Lawrence et al., 2022). The data suggest that PBIS improves perceptions, therefore, improving the overall school climate. Moreover, the results suggest that an easily applicable intervention may produce some of the most significant improvements in classroom climate and culture (Närhi et al., 2017,). Overall, the results of these studies support the implementation of PBIS in secondary schools to promote positive school climate and culture.

Lloyd et al. (2022) conducted a series of focus groups with middle school students to learn their perception of PBIS, the impact of the program, and the extent to which students were involved with PBIS. Researchers found that middle school students' understanding of PBIS was

focused on the acknowledgment system (Lloyd et al., 2022). Some of the impacts discussed included positively impacting student behavior, academic performance, attendance, and attitudes about the school, educators, and students. Students found that through PBIS they felt their voices were being heard; it helped create a positive shift in student attitudes toward school; and encouraged students to help others in their school (Lloyd et al., 2022). Overall, PBIS impacted the school climate in a positive way and students described the school as safe, positive, and accepting.

Data from educators, administrators, students, and parents about school climate and culture can be used to inform PBIS school improvement efforts. For example, during a three-year study, Elrod et al. (2022), found an increase in school climate after PBIS implementation. Students' perceptions of the overall school climate increased significantly, which researchers suggested was influenced by the changes in student behavior and discipline practices (Elrod et al., 2022).With each additional year of PBIS implementation, more positive outcomes were observed. Elrod et al. (2022) concluded the study by stating, "This suggests that as schools create safer and more supportive environments and incorporate preventative behavior management strategies, faculty and staff can more consistently implement PBIS principles" (p. 393). James et al. (2018), found that school safety was identified as a strength by all school stakeholders. Staff identified staff connectedness and structure for learning as strengths after the implementation of PBIS (James et al., 2018). There was a consensus among parents that the school provided an environment with ambitious standards and academic support after PBIS implementation (James et al., 2018). The parents felt that the school set clear rules for behavior, was consistent in enforcing expectations, and addressed behavior problems fairly (James et al., 2018). Additionally, the parents noted that their students enjoyed attending school and parents felt comfortable interacting

with educators at the school (James et al., 2018). Overall, researchers noted that school climate is an important consideration within a PBIS framework, because PBIS aims to promote a positive school experience for all stakeholders.

Poor school climate and culture is associated with an increase in student bullying and negative student outcomes. According to Bradshaw (2013), "In contrast, positive, schoolwide approaches to student behavior management have been shown to improve school climate and will, in turn, likely reduce bullying" (p. 293). Bradshaw et al. (2015) noticed the growing interest in the use of PBIS to address issues related to school climate and bullying. Analysis of the data indicated that schools with higher baseline rates of bullying implemented PBIS with greater fidelity (Bradshaw et al., 2015). Additionally, McDaniel et al. (2018) found that as the administrative time to process each office discipline referral was reduced, the time could be used more proactively by administrators and educators. The implementation of PBIS and the decrease in adverse student outcomes suggests that PBIS can have a significant improvement of school climate (McDaniel et al., 201).

Relationships Between Educators and Students

Relationships between educators and students are significant for secondary students' engagement (Roorda et al., 2019). Additionally, these relationships are essential to adolescents' developmental, emotions, and psychological progress (Ma et al., 2021). Educators that utilize PBIS strategies can improve the relationship development between educators and students. Several studies use the attachment theory to explain relationships between educators and students. This theory states that a positive relationship with educators enables students to seek comfort and support from their educators in times of stress and provide them with a secure base from which they can explore the classroom environment (Roorda et al., 2019). Because of this relationship,

students are enabled to become engaged with learning activities, therefore, performing better on school tasks (Roorda et al., 2019). If students share a negative relationship with their educator, this will hamper their engagement with learning activities (Roorda et al., 2019). High quality relationships between educators and students result in positive outcomes for students, such as improved student behavior, relationships with peers, and academic performance.

PBIS is one method utilized to support relationships between educators and students. McPhee et al. (2017) examined how PBIS and relationships between educators and students influence student outcomes and school climate. Researchers discovered that the rituals and routines of PBIS provide opportunities for positive interactions between educators and students that create and enhance positive relationships between educators and students (McPhee et al., 2017). Moreover, these relationships support positive student behavior in a way that is consistent with the goals of PBIS (McPhee et al., 2017). McPhee et al. (2017) found that poor relationships between educators and students had a negative impact on PBIS goals and contribute to an increase in negative student behaviors. Little research has been done to examine how PBIS intersects with relationship-building between educators and students. However, research has shown that relationships between educators and students have a strong impact on PBIS.

In secondary students, academic engagement begins to decline, and students have an increased need for positive and supportive relationships with their peers and non-parental adults (Engels et al., 2016). A study by Krane et al. (2017), obtained first-person perspectives on the development of positive relationships between educators and students in secondary education. The students in the study described how educators influenced them through what and how they taught, their demeanor, and how they related to students. Educators' kindness was significant in the development of positive relationships (Krane et al., 2017). Furthermore, students in the study

described helpfulness, care, and support as traits representative of educator kindness (Krane et al., 2017). Students appreciated educators who supported their emotional needs and helped students with academic challenges (Krane et al., 2017). The study indicated that students appreciated recognition from educators in numerous ways (Krane et al., 2017). Recognition included basic recognition in everyday life, personal recognition in individual conversations, and recognition through practical help and assistance (Krane et al., 2017). Students appreciated educators who cared about them as individuals and learners (Krane et al., 2017). According to Engels et al., (2016), a positive relationship between educators and students can contribute to students' positive self-perceptions regarding academic success, which can increase students' level of academic engagement (Engels et al., 2016). Engels et al. (2016) found that "students with positive teacher-student relationships had higher levels of behavioral engagement overtime, whereas students with negative teacher-student relationships showed lower levels of behavioral engagement overtime" (p. 1203).

Ma et al. (2021) examined the association of student learning outcomes and relationships between educators and students. The research discovered that relationships between educators and students, and students' academic performance are positively correlated with one another (Ma et al., 2021). Allen et al. (2013) found that classrooms with the highest level of student achievement were characterized by a positive emotional climate with sensitivity to student needs, use of diverse and engaging instruction, and a focus on analysis and problem solving (Allen et al., 2013). Furthermore, parent involvement moderates the relationship between educators and students and students' academic performance (Ma et al., 2021). Therefore, parent involvement has a significant impact on student's academic performance (Ma et al., 2021). Researchers recommended professional learning for educators and school staff on how to improve relationships with students

through classroom interactions, teaching skills, showing mutual respect and care for students, and building warm and supportive interpersonal relationships with students (Ma et al., 2021). Researchers stated that relationships between educators and students are developed through multilevel systems, such as classroom environment, school climate and culture, and collaboration between parents and educators (Ma et al., 2021).

In similar research, Scales et al. (2020) found that students who improved in developmental relationships with educators reported greater academic motivation, positive perceptions of school climate and instructional quality, and increase in student GPA. Scales et al. (2020) stated,

> Drawing on self-determination theory, we define developmental relationships as close connections through which young people discover who they are (their identity), cultivate abilities to shape their own lives (agency, and engage with and contribute to the world around them contributions and connections to community (p. 502)

Students talked about how it greatly impacted them when an educator apologized or was honest about something they did wrong (Scales et al., 2020). Students responded to educators that challenged growth by demonstrating high expectations and helping students learn from their mistakes, common PBIS strategies. The study suggested that strengthening relationships between educators and students is powerful and should be a central part of schools' missions, visions, and plans (Scales et al., 2020).

Researchers have found that educator-student relationships are specifically beneficial for math achievement in early grade levels because they are strong predictors of student achievement in upper grade levels (Olsen & Huang, 2021). Negative relationships between educators and students were associated with lower math achievement in elementary students (Olsen & Huang,

2021). Olsen and Huang (2021) researched if closeness and conflict between educators and students, and student socioeconomic status were associated with first grade math achievement. Researchers found that both relationships between educators and students, and student socioeconomic status were significant predictors of math achievement (Olsen & Huang, 2021). Students with higher socioeconomic status had an increase in student math achievement when strong relationships between educators and students existed (Olsen & Huang, 2021). Students create the foundation for successful adaptation to social and academic environments through the relationships built with their educators (Olsen & Huang, 2021). “Specifically, students who have close relationships with their teachers were found to have better academic performance, liked school more, engaged at higher rates, and exhibited greater self-direction" (Olsen & Huang, 2021, p. 471). Lastly, Olsen and Huang (2021) recommend that educators develop high expectations of success for all students in early grade levels as early math achievement is strongly predictive of math achievement in later grade levels.

Relationships between educators and students not only play a role in student achievement, but also in peer relationships and student behavior. Endedijk et al. (2022) studied the connection between peer relationship quality and quality of relationships students built with their educators. Researchers found that educator-student relationship played a significant role for peer relationships (Endedijk et al., 2022). Educators have the opportunity to unintentionally affect a students’ relationships with his or her peers through their own relationship and interactions with that student. Moreover, these relationships mediated the connection between student behavior and the quality of peer relationships, meaning that way in which an educator deals with a student’s behavior can affect peer relationships (Endedijk et al., 2022). Researchers suggested that educators focus on preventing or reducing negative interactions with students, especially students

who are at risk of negative peer relationships (Endedijk et al., 2022). This can be done through PBIS strategies. Moreover, Endedijk et al (2022) stated that the largest improvements in relationships between educators and students are achieved when educators use proactive direct practices, such as praise and reinforcement, a common strategy seen in PBIS.

As noted earlier, behavior-specific praise and recognition, a method used in PBIS, is the most powerful form of praise provided to a student. "A substantial research base suggests that specific praise increases student academic and behavioral outcomes across age, grade level, and disability status" (Whitney & Ackerman, 2020). The deterioration of the classroom climate can be explained by more distant relationships between educators and students (Ingemarson et al., 2019). Close relationships and emotional understanding are crucial to high quality learning in secondary schools. Studies have shown behavior-specific praise is effective for increasing on-task behavior and decreasing disruptive student behavior. Students in classes with less disruption were more positive in their classroom climate ratings, which included educator-student and peer relationships, and the educational atmosphere (Ingemarson et al., 2019). "A teacher's acknowledgement of a student behavior can not only have a significant impact on the student's academic and behavioral outcomes, but also on the development of student-teacher relationships" (Whitney & Ackerman, 2020). Disruptive students specifically benefit from positive relationships between educators and students, which have been found to reduce the level of disruption in classes (Ingemarson et al., 2019).

Research has shown that educator-student relationships are associated with positive student outcomes, such as improvements in academic achievement and engagement, and reductions in disruptive behaviors, out-of-school and in-school suspensions, and risk of students dropping out. Schools can support educators building relationships with their students by

implementing schoolwide programs and proactive, direct practices, such as PBIS. Kincade et al. (2020) completed a meta-analysis to determine common practice elements that improve relationship building between educators and students. As noted earlier, providing praise is one common strategy that educators can utilize that affects the quality of students' relationships with educators (Lind et al., 2017). Other proactive direct practices seen across effective programs included educators demonstrating respect, spending on-on-one time with students to build relationships, coaching and validating student emotions, getting to know students personally, positive to negative ration of interactions, check-ins with students throughout the day, reflective and supportive listening, positive greetings at the door, and expressing care (Kincade et al., 2020).

Chapter 3. Methodology

Introduction

This phenomenological research study investigated secondary school educator and administrator perceptions of Positive Behavior Interventions and Supports (PBIS) and high school student achievement. Qualitative data were collected through educator and administrator interviews. The data was triangulated by searching for common responses that appeared multiple times elaborated on the PBIS framework and which specific interventions are most associated with student achievement. Furthermore, this study aims to describe how Positive Behavior Interventions and Supports could be adapted to provide increased student academic support.

Research Questions

The central research question is: what are the perceptions of secondary educators and administrators of Positive Behavior Interventions and Supports to facilitate high school student achievement? This study will address the following research questions:

1. What are secondary educator and administrator perceptions of the Positive Behavior Interventions and Supports program and high school student achievement?
2. Which specific interventions in Positive Behavior Interventions and Supports program are most associated with student achievement?
3. What are the secondary educator perceptions of how the Positive Behavior Interventions and Supports program could be adapted to provide increased student academic support?

Phenomenology

A qualitative research method is most appropriate to answer the research questions. Qualitative methods provide detail through direct quotation and description of situations, events, interactions, and observed behaviors (Klenke, 2016). Researchers use a theoretical perspective

that shapes the types of questions asked, informs how data will be collected and analyzed, and provides a call for action (Creswell & Creswell, 2018). Theory appears as an end point and emerges inductively from the data collected and analyzed (Creswell & Creswell, 2018).

Qualitative phenomenology research is a design of inquiry from philosophy and psychology (Creswell & Creswell, 2018). The researcher examines several types of experiences gained from perceptions, thoughts, memories, etc. (Klenke, 2016). This form of research has a strong philosophical foundation and typically involves conducting interviews (Creswell & Creswell, 2018). The intent of phenomenological research is to understand the phenomena, in this case, PBIS, and investigate what was experienced, how it was experienced, and the meaning that the participants assigned to the experience (McMillan & Schumacher, 2014). As stated by Klenke (2016), "The method of phenomenology is radical reflection intended to emulate the lived experience" (p. 212).

The researcher was able to conduct in-depth interviews to understand and gain multiple meanings of how educators and administrators perceive PBIS and student achievement. The purpose of interviewing is to obtain information that cannot be directly observed. "Using the interview techniques, the researcher commonly aims to obtain the perspective of the interviewee by interpreting the meaning of the described phenomena" (Alamri, 2019, p. 65). The researcher can ask more in-depth questions regarding educators' attitudes, beliefs, opinions, and experiences by using the interview method. The interview was unstructured with open-ended questions. "Unstructured interviews aim to delve deep beneath the surface responses to obtain true meanings that interviewees assign to their experiences and the complexities of their attitudes and behaviors" (Klenke, K. 2016, p. 129). During the interview, the researcher took detailed notes and observations. This was analyzed, and attention was paid to any patterns or themes that emerged.

Role of the Researcher

A qualitative researcher is the key instrument. Qualitative researchers collect data by examining documents, observing behavior, or interviewing participants (Creswell, 2014). "Qualitative researchers build their patterns, categories, and themes from the bottom up by organizing the data into increasingly more abstract units of information" (Creswell, 2014, p. 186). During the qualitative research process, the researcher focuses on learning the meaning that the participants hold about the problem or issue (Creswell, 2014). The interview process calls for interactions between the researcher and participant so that the researcher can share in the participant's experiences (Qu & Dumay, 2011). Interviewers are empathetic listeners that explore the inner life of their participants. As a key instrument of the research, the researcher must develop, adapt, and generate follow-up questions that reflect the central purpose of the research during open-ended interviews (Qu & Dumay, 2011).

For the purpose of this study, the researcher aimed to report educator and administrator perceptions of the PBIS framework and student academic achievement. The researcher communicated that participation in the study was voluntary and without adverse outcomes if the potential participants declined to participate. The researcher obtained permission to conduct research and conveyed to administrators of the district and school that the research would not disrupt any of the activities at the school. The participants were not deceived about the nature of the research and the process of providing information and data.

Creswell and Creswell (2018) recommend that the researcher uses reflective thinking. Qualitative research is interpretive research involving the researcher in an intensive experience with the participants (Creswell & Creswell, 2018). This can introduce a range of ethical and personal issues into the research process. Therefore, past experiences with the research problem

can shape the researcher's interpretations during the study (Creswell & Creswell, 2018). Utilizing long, open-ended, in-depth interviews allows the researcher to understand the context of the participants and drill down into the phenomenon in more detail (Qu & Dumay, 2011). Therefore, the potential for ethical and personal issues, and bias is weak because as much of the truth as possible is revealed (Qu & Dumay, 2011).

The researcher of the current study had experience in implementing PBIS at a secondary school, grades six through twelve. As an educator, the researcher was on the committee that progress monitored the PBIS program and created an action plan for improvement. Furthermore, the researcher conducted professional development for educators that focused on PBIS and its three tiers of interventions and supports. As recommended by Creswell and Creswell (2018), multiple strategies for validating the data in this qualitative study will be used to demonstrate the accuracy of the information and ensure the data was not compromised.

Ethics

After deciding on a research topic and exploring previous research, the researcher applied and received IRB approval to conduct a study on secondary school educators' and administrators' perceptions of PBIS and student achievement. The researcher also obtained permission from the county and school administration to conduct individual interviews to collect data for this study. "Among the most important ethical principles, the qualitative researcher has to adhere to are informed consent, voluntary participation, confidentiality, protection from harm, and maintenance of the well-being of the participants" (Klenke, 2016, p. 51). Therefore, participation in the study was voluntary. Participants were given a copy of a consent agreement before participating. Participants' identities were kept confidential. Individual interviews were recorded and transcribed. Then, hard copies of the interviews were distributed to the participants to be member-

checked. Participants were allowed to amend or withhold information from their recorded responses.

Setting

According to Creswell and Creswell (2018), "The idea behind qualitative research is to purposefully select participants or sites that will best help the researcher to understand the problem and the research question" (p. 185). Therefore, the PBIS Tiered Fidelity Inventory (TFI) was used to provide a valid and reliable measure of how a school is applying the core features of PBIS (Algozzine et al., 2019). All schools chosen for this study had a TFI score of 70% or above. "As a general rule, a score of 70% for each tier is accepted as a level of implementation that will result in improved student outcomes…" (Algozzine et al., 2019, p. 3)

In-depth individual interviews were conducted virtually through Zoom to allow the participants to openly discuss their perceptions of PBIS. The participants were asked a series of open-ended questions, which helped produce detailed conversations and gave the researcher insight into their experiences.

Sample

The participants for this study were two administrators and seven educators at two different high schools in the state of West Virginia. Both high schools had a score of 70% or above on the Tiered Fidelity Inventory (TFI). Moreover, both high schools were given the PBIS Model School award. "A Model School will exemplify a high level of PBIS implementation with fidelity in a majority of features of the PBIS framework and show improved student outcomes due to PBIS" (WVPBIS, 2016). Participants were identified and chosen through criterion purposive sampling according to their years of experience teaching and utilizing PBIS interventions. The logic of criterion sampling is to review and study all cases that meet some predetermined criterion

of importance (Patton, 2002). In order to participate in the study, educators and administrators had to have at least three years vested in the school. Additionally, educators had to currently teach a core general education class, such as math, science, social studies, or English. After receiving a list of educators that fit the criteria from the administrator of the school, an email was sent to the educators inviting them to participate in the research study.

Sampling Strategy

For this study, purposeful sampling, specifically criterion sampling, was used to find the individuals that could give the most productive answers to the research question. Since the researcher was trying to determine perceptions of PBIS and student achievement, it was significant that the researcher locate individuals who implemented the PBIS framework and had experience with students who required additional interventions and struggled academically. Creswell and Creswell (2018) recommend three to ten individuals for a phenomenology study so the researcher can gain more in-depth information.

Data Collection Procedures

Data collection took place during October through December 202. Interviews were scheduled after contacting each participant by email. Informed consent forms were provided to the participants upon their agreement to be a part of the study. Each interview was held on a specific day and at a time that was convenient for the participant. All interviews were conducted virtually. An unstructured, open-ended interviewing process was used for educators who voluntarily participated. “Unstructured interviews aim to delve deep beneath the surface responses to obtain true meanings that the interviewees assign to their experiences and the complexities of their attitudes and behaviors” (Klenke, 2016, p. 129). The structure of the interviews helped educators and administrators to describe their perceptions of PBIS and student academic

achievement, while allowing them to divulge their experiences of using the framework. Open-ended interviews allow the participants to contribute as much detailed information as they desire and allows the researcher to ask probing questions as a means of follow-up in order capture rich, descriptive detail (Turner, 2010). Educators and administrators concluded the interview by suggesting ways PBIS could be adapted to provide increased student academic support.

The interviews were recorded using the Zoom platform. In order to develop rapport, all interviews began with a few sentences describing the nature of the research, the researcher's interest in the study, and any additional information the participant wanted or needed to know (Klenke, 2016). Upon permission of the participants, interviews were recorded. All participants were assured of confidentiality. The researcher shared her interpretation with the participants in order to increase reliability and validity of the data. "The idea behind this way of increasing validity is to place the interviewee in a position to corroborate or disapprove the interviewer's interpretations" (Klenke, 2016, p. 142). Furthermore, hard copies of the interviews were distributed to the participants to be member-checked. Participants were allowed to amend or withhold information from their previously recorded responses. In order to eliminate researcher bias, participants were made aware of verbatim comments from their interview.

Data Management

In order to ensure confidentiality, the researcher agreed not to report confidential data that identifies the participants (Klenke, 2016). When the researcher conducts interviews with the participants, the researcher enters into a relationship and agrees to not use the data gathered to harm the participants (Qu & Dumay, 2011). "The right to privacy and confidentiality should be inviolate, especially when the interviewees are employees talking about their work life, where the interviewer should enter into an agreement with the interviewee not to disclose anything to the

employer" (Qu & Dumay, 2011, p. 254). Participant names for this qualitative case study were coded with pseudonyms. This is one of the safest ways to ensure anonymity, according to Klenke (2016). In addition, unique identifying information was removed (Klenke, 2016).

Trustworthiness

According to Creswell and Creswell (2018), validity is a strength of qualitative research. It is based on determining if the findings are accurate from the researcher's standpoint, the participant, and the readers (Creswell & Creswell, 2018). Therefore, multiple approaches were used to enhance the researcher's ability to assess the validity and accuracy of the findings. Together, credibility, transferability, dependability, and confirmability encompass the concept of trustworthiness of qualitative research, which are linked to the criteria of validity (Klenke, 2016).

Credibility

Data in this research study was triangulated by collecting information from various sources, which increased the study's creditability. "By combining different research methods or instruments, the researcher checks the results to increase the credibility and validity of the data" (Alamri, 2019, p. 66). In other words, triangulation validates the research data by verifying the information. Hard copies of the interviews were distributed to the participants to be member-checked. Participants were allowed to amend or withhold information from their previously recorded responses. Furthermore, peer debriefing was used. Members of the dissertation committee reviewed and asked questions about the qualitative study, so the account resonated with people other than the researcher (Creswell & Creswell, 2018).

Transferability

This study is given transferability by providing sufficient descriptive data, also known as a "thick description" (Meriam & Tisdell, 2015). The research methods and role of the researcher are

clearly defined, in addition to describing the sampling methods, and collecting and analyzing the data. A rich, thick description is a common strategy used to ensure the possibility of transferability so that an individual in a similar context can assess similarities between them and the study, and whether findings can be transferred (Merrian & Tisdell, 2015).

Dependability

Strategies used to ensure dependability include triangulation and member checking, as discussed earlier, and audit trail. "An audit trail in a qualitative study describes in detail how data were collected, how categories were derived, and how decisions were made throughout the inquiry" (Merrian & Tisdell, 2015, p. 252). Essentially, an audit trail is a detailed account of how the study was conducted and how data was analyzed.

Confirmability

Lastly, confirmability was addressed by providing an audit trail that included raw data; analysis, process, and personal notes; and preliminary developmental information (Klenke, 2016). Through an audit trial, the results can be corroborated or confirmed by others to increase the confirmability of the study (Klenke, 2016).

Data Analysis

Once all interviews were transcribed, data was organized by topics and themes coded into various categories (Creswell & Creswell, 2018; Klenke, 2016). According to Merriam and Tisdell (2015), "Coding is nothing more than assigning some sort of short-hand designation to various aspects of your data so that you can easily retrieve specific pieces of data" (p. 199). First, the researcher looked for individual concepts and themes that answered the research question. Then, the researcher placed a chosen label next to each data unit to allow retrieval of coded items (Klenke, 2016). Line-by-line coding helps to define implicit meanings. This method of data

analysis gives the researcher direction to explore, make comparisons between data, and suggest links between the various sources of data (Denzin & Lincoln, 2011).

The coding process for this research occurred in multiple steps that evolved throughout the research process. Codes were generated for themes that emerged during line-by-line coding. The themes displayed numerous perspectives from educators and administrators (Creswell & Creswell, 2018). The themes were analyzed for each case and shaped into a general descriptions and categories. The coding process was repeated a second time with axial coding until data saturation occurred. The focus of axial coding was to piece data together in new ways to allow connections between categories (Kolb, 2012). Data saturation was reached when the researcher gathered data to the point of diminishing returns, when nothing new was being added (Bowen, 2008). Saturation was the point at which no new insights were obtained by the researcher, no new themes were identified, and no issues arose regarding category of data (Bowen, 2008). At this point, the data categories were well established and validated.

Chapter 4. Data Analysis and Findings

Introduction

The purpose of this phenomenological research study was to investigate perceptions of secondary educators and administrators of PBIS to facilitate high school student achievement in two high schools in the state of West Virginia. The data for this study included unstructured, open-ended interviews based on three research questions. The questions addressed secondary educator and administrator perceptions of PBIS and high school student achievement, interventions associated with student achievement, and how the program could be adapted to provide increased student academic support.

Participants

The participants for this study were two administrators and seven educators from two different high schools in the state of West Virginia. Both high schools had a score of 70% or above on the Tiered Fidelity Inventory (TFI). Moreover, both high schools were given the PBIS Model School award. "A Model School will exemplify a high level of PBIS implementation with fidelity in a majority of features of the PBIS framework and show improved student outcomes due to PBIS" (WVPBIS, 2016). Participants were identified and chosen through criterion purposive sampling techniques according to their years of experience teaching and utilizing PBIS interventions.

Educator A was a male with eighteen years total of teaching experience and eight years of teaching at his current high school placement. He taught English and was the department head for the English committee. Educator B was a new female teacher with three years of social studies teaching experience. She taught civics, world history, and US studies. Moreover, Educator C was a female teacher with four total years of teaching experience. She taught earth and space science

and biology. Educator D was a male math teacher with three total years of experience teaching specifically geometry and algebra. Furthermore, Educator E was a female Algebra teacher with twelve years of experience at her current high school placement. Educator F had thirteen years of teaching experience. She taught biology, human anatomy and physiology, and principles of biomedical science. Lastly, Educator G had twenty-one years of teaching experience with eighteen of those years at her current high school placement. Educator G taught English and public speaking.

Table 1

Participants Roles and Experience

Interviewee Pseudonym	Years of Teaching Experience	Subject Taught
Educator A	18	English
Educator B	3	Social Studies
Educator C	4	Science
Educator D	3	Math
Educator E	12	Math
Educator F	13	Science
Educator G	21	English
Administrator A	N/A	N/A
Administrator B	N/A	N/A

Interview Data

Transcriptions from the nine interviews were reviewed for emergent categories and themes. Table 2 demonstrates category distribution across participant responses.

Table 2

Category Distribution Across Participant Responses

Particpants	PBIS influences student work ethic	Positive reinforcement of high expectations	Student Assistance Team	Advisory	Consistency
A	X	X	X	X	
B	X	X	X	X	X
C	X	X	X	X	X
D	X	X	X	X	X
E	X	X	X	X	X
F	X	X	X	X	X
G	X	X	X	X	X
Admin A	X	X	X	X	
Admin B		X	X	X	X

Research Question 1

What are secondary educator perceptions of PBIS program and high school student achievement?

Throughout the interviews, the main category that emerged was the impact PBIS had on student work ethics which affected student achievement. For example, Educator B stated the following impact of PBIS on student achievement, “I think it keeps them on task...they're more likely to participate and then they pay attention to the review.” Educator B explained how this affects student achievement, “And now that they have, like, they pay more attention to the content and they're more likely to succeed on the tests because they paid attention to the review.”

Educator D stated that PBIS impacted student academic achievement by enforcing positive work habits, “I do think there is an impact...it enforces positive work habits. You know what I'm saying? It gives them an idea of where they should be and how you know how they should be allocating their time towards work.” Educator D continued to explain, “Positive work habits. Uh, you know, just getting the students to complete assignments in a timely manner. Getting students to, you know, keep good notes. You know, getting students to prepare for their assessment...”

Educator F also noticed the impact PBIS made on student work habits, “I mean, it is easier to keep control of your class and keep on task...” Educator F explained how this was dependent upon defining and teaching the classroom expectations:

> But you have to teach expectations, if you don't do that, there's going to be a handful of kids that are like, dude, what are you doing? But I mean, you have to teach expectations and revisit.

Educator E stated that students were more conscious of their work and turning in assignments on time. “I feel that it has improved that makes them more responsible, more accountable for their work and their actions.” Educator E gave an example:

> Students have, since we started PBIS, come to me personally have said, “You know, Ms...what do I, what do I need to do to get my grade up? What do I have out? You know, can I have my missing work?”...And so it is making them more responsible for that. And I think that's a big improvement. We didn't have that as well the first couple of years I was here, but that, I think that's changed with PBIS.

Educator B also felt that PBIS encouraged students more: “So academically, it just kind of encourages them more to get like interested. The best thing...is that they pay more attention to

things, like the reviews." Similarly, Educator C saw student motivation increase in her classroom through the implementation of PBIS: "You know, like whenever the kids like are more motivated by themselves and that's whenever they typically do better...And then it eventually leads to like more motivation for them wanting to do better for themselves." Educator C also stated that PBIS influenced students being on task in her classroom.

Educator D explained how he uses PBIS strategies to teach students correct work habits in his classroom. "I use them predominantly to enforce work habits...You know be like, 'Hey like I appreciate you taking notes. I appreciate you, you know, improving on what needs to be improved' right?" Educator D explained how student performance has changed:

> ...but generally, it seems like the incentive comes in improving student performance, you know, with regard to what they're working on...Like I said, students appreciate it. They appreciate it to the extent that they remember, you know...that's a, that's a positive interaction that they remember. So that's that, that's probably the, you know, that's the best part about it is they remember that positive interaction so that hopefully more interactions in the future that are positive...students are proud of themselves.

Educator C explained how the positive reinforcement and rewards impacted students:

> Yeah, because especially like for some of the other like classes like sometimes what I would do is I would give them a reward for like staying on task the whole time...So I think that like them realizing like hey like we can get rewarded not just by getting the points but also by like getting like a reward for actually doing our work.

Educator F explained how PBIS indirectly affects student academic achievement by changing student work habits, "I mean if you look at it in the whole picture, that you know a kid that's able to control themselves and take charge of their learning does better, then yes [PBIS affects

academics].” Educator F also described how PBIS affects several factors: “...it's everything. Attendance, behavior, achievement. I mean it's everything.” Similarly, Educator E stated, “It works, it improves student academic achievement. It works for behavior. It is very successful. I'm glad to be a part of that...I love it...It is a good improvement. It gives the kids the kids a reason to care.” Educator G explained how PBIS makes the students want to attend school, which has an impact on student achievement:

> We were just on a really positive roll, really. Kids were coming to school more. We had a lot of activities. We had monthly activities that they were participating in. And all of that, I think, it transferred into the classroom, I mean, it did. When they wanted to be here, it just made them perform better while they were here.

When Educator G was asked her overall perception of PBIS and student academic achievement, Educator G stated:

> I think the two go hand in hand. I really do. I think that the kids need to know the expectations when they're here. And when they know the expectations, and they know that there's caring adults here who are going to help them, whether it be socially, emotionally, academically, I mean it's going to ultimately transfer into the academics...They're going to get it, so to speak. Or they'll be more open to it.

Educator C also thought that PBIS impacted student achievement and more, “So I definitely think that there is like a huge correlation between you know, PBIS and attendance and academic achievement.” When Administrator A was asked her overall perception of PBIS, she stated:

> My perception is that PBIS helps support our students, particularly their enjoyment being here in the building and understanding the expectations of being in the building, and that in turn can can translate into academic success. We're very clear about what we want our

> students to do, and we're all using the same language and expectations, which PBIS does. Umh. There's no real confusion about what it means to attend. Uhm, there's no real confusion about what it means to be respectful. So I think those are really valuable for our kids to move past any of that confusion and focus on their on their academics.

Educator A was the only participant that discussed the direct impact PBIS made on student achievement scores. Educator A stated: "I have watched the data and I've designed benchmarks, you know what I mean? So that we can inform our teaching as we go through and that kind of thing and I have seen a steady improvement…"

Research Question 2

Which specific interventions in PBIS are most associated with student achievement?

All participants stated that positive reinforcement of high expectations was a, if not the most, successful intervention. Administrator A explained how clear, high expectations was a significant intervention used at the school:

> ...we talk a lot about "clear is kind," you know, having very clear classroom expectations, being very, very consistent with them is what's best for our kids, you know?...You have like whatever your kind of system is in your classroom...reinforce that.

Administrator A explained the impact of reinforcement of high expectations at her school: "Students know what they're expected to do, and most of the time they'll meet those expectations if you set them and make them clear."

Educator D stated, "I think the most successful intervention is, one of the most successful interventions is positive language and student autonomy..." Educator G also stated that reviewing expectations with students often is a successful intervention. "...just reminding kids of behavior expectations and having high expectations...I always revisit what I have posted...don't really have

too many like discipline issues, honestly." Educator G said that the expectations are reviewed in her classroom and throughout the school often, which has a significant impact,

> In my classroom, it's setting the standards, first of all. We have school wide standards and that transfers into our classroom. We have the same kind of setup where um we have the same mission, if you will. Come prepared, have high expectations, show respect. So those are the things that are throughout the school and in each classroom. We each have our own like definition, our own expectations of you know what that means in our classroom guidelines...A lot of like teaching respect and how you know they're varying opinions in the classroom, and this is how we are respectful to each other. And this is how we answer questions. And this is how we behave.

Educator B explained her perception of the most used PBIS intervention as,

> I do use like, positive reinforcement in the classroom a lot. And I do see like, if the kids know that, like there's a potential reward, like sometimes if they're all on task, I'll just give them something for that. So if they know that there's that possibility at some random point that if they're all on task that they might get some type of reward, they're more likely to be on task because they're thinking about that reward.

Educator A felt that the positive reinforcement of behavior had a significant impact on students in his classroom: "I think that kind of positive emanating from the very top and and being very clear with what we expect has had a tremendous effect." Educator A continued to explain, "So that kind of 'Hey, you went above and beyond" ...And it's rewarding, you know that positive reinforcement. That that positive I I like this behavior. This is exactly what we need. You go!" Educator B gave an example of effect of positive reinforcement: "But he tries, so he's like going the extra mile...every day." Administrator A discussed how educators review expectations,

"So really, in each classroom, if a teacher is doing is implementing PBIS at a high level, every day is a Tier 1 intervention. Because they're within their teaching, they are still making sure that kids know and are expected to do these certain behaviors or follow these expectations."

Educator E explained how when reinforcing high expectations, she always remains positive: "We try to reinforce the positive of it. You know, the positive actions and try to get that turned around from those negative actions." Educator C explained how significant it is for students to have positive reinforcement immediately when meeting high expectations in her classroom. "But now that they get the immediate gratification...the kids are more invested." Educator A explained the impact of immediate gratification and positive reinforcement, "Yeah, I would say for those kids that are kind of like borderline...like they become more invested."

Educators also thought that the relationships created between students and themselves through PBIS positive reinforcement had the ability to be a powerful intervention. Administrator A noted that relationships were encouraged as a part of PBIS:

> We have really talked a lot about like relationships. That's a big kind of overhang for us. Like our theme this year is welcome, like our kids need feel welcomed in their classrooms...so that's something that we really encourage in our building is those relationships.

Educator C noted how recognizing students with immediate positive reinforcement created a positive relationship between the educator and the student:

> And I mean like I think the biggest thing is like that relationship that they have with who they're getting that part of PBIS from. You know? It's a good relationship with me and like something from me, it is going to mean more...

Educator E also mentioned how the positive reinforcement created positive relationships with students:

> And so we try to show our students that we do care. Because a lot of them, if you ask them...What's different? And they'll tell you, well, I know I have somebody that cares now, and so I care about myself. And so I feel like PBIS is helping our students. We show that we care about them. But it's helping them to care about themselves as well.

When answering interview questions three participants mentioned the intervention of the student assistance team, referred to as SAT by several participants, as being a powerful intervention for students. However, all participants mentioned the student assistance team as a successful intervention used often at their school. Educator F discussed the student assistance team that is present at the high school and how it is used.

> Like if I noticed that someone needed help...I could refer them [to SAT] and then we could have a meeting with like an admin and a guidance counselor and the student, and I mean, I guess if the students' parents wanted to be involved, and just sort of write a little plan of action.

Educator E described their school student assistance team:

> ...when teachers notice students struggling, we give that information, that student name, we have a form we fill out to our counseling department...And she sets up a student assistance team meeting with the parents and the teachers and we sit down and we talk and the student. And you know, how can we assist you to improve? And what can we do to help you? What can we do to help the parent? What does the parent think that the student needs? So everybody has input on it, including the student.

Correspondingly, Educator C described the student assistance team present at the high school:

> So the people in the student assistance team...what they'll do is they'll talk with students that...struggling, that like the teachers have like expressed concerns about. And what they'll do is they'll like set up team or with meetings with parents with like in principals, with guidance counselors and they'll send out like little feedback forms. So we fill out like the feedback forms and we send it back to them. And like the feedback forms asks about how the kids are doing in class, how they're doing academically, areas that we notice that they're struggling in, areas that we notice that they're strong in. And then they send us feedback based on those meetings.

When Educator C was asked if the student assistance team was for academics only, she stated, "There's been meetings for like just behavioral. There's been meetings for just academics. There's been meetings for attendance." Educator C gave an example of how much of an impact the student assistance team can have on students:

> And I had this kid again this year and I was noticing the same thing where he was just not showing up for weeks at a time and like just constantly not being there. And they sent out a uh SAT team like notification about it and ever since his meeting with them he's been here every single day and he brought his grade. Up from like from an F to a C. So definitely, yeah, has an impact.

Administrator B explained why the student assistance team had the greatest impact: "Our SAT teams because that's, it it basically provides a personalized plan for kids that are struggling..." Educator B also felt that the student assistance team had an impact because of the relationship created with the parents or guardians: "I think that's the most effective, like most efficient when it comes to a kid who does not care in academics...if the parent, you know, if the parent cares then they'll get in." Educator E stated, "Yeah yeah, and I have seen improvement...

And that's what, that's what the PBIS and the SAT is all about getting them prepared for that adult life so they can succeed." Educator A was enthusiastic when discussing the difference the student assistance team made on students:

> Yes! OK! So, if if a kid is struggling and it can certainly be behavior, but it can be attendance, it can be both. It can be just academics. They're just not handing anything in. Then we'll set up a meeting and it has to be at least two teachers, their guidance counselor, the kid himself or herself, and a parent.

Educator A continued, "And then we meet with the student and the parent to get a commitment on their part and and a prescribed here's how we're going to improve kind of thing." When Educator G was asked if the school student assistance team made a difference, Educator G stated, "Absolutely, and probably have been what has helped some kids pass academically or what has helped some kids' behavior."

Lastly, all participants mentioned the large impact the advisory course had on students. One high school called the course developmental guidance. The other school called the course LINKS: Learning, Individualized Needs, Knowledge and Skills. Educator A explained the format of developmental guidance,

> Oh yeah, developmental guidance is awesome. Um It is. Gosh, I think it's 30 minutes...And like our 9th and 10th graders um do high school 101, you know what I mean? Where it's set up where you're like, OK, here's how to be a high school student when you come fresh out of out of middle school.

Educator A continued to explain that they are given their group of developmental guidance students in the ninth grade and continue to have those students for their whole four years of high school. "And it's nice because our developmental guidance kids we take them as freshmen and

then they're in our developmental guidance for their whole four years. So you're developing relationship with those kids, which is really good."

Administrator B stated that the advisory program was part of their Tier 1 interventions as an entire school.

> And then as a Tier 1 intervention as an entire school, we have LINKS, which is an advisory program. And within LINKS each teacher has, on average, about 13 kids, and it's like a home base for them, similar to a home room. But within the LINKS curriculum, teachers...pick two students each week, and they call home to communicate with parents and say, "Have you you know followed up with your student's grades? Do you know how they're doing? Do you have questions? Do you want to meet with teachers?"

Administrator B continued to explain that schoolwide expectations are reviewed in the advisory class, especially before a schoolwide event. Educator E also explained how schoolwide expectations are taught in advisory:

> And when we came back from Thanksgiving break all of the teachers, we reviewed those again in the classroom at the beginning of advisory...We know that the more you read it in there those expectations are posted throughout the hallways, the stairwells, and every classroom. When you walk in, those expectations are posted, so they're constantly seeing those. They're constantly reading them. They're constantly hearing those. And we know as teachers that when you see it, when you hear it, when you read it. You have a better chance of retaining.

Educator G explained how the time in advisory is used to review expectation:

> And they do we do it through LINKS...We'll go, they're broken up into like, two or three groups, and they'll go together to expectations in the cafeteria. This is how you behave in

> the cafeteria. Then we go to the auditorium. Here the expectations in the auditorium. Gym. Library. We even put them on a bus."

Educator B stated that the expectations were also reviewed in their advisory class at their school and expectations are posted throughout the school: "We also have signs in around the rooms...they use the word like the acronym PARK for everything. And it's like expected behaviors in the hallway, expected behaviors in the restroom. So we have those signs in every classroom." Educator A also explained how lesson plans are created for their advisory course: "But there is a a committee that that meets usually all through the summer and then plans out what we're doing in developmental guidance for the next year." Educator E explained how expectations are taught in advisory:

> And we've done our high school 101 a little bit different...The PBIS team is the ones that are teaching it. We are rotating every seven weeks with the group of students and everybody is teaching a different aspect. And my aspect that I chose to to teach is all about positive actions, feelings and thoughts versus the negatives. And how they can turn those around and how important that is for them to be able to succeed.

Similarly, Educator F explained how expectations are taught in advisory:

> And it's also where we teach expectations. Like if we're getting ready to have a big assembly, or if we're getting ready to you, to you know, have a Veteran's day program. You know that your LINKS, your mentor group, is also where every day I have a chance to say, "Hey remember, shouldn't be on your cell phone during this or you should be talking when the veterans' members are up giving speeches."

Furthermore, Administrator B explained how the student's advisor checks grades and prints midterms that students are required to take home and have signed by a parent or guardian.

> And also the LINKS program and giving kids an advisor that keeps up with them specifically. Calls home, the contact with parents is huge. And what what we've noticed has happened is that when we call home, a lot of our students who are struggling are a lot of times living with their grandparents, who are older and don't necessarily have the skills to get into Livegrades or know how to do that. Or they don't realize that, ohh, the midterms were today.

Overall, Administrator B felt that their advisory program and the student assistance team had a large impact on student academic achievement: “And so LINKS and the SAT program are the two biggest things because they reach out to parents and they provide awareness and let's that parent know.”

Educator G explained how time is put aside in their advisory class for academics, “...if they're struggling in a class, they all have the opportunity two days a week, Tuesdays and Thursdays to use that advisory time on academics. So everybody has that opportunity.” Educator G continued to explain how the educators and school staff work together during advisory to help students be successful academically: “And honestly, if a kid needs more than that anytime during LINKS, every teacher...would be like sure, let's work on this to get you caught up.” Educator A also mentioned that their advisory course has time set aside for at-risk students: “We have offered if kids are, I don't want to call them high risk, but kids who face challenges that others do not or are struggling in certain areas, there are actually even classes set up for them. Or they'll have a special developmental guidance.”

Educator F described how the advisory class had a large impact on her students' academics. Last school year, Educator F had several freshmen in the advisory class that were failing multiple courses. When being interviewed, Educator F had the same students as

sophomores, “But now...the same group I have, I don't have hardly any people failing.” Educator F felt that PBIS and the students becoming more mature had the largest impact: “I'm sure it's a combination of just PBIS, you know...they're more mature.”

Educator G stated that building strong relationships with the students is part of the success of their advisory program: “With our LINKS program is that every student has a go-to person. And your your LINKS teacher is your go-to person you have. We have them all four years.” Educator E explained how relationships are formed with students in advisory, “We're finding out who they are, what they want, what their dreams are, how they can achieve those by their actions.” Educator F explained how relationship building in advisory impacts student behavior, “But like really, it's a way to just meet with them every day and take care of them. And when a kid thinks they're taken care of, then they're less of a behavior problem.” Overall, when Educator G was asked about the overall perception of PBIS and advisory, the response was, “...the LINKS program, coupled with PBIS. You just see, you see a difference. You see a difference. And it just translates into the classroom. I mean it just does!”

Educator F also explained how relationships are formed between educators and students, and students and students through the advisory course.

> But then by the time they're seniors, and they've been together every day in like a comfortable, non-academic environment for four years, you know what I'm saying. Like they're a really tight group of kids and I just think that's the reward. That's what my kids like, that's what my kids like in in Links is just to be together every day forming those relationships.

Educator C explained how building relationships with her students has been significant. Educator C explained how creating positive relationships with the students in her advisory also

has more of an impact when the students are rewarded: "...like building that relationship with like students...and like making sure that like the kids realize...that they're getting it from a teacher that like they kind of you know, not even like, you know, hopefully respect. But also, like somebody that they appreciate...that positive interaction from." Educator C gave an example of how PBIS, advisory, and relationship building impacted a student in her class that was failing:

> The biggest thing that, like I think helped her just start turning that work in is whenever I was like, "Hey, listen, like I don't want you to fail. Like, I want you to do well in the class. I want to see you succeed." And I think whenever she realized that I was there to help her, and you know like I wasn't trying to like fail her or anything like that ,and what I expected from her. That's when she first she started, like turning in her work a little bit more. UM, so, like, I definitely agree with PBIS. I definitely think that it's like a good system to have in place. But I think I kind of like making sure that the students realize like what your expectations are and just like knowing that like you're there for them to like help out, I think is like the bigger factor in helping these kids with like succeeding.

Educator D discussed how he builds relationships with his students in advisory: "I've also found just positive language, saying please, saying thank you...you know, positive language, positive feedback...So you know, you encourage them."

Administrator A explained that their advisory class also included attendance incentives for the students.

> We call it developmental guidance and we'll do like competitions by grade level to see which grade level has the best attendance, you know. We'll throw out our large chronic attendance number for a month and say OK, if you can get that down for next month, you

know, pep rally, prizes, something of that sort to make that happen and just get the kids a little bit more understanding of, you know, how important that attendance piece is.

Overall, advisory gives educators the opportunity to build relationships and be a positive influence in students' lives, as described by Educator C:

> And like them kind of getting a chance like have like those positive interactions, whether it be like the PARK cards or like there's teachers like reaching out to them and like making sure they're OK. I feel like it's definitely like a positive thing that has made those kids or made those kids realize, like, hey, you're cared about here. Like, we will want you to succeed, we're trying to give you the tools to help you succeed.

When Educator G was asked if she has seen a change in her students through advisory and PBIS, Educator G enthusiastically said:

> Oh my, do, have they ever changed for the positive, really! And you see that growth as the LINKS teacher when you have them all four years. It's really really I I can't say enough good about it...And but you make those relationships form those relationships with them and you see them grow up.

Research Question 3

What are secondary educator perceptions of how PBIS program could be changed?

Throughout all interviews, participants stated that the consistency with how the PBIS program was utilized at their schools would be the one part of the program that they would change. For example, Educator C wished all educators and school staff would form positive relationships through PBIS with their students: "I mean, like I would say definitely again, like building that relationship with like students. I would say that there needs to be a little bit more

emphasis on that...” Educator C continued and stated that implementation of PBIS with all educators being consistent:

> And then I would also say maybe making sure that everybody was kind of on the same page how PBIS should work...So I feel like properly utilizing it is definitely a big thing that needs to be across the board for a schoolwide program like that.

Educator D also stated that all educators and school staff need to be consistent: “Communication between between staff members with regard to, you know, frequency of an implementation, right?” Educator D continued “Yes, I think that communication between between staff members...with regard to rewards could be a little bit better...could be improved to the extent that students are more consistently being rewarded for positive behaviors.”

Educator G stated that consistency and buy-in from the staff was key to PBIS success. Furthermore, Educator G gave the advice,

> Have an open mind because a lot, especially if it's at a high school, because I think that a lot of um high school teachers think that it's all about golden tickets and prize boxes. And I think it's much more than that. And um just have an open mind. And don't be too set in your ways.

Educator E stated that consistency was difficult because not all educators implement PBIS: “Of course I mean not everybody like is going to buy in. Because it does seem a little counselor-ish. And not everybody is comfortable with that. And and and that's for the teachers and the kids too...So buy in with the staff is not always 100%...I think that's probably the biggest barrier.” Administrator B stated, “...if you don’t have buy-in, you’re it’s not gonna work.”

Administrator A explained the impact when there is a lack of consistency, “You can't, you can't enforce anything. If one teacher, just you know, lets them sit there with their head down and

sleep because they don't want to do the work today and then the next teacher they go to have high expectations, it's confusing it doesn't kids don't know what to do." Administrator A stated the impact of consistency with PBIS, "So being PBIS allows us to make sure that we are consistent in everything we do, and so as far as you know students student discipline it makes things a lot easier."

Summary

The findings detailed in Chapter 4 include verbatim comments provided by the nine participants during open-ended virtual interviews with the researcher. The purpose of this qualitative study was to investigate perceptions of secondary educators and administrators of PBIS to facilitate high school student achievement in two high schools in the state of West Virginia.

The main categories that emerged was the impact PBIS had on student work habits, which affected student achievement. Furthermore, the interventions that participants found to be the most successful were utilizing positive reinforcement of high expectations and the advisory course. All participants discussed the success of the student assistance team at their school. Lastly, all participants felt PBIS needed to be implemented consistently to see the success of the program.

Chapter 5. Conclusion and Recommendations

Introduction

The purpose of this phenomenological study was to investigate perceptions of secondary educators and administrators utilizing PBIS and its impact on student achievement in two high schools in the state of West Virginia. The research study consists of five chapters. In Chapter 1, the researcher introduced the research topic, significance of the study, and discussed limitations and delimitations. Chapter 2 contained a review of pertinent literature on the research topic. Chapter 3 described the researcher's methodology and data collection procedures. Chapter 4 presented the results of the participant interviews and emergent categories that were presented throughout the course of the data collection. The data provided the researcher with rich, in-depth descriptions of educator and administrator perceptions which align with pertinent literature. A summary of the findings, conclusions, and recommendations for future research are presented in Chapter 5.

Findings

The purpose of this phenomenological research study was to investigate perceptions of secondary educators and administrators of PBIS to facilitate high school student achievement in two high schools in the state of West Virginia. The central research question is: what are the perceptions of secondary educators and administrators of Positive Behavior Interventions and Supports to facilitate high school student achievement? The qualitative methodology was guided by three supporting research questions:

1. What are secondary educator and administrator perceptions of the Positive Behavior Interventions and Supports program and high school student achievement?

2. Which specific interventions in Positive Behavior Interventions and Supports program are most associated with student achievement?
3. What are the secondary educator perceptions of how the Positive Behavior Interventions and Supports program could be adapted to provide increased student academic support?

Category 1: PBIS Influences Student Work Ethic

Collectively, all participants felt that PBIS influenced student work ethic, such as being on-task and engaged in learning. The data derived from the interviews clearly shows that using PBIS is effective in increasing levels of student work ethics. As demonstrated in research, when educators use proactive classroom management strategies, improvements in on-task behavior and students' engagement in learning have been observed (Cook et al., 2017; Davis et al., 2014; Faul et al., 2012; Speight et al., 2020; Speight & Kucharczyk, 2021).

An essential part of the learning process is students being able to focus and engage. When a student does not focus on the task, the time spent on task decreases; therefore, the learning decreases and it becomes less likely that the student will develop the skills necessary to master the content (Beserra et al., 2019; Godwin et al., 2021). “Time off-task is time spent on things other than the learning task and is associated with low academic performance” (Beserra et al., 2019, p. 1361). Off-task student behavior and disengagement are considered a significant problem for educators because of the effects it has on the learning environment (Beserra et al., 2019). All educator participants noticed that the greatest impact of PBIS was increasing student work ethic, such as on-task student behavior, participation, and how students allocated their classwork time. Educator E noticed that students were more conscious of their classwork and turning in assignments on time.

Increasing on-task behavior and student engagement is significant as high levels of on-task behavior are associated with improved academic performance (Godwin et al., 2016). Godwin et al. (2021) researched if the amount of time a student allocates to an instructional task determines the extent to which learning occurs. Goodwin et al. (2021) stated, “Overall, on-task behaviour was positively correlated with learning, controlling for gender, school type, and grade-level" (p. 502). According to Jaquett et al. (2021), rewarding on-task behavior causes an even greater increase in academic performance. This is where educators utilizing positive reinforcement and rewards as part of the PBIS program is significant.

Category 2: Positive Reinforcement of High Expectations

The PBIS framework encourages educators to frequently acknowledge behaviors aligned with schoolwide expectations. According to Petrasek et al. (2022), “Reinforcement refers to any stimulus that strengthens or increases the probability of a specific response.” Educators routinely seek to reinforce students meeting classroom expectations in order to increase the likelihood they will continue in the future (Petrasek et al., 2022).

The data derived from this study suggested that positive reinforcement of high expectations was a successful intervention. All participants discussed the significance of positive reinforcement and its impact on students. Several participants mentioned how a positive relationship between educator and student was created because of the positive reinforcement.

According to Whitney and Ackerman (2020), “A teacher’s acknowledgement of a student behavior can not only have a significant impact on the student’s academic and behavioral outcomes, but also on the development of student-teacher relationships.” Furthermore, according to Roorda et al., (2019), educators building relationships with students are significant for secondary students’ engagement. The attachment theory explains how positive relationships with

educators enable students to seek comfort and support from their educators, which allow them to feel comfortable exploring the classroom environment (Roorda et al., 2019). Therefore, students are enabled to become engaged with learning activities, which in turn students perform better on school tasks (Roorda et al., 2019).

Category 3: Student Assistance Team

Three participants stated that the student assistance team was the most powerful intervention for students. However, all participants mentioned the student assistance team as a successful intervention that they often use at their school. Student assistance teams include various stakeholders, such as the classroom educators, student family members, and other school personnel (Nese et al., 2023). The student assistance team present at the participants' high schools was for academics, behavior, and attendance.

The student assistance team process involved collecting and assessing individual student data. The high schools that participated in this study had forms for educators to complete prior to a student assistance team meeting. Furthermore, data on academics, attendance, and discipline were brought to the meetings. Together, the team identified areas of improvement and created a student support plan, similar to how Nese et al. (2023) described the student assistance team process in the advanced tiers of PBIS. Administrator B felt that the student assistance team had the largest impact because it provided struggling students with a personalized plan. Furthermore, Educator G felt that the student assistance team is what helped students pass academically and assisted in changing students' behavior.

Category 4: Advisory

Lastly, all participants mentioned the large impact the advisory course had on students. According to Champeau (2011), "...when executed properly, advisories address students' needs so

that test scores improve, classroom instruction is supported, parents are engaged in their children's learning, and students' 'relationships' with their own learning are facilitated" (p. 38). Both schools with educators that participated in the study, had an advisory course that was organized so the same group of students would stay in the same advisory group for all four years of high school with the same educator. This allowed the students and the educator to form a deeper relationship. This organization strategy was recommended by DiMartino and Clarke (2008), "to ensure that students and staff members have time to develop the kind of relationships that can have a powerful positive impact on student achievement, it was decided that heterogeneously grouped students would stay in the same advisory group for their entire high school experience..." (p. 18). Furthermore, advisory course curriculum remained fluid, which allowed the educators to do what they know is in the best interest of the students in their advisory group while also providing guidance (DiMartino & Clarke, 2008).

At both high schools that participated in the study, educators completed check-ins with their students and viewed their grades on a weekly basis. Kashy-Rosenbaum et al. (2018) found that classrooms with a higher positive effect and higher educator support were tied to a higher GPA. The perception of educator support was positively related to the student's emotional state and generated better learning opportunities (Kashy-Rosenbaum et al., 2018). Additionally, both high schools utilized the advisory period to review schoolwide PBIS expectations at the beginning of the school year, after breaks, and before events.

Lastly, four participants commented on the relationships they have formed with students in their advisory course. According to McClure et al. (2010), "The primary goal of advisory programs is usually to create tighter relationships between adults and students to foster a more supportive school climate." Supportive teacher-student relationships are a significant factor in

creating and maintaining a sense of belonging that encourages positive behavioral outcomes and academic success (Mason et al., 2017).

Category 5: Consistency

Seven of the nine participants stated that they wanted the PBIS program to be utilized more consistently in their school. Consistency can be defined as implementing interventions in the same manner across time and school personnel (Scott et al., 2010). Consistency while implementing interventions is critical. According to Scott et al. (2010), "When students receive different messages from different adults in the schools, this becomes a harbinger for increased behavioral difficulties from all students" (p. 522). Inconsistency can hinder clear communication between all staff members (Scott et al., 2012). Lastly, Scott et al. (2012) stated, "...no student is well-served with a staff that consistently implements an intervention incorrectly" (p. 523)

Inconsistent buy-in from the staff, administrators, and personnel was noted as a barrier that could impede PBIS implementation and sustainability, according to Kimball et al. (2017). Similarly, Boden et al. (2020), noted that staff inconsistency is a barrier to PBIS implementation, and suggested that school stakeholders ensure PBIS is a part of professional development and training for new staff members after initial implementation of the PBIS program.

The fidelity of PBIS implementation also includes how consistently the plans are followed by staff and students. Fidelity is the extent and accuracy to which a school follows the PBIS framework and how well the model is used with integrity (Baker & Ryan, 2014). Furthermore, Nas et al. (2016) reported that two-thirds of schools that abandoned the PBIS program were not implementing PBIS adequately by the end of the first year of implementation. Other factors leading to the early abandonment and not implementing PBIS with fidelity included being located in a city and being labeled as a Title I school (Pas et al., 2016).

Recommendations for Practice

After a review of the literature and an analysis of the data collected, the researcher recommends that school stakeholders implement PBIS to improve student academic achievement indirectly through reduced office discipline referrals, increased attendance, positive changes in student work ethics, and relationships created between educators and students.

Secondly, the researcher recommends that the same schoolwide expectations be used throughout all schools in a district. This will assist in creating consistency throughout the school district and students will know the expectations as they move throughout elementary grade levels to middle and high school. The researcher also recommends that classroom expectations are posted for students to view at all times. This will assist the educator in reviewing the classroom expectations and redirecting students when needed. The classroom expectations should be reviewed daily and students meeting those expectations should be rewarded. Rewards for students meeting the classroom expectations do not need to be a physical item. Many of the educators interviewed in this research study utilized positive feedback and praise with students, which created a strong relationship between educators and students that had a positive impact on the climate and culture of the classroom. Moreover, reinforcement of schoolwide expectations is significant. When an educator acknowledges a student's behavior, it impacts the student's academic and behavioral outcomes and the development relationships between educators and students. These relationships can then increase student engagement in the classroom. When students are engaged with the learning activities, they can perform better on tasks.

Thirdly, basic PBIS professional development should be provided for all staff members, including bus drivers, cafeteria workers, custodial staff, administrative assistants, teachers, and counselors. This will assist in creating consistency. Staff will be more receptive to the PBIS

professional development if it is created and taught by their fellow staff members. Additionally, it should be modeled for staff how to implement and utilize PBIS. For example, when conducting the professional development, expectations should be taught, and participants should be acknowledged for meeting the expectations in the same way students should be acknowledged. Overall, staff perceptions of PBIS are critical to the successful implementation of the program (Feuerborn et al., 2015).

Recommendations for Future Research

Although the sample size was sufficiently large enough to answer the research questions, the study should be repeated with a larger sample size. The researcher interviewed only two high schools in the state of West Virginia, and this limits the ability to make broad generalizations. A large-scale study should be replicated in other regions with a larger sample size.

This study can be conducted with a similar population as a quantitative study. More in-depth research could show possible changes in student grades. It was difficult for educators to compare student academic achievement before PBIS was implemented because of student learning being interrupted due to the COVID pandemic. Future research should explore the impact of PBIS on academic performance using more reliable and valid measures.

Professional development to review the interventions available for students would be beneficial. Many educators were confused about which tiers contained which interventions and strategies. Additionally, this would ensure that every educator implements the PBIS framework correctly and consistently.

The study can be replicated with educators of non-core subjects and classified personnel, such as administrative assistants, counselors, bus drivers, custodians, and cafeteria workers. This

would allow the researcher to gain additional perceptions of PBIS and student academic achievement.

Summary

The findings from this study provide information about the participants' perceptions of PBIS and student academic achievement in two secondary schools in West Virginia. This qualitative phenomenological study was guided by three research questions. Through open-ended interviews, the researcher was able to obtain rich descriptions of educator perceptions of PBIS from the data. In conclusion, the participants identified that PBIS influences student work ethic, such as being on-task and engaged in learning. Consistent positive reinforcement of high expectations and acknowledgement of meeting those expectations, has a significant impact on the student's academic and behavioral outcomes, and the development of relationships between educators and their students. Furthermore, the student assistance team and advisory class were powerful interventions for students. Consistency is significant to the success of PBIS implementation and ensuring the program is implemented with fidelity.

References

Alamri, W. A. (2019). Effectiveness of qualitative research methods: Interviews and diaries. *International Journal of English and Cultural Studies, 2* (1), 65-70. https://doi.org/10.11114/ijecs.v2i1.4302

Alter, P., Walker, J., & Landers, E. (2013). Teachers' perceptions of students' challenging behavior and impact of teacher demographics. *Education and Treatment of Children, 36*(4), p. 51-69.

Barrett, S B., Bradshaw, C. P., & Lewis-Palmer, T. (2008). Maryland statewide PBIS initiative: Systems, evaluation, and next steps. *Journal of Positive Behavior Interventions, 10*(2), 105-114. https://doi.org/10.1177/1098300707312541

Bauer, D., Previts, J. L., Nocera, E. J., Whitbread, K. M., & Nocera, G. P. (2014). Impact of school-wide Positive Behavior Supports on student behavior in the middle grades. *Research in Middle Level Education*, 37(8), 1-14.

Beserra, V., Nussbaum, M., & Oteo, M. (2019). On-task and off-task behavior in the classroom: A study on mathematics learning with education video games. *Journal of Educational Computing Research, 56*(8), 1361-1383. https://doi.org/10.1177/0735633117744346

Boden, L. J., Ennis, R. P., Allen, L., Williams, D., & Dana, L. (2020) Staff and youth buy-in ideas for initial and sustainable facility-wide Positive Behavior Intervention and Supports implementation within residential and juvenile facilities. *Remedial and Special Education, 41*(2), 88-98. https://doi.org/10.1177/0741932519896078

Boden, L. J., Jolivette, K. & Alberto, P. A. (2018). The effects of Check-In, Check-Up, Check-Out for students with moderate intellectual disability during on- and off-site vocational training. *Journal of Classroom Interaction, 53*(1), 4-21.

Bohanon, H., Fenning, P., Carney, K. L., Minnis-Kim, M. J., Anderson-Harriss, S., Moroz, K. B., Hicks, K. J., Kasper, B. B., Culos, C., Sailor, W., & Pigott, T. D. (2006). Schoolwide application of Positive Behavior Support in an urban high school: A case study. *Journal of Positive Behavior Interventions, 8*(3), 131-145.

Bohanon, H. Flannery, K. B., Malloy, J., & Fenning, P. (2009). Utilizing Positive Behavior Supports in high school settings to improve school completion rates for students with high incidence conditions. *Journal of Applied School Psychology, 37*(2), 197-220.

Bohanon, H. & Wu, M. (2014). Developing buy-in for Positive Behavior Support in secondary settings. *Preventing School Failure, 58*(4), 223-229.

Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: A research note. *Qualitative Research, 8*(1), 137-152.

Bradshaw C. P. (2013). Preventing bullying through Positive Behavioral Interventions and Supports (PBIS): A multitiered approach to prevention and integration. *Theory Into Practice, 52*(4), 288-295.

Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., Leaf, P. J. (2008). The impact of school-wide Positive Behavioral Interventions and Supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly, 23*(4), 462-473. https://doi.org/10.1037/a0012883

Bradshaw, C. P., Koth, C. W., Thornton, L. A., & Leaf, P. J. (2009). Altering school climate through school-wide Positive Behavioral Interventions and Supports: Findings from a group-randomized effectiveness trial. *Prev Sci, 10*, 100-115. https://doi.org/10.1007/s11121-008-0114-9

Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of schoolwide

Positive Behavioral Interventions and Supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions 12*(3), 133-148. https://doi.org/10.1177/1098300709334798

Bradshaw, C. P., Pas, E. T., Debnam, K. J., & Johnson, S. L. (2015). A focus on the implementation of positive behavioral interventions and supports (PBIS) in high schools: Associations with bullying and other indicators of school disorder. *School Psychology Review, 44*(4), 480-498.

Bradshaw, C. P., Waasdorp, T. E., & Leaf, P. J. (2012). Effects of school-wide Positive Behavioral Interventions and Supports on Child Behavior Problems. *Pediatrics, 130*(5), 1136-1145.

Bruhn, A. L., Estrapala, S., Rile, A., & Colbert, J. (2021). A case example of Tier 1 PBIS implementation in a high school. *Preventing School Failure: Alternative Education for Children and Youth, 66*(1),*66-76*. https://doi.org/10.1080/1045988X.2021.1946463

Bruhn, A. L., Lane, K. L., & Hirsch, S. E. (2014). A review of Tier 2 interventions conducted within multitiered models of behavioral prevention. *Journal of Emotional and Behavioral Disorders, 22*(3), 171-189. https://doi.org/10.1177/1063426613476092

Bruhn, A. L., & McDaniel, S. C. (2021). Tier 2: Critical issues in systems, practices, and data. *Journal of Emotional and Behavioral Disorders, 29*(1), 34-43.

Casey, L. B., & Carter, S. L. (2016). *Applied Behavior Analysis in early Childhood Education: An introduction to evidence-based interventions and teaching strategies*. Taylor & Francis.

Champeau, R. D. (2011). Great Relationships Great Education. *Principal Leadership, 11*(7), 38-40.

Childs, K. E., Kincaid, D., & George, H. P. (2010). A model for statewide evaluation of a universal Positive Behavior Support Initiative. *Journal of Positive Behavior Interventions, 12*(4), 198-210. https://doi.org/10.1177/1098300709340699

Childs, K. E., Kincaid, D., George, H. P., & Gage, N. A. (2016). The relationship between school-wide implementation of Positive Behavior Intervention and Supports and student discipline outcomes. *Journal of Positive Behavior Interventions, 18*(2), 89-99. https://doi.org/10.1177/1098300715590398

Christofferson, R. D., & Callahan, K. (2015). Positive Behavior Support in Schools (PBSIS): An administrative perceptive on the implementation of a comprehensive school-wide intervention in an urban charter school. *NCPEA Education Leadership Review of Doctoral Research, 2*(2), 35-49.

Cook, C. R., Grady, E. A., Long, A. C., Renshaw, T., Codding, R. S., Fiat, A., & Larson, M. Evaluating the impact of increasing general education teachers' ratio of positive-to-negative interactions on students' classroom behavior. *Journal of Positive Behavior Interventions, 19*(2), 67-77. https://doi.org/10.1177/1098300716679137

Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications, Inc.

Davis, T. N., Dacus, S., Bankhead, J., Haupert, M., Fuentes, L., Zoch, T., Kang, S., Attai, S., & Lang, R. (2014). A comparison of self-monitoring with and without reinforcement to improve on-task classroom behavior. *Journal of School Counseling, 12*(12).

Debnam, K. J., Pas, E. T., & Bradshaw, C. P. (2012). Secondary and tertiary support systems in schools implementing school-wide Positive Behavioral Interventions and Supports. *Journal of Positive Behavior Interventions, 14*(3), 131-191.

DiMartino, J., & Clarke, J. H. (2008). The Heart of School. *Principal Leadership, 9*(3), 16-19.

Elrod, B. G., Rice, K. G., & Meyers, J. (2022). PBIS fidelity, school climate, and student discipline: A longitudinal study of secondary schools. *Psychol Schs, 59*, 376-397. https://doi.org/10.1002/pits.22614

Endedijk, H. M., Breeman, L. D., Lissa, C. J., Hendrickx, M. M. H. G., Boer, L., & Mainhard, T. (2022). The teacher's invisible hand: A meta-analysis of the relevance of teacher-student relationship quality for peer relationships and the contribution of student behavior. *Review of Educational Research, 93*(3), 370-412.

Engels, M. C., Colpin, H., Leeuwen, K. L., Bijttebier, P., Noortgate, W. V. D., Claes, S., Goosens, L., & Verschueren, K. (2016). Behavioral engagement, peer status, and teacher-student relationships in adolescence: A longitudinal study on reciprocal influences. *J Youth Adolescence, 45*, 1192-1207. https://doi.org/10.1007/s10964-016-0414-5

Estrapala, S., Rila, A., & Bruhn, A. L. (2021). A systematic review of Tier I PBIS implementation in high schools. *Journal of Positive Behavior Interventions, 23*(4), 288-302. https://doi.org/10.1177/1098300720929684

Faul, A., Stepensky, K., & Simonsen, B. (2012). The effects of prompting appropriate behavior on the off-task behavior of two middle school students. (2012). *Journal of Positive Behavior Interventions, 14*(1), 47-55. https://doi.org/10.1177/1098300711410702

Fefer, S. A., Hieneman, M., Virga, C., Thoma, A., & Donnelly, M. (2020). Evaluating the effect of positive parent contact on elementary students' on-task behavior. *Journal of Positive Behavior Interventions, 22*(4), 234-245. https://doi.org/10.1177/1098300720908009

Feuerborn, L. L., Tyre, A. D., King, J. P. (2015). The staff perceptions of behavior and discipline survey: A tool to help achieve systematic change through Schoolwide Positive Behavior Support. *Journal of Positive Behavioral Interventions, 17*(2), 116-126. https://doi.org/10.1177/1098300714556675

Feuerborn, L. L., Wallace, C., & Tyre, A. D. (2016). A qualitative analysis of middle and high school teachers perceptions of schoolwide Positive Behavior Supports. *Journal of Positive Behavior Interventions, 18*(4), 219-229. https://doi.org/10.1177/1098300716632591

Flannery, K. B., Fenning, P., Kato, M. M., & McIntosh, K. (2014). Effects of school-wide Positive Behavioral Interventions and Supports and fidelity of implementation on problem behavior in high schools. *School Psychology Quarterly, 29*(2), 111-124. https://doi.org/10.1037/spq0000039

Freeman, J., Kern, L., Gambino, A. J., Lombardi, A., & Kowitt, J. (2019) Assessing the relationship between the Positive Behavior Interventions and Supports framework and student outcomes in high schools. *Journal of At-Risk Issues, 22*(2), 1-11.

Freeman, J., Simonsen, B., McCoach, D. B., Sugai, G., Lombardi, A., & Horner, R. (2015). An analysis of the relationship between implementation of School-wide Positive Behavior Interventions and Supports and high school dropout rates. *The High School Journal, 98*(4), 290-315. https://doi.org/10.1353/hsj.2015.0009

Freeman, J., Simonsen, B., McCoach, D. B., Sugai, G., Lombardi, A., & Horner, R. (2016). Relationship between School-Wide Positive Behavior Interventions and Supports and academic, attendance and behavior outcomes in high schools. *Journal of Positive Behavior Interventions, 18* (1), 41-51. https://doi.org/10.1177/1098300715580992

Gage, N. A., Grasley-Boy, N., George, H. P., Childs, K., & Kincaid, D. (2019). A quasi-experimental design analysis of the effects of school-wide Positive Behavior Interventions and Supports on discipline in Florida. *Journal of Positive Behavior Interventions, 21*(1), 50-61. https://doi.org/10.1177/1098300718768208

Gage, N. A., Lee, A., Grasley-Boy, N., & George, H. P. (2018). The impact of School-Wide Positive Behavior Interventions and Supports on school suspensions: A statewide quasi-experimental analysis. *Journal of Positive Behavior Interventions, 20*(4), 217-226.

Gietz, C., & McIntosh, K. (2014), Relations between student perceptions of their school environment and academic achievement. *Canadian Journal of School Psychology, 29*(3), 161-176. https://doi.org/10.1177/0829573514540415

Godwin, K. E., Seltman, H., Almeda, M., Skerbetz, M. D., Kai, S., Baker, R. S., & Fisher, A. V. (2021). The elusive relationship between time on-task and learning: Not simply an issue of measurement, *Educational Psychology, 41*(4), 502- 519. https://doi.org/10.1080/01443410.2021.1894324

Godwin, K.E., Seltman, H.J., Almeda, M.V., Kai, S., Baker, R., & Fisher, A.V. (2016). The variable relationship between on-task behavior and learning. *Learning and Instruction, 44*, 128-143. Retrieved from https://learninganalytics.upenn.edu/ryanbaker/Godwin_Cogsci_2016_Final.pdf

Grasley-Boy, N. M., Gage, N. A., & Lombardo, M. (2019). Effect of SWPBIS on disciplinary exclusions for students with and without disabilities. *Exceptional Children, 86*(1), 25-39. https://doi.org/10.1177/0014402919854196

Grasley-Boy, N. M., Reichow, B., Dijk, W. v., & Gage, N. (2021). A systematic review of Tier 1 PBIS implementation in alternative education settings. *Behavioral Disorders, 46*(4), 199-213. https://doi.org/10.1177/0198742920915648

Hill, D. & Brown, D. (2013). Supporting inclusion of at risk students in secondary school through positive behaviour support. *International Journal of Inclusive Education, 17*(8), 868-881.

Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing School-Wide Positive Behavior Support in elementary schools. *Journal of Positive Behavior Interventions, 11*(3), 133-144. https://doi.org/10.1177/1098300709332067

Horsburgh, J., & Ippolito, K. (2018). A skill to be worked at: Using social learning theory to explore the process of learning from role models in clinical settings. *BMC Medical Education, 18*(156).

Houchens, G. W., Zhang, J., Davis, K., Niu, C., Chon, K. H., & Miller, S. (2017). The impact of Positive Behavior Interventions and Supports on teachers' perceptions of teaching conditions and student achievement. *Journal of Positive Behavior Interventions, 19*(3), 168-179.

Huang, F. & Anyon, Y. (2020). The relationships between school disciplinary resolutions with school climate and attitudes toward school. *Preventing School Failure: Alternative Education for Children and Youth, 64*(3), 212-222. https://doi.org/10.1080/1045988X.2020.1722940

Ingemarson, M., Rosendahl, I., Bodin, M., & Birgegård, A. (2019). Teacher's use of praise, clarity of school rules and classroom climate: Comparing classroom compositions in terms of disruptive students. *School Psychology of Education, 23*, 217-232.

James, A. G., Noltemeyer, A., Ritchie, R., & Palmer, K. (2019). Longitudinal disciplinary achievement outcomes associated with school-wide PBIS implemental level. *Psychol Schs., 56*, 1512-1521. https://doi.org/10.1002/pits.22282

James, A. G., Smallwood, L., Noltemeyer, A., Green, J. (2018). Assessing school climate within a PBIS framework: Using multi-informant assessment to identify strengths and needs. *Educational Studies, 44*(1), 115-118.

Jaquett, C. M., Skinner, C. H., Moore, T., Ryan, K., McCurdy, M., & Cihak, D. (2021). Interdependent group rewards: Rewarding on-task behavior versus academic performance in an eighth-grade classroom serving students with emotional and behavioral disorders. *Behavioral Disorders, 46*(4), 238–252. https://doi.org/10.1177/0198742920934006

Johnson, L. E., Wang, E. W., Gilinsky, N., He, Z., Carpenter, C., Nelson, C. M., & Scheuermann, B. K. (2013). Youth outcomes following implementation of universal SW-PBIS strategies in a Texas secure juvenile facility. *Education and Treatment of Children, 36*(3), 135-145.

Jones, A., & Shindler, J. (2016). Exploring the school climate—Student achievement connection: Making sense of why the first precedes the second. *Educational Leadership and Administration: Teaching and Program Development,* 2735-2751.

Kashy-Rosenbaum, G., Kaplan, O., & Israel-Cohen, Y. (2018). Predicting academic achievement by class-level emotions and perceived homeroom teachers' emotional support. *Psychology in the Schools, 55*, 770-782. https://doi.org/10.1002/pits.22140

Kelm, J. L., McIntosh, K., & Cooley, S. (2014). Effects of implementing School-Wide Positive Behavioural Interventions and Supports on problem behaviour and academic achievement in a Canadian elementary school. *Canadian Journal of School Psychology, 29*(3), 195-212.

Kilgus, S. P. & Eklund, K. R. (2016). Consideration of base rates within universal screening for behavioral and emotional risk: A novel procedural framework. *National Association of School Psychologists, 10*(1), 120-130.

Kim, J., McIntosh, K., Mercer, S. H., & Nese, R. N. T. (2018). Longitudinal associations between SWPBIS fidelity of implementation and behavior and academic outcomes. *Behavioral Disorders, 43*(3), 357-369. https://doi.org/10.1177/0198742917747589

Kimbal, K. A., Jolivette, K., Sprague, J. R. (2017) Agency-stakeholder reflections: Perspectives of state-wide adoption of the PBIS framework in juvenile facilities. *The Journal of Correctional Education, 68*(2), 17-36.

Kincade, L., Cook, C., & Goerdt, A. (2020). Metal-analysis and common practice elements of universal approaches to improving student-teacher relationships. *Review of Educational Research, 90*(5), 710-748.

Klenke, K. (2016). *Qualitative Research in the Study of Leadership* (2nd ed.). Emerald Group Publishing Limited.

Koenka, A. C., Linnenbrink-Garcia, L., Moshontz, H., Atkinson, K. M., Sanchez, C. E., & Cooper, H. (2021). A meta-analysis on the impact of grades and comments on academic motivation and achievement: A case for written feedback. *Educational Psychology, 41*(7), 922-947

Kolb, S. M. (2012). Grounded theory and the constant comparative method: Valid research strategies for educators. *Journal of Emerging Trends in Educational Research and Policy Studies, 3*(1), 83-86.

Krane, V., Ness, O., Holter-Sorensen, N. H., Karlsson, B., & Binder, P. E. (2017). 'You notice that there is something positive about going to school': How teachers' kindness can promote positive teacher-student relationships in upper secondary school. *International Journal of Adolescence and Youth, 22*(4) 377-389. https://doi.org/10.1080/02673843.2016.1202843

Lane, K. L., Wehby, J. H., Robertson, E. J., & Rogers, L. A. (2007). How do different types of high school students respond to schoolwide Positive Behavior Support programs? *Journal of Emotional and Behavioral Disorders, 15*(1), 3-20.

Lassen, S. R., Steele, M. M., & Sailor, W. (2006). The relationship of School-Wide Positive Behavior Support to academic achievement in an urban middle school. *Psychology in the Schools, 43*(6), 701-712.

Lawrence, T. D., Holubz, B. J., Paynter, K. C., & Hixon, M. L. (2022) Implementing Positive Behavior Intervention and Support (PBIS) with fidelity: Secondary school staff members' descriptions of school climate. *Journal of Educational Research & Practice, 12*(1), 278-290.

Lee, S. W., & Jamison, T. R. (2003). Including the FBA process in student assistance teams: An exploratory study of team communications and intervention selection. *Journal of Educational & Psychological Consultation, 14*(2), 209-239.

Lind, J., Poppen, M., & Murray, C. (2017). An intervention to promote positive teacher-student relationships and self-determination among adolescents with emotional disturbance. *Career Development and Transition for Exceptional Individuals, 40*(3), 186-191.

Lloyd, B. P., Carter, E. W., Hine, M. C., Davis, D., Lanchak, E. R., Ferrell, M. A., Axelroth, T. L., Shuster. B. C., Haynes, R. L., Higgs, J., & Chauvin, C. B. (2022). Student perspectives of implementation and impact of Positive Behavior Interventions and Supports (PBIS) in their middle schools. *Journal of Positive Behavior Interventions.* https://doi.org/10.1177/10983007221082961

Ma, L., Liu, J., & Li, B. (2021). The association between teacher-student relationship and academic achievement: The moderating effect of parental involvement. *Psychology in the Schools, 59*, 281-296.

Madigan, K., Cross, R. W., Smolkowski, K., & Stryker, L. A. (2016). Association between schoolwide positive behavioral interventions and supports and academic achievement: a 9-year evaluation. *Educational Research and Evaluation, 22*(7-8), 402-421.

Malloy, J. M., Bohanon, H., & Francoeur, K. (2018). Positive Behavioral Interventions and Supports in high schools: A case study from New Hampshire. *Journal of Educational and Psychological Consultation, 28*(2), 219-247.

Markelz, A., Riden, B., Floress, M. T., Balint-Langel, K., Heath, J., & Pavelka, S. (2021). Teachers' use of specific, contingent, and varied praise. *Journal of Positive Behavior Interventions, 24*(2), 1-12. https://doi.org/10.1177/1098300720988250

Martin, A. (2016). Supporting positive behaviour change for at-risk students: A best practice checklist for schools. *Kairaranga, 17*(2), 37-42.

Mason, B. A., Hajovsky, D. B., McCune, L. A., & Turek, J. J. (2017). Conflict, closeness, and academic skills: A longitudinal examination of the teacher-student relationship. *School Psychology Review, 46*(2), 177-189.

McClure, L., Yonezawa, S., & Jones, M. (2010). Can school structures improve teacher-student relationships? The relationship between advisory program, personalization and students' academic achievement. *Education Policy Analysis Archives, 18*(17). https://doi.org/10.14507/epaa.v18n17.2010

McCrary, D., Lechtenberger, D., & Wang, E. (2012). The effect of schoolwide Positive Behavioral Supports on children in impoverished rural community schools. *Preventing School Failure, 56*(1), 1-7. https://doi.org/10.1080/1045988X.2010.548417

McDaniel, S. C., Cohen, D., & Bruhn, A. L. (2022). Evaluating school-level student outcomes of a systematic Tier 2 framework. *Behavioral Disorders, 47*(3), 176-186. https://doi.org/10.1177/01987429211009156

McDaniel, S. C., Houchins, D. E., & Robinson, C. (2016). The effects of Check, Connect, and Expect on behavioral and academic growth. *Journal of Emotional and Behavioral Disorder, 24*(1), 42-53.

McDaniel S., Kim, S., Kwon, D., & Choi, Y. (2018). Stakeholder perceptions of contextual factors related to PBIS implementation in high need schools. *Journal of Children and Poverty, 24*(2), 109-122. https://doi.org/10.1080/10796126.2018.1518777

McIntosh, K., Girvan, E. J., Fairbanks Falcon, S., McDaniel, S. C., Smolkowski, K., Bastable, E., Santiago-Rosario, M. R., Izzard, S., Austin, S. C., Nese, R. N. T., & Baldy, T. S. (2021). Equity-focused PBIS approach reduces racial inequities in school discipline: A randomized controlled trial. *School Psychology, 36*(6), 433-444.

https://doi.org/10.1037/spq0000466

McIntosh, K., Kelm, J. L., & Delabra, A. C. (2016). In search of how principal change: A qualitative study of events that help and hinder administrator support for school-wide PBIS. *Journal of Positive Behavior Interventions, 18*(2), 100-110. https://doi.org/10.1177/1098300715599960

McIntosh, K., Massar, M. M., Algozzine, R. F., George, H. P., Horner, R. H., Lewis, T. J., & Swain-Bradway, J. (2017). Technical adequacy of the SWPBIS Tiered Fidelity Inventory. *Journal of Positive Behavior Interventions*, *19*(1), 3-13. https://doi.org/10.1177/1098300716637193

McPhee, K., Givhan, K., Srisarajivakul, E. N., Ramirez, V., Taylor, E., Varjas, K., Perkins, C., & Meyers, J. (2017). Teacher-student relationships: Strengthening the impact of PBIS on Climate. *Georgia Association of Positive Behavior Support Conference, 64*. https://digitalcommons.georgiasouthern.edu/gapbs/2017/2017/64

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative Research: A guide to design and implementation.* John Wiley & Sons, Incorporated.

Mertler, C. A., & Charles, C. M. (2011). *Introduction to Educational Research* (7th ed.) Pearson Education: Boston MA

Moghaddam, A. (2006). Coding issues in grounded theory. *Issues in Educational Research, 16*, 52-66.

Muscott, H. S., Mann, E. L., & LeBrun, M. R. (2008). Positive Behavioral Interventions and Supports in New Hampshire: Effects of large-scale implementation of School wide Positive Behavior Support on student discipline and academic achievement. *Journal of*

Positive Behavior Interventions, 10 (3), 190-205. https://doi.org/10.1177/1098300708316258

Närhi, C., Kiiski, T., & Savolainen, H. (2017). Reducing disruptive behaviours and improving classroom behavioural climate with class-wide positive behaviour support in middle schools. *British Educational Research Journal, 43*(6), 1186-1205.

Nese, R. N. T., Kittelman, A., Strickland-Cohen, K., & McIntosh, K. (2023). Examining teaming and Tier 2 and 3 practices within PBIS framework. *Journal of Positive Behavior Interventions, 25*(1), 16-27. https://doi.org.10.1177/10983007211051090

Nese, R., McIntosh, K., Nese, J., Hoselton, R., Bloom, J., Johnson, N., Richter, M., Phillips, D., & Ghemraoui, A. (2016). Predicting abandonment of school-wide Positive Behavioral Interventions and Supports. *Behavioral Disorder, 42*(1), 261-270.

Noltemeyer, A., Palmer, K., James, A. G., & Petrasek, M. (2019). Disciplinary and achievement outcomes associated with school-wide Positive Behavioral Interventions and Supports implementation level. *School Psychology Review, 48*(1), 81-87. https://doi.org/10.17105/SPR-2017-0131.V48-1

Olsen, A. A. & Huang, F. L. (2021). The association between student socioeconomic status and student-teacher relationships on math achievement. *School Psychology, 36*(6), 464-474. https://doi.org/10.1037/spq0000455

Oyen, K. A., & Wollersheim-Shervey, S. (2019). An examination of critical features of positive frameworks: Impact in rural environments for school-based practitioners. *Contemporary School Psychology, 23*, 388-400. https://doi.org/10.1007/s40688-018-0198-6

Pas, E. T., & Bradshaw, C. P. (2012). Examining the association between implementation and outcomes: State-wide scale-up of school-wide Positive Behavior Inter vention and Supports. *Journal of Behavioral Health Services & Research, 39*(4), 417-433.

Pas, E. T., Bradshaw, C. P., & Mitchell, M. M. (2011) Examining the validity of office discipline referrals as an indicator of student behavior problems. *Psychology in the Schools, 48*(6), 541-555.

Pas, E. T., Ryoo, J. H., Musci, R. J., & Bradshaw, C. P. (2019). A state-wide quasi-experimental effectiveness study of the scale-up of school-wide Positive Behavioral Interventions and Supports. *Journal of School Psychology, 73*, 41-55. https://doi.org/10.1016/j.jsp.2019.03.001

Patton, M. Q. (2002) *Qualitative Research & Evaluation Methods* (3rd ed.). SAGE Publications, Inc.

Petrasek, M., James, A., Noltemeyer, A., Green, J., & Palmer, K. (2022). Enhancing motivation and engagement within a PBIS framework. *Improving Schools, 25*(1), 37-51. https://doi.org/10.1177/13654802211002299

Pinkelman, S. E., McIntosh, K., Rasplica, C. K., Berg, T., & Strickland-Cohen, M. K. (2015). Perceived enablers and barriers related to sustainability of school-wide Positive Behavioral Interventions and Supports. *Behavioral Disorders, 40*(3), 171-183.

Putnam, R., Horner, R. H., & Algozzine, R. (2006). Academic achievement and the implementation of school-wide behavior support. *Positive Behavior Interventions and Supports Newsletter*, 3(1).

Qu, S. Q. & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management, 8*(3), 238-264. https://doi.org/10.1108/11766091111162070

Rifenbark, G. G., Lombardi, A. R., Freeman, J., & Morningstar, M. E. (2012). The adolescent behavioral index: Identifying students at risk for disengagement in high school. *Journal of Vocational Rehabilitation, 58*(2), 115-128. https://doi.org/10.3233/JVR-230002

Robertson, R. E., Kokina, A. A., & Moore, D. W. (2020). Barriers to implementing behavior intervention plans: Results of a statewide survey. *Journal of Positive Behavior Interventions, 22*(3), 145-155. https://doi.org/10.1177/1098300720908013

Royer, D. J., Lane, K. L., Dunlap, K. D., & Ennis, R. P. (2019) A systematic review of teacher-delivered behavior-specific praise on K-12 student performance. *Remedial and Special Education, 40*(2), 112-128.

Ryoo, J. H., Hong, S., Bart, W. M., Shin, J., & Bradshaw, C. P. (2018). Investigating the effect of school-wide positive behavioral interventions and supports on student learning and behavioral problems in elementary and middle schools. *Psychol Schs., 55*, 629-643.

Sadler, C. & Sugai, G. (2009). Effective behavior and instruction support: A district model for early identification and prevention of reading and behavior problems. *Journal of Positive Behavior Interventions, 11*(1), 35-46.

Scales, P. C., Pekel, K., Sethi, J. Chamberlain, R., & Van Boekel, M. (2020). Academic year changes in student-teacher developmental relationships and their linkage to middle and high school students' motivation: A mixed methods study. *Journal of Early Adolescence, 40*(4), 499-536.

Scaletta, M., & Hughes, M. T. (2021). Sustained Positive Behavioral Interventions and Supports implementation: School leaders discuss their processes and practices. *Journal of Positive Behavior Interventions, 23*(1), 30-41.

Scott, Et. M., Alter, P. J., Rosenbery, M., & Borgmeier, C. (2010). Decision–making in secondary and tertiary interventions of school-wide systems of Positive Behavior Supports. *Education and Treatment of Children, 33*(4), 513-535.

Simonsen, B., Britton, L., & Young, D. (2010). School-wide Positive Behavior Support in an Alternative School Setting. *Journal of Positive Behavior Interventions, 12*(3), 180-191. https://doi.org/10.1177/1098300708330495

Simonsen, B., Freeman, J., Gambino, A. J., Sears, S., Meyer, K., & Hoselton, R. (2022). An exploration of the relationships between PBIS and discipline outcomes for students with disabilities. *Remedial and Special Education, 43*(5), 287-300.

Simonsen, B. & Sugai, G. (2013). PBIS in alternative education settings: Positive support for youth with high-risk behavior. *Education and Treatment of Children, 36*(3), 3-14.

Spaulding, S. A., Irvin, L. K., Horner, R. H., May, S. L., Emeldi, M., Tobin, T. J., & Sugai, G. (2010). Schoolwide social-behavioral climate, student problem behavior, and related administrative decisions: Empirical patterns from 1,510 schools nationwide. *Journal of Positive Behavior Interventions, 2*(2), 6-85. https://doi.org/10.1177/1098300708329011

Speight, R. & Kuckarczyk, S. (2021). Leveraging Positive Behavior Supports to improve engagement in virtual settings. *Journal of Special education Technology, 36*(2), 90-96. https://doi.org/10.1177/0162643421992704

Speight, R., Whitby, P., & Kucharczyk, S. (2020). Impact of CW-FIT on student and teacher behavior in a middle school. *Journal of Positive Behavior Interventions, 22*(4), 195-206. https://doi.org.iris.etsu.edu/10.1177/1098300720910133

Stoehr, J. & Isernhagen, J. (2011). High school teacher perceptions of the student assistance team process. *Journal of the American Academy of Special Education Professionals,* 52-60.

Stormont, M., Reinke, W. M., Herman, K. C., & Lembke, E. S. (2012). *Academic and Behavior Support for At-Risk Students: Tier 2 Interventions*. Guilford Publications.

Thouin, E., Dupere, V., Dion, E., McCabe, J., Denault, A. S., Archambault, I., Brière, F. N., Leventhal, T., & Crosnoe, R. (2020). School-based extracurricular activity involvement and high school dropout among at-risk students: Consistency matters. *Applied Developmental Science, 26*(3), 303-316. https://doi.org/10.1080/10888691.2020.1796665

Trainor, A. A., Morningstar, M. E., Murray, A., & Kim, H. (2013). Social capital during the postsecondary transition for young adults with high incidence disabilities. *The Prevention Researcher, 20*(2), 7-11.

Turner, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report, 15*(3), 754-760.

Vancel, S. M., Missall, K. N., & Bruhn, A. L. Teacher ratings of social validity of Schoolwide Positive Behavior Interventions and Supports: A Comparison of School Groups. *Preventing School Failure, 60*(4), 320-328. https://doi.org/10.1080/1045988X.2016.1157784

Vincent, C. G., & Tobin, T. J. (2011) The relationship between implementation of School-Wide Positive Behavior Support (SWPBS) and disciplinary exclusion of students from various ethnic backgrounds with and without disabilities. *Journal of Emotional and Behavioral Disorders, 19*(4), 217-232. https://doi.org/10.1177/1063426610377329

Voight, A., & Nation, M. (2016). Practices for improving secondary school climate: A systematic review of the research literature. *American Journal of Community Psychology, 58*, 174-191. https://doi.org/10.1002/ajcp.12074

Wadesango, N. (2022). The importance of reinforcement in the classroom. *International Journal of Early Childhood Special Education, 14*(8), 99-107

Wheeler, J. J., & Richey, D. D. (2019). *Behavior Management: Principles and practices of Positive Behavioral Interventions and Supports* (4th ed.) Pearson.

Whitney, T., & Ackerman, K. B. (2020). Acknowledging student behavior: A review of methods promoting positive and constructive feedback. *Beyond Behavior, 29*(2), 86-94. https://doi.org/10.1177/1074295620902474

Xie, K., Vongkulluksn, V. W., Cheng, S. L., & Jiang, Z. (2022). Examining high-school students' motivation change through a person-centered approach. *Journal of Educational Psychology, 114*(1), 89-107. https://doi.org/10.1037/edu0000507

APPENDICES

APPENDIX A: The Three Tiers and Subscales of the PBIS TFI

Tier 1: Universal PBIS Features	1.1	Team Composition
	1.2	Team Operating Procedures
	1.3	Behavioral Expectations
	1.4	Teaching Expectations
	1.5	Problem Behavior Definitions
	1.6	Discipline Policies
	1.7	Professional Development
	1.8	Classroom Procedures
	1.9	Feedback and Acknowledgement
	1.10	Faculty Involvement
	1.11	Student/Family/Community Involvement
	1.12	Discipline Data
	1.13	Data-based Decision Making
	1.14	Fidelity Data
	1.15	Annual Evaluation
Tier 2: Targeted PBIS Features	2.1	Team Composition
	2.2	Team Operating Procedures
	2.3	Screening
	2.4	Request for Assistance
	2.5	Options for Tier 2 Interventions
	2.6	Tier 2 Critical Features
	2.7	Practices Matched to Student Need
	2.8	Access to Tier 1 Supports
	2.9	Professional Development
	2.10	Level of Use
	2.11	Student Performance Data
	2.12	Fidelity Data
	2.13	Annual Evaluation
Tier 3: Intensive PBIS Features	3.1	Team Composition
	3.2	Team Operating Procedures
	3.3	Screening
	3.4	Student Support Team
	3.5	Staffing
	3.6	Student/Family/Community Involvement
	3.7	Professional Development
	3.8	Quality of Life Indicators

	3.9	Academic, Social, and Physical Indicators
	3.10	Hypothesis Statement
	3.11	Comprehensive Support
	3.12	Formal and Natural Supports
	3.12	Access to Tier 1 and Tier 2 Supports
	3.14	Data System
	3.15	Data-based Decision Making
	3.16	Level of Use
	3.17	Annual Evaluation

APPENDIX B: Interview Questions

Research Questions:

1. What are secondary educator perceptions of PBIS program and high school student achievement?
    a. Describe your perceptions of PBIS and student academic achievement.
    b. Describe how you implement PBIS in your classroom.
    c. How has student achievement changed since the implementation of PBIS?
2. Which specific interventions in PBIS are most associated with student achievement?
    a. What specific academic supports are currently in place for students?
    b. What interventions have you found to be the most successful in your classroom? Least successful?
3. What are secondary educator perceptions of how PBIS program could be changed?
    a. Describe any recommendations that you have regarding PBIS?
    b. Describe any barriers that you perceive as limiting the implementation of PBIS?

VITA

CYNTHIA L. EVERITT-DAY

Education:

Ed.D. Educational Leadership, East Tennessee State University, Johnson City, Tennessee, 2023

Post-MA Principal Licensure, Marshall University, South Charleston, West Virginia, 2017

M.A. Teaching, Marshall University, South Charleston, West Virginia, 2015

B.S. Biology, Hollins University, Roanoke, Virginia, 2010

Batten Leadership Institute Certificate in Leadership Studies, Hollins University, Roanoke, Virginia, 2010

Professional Experience:

Supervisor of Instruction and Academic Support, 2022- present, Bland County Public Schools, Virginia

Coordinator of Virtual Learning, 2021-2022, Bland County Public Schools, Virginia

Assistant Principal, Mount View High School, 2017-2021, McDowell County Public Schools, West Virginia

High School Science Teacher, Mount View High School, 2012-2017, McDowell County Public Schools, West Virginia