TEACHERS' PERCEPTIONS OF SUCCESSFULLY SUSTAINED PBIS PROGRAMS

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ABSTRACT

Positive Behavioral Interventions and Supports (PBIS) is a system of support that includes proactive interventions for defining, teaching, and supporting student behaviors to ensure a positive school atmosphere. PBIS programs are being implemented more and more and there is a large amount of research and literature about best practices when implementing these programs, but not as much on sustaining these programs. The purpose of this mixed methods study is to look at successfully sustained PBIS programs and to find commonalities from teacher perspectives on these programs. Finding these common trends will help other schools and districts being able to maintain their PBIS program after implementation. The data for this study was collected through teacher responses to open-ended questions on PBIS programs and ratings based on Likert-type questions on the importance and effectiveness of key PBIS program components. The school used for this study had been identified by the state of Pennsylvania as having sustained fidelity with their PBIS program. Themes that emerged from this research were the importance of adapting programs, staff buy-in, the use of data, teacher training and professional development, administrative support, and the token economy. These findings show the need to continually make changes to programs over time, the proper use of data, continued professional development, and the importance of funding to sustain PBIS programs.

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CHAPTER 1

Introduction

Positive Behavioral Intervention and Supports (PBIS) is a system of support that includes proactive interventions for defining, teaching, and supporting student behaviors to ensure a positive school atmosphere (Office of Special Education Programs [OSEP] Technical Assistance Center on Positive Behavioral Interventions and Supports [PBIS], 2017). PBIS was directly detailed in the 1997 Reauthorization of the Individuals with Disabilities Education Act (IDEA), as well as formally identified in the Every Student Succeeds Act (ESSA) of 2016. The term PBIS can also be used interchangeably with Schoolwide Positive Behavior Interventions and Supports (SWPBIS) and is based upon the principles of Applied Behavior Analysis (ABA) in alignment with the values of positive behavior support and the prevention approach (Carriere, 2018). Overall, PBIS is a method for building a supportive and positive school atmosphere by means of a proactive methodology to school discipline reform.

While there is quality research on the background, validity, and implementation of PBIS programs, there is less on sustaining a program once it has been put into place. One of the most significant restraints on maintaining successful PBIS programs is the lack of research on sustainability (Johnson, 2014). This study will set out to look at programs that have been recognized by the state of Pennsylvania as having sustained their PBIS program with fidelity after the initial implementation process. Teachers at these schools will be interviewed to look for common themes, among these programs, that have helped these PBIS programs to sustain their effectiveness over time. The results of this study will then have the potential to be used to help guide future schools and districts to maintain the successfulness of their programs for a longer period.

Overview of PBIS

As the foundation for Applied Behavior Analysis (ABA) was being cemented by Baer, Wolf, and Risley (1968), these ABA researchers focused on three main issues of research in their field, applied, behavioral, and analytic, as well as three additional issues, technological, conceptually systematic, and effective. Using these traits, the researchers set out to define and outline what the exact requirements and purpose were of the research in this field to make it valuable and able to be implemented effectively. The authors wanted research that could be applied in every day settings, not just in a laboratory, and with more controllable variables. The goal was to work towards a specific result that could be repeated over and over again, while being related to a real-world application. This was to be the framework for the field of ABA and, when paired with other aspects, such as a token economy, tiered intervention programs, tiered support programs, and data analysis, would be adapted into a step-by-step model of SWPBIS. Sugai and Horner (2002) developed this model that has been implemented in numerous schools across the world. More than 16,000 schools in the United State of America received support from the National Technical Assistance Center for SWPBIS in 2012 (Sugai & Simonsen, 2012).

The goal of a PBIS program is to create a positive, welcoming school atmosphere. The aim is to accomplish this by preventing undesired behaviors, such as bullying, harassing, and fighting, before they start, instead of responding to them. When students are in a school setting it has been shown to have significant positive impact on the students when they feel safe and welcomed (Hannigan & Hauser, 2015). PBIS is a preventative program, not a responsive one. The goal is to prevent the negative behaviors from happening instead of punishing students after

the fact. Punitive discipline practices, such as suspension and expulsion has been shown to do more harm than good, and even dramatically increase the likelihood of greater discipline problems later (Hannigan & Hauser, 2015). If the students are in a setting that is positive and welcoming, it will then lead to greater academic results as well.

In a well known quote by Tom Herner, National Association of State Directors of Special Education (NASDSE) President, from 1998, he stated, "If a child doesn't know how to read, we teach. If a child doesn't know how to swim, we teach. If a child doesn't know how to multiply, we teach. If a child doesn't know how to drive, we teach. If a child doesn't know how to behave, we… teach? …punish?" Herner finishes by stating, "Why can't we finish the last sentence as automatically as we do the others? (PBIS Rewards, 2019)." These statements point out the aim of PBIS programs in actually instructing appropriate and desired behaviors. PBIS programs do this through teaching students lessons on behaviors and through expected behavioral matrixes that are displayed and taught (PBIS Rewards, 2019). Additionally, to achieve this goal, successful PBIS programs rely and depend on the commitment of the entire staff and faculty, from teachers, to support staff, to the administration.

The PBIS Tiers

A well set-up PBIS program has three levels, or tiers, with each building upon one another to create a continuum of intervention strategies for both school atmosphere (instructional settings) and behavioral expectations. For the school atmosphere and culture aspect, the primary level (first tier) is considered the school wide level systems of support, the secondary level (second tier) is the classroom setting systems of support, and the tertiary level (third tier) is the individual systems of support that each have the same goal. This goal would be to create and sustain programs and interventions that improve the results for the desired, or positive,

behaviors. The behavioral interventions and support system also follow a tiered system with the primary level being for all students and staff, the secondary level being for a smaller group of students who more frequently exhibit at-risk or undesired behaviors, and the tertiary level would be for the few students who need individualized and specialized supports for their recurrent at-risk behaviors (NEA, 2014). Each of these tiers has its own best practices to create the most effective program to help with problem behaviors. Additionally, there are specific, essential components at each level that are necessary for a successfully implemented program.

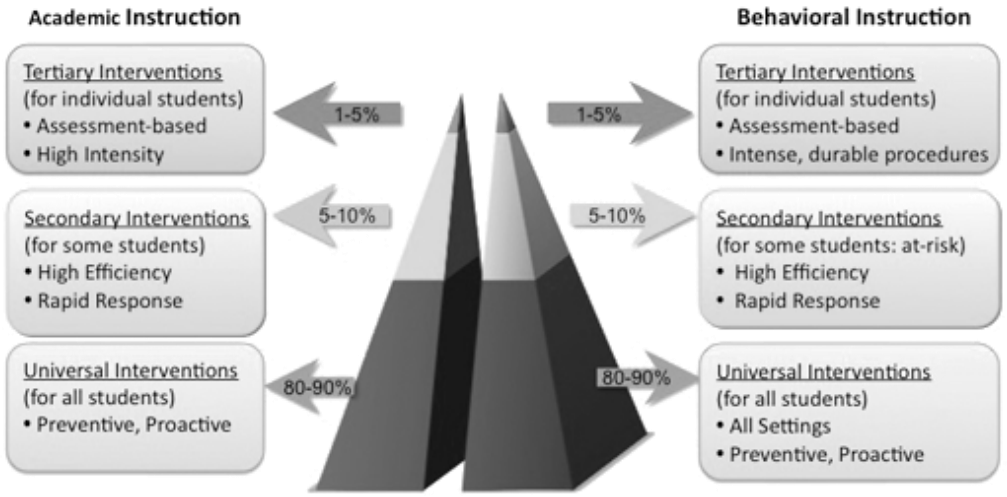


Figure 1.1. Designing Schoolwide Systems for Student Success. Retrieved from https://www.pbis.org/school/mtss. Copyright 2019 Positive Behavioral Interventions & Supports (PBIS).

Implementing a successful PBIS program has a basic framework to be followed. First, a school would put together a team consisting of administrators, regular education teachers, special education teachers, and support staff. Then, the team would look to develop three to five positive behavioral expectations. These expectations should be easy to remember and need to focus on what students should do, as opposed to what they should not. After these expectations

are taken back to the staff, to hopefully ensure at least 80% of staff buy-in to the program, a behavioral matrix is created on what those expectations would look like and sound like in all non-classroom areas. These areas would include, but are not limited to, on the bus, in the cafeteria, in the restrooms, on the playground, and in the hallways. For example, if one of the behavioral expectations is to "Be Respectful," then the matrix for the cafeteria might include examples like "say please/thank you to the cafeteria staff," or "clean up spills on the table and floor." These matrices would then be displayed in the appropriate settings as well as lessons would be taught to demonstrate what the appropriate behaviors would look like. The team would then work with classroom teachers to create a matrix for each classroom as well. After the matrices are all complete, posted, and lessons on how to demonstrated the expected behaviors are created, a token system and a reporting system are created. The token system is a reward system that is created to reinforce the positive behaviors by giving the student a token when they are seen doing the expected behavior. These tokens are then used for some type of reward system. These reward systems can vary greatly depending on the specific school system. The reporting system is used to create an office discipline form where behaviors are pre-determined as "instant trip to the office," or behaviors that are taken care of in the classroom. Data is then collected from these forms and through the token economy system to monitor, reinforce, and/or modify the school-wide program (OSEP, 2019). These topics will be covered more in depth in the upcoming sections and throughout chapter 2.

Critical Components to a Successful PBIS Program

The state of Pennsylvania uses a scoring system identified as the Benchmarks of Quality (BoQ) when assessing the implementation of PBIS programs (PAPBS, 2018). The BoQ is a 53 question evaluation tool with a total score of 107. The BoQ has been established as a valid

assessment tool in numerous studies (Kincaid, Childs, & George, 2005; Cohen, Kincaid, & Childs, 2007; Childs, Kincaid, & George, 2011; Matthews, McIntosh, Frank, & May, 2014). Pennsylvania identifies a school as having implemented a PBIS program with fidelity if they score at or above 70% on the BoQ. A school is identified as having sustained fidelity with their PBIS program with a score of 80% or higher (PAPBS, 2018). The BoQ identifies a total of ten critical elements of a successful PBIS program: PBIS Team; Faculty Commitment; Effective Procedures for Dealing with Discipline; Data Entry & Analysis Plan Established; Expectations & Rules Developed; Reward/Recognition Program Established; Lesson Plans for Teaching Expectations/Rules; Implementation Plan; Classroom Systems; and Evaluation (Childs, et al., 2011). These critical elements will be expanded upon in the literature review

Statement of the Problem

PBIS programs are being implemented all over the world and have specific guidelines for implementation. There have been numerous studies analyzing the teachers' perceptions of PBIS programs and the implementation strategies. With the young age of the PBIS programs that are being put into place, there is not as much research looking at maintaining and sustaining a successful PBIS program. Additionally, there is a lack of research looking at teachers' perspectives at sustained PBIS programs and what themes there are for their sustained fidelity in implementation.

Research Question and Subquestions

1. What do successful PBIS programs, that have been identified as having sustained fidelity by the state, have in common, from the teachers' perspective?
    1.1. What are the most important enabling factors about PBIS programs to maintain sustained fidelity?

1.2. What are the biggest barriers facing PBIS programs to maintain sustained fidelity?

1.3. Do the teacher perceptions and opinions about the critical components of these sustained PBIS programs align with the state recognition based on Likert-type responses?

Definition of Important Terms

PBIS: Positive Behavioral Intervention and Supports (PBIS) is a system of support that includes proactive interventions for defining, teaching, and supporting student behaviors to ensure a positive school atmosphere (Office of Special Education Programs [OSEP] Technical Assistance Center on Positive Behavioral Interventions and Supports [PBIS], 2017).

SWPBIS: "School Wide Positive Behavior Interventions and Supports is a framework or approach for assisting school personnel in adopting and organizing evidence-based behavioral interventions into an integrated continuum that enhances academic and social behavior outcomes for all students" (Technical Assistance Center on Positive Behavioral Interventions and Supports U.S. Department of Education, Office of Special Education Programs, 2019).

Token economy: A token economy is a behavior change system that has three main components: a specified list of target behaviors; tokens (or points) that individuals earn for displaying the target behaviors; and a set of rewards for which the tokens can be exchanged (Cooper, Heron, & Heward, 2007).

A successful PBIS program: A successful PBIS program is a program that has been implemented with fidelity and then continued to be sustained with fidelity based on a Benchmarks of Quality score of 70% or higher for implementation and a Benchmarks of Quality score of 80% of higher for sustained fidelity (Childs, Kincaid, & George, 2011).

BoQ: Benchmarks of Quality is a PBIS evaluating document that evaluates PBIS programs across 53 different benchmarks (Childs, Kincaid, & George, 2011).

Tier I: The primary, or universal (school-wide), level of interventions and supports that aims to prevent problem behaviors by introducing high quality academic settings and environments for all students, staff, and faculty, across all settings (OSEP, 2019).

Tier II: The targeted, or secondary, level of supports and interventions that aims to reduce the number of prevalent behavior problems that present high-risk behaviors and/or are not responding to Tier I interventions. This level includes more intensive, focused, and small group responses where repeated problem behaviors have been identified (OSEP, 2019).

Tier III: The intensive, or tertiary, level of supports and interventions that aims to reduce the intensity and/or complexity of existing behavior problems that are resistant to both primary and secondary levels of intervention and support. This level includes the most intensive efforts and, typically, the most individualized responses where repeated problem behaviors have been identified (OSEP, 2019).

Applied Behavior Analysis (ABA): "Applied behavior analysis is the science in which the principles of the analysis of behavior are applied systematically to improve socially significant behavior and experimentation is used to identify the variables responsible for behavior change" (Cooper, Heron, & Heward, 2007).

Significance of the problem

Significant research has been done on the importance of Positive Behavioral and Interventions Supports (PBIS) programs in today's schools as well as research done on how to implement these types of programs effectively and successfully. However, once the programs have been designed and put into place, there is less research on following through with the program. Many programs fail within a couple of years and need to be redone while some programs continue to be implemented well. A recent study of 5,331 schools implementing PBIS

programs across 37 states showed that 58% of schools that implemented a PBIS program abandoned the program within the first three years (McIntosh, Mercer, Nese, & Ghemraoui, 2016). This study will look to assist in overcoming the high percentages of schools abandoning their program by adding to the lack of literature on sustaining PBIS longer. Through this study, the researcher will focus on the successful programs over time. With the research question identified as looking for the commonalities of successful PBIS programs, that have been identified as having sustained fidelity by the state of Pennsylvania, from the teachers' perspectives, there are many steps that need to be taken to collect and analyze the data.

Basic assumptions

For this research study, it is assumed that the schools involved have successfully implemented and sustained, with fidelity, PBIS programs. Each year, the state of Pennsylvania acknowledges and recognizes a list of schools that have implemented PBIS programs with fidelity through tier one, as well as additionally for tiers two and three. Similarly, the state recognizes schools that have successfully sustained, with fidelity, PBIS programs through tier one and then again for tiers two and three as well. The state of Pennsylvania uses a scoring system identified as the Benchmarks of Quality (BoQ) when assessing the implementation of PBIS programs (PAPBS, 2018). The BoQ is a 53 question evaluation tool with a total score of 107. Pennsylvania identifies a school as having implemented a PBIS program with fidelity if they score at or above 70% on the BoQ. A school is identified as having sustained fidelity with their PBIS program with a score of 80% or higher (PAPBS, 2018). The schools that have been chosen for participation in this study, come from this list published by the state. Additionally, it is assumed that the teachers participating in the study have direct knowledge of their school PBIS program, its goals, its implementation team, and its overall PBIS philosophy.

Basic limitations

In any research, it is always imperative to acknowledge that there are limitations. In this study, a possible limitation is that the teachers participating in the study have not been at the school for the entire length of time that the PBIS program has been implemented and might not be aware of the implementation process that occurred at the school. This can be observed in the interview process when looking at how long the teacher has been at the school. Another limitation to this study could be the lack of complete disclosure by the teacher on the questionnaire, which little can be done to overcome. The teachers will be completing the questionnaire electronically so there will not be the ability to ask follow-up questions to expand on answers. Another limitation of this research study is that all the schools participating in are located in one central region, suburban areas of Allegheny County in southwestern Pennsylvania. This limits the ability to apply the findings to high-need inner-city schools or other regions throughout the country.

Summary

In summary, with the constant expansion of numbers of PBIS programs being put into place across the country in recent years, it is imperative to look for best practices in implementing and sustaining them. As more PBIS programs have been implemented, the research and literature providing a guiding framework on implementation has become more clear and precise. However, the longevity and effectiveness of these PBIS programs over time has not fully been research and reviewed. The purpose of this study is to look for common themes among PBIS programs that have been successfully sustained, in relationship to the evaluation process put forth by the state of Pennsylvania using the Benchmarks of Equality. The researcher will look for teacher perceptions as to the biggest factors enabling the programs at these schools

to be successful over time as well as the biggest barriers that were successfully overcome. The teacher perceptions will be used because they are the everyday implementers of the PBIS programs in the largest variety of settings of the program, across tier one as well as tier two and three. In the following chapter, the researcher will present literature on the background, history, effectiveness, and sustainability of PBIS programs in setting up the research for this study, findings, and future implications.

Chapter II

Review of Literature

Introduction

Research and literature Positive Behavioral Interventions and Supports (PBIS) is becoming more and more prevalent. While PBIS is not a singular behavior theory, it is a combination of several different behavior support programs and interventions that have been in place for years, but in a comprehensive manner to support all students, staff, and faculty in a school setting. This review of literature will look at the history of PBIS programs, specifically PBIS implementation and acceptance in response to special education law, the history of PBIS programs, the history and importance of the principal components of PBIS programs, and a review of BoQ. Additionally, literature will be reviewed on the effectiveness of PBIS programs, perceived barriers and enablers of implementing PBIS programs, and staff and administrative perceptions involving the implementation and effectiveness of PBIS programs.

PBIS and the Law

PBIS in Response to the Law. Positive Behavioral Intervention and Supports (PBIS) are programs and interventions put into place with the goal of helping a school achieve positive behavior changes and sustain them as part of the school culture. PBIS is a not a new behavior theory, but the culmination of research and implementation of behaviorally based systems approach ideas and concepts to help schools create positive atmospheres that are conducive to quality learning and quality teaching while producing quality citizens. While PBIS is not new, it has been shaped and created through the culmination of research and application of behaviorally based systems approach ideas and concepts over time in a response to special education law, such as the Individuals with Disabilities Education Act (IDEA). PBIS is the only behavior

addressing approach specifically mentioned in the 1997 amending of the law and remains in the current 2004 amended version of the law (NEA, 2014). The goal of PBIS is to improve the overall school atmosphere by improving the behavioral climate and school culture of schools. By having this effect in the schools and in the classrooms, it has also been shown to have a positive impact on academic performance as well through the PBIS approach of teaching achievement and behavior as related outcomes, instead of causes of each other. When behavior is taught with the same vigor as math, reading, and other academic content, the ultimate goal of prevention and achievement of PBIS programs can be met (Sugai, 2011).

The purpose and goals of PBIS have arisen in response to many significant special education court cases over the years. Two of the biggest impacting law cases were Mills v. Board of Education of the District of Columbia (348 F. Supp. 866 (D.D.C. 1972)) in 1972 and Honig v. Doe in 1988 (484 U.S. 305 (1988)). In the Mills v. Board of Education of the District of Columbia case, several students with disabilities were being excluded from public education based on behavioral issues. The school district stated that it cost the district too much money to educate these children based on their needs. The court ruled that the school district needed to provide these students with education services based on their individual needs, regardless of cost. This case, along with another case in the early 1970s in Pennsylvania dealing with excluding students with mental retardation, even led to Congress initiating an investigation into the education of students with disabilities and found that millions of these children were not receiving a proper and appropriate education (Wright, P.W. & Wright, P.D., 2007). In Honig v. Doe (484 U.S. 305 (1988)), the major issue was that a school district has limited power in disciplining special education students in regards to dangerous behavior if that behavior is a manifestation of their disability. This protects the student and forces the schools to find ways to

help these students to control, or hopefully overcome, their behaviors. From work in response to these issues, PBIS was born.

Practitioners realized that schools needed a way to be able to help these students, along with other general education students as well, by focusing and promoting on positive behaviors through interventions and support systems. Through the amending of IDEA in both 1997 and 2004, Congress specifically mentioned the potential of PBIS programs to help limit the exclusion of special education students while at the same time improving educational results (OSEP, 2019). It was stated is 20 U.S.C 1401(c)(5)(F):

> "(5) Almost 30 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by - (F) providing incentives for whole-school approaches, scientifically based early reading programs, positive behavioral interventions and supports, and early intervening services to reduce the need to label children as disabled in order to address the learning and behavioral needs of such children."

This specifically pointed out not only PBIS programs, but the emphasis of a whole-school approach to teaching behavior as well, which is one of the main pillars of the PBIS approach. The Bazelon Center for Mental Health Law (2003) stated that the inclusion of PBIS programs, along with Functional Behavior Assessments (FBAs), in IDEA "was both revolutionary and unremarkable-revolutionary because the federal government had never before explicitly required use of these practices, and unremarkable because professional literature reports the successful use of these techniques for more than 25 years." This has led to an increase in PBIS research and programs.

PBIS and Pennsylvania Law. Given that the current study is being executed in Pennsylvania, the relationship between PBIS and Pennsylvania law is outlined. After the inclusion of PBIS in IDEA, there has been a rise in state laws, or practices put in to place, to support PBIS throughout the nation. Currently, there are 22 states, plus the District of Columbia, that mention the use of specific, evidence-based interventions, such as PBIS (Rafa, 2018). While PBIS is mentioned in IDEA, it is not identified specifically in Pennsylvania state law. Pennsylvania did, however, officially add a requirement to Chapter 12 of the PA School Code for the Student Assistance Program (SAP Interagency Committee, 2017). The Student Assistance Program (SAP) is a systematic team process that utilizes school resources to remove barriers to learning for students. It is designed to assist in identifying and supporting issues that include alcohol, tobacco, other drugs, and mental health issues which would pose a barrier to a student's academic success. The goal of the program is to help the student overcome these barriers so that the student can be successful (PA Department of Education, 2019). As SAP's goals and the goals of PBIS programs overlap in many areas, in 2011 the Pennsylvania SAP interagency Committee developed a framework to guide the integration of SAP with PBIS for Pennsylvania schools and even trained Commonwealth Approved Trainers, SAP Regional Coordinators, SAP Liaisons, and school-wide PBIS Facilitators affiliated with the Pennsylvania PBIS Network (SAP Interagency Committee, 2017). Additionally, in Pennsylvania, under 24 Pa PS 1302-A, the Office for Safe Schools is authorized to make targeted grants to fund programs addressing school violence including, specifically, school-wide positive behavior support programs (U.S. Department of Education, 2019). While PBIS is not specifically named in state law, it has been supported by the state government and agencies, some of which were put in to place specifically to help guide and implement PBIS programs.

History of the Implementation of PBIS programs.

Programs similar to PBIS programs, based on framework and goals, have been utilized in education for a number of years, just not always labeled as PBIS programs. Schools first started to pay more attention to finding and implementing successful behavioral interventions for students with disruptive behavior disorders in the 1980s (Martin, 2013). Research from the University of Oregon, on student problem behavior, started to shift from reactive and punitive measures to more preventative with research-based interventions and school-wide initiatives to find a way to help with these disruptions. When PBIS was specifically mentioned in the reauthorization of IDEA in 1997, a grant was given to establish the first National Center on PBIS. With that, came the cooperation of researchers from the University of Oregon, Kansas, Kentucky, Missouri, and South Florida. Additionally, the states of Maryland, Iowa, New Hampshire, and Illinois started up state-level leadership teams for PBIS. Much of the early research and literature on PBIS derives from the researchers at these institutions and the leaders at these state initiative programs (Martin, 2013). Funded by the U.S. Department of Education's Office of Special Education (OSEP) and the Office of Elementary and Secondary Education (OESE), the Technical Assistance Center on PBIS has provided professional development, information, and guides to more than 16,000 schools for over 20 years (Martin, 2013; OSEP, 2019). Additionally, in 2018, a new five-year funding cycle was started for the center with the purpose of continuing to help schools start PBIS programs, but also to sustain their framework while improving tier 2 and tier 3 systems to better help students who are at-risk or have disabilities (OSEP, 2019).

When PBIS was specifically referenced in IDEA, it not only made all of the past research instantly more credible, but also paved the way for future research to be funded as well. In

addition to including the program in the statute, the federal government also funded new, up-to-date research, and made it available to all schools, nationwide (Bazelon Center for Mental Health Law, 2003). Project ACHIEVE is a school-wide behavior management and social skills program that was developed at the University of Florida in 1990. This program was first implemented in two schools in Florida and one school in Texas and showed extremely positive results over the first eight years of implementation. Areas of improvement included office discipline referrals decreasing 16%, school bus discipline referrals dropping 26%, out-of-school suspensions decreasing 29%, grade retentions dropping 47%, special education referrals decreasing 61%, and special education placements dropping 57%. This success, along with another program started at Indiana University and piloted at five schools in Indiana with great success, helped to pave the way for more national acceptance and implementation of these programs. The Indiana University project director testified before Congress on the successfulness of PBIS programs, going on to say that one of the easiest measurements of success was that there was no longer a line of students sitting in chairs outside of the principal's office awaiting discipline (Bazelon Center for Mental Health Law, 2003). Another example in the early 1990s was Project PREPARE, introduced in 1993. This behavioral prevention program was one of the first universal approaches and focused on 6 main principles: a consistent approach to managing behavioral problems; viewing school discipline as a prerequisite of academic learning; a focus on proactive prevention; active involvement from school administration; faculty commitment; and a focus on effective staff development (Solomon, Klein, Hintze, Cressey, & Peller, 2011). As programs began to be implemented, research studies on them soon followed. First, a single case study was done in 1997 on the implementation of a school-wide behavior intervention program. Then, a year later, a similar program's effect on student behavior during hallway and recess

transitions was done. Both of these studies showed positive effects and while the actual PBIS term was not associated with these programs just yet, the researchers of these studies would use the research to establish a set of positively stated school rules and initiate a school-wide token economy system under the SWPBS name (Solomon et al., 2011). While these were some of the first widely examined and accepted PBIS type programs studied, more and more studies started to show the overall effectiveness of PBIS programs.

Effectiveness of PBIS Programs

The PBIS system is built on two concurrently set up three tiered systems. The first tiered system is built on expected and appropriate behaviors with the second tiered system built on academic instruction. In both systems, the first tier is the universal tier where the interventions are for all the students and all of the school settings. The secondary interventions, or tier 2, are designed for at-risk students. In the behavioral system, tier 2 is designed to be highly efficient with a quick response, giving students the support and help that they need to correct their undesired behavior. This could be through re-teaching of appropriate behaviors, or through small group counselor settings. In the academic system, tier 2 looks to differentiate instruction in more small group settings. Finally, the tertiary interventions, or tier 3, are designed for individual students that need specialized assistance, interventions, and support programs. For behaviors, tier 3 would happen in a more one-on-one setting such as individualized counseling or support programs. For academic instruction, tier 3 would consist of a much greater individualized approach, possibly through an Individualized Education Program (IEP) or out of the general education instructional setting. It is necessary to review the tiered systems before moving in to the literature on the successfulness of PBIS programs.

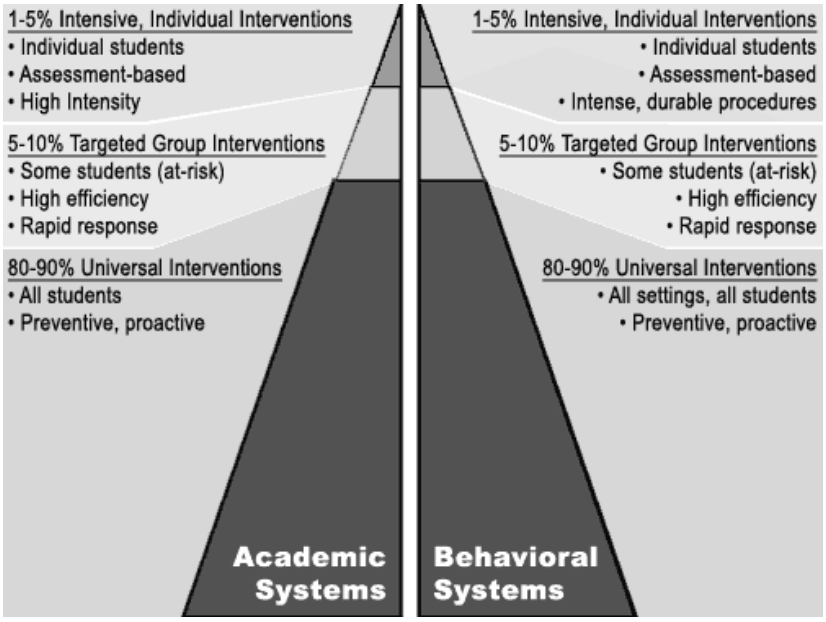


Figure 2.1. Positive Behavioral Supports. Retrieved from http://www.alspdg.org/positivebehavior.html. Copyright 2018 Alabama State Personnel Development Grant.

PBIS programs, from the very beginning, have shown positive results across many different settings and through many different research studies. Even before being technically classified as PBIS programs, the early programs showed defined and easy to quantify findings. Project ACHIEVE, mentioned earlier, showed results dramatically decreasing the amount of special education referrals and placements, office discipline referrals, bus discipline referrals, out-of-school suspensions, and grade retentions in some of the earlier studies on PBIS programs. Similarly, the project at Indiana University, involving five different schools in Indiana for their pilot program, showed results that reduced the number of out-of-school suspensions by 40% to 60%. Additionally, children with disabilities were positively effected with one of the schools seeing a reduction in suspensions of special education students going from 39 the previous year to none in the first year of the project. In another school from the project, the special education student suspensions fell over 70% and expulsions dropped from 5 to zero (Bazelon Center for Mental Health Law, 2003).

There has been success in other areas of creating a positive school climate and its effects on school behaviors as well. Psanos (2013) conducted a study to examine the impact of PBIS and anti-bullying programs put into place in an elementary school in the Middle Tennessee area in conjunction with Middle Tennessee State University. Additionally, in relationship to the PBIS program being implemented along with anti-bullying programs, reports showed an increase, in comparison to the prior year, in empathy in students toward other students that are being bullied and a decrease in students that stated that they would join in bullying a student that they did not like. This aligns itself with some of the principles of PBIS in creating a more positive school climate so that more positive behaviors are demonstrated and preventing undesired behavior problems. Weeden, Wills, Kottwitz, and Kamps (2016) looked at the effects of behavior intervention supports for students with emotional and behavioral disorders. These would typically be tier 2 or tier 3 students. They specifically noted improvement in school behaviors, increased academic learning, and the ability to develop and maintain positive relationships. Nocera, Whitbread, and Nocera (2014) conducted a study designed to look at the impact of School-wide Positive Behavior Supports (SWPBS) on student behavior in the middle grades. The study was conducted at a middle school that had shown significant student behavioral problems with high teacher discipline referrals and suspensions. The data of this mixed methods study supported the premise that the student behavior improved at the school. Five themes arose from the interviews of the power of rewarding positive behavior, the importance of staff investment and commitment to a SWPBS approach, the critical nature of administrative leadership, the importance of consistency in responding to student behavior, and the value of making data-driven decisions that promote school improvement (Nocera et al., 2014). Betters-Bubon and Donohue (2016) published a report that showed the implementation of PBIS

programs has reduced behavioral incidents and lead to more positive school climates in both the elementary and middle school settings. They wrote about a 30% reduction in office referrals from year one to year five for a middle school of 600 that implemented a school-wide program. This would relate to tier 2 and tier 3 strategies as there were a huge drop in students expelled and in-school suspensions. The authors noted strong tier 1 social and behavioral supports at the school as well. One interesting side note that the authors pointed out was the role that the school counselors played in this implementation. The authors saw an increase in the counselor professional capacity including the allotment of extra time, once not dealing with as many office referrals, to teach classroom guidance lessons at the elementary level and more time to focus on address problem behaviors at the middle school level.

The positive effects of PBIS programs were also shown in a rural, low-income setting as well. Steed, Pomerleau, Muscott, and Rohde (2013) published a case study that looked at a PBIS program put into place in rural preschools over a three-year period. This study involved three rural preschool programs for students ages three to five for 160 children, of which approximately 27% were from low-income households. What they found was that the student scores on the PreSET (Preschool-wide Evaluation Tool) increased each year. One of the biggest aspects that the teachers noted improved, was their use of tier 1 practices. They noted improvements in defining program-wide expectations, teaching expectations, responding consistently to challenging behavior, providing an organized environment, involving families, and maintaining an effective leadership team. The teachers also noted an improvement in using data for decision-making, which is one of the necessities for all tiers noted earlier.

While research has shown that schools that implement PBIS have fewer office discipline referrals, and are less likely to use discipline practices that are exclusionary at the tier one level,

a more recent research study showed the effectiveness of tier two and tier three intervention programs as well (Bunch-Crump & Lo, 2017). These researchers looked at the effects of using Check-In Check-Out (CICO) as a tier two intervention and function-based self-monitoring (FBSM) as a tier three intervention for students in need of more individualized and intensive interventions. This study looked at four elementary students with a very high rate of disruptive behavior with all of them getting the CICO training and one of them getting the FBSM training. The study was able to show a reduced rate of disruptive behavior and increased academic engagement in three of the students, with the fourth showing some positive effects albeit inconclusive due to a change of classroom setting. This study starts the direction of research deeper into the PBIS spectrum and looking not just at implementation of tier one interventions and supports, but also the more intensive tier two and three levels of support for students that need more instruction. Again, the purpose of PBIS is not to punish the students that are more disruptive, but to educate them and give them the tools they need to be successful both behaviorally and academically.

There have also been other positive effects of PBIS programs that have shown its effectiveness in areas that were not originally studied and could be studied more. While most of the early studies involved applying PBIS programs in elementary settings, research has now started to become more available on middle school and high school settings. In a meta-analysis of PBIS programs from 2011, it was shown that PBIS programs had a higher mean effect in middle school than elementary. The analysis pointed out that due to the higher rate of transitions between classes in middle school, this lines itself up with the benefits of appropriate PBIS implementation across the different school settings. The researchers further mentioned the applications of PBIS programs across school locations in that the purpose is not to only prevent

undesired behaviors exclusively outside of the classroom and noted the positive effect on school bus behavior (Solomon et al., 2011). While this meta-analysis pointed the benefits to the middle school setting, it also stated that only three of the studies it reviewed were located in a middle school, with the remaining studies coming from an elementary setting. Another possible positive benefit of PBIS program implementation is shown in a recent study out of Florida. Barclay (2017) published a study looking at the effects of PBIS programs in relationship to the discipline gap for Black and Hispanic youth in comparison to their White peers. This study looked at 322 different PBIS-implementing schools in Florida with a total of 292,490 students. What was found was that the study showed that the overall framework of SWPBIS may reduce the discipline gap, but further research is needed.

As research like this is published on PBIS, it shows that further research is still needed and specifically needs to be expanded to newer areas that have not been studied as significantly. The dramatic improvement in student behavior shown when effectively putting in place PBIS is the reason that PBIS programs continue to be backed by law, funded, and implemented in schools across the country. Additionally, in the research, some common themes have emerged in relationship to being able to successfully implement PBIS programs with fidelity. This, along with the need for deeper PBIS research and studies, ties back to the research questions of this study. It is needed no longer look simply at implementing PBIS programs, but sustaining them with the same fidelity as has been established when putting them into place.

Critical Aspects of Successful PBIS Programs

Along with the best practice, there are certain critical aspects that are necessary at every level for a successful PBIS program. One of the biggest aspects of a successful PBIS program is

a constant analysis of data. This applies to all tiers. At the very beginning of a PBIS program is data analysis. The team working on the program must analyze school data to pinpoint the types of behavior that need to be addressed (OSEP, n.d.). It has also been shown that if these needs of the school do not align with the creation of the PBIS program, then the program will not be as successful (Balu & Malbin, 2017). After that, data needs to be regularly monitored while implementing the PBIS program, at each tier. This data needs to show improvement in the areas identified. If it does not, then there needs to be an adjustment. This is necessary for all tiers, at all times. Regular reviews of the data are an incredibly vital component of any successful PBIS program. Data is required in four different ways for an effective PBIS program. Data is collected and analyzed in universal screenings, or Functional Behavior Assessments (FBA), monitoring the effectiveness of the implementation, and in evaluating intervention effects, such as progress monitoring (Anderson, Horner, Rodriguez, & Stiller, 2013). Data is used in universal screenings to determine the areas of concern and used to monitor the effectiveness of the program as listed above. Data will also be used to determine what intervention strategies are most effective. This well help the team moving forward as to what strategies to continue to use and what are shown to not be helpful. Finally, the collection and analysis of data is necessary for FBAs. The data will be used to determine if there is a relationship between when, where, why, and how extreme behaviors are happening to determine the best intervention to use to correct them (Anderson et al., 2013). One more aspect of a well implemented PBIS program that pertains to all levels is to make sure that the interventions, strategies, and programs to be used all state positive behaviors. Punishment and negativity can be harmful to children and counterproductive (Northeast Foundation for Children, 2009).

At tier 1, a component of PBIS that needs to happen is that the team continually takes their ideas back to the rest of the staff as they are developing the 3-5 behavioral expectations that will guide the program and as they start to create the matrixes that will be used in non-classroom areas. This is essential to get the crucial staff buy in of at least 80% (OSEP, n.d.). Also, at tier 1, the 3-5 behavior expectations need to be simple and easy to remember. That will ensure that they are not only easier for the students to recall but will also be easier to use by the staff as well as more consistently use across the board (OSEP, n.d.). At tier 2 and 3, a critical variable to the success of the PBIS program is that the interventions and strategies that are being chosen can be done effectively and efficiently by the school staff that is already in place, or would typically be in place (MacLeod, Hawken, O'Neill, & Bundock, 2016). A program can have great interventions, but if the right people are not available when needed, or at certain times, the strategy will not be able to be implemented with fidelity. The strategies chosen need to be able to be handled by the people that will be with the students at the typical times the interventions need to be implemented. One strategy to do this would be the intervention first being implemented by a school psychologist or counselor while at the same time training the classroom, or learning support teacher, to take over the intervention eventually. That way, in the future, if the psychologist or counselor is unavailable, the classroom teacher will be able to handle the situation, and eventually, take it over (MacLeod et al., 2016). This also leads into the next important aspect that is essential to a fully functioning PBIS program, which is to have the right people involved along the way, especially at tier 2 and tier 3. Most classroom teachers do not have the specialized training that a counselor, psychologist, or learning support teacher has. This means that those people need to be involved in the planning and implementation of the program along the way. School counselors that are trained in data-informed decisions and

school-level change can not only play a huge part in the success of the program, but also can be leaders throughout the entire process (Betters-Bubon, Brunner, & Kansteiner, 2016). Those are some of the biggest necessities that need to be considered when developing and implementing a PBIS program. Without them in place, it will be that much harder to have a successful program.

The state of Pennsylvania uses a scoring system identified as the Benchmarks of Quality (BoQ) when assessing the implementation of PBIS programs (PAPBS, 2018). The BoQ identifies a total of ten critical elements of a successful PBIS program: PBIS Team; Faculty Commitment; Effective Procedures for Dealing with Discipline; Data Entry & Analysis Plan Established; Expectations & Rules Developed; Reward/Recognition Program Established; Lesson Plans for Teaching Expectations/Rules; Implementation Plan; Classroom Systems; and Evaluation (Childs, et al., 2011). These ten critical elements will be covered, and in some cases combined, in the following sections that have broken down the critical aspects of successful PBIS programs through research, literature, and the BoQ.

Token Economy. While PBIS programs are relatively new, one of the biggest aspects of the PBIS program, the token economy has a much longer history. The token economy system has been used for centuries to help reduce undesired behaviors and increase desired behaviors in the fields of education and Applied Behavior Analysis (ABA). Cooper, Heron, and Heward (2007) define a token economy as a behavior change system that has three main components: a specified list of target behaviors; tokens (or points) that individuals earn for displaying the target behaviors; and a set of rewards for which the tokens can be exchanged. In a school classroom, if a teacher has identified an issue in the classroom as students shouting out instead of raising their hand, this might look like a student raising his/her hand to answer a question and waiting to be called upon instead of just yelling out, receiving a marble on his/her desk, and later turning in

five marbles to be able to sit in the teacher's chair for a class period. The tokens take on the role as a conditioned reinforcer for the replacement behavior that has been previously identified to cut down on the undesired behavior. The tokens are then used to purchase rewards, which work as backup reinforcers. The rewards can be items that are redeemed right away or may take on the role of coupons that could be used at a later moment of time (Cooper, Heron, & Heward, 2007). While resembling other contingency programs, token economies have specific characteristics that make them effective tools in the more general analysis of behavior, and thus, the field of ABA (Hackenberg, 2009).

Figure 2.2.. Seven Elements of a Token Economy. Retrieved from http://www.educateautism.com/token-economy.html. Copyright 2008 Raymond Miltenberger.

Token economies have been noted in schooling methods throughout history. Some of the earliest mentions of using a token economy date back to the teaching methods of Joseph Lancaster (1778-1838) where older students monitored younger ones and gave out badges of merit and tokens that the younger students could turn in for prizes (Stilitz, 2009). Research on token systems date back to the 1930s with studies done on chimpanzees. This research looked at the tokens as conditioned reinforcers and was conditioned with further research with chimpanzees in the 1950s with the addition of looking at putting tokens on reinforcement schedules. This research led to the possible change of token economy research to a more refined system of looking at conditioned reinforcement value (Hackenberg, 2009, pg. 258). Token economy research then showed up sporadically until the 1960s when there was a shift more towards looking at it through the lens of ABA. In one of the earliest looks at using a token economy with humans, Ayllon and Azrin (1965) published a paper looking at trying to increase desired behaviors in patients in a hospital mental ward through the use of token reinforcements. O'Leary, Becker, Evans, and Saudargas (1969) took the token economy research to the classroom in their study that looked at a token economy in a second-grade public school class. At the end of the study, it was noted the dramatic decrease in disruptive behaviors observed. In the 1970s, some of the published work looking at token economies took a larger view and examined the field as a whole as well as applying the program back to hospitals. Kazdin and Bootzin (1972) and Goodall (1972) reviewed some of the trends of previous researchers that had looked at token economies. Both articles looked at how the token economies had been used in hospitals, mental wards, classrooms with both the mentally ill and the non-disabled. Kazdin and Bootzin noted that the extensive literature that had been recently published on token economies show that a wide variety of behaviors can be changed across many different populations. In the

1980s, research was looked at on how students in token economies did outside of those individual programs in different settings as well as a look back by researchers on the previous decade's work. Kistner, Hammer, Wolfe, Rothblum, and Drabman (1982) published a study that looked at the idea that students that participate in a classroom with a token economy might not perform as well in other situations without the program. The study confirmed results that agreed with earlier studies showing that a token program was effective in increasing student work output.

In the 2000s, additional works were published that looked at the field of token economy research in the form of a review and analysis as well as applying the programs to modern day medical issues facing children. Hackenberg (2009) published a report that review token economy programs in relation to general principles of behavior. It was noted how token economies have been utilized throughout human history through being the basic framework for economic transactions throughout the world. In reviewing the literature on token economies over a wide range of years, it is also apparent for the need for future research in certain areas. While there is some research that seems to point to the symmetrical affect of losing versus earning tokens, this is a field that could be investigated much further. The Donaldson study, while in a small sample, shows the potential of the advantages of a program that students lose tokens over the earning of tokens. This could be investigated and evaluated further. There are also drawbacks to a token economy system that could use future research on how to overcome. This includes the how to manage the time, effort, resources, and money that it takes to effectively implement a token economy program (Cooper et al., 2007). Overall, this could help the token economy system be an even more effective and research-based program to help replace undesired behaviors with more appropriate and socially acceptable behaviors. However, given

the studied and proven ability of the token economy to be able to shape and direct human behaviors, it is easily seen why it is an important building block of the PBIS support programs.

In regards to PBIS and the BoQ assessment tool, it supports the importance of a token economy system under the critical element of Reward/Recognition Program Established. In this critical element, the BoQ states seven different reporting categories for a total of sixteen possible points (Childs et al., 2011). That breaks down to about 14.95% of the total points on the BoQ coming from the token economy reward system in a PBIS program.

The PBIS Team. Another crucial aspect of a successful PBIS program is the selection of the PBIS team. The team is responsible for a variety of tasks, such as creating and designing the PBIS program, checking with staff to ensure staff buy-in, regularly holding meetings to analyze data, and evaluate the need to make changes or adaptations to the PBIS program based on the data. According to OSEP, a successful PBIS team is made up of a variety of staff and faculty members on it, such as administrators, classroom teachers, specialist teachers, learning support teachers, guidance counselors, and representatives of other school staff that would be important in implementing the PBIS program, such as cafeteria and support staff (OSEP, 2010). The PBIS team should be made up of 6-10 individuals. Additionally, research has shown that the selection of an effective team has also been shown as an important factor in PBIS sustainability as well (Mathews et al., 2014).

In the BoQ, the PBIS Team is a category all by itself. This signifies the importance of having an effective, well put-together plan in place. There are three reporting categories under PBIS Team. Overall, the BoQ is looking for if the PBIS team has administrative support, at least

monthly regular meetings, and if it has a clear, established purpose. These categories have a possibility of six total points on the BoQ scale (Childs et al., 2011).

Expected Behaviors Matrix. One of the core values of PBIS is the understanding that it is vital for the students to be aware of the expected behaviors of them and to be instructed in those behaviors. As part of the PBIS implementation process, the school's PBIS team identifies three to five clearly stated behavioral expectations that are stated in a positive manner, are easy to remember, and are reinforced through instruction. These behaviors are posted throughout the different settings of the school in a behavior matrix that shows the how the behavioral expectations relate to that specific setting (PBIS.org, 2019). Teaching students the appropriate and expected way to behave has been shown to be a basis for ABA and PBIS research (Fronapfel, Dunlap, Flagtvedt, Strain, & Lee, 2018). Studies have also shown that having a specific set of expected behaviors and instructing students in them has been an effective way to lower undesired behaviors and replace them with more appropriate behaviors (Dunlap, Strain, Lee, Joseph, & Leech, 2018).

There are several different critical elements of the BoQ that can be combined under the framework for the expected behaviors matrix. Effective Procedures for Dealing with Discipline; Expectations & Rules Developed; Lesson Plans for Teaching Expectations/Rules; Implementation Plan; and Classroom Systems can all be pointed back to the umbrella of the expected behaviors matrix. Across these different elements there are thirty-three different reporting categories for a total of sixty-three total points on the BoQ assessment tool (Childs et al., 2011). As outlined in the introduction to PBIS programs in chapter 1, this shows the perceived importance of having a well thought out PBIS program in place before implementation can start.

Staff Buy-in. One of the biggest contributing factors to the initial implementation of a successful PBIS program is staff buy-in. Staff buy-in means that the staff has committed to the principles and implementation of the PBIS program. At least 80% of buy-in from the staff is the minimum expectation to be able to successfully implement a successful PBIS program (PBIS.org, 2019). Having the support and commitment of the staff has been shown to be a critical aspect to not only implementation, but also sustaining successful PBIS programs (Mathews et al., 2014; Pinkelman et al., 2015). Additionally, it has been shown that teachers who perceive that students will benefit from the PBIS program will be more likely to support the implementation and sustaining of the PBIS program while also being more open to learning about and volunteering to train other staff members on the PBIS program (Pinkelman et al., 2015).

Staff buy-in is represented on the BoQ under the critical element of faculty commitment. In this element, there are three reporting categories, including faculty being aware of behavior problems through regular data sharing, being involved in establishing and reviewing goals, and feedback being obtained throughout the year. These categories account for a total of six possibly points on the BoQ assessment tool (Childs et al., 2011). Not only does this point to the perceived necessity of having staff buy-in before the implementation of the program, but to sustain the program as well.

Administrative Support. Through the research of successful PBIS program implementation and sustainment, it has been repeatedly shown that administrative support is crucial to a PBIS program's success. It has been found that administrators that were most supportive in the implementation of PBIS programs were actively involved in the adoption process, showed a prominent leadership style, and acted as team leaders in the process

(Pinkelman et al., 2015). Additional research has shown that administrators can show their support by allocating appropriate resources, such as time, training, and incentives, making their goals for the program clear, and addressing competing programs in the school that might decrease valuable resources (Mathews et al., 2014). Administrative support also does not stop at the school level, but also extends to the district level. The teachers and staff being able to see district-level support has been shown to emphasize the role of institutional knowledge within the entire district as a crucial strategy for supporting the PBIS implementation process (George, Elfner, Minch, & Sandomierski, 2018). Even after implementation of PBIS programs, administrative support has even been shown, in some studies, to have had the strongest impact on sustainability (Mathews et al., 2014).

While administrative support is not a separate critical element on the BoQ, it is a part of several of the reporting categories. Administrative support is listed under reporting categories in the critical elements of the PBIS Team, the Implementation Plan, and Evaluation (Childs et al., 2011). Administrative support in the BoQ mainly falls under guidance of the team, professional development, and evaluation of the program.

Utilization of Data. One last crucial aspect of successful PBIS programs is the use of data. Data is used in PBIS programs to identify problems areas, track progress, see if changes need to be made, increase or decrease the token economy system, and, overall, evaluate the successfulness of a PBIS program (PBIS.org, 2019). The use of data in PBIS programs is also crucial to provide a concrete and visible way to assess almost all parts of a PBIS program, but can also be used as a powerful motivation tool for influencing teaches' and staff's opinions of PBIS programs by seeing a visible change in student behaviors (Mathews et al., 2014). Additionally, while data can be used at the implementation process of the program to identify the

major problem areas of the school, such as the hallways or cafeteria, data can then be used to show the improvement in those areas while being able to move the emphasis of the program that while wasn't a top priority at first, can now be looked at, like the classrooms (PBIS.org, 2019). Establishing an effective district data infrastructure has also been shown to be crucial to the PBIS implementation process in the way of assembling an effective data team including having a representative from the district's data management system to work along with the district's administration team to guarantee that the district's data system addressed the needs of the PBIS program (George et al., 2018).

The utilization of data is covered on the BoQ assessment tool under two critical elements, Data Entry & Analysis Plan Established and Evaluation. These two critical elements account for nine different reporting categories and a possibility of twenty-one total points out of the 107 points possible (Childs et al., 2011). In addition, data is referred to in several other reporting categories, under different critical elements, such as the PBIS Team and Faculty Commitment. In these elements, the BoQ is looking to see if the data is not only being analyzed, but being shared regularly with the team and staff as well.

Perceived Barriers and Enablers of PBIS Programs

The literature on PBIS also illustrates many perceived barriers and enablers when first implementing PBIS. To be able to successfully implement PBIS, it is important to know the important factors that can help, or hurt, at the very beginning so a school can be fully prepared. While the OSEP Technical Assistance Center for PBIS has a general guideline for implementing PBIS that was discussed earlier, it is also important to know what common perceptions are when presenting the process and implementation strategy to the PBIS team and staff. The following

sections will look at common perceptions overall and then specifically from teacher and administration points of view.

In 2010, a study was published that looked at perspectives on implementation and outcomes of PBIS. Four main themes were identified and then the contributing factors and barriers were laid out for each of those themes (Ackerman et al., 2010). These themes were consistency and adaptability, rewards, data-based decision making, and professional development and support. For consistency and adaptability, the contributors were a consistent commitment to PBIS by teachers and administrators, a consistency of policies and practices as applied in the school, and a willingness to adapt and experiment within the framework of PBIS. The barriers were a lack of buy-in to PBIS and a limited understanding of PBIS principles. For the theme of rewards, the contributors were student input, appropriate nature and timing of rewards, and external support with the barriers of a lack of clarity/agreement about when to use rewards, student manipulation of the system, and rewards that are inappropriate for the age group. The theme of data-based decision making had the contributors of responding to emerging issues, monitoring individual behavior, and increase staff buy-in with the barriers of the perceptions of data as window-dressing and an unsystematic collection of data. Finally, for the theme of professional development and support, the contributors were the awareness of a District Coach as a resource and an annual refresher training with barriers of insufficient training for new teachers, a lack of refresher training, and limited resources (Ackerman et al., 2010).

Additionally, Ackerman et al. (2010) developed five specific recommendations that go across all of the major themes: teacher commitment to the initiative needs to be developed and reinforced; clear implementation guidelines should be provided to all school staff through a structured system of professional development; systematic data collection; including student

input in data-based decision making with regards to the rewards systems; and PBIS orientation/training for new and substitute teachers to increase the consistency of the PBIS program (Ackerman et al., 2010). Similarly, Andreou, McIntosh, Ross, & Kahn (2015) published a study designed to identify, categorize, and describe implementers' perspectives in relationship to factors that helped or hurt the sustainability of Tier 1 systems in School-wide Positive Behavioral Interventions and Supports (SWPBIS. As a result of the study, 227 critical incidents were recorded and broken down into 13 categories spanning the following topics that affect the sustainability of Tier 1 SWPBIS implementation: continuous teaching; positive reinforcement; SWPBIS team effectiveness; staff ownership; school administrator involvement; adaptation; community of practice; use of data; involving new personnel; access to external expertise; maintaining priority; staff turnover; and conflict of personal beliefs/mistaken beliefs (Andreou et al., 2015). These recommendations and contributing factors, across all of the themes, are in line with current research on implementing and sustaining PBIS programs.

Adding to this growing literature base on pinpointing contributing factors and barriers in properly implementing PBIS with fidelity, McDaniel, Kim, and Guyotte (2017) looked at perceptions of implementing PBIS in a high-need school. The researchers did a case study on school faculty and staff members that had recently gone through implementation of PBIS programs in high-need schools, specifically high-poverty schools. The participants for this study all came from schools with over 75% free and reduced lunch status. Through the data collecting process, the participants noted that the success of implementing PBIS for high-need schools was dependent on fidelity, grade level, buy-in, and leadership report. It was also mentioned that the reason these schools looked at PBIS was because the high-need schools required alternatives to exclusionary discipline practices. At the conclusion of the study, there were six different barriers

that emerged: state, district, and administrator buy-in; teacher training and teacher buy-in; complex, high-need student issues; lack of parent and community involvement and shared value for positive behavior support; challenges in secondary schools; and challenges due to a culture of poverty. All of the educator participants in the study also mentioned the importance of continued training and support for implementing PBIS in an effective cultural and contextually responsive manner. Additionally, there were some suggestions for PBIS support at the state level that came out of the study: prioritizing PBIS as a critical initiative, integrated with additional student supports; providing resources, training, and awareness; and monitoring implementation and adherence to evidence-based PBIS practices (McDaniel, Kim, & Guyotte, 2017).

Teacher and Staff Perceptions. Recent studies have emerged looking at teacher and staff perceptions of PBIS programs. While Staff-Buy in is considered paramount to success of PBIS implementation, the overall perceptions of the teachers is not a main focal point. Therefore, it is important to look at the literature on teacher and staff perceptions of PBIS programs. The perceptions of the teachers are important to get the needed buy-in as teachers that perceive the advantages of PBIS will be more likely to take their part more seriously and implement it with greater fidelity (Mathews et al., 2014; Pinkelman et al., 2015).

The majority of the studies show positive teacher perceptions. Martin (2013) performed a study looking at 71 teachers in southeastern Georgia at two schools were a PBIS program had been implemented and in place for three years. The result of the study showed that most teachers appeared to be satisfied with the PBIS program. The data showed specifically that teachers were satisfied with the behavioral expectations, consequences, incentive programs, data analysis systems, administrative support, and the decisions of the schools' PBIS team. Additionally, the teachers indicated that they thought the PBIS program positively affected teacher and staff

behavior. They did not conclusively indicate that they thought the PBIS program decreased student discipline problems, attitudes towards school, or respectfulness toward others (Martin, 2013). Psanos (2013) published a study that included looking at 37 Maryland elementary schools, 21 of which implemented PBIS programs, and 16 that did not. Comparatively, the schools that implemented PBIS programs, through data obtained through teacher surveys, showed a greater improvement in school climate that the schools that did not implement a PBIS program. Halliburton (2015) looked at a rural school in North Carolina and teacher perceptions after implementing a PBIS program. The study showed that a majority of teachers (89%) agreed that students benefited from the program and that the school environment has been positively impacted by their PBIS program. Over 83% of the teachers agreed that the PBIS program was effective in increasing instructional time and improved overall communication. While all teachers (100%) agreed that they felt safe at school and that the school was a safe place for the students and teachers, less teachers (78%) stated that they believed PBIS reduced student disrespect or improved student to student interactions (Halliburton, 2015). Bartosik (2014) conducted a study that included teacher surveys to find perceptions that showed significantly higher ratings of feeling safe within the school environment by teachers at schools that had implemented PBIS programs for at least three years.

Colak, Tomris, Diken, Arikan, Aksoy, & Celik (2015) authored a study designed to examine the views and opinions of teachers and counselors toward the Preschool Version of First Step to Success Early Intervention Program (FSS-PSV) in preventing antisocial behaviors. The findings of the study broke student antisocial behaviors into five different categories: physical attack; inadequacy in social skills; verbal attack; obsessive behaviors; and attention deficiency. The reasons for these behaviors were broken down into four main reasons: family-related

reasons; child-related reasons; teacher-related reasons; and unsure. Overall, a majority of the teachers and counselors noted a positive effect in decreasing aggressive behaviors and increasing the development of social skills. As a final result of the study, it was noted that teachers, families, and counselors need extensive support in overcoming antisocial behaviors and, therefore, programs need to be created and maintained that support and provide school-teacher-family collaboration and organizing seminars, conferences, parent education classes, and in-service trainings for teachers to cope with antisocial behaviors (Colak et al., 2015).

In reviewing the literature on teacher perceptions of PBIS programs, there are several conclusions that can be made. Teachers at the schools looked at in the studies, where PBIS programs were implemented, had positive perceptions of these programs. Their positive perceptions include improvements to school climate and atmosphere, student office referrals, and student behavior. However, while perceptions on the overall programs were positive, not all perceptions were positive, such as student to student interactions, and the need for more overall training.

Administration Perceptions and Involvement. In reviewing the literature on PBIS programs, a common theme as a possible contributing factor and as a possible barrier is the involvement and active participation of the principal, or administration. It is important to investigate this avenue further to see if there are important perceptions or suggestions that can impact the fidelity of PBIS programs just in the role of administrators and PBIS. George and Kincaid (2008) published a report on the importance of building district-level capacity for PBIS. Using Florida as an example, the researchers pointed out that it is not uncommon for school districts to implement PBIS programs in one to three schools the first year and to increase that to fifteen to twenty new schools the following year. This dramatic increase in the number of

schools in a district implementing new PBIS programs at one time, urges for the support and involvement of district administrators in this process. Developing a district wide implementation program with full administration support and involvement will build overall knowledge and awareness of PBIS as well as enhance the implementation efforts by utilizing more collaboration and less competition (George & Kincaid, 2008). The authors suggest nine important implementation elements: establishing a district leadership team; choosing a PBIS district coordinator; proper funding; building visibility of PBIS programs to maintain communication; political support that is communicated to school administrators, personnel, parents, and students; the use of PBIS trainers, training curriculum, and training preparation; the use of PBIS coaches; demonstrations sites utilizing schools implementing PBIS with fidelity; and an effective evaluation process. Using these elements as a guideline, district personnel will be able to better organize the resources and maintain the support to successfully implement and sustain district-wide PBIS programs (George & Kincaid, 2008).

Building on the administration involvement in district-wide implementation of PBIS, Richards, Aguilera, Murakami, and Weiland (2014) published a study exploring the district-wide implementation of PBIS in a large inner-city school district in Texas. In the process of the study, through discussions with the leaders of the PBIS programs in the schools, it was noted that different school campuses either fell into the categories of a strong principal focus, or a limited principal focus. Schools that had a strong principal focus saw principals, or assistant principals, that regularly attended PBIS meetings, were aware of the PBIS plans and worked collaboratively with the team on implementation, and provided adequate time for the team to present to the staff while supporting the team during these presentations. Schools that had a limited principal focus had principals that did not attend meetings, but an assistant principal may attend sporadically,

was not knowledgeable about the PBIS team plans or does not work with the team on implementation (additionally the principal may sometimes hinder the process and not provide access to space and/or resources needed), and does not provide adequate time for the team to present or does not support the PBIS team during the presentations (Richards, Aguilera, Murakami, & Weiland, 2014). Through the research of the study, it was shown that the level of principal focus did effect the success of the PBIS program, but mainly after the first year. In the first year of implementation, the principal focus did not have much of an effect. In the following years, it was found to be significant (Richards et al., 2014). This shows the importance of involvement and support of principals and administration in successful PBIS programs.

Further literature from the administrative perspective, Christofferson and Callahan (2015) published research on implementing a PBIS program in a charter school that had shown high staff turnover, negative school climate, and high student suspension rates in an urban setting. They found a significant drop in the amount of in-school suspension and disruptive behaviors while also a significant rise in students that agreed that the school had a respectful and positive school climate. Additionally, based on the findings, the administrators made recommendations, such as reviewing procedures for office discipline referrals to ensure staff understand the procedures (tier 1), analyze the office discipline referrals to discuss underlying issues (the basis for tier 1), provide ongoing professional development to teaching staff on positive interventions (tier 2), provide ongoing professional development regarding the implementation of Behavior Intervention Plans and the check-in/check-out system (tier3), identify students with the highest number of discipline referrals to understand underlying causes of disruptive behavior (tier 3), and to review the office referrals to see if there was a relationship in regards to race, gender, and age (tier 1). All of these recommendations would imply that the school was seeing a positive effect.

Additional qualitative research has been done that has shown the perceptions of principals toward the implementation of PBIS programs. McIntosh, Kelm, and Canizal Delabra (2016) conducted a study that looked at events that influenced principals' overall support for school-wide behavioral interventions and supports (PBIS). The purpose of the study was to gather information on events or experiences that principals perceived to help or hurt their decision to support PBIS. The research questions looked at in the city specifically looked for incidents that helped and hindered the implementation of a PBIS program. Additionally, the research looked at what would have been important prior knowledge before attempting to implement the program. The study included 10 administrators, both principals and vice-principals, from 10 different school districts across 8 U.S. states and Canada. Participants were chosen for meeting the desired criteria of being initially against PBIS but had recently increased their support (McIntosh et al., 2016). The results of the study showed there were 62 helping incidents for the principals' support of PBIS that were broken into 9 different categories, included learning from others, networking with other schools, learning how PBIS aligns with personal values, experiencing the effectiveness firsthand, observing a need for PBIS, attending quality trainings, seeing staff show support, connection to a coach, and attending PBIS team meetings (McIntosh et al., 2016). There were 14 hindering incidents that were grouped into three categories of disagreeing with the philosophy of PBIS, witnessing unsupportive staff, and negative reaction to time commitment. Additionally, there were also 15 wish list items discussed by the administrators that if they had experienced early on would have helped in their support earlier for PBIS. These were broken down into two categories of learning about PBIS earlier, which includes two subcategories of learning from more experience administrators and staff and

attending a conference or training earlier on, and planning for implementation (McIntosh et al., 2016).

Overcoming Perceived Barriers. In-line with teacher perceptions and the common contributing factor or barrier on teacher training on PBIS implementation, there was also research found on the positive effect of teacher pre-teacher training on the knowledge of implementation of PBIS programs. Ross and Lignugaris-Kraft (2015) and Wu (2017) published literature showing the positive effects of properly training teacher and future teachers on PBIS programs. It was found that the knowledge base of PBIS and the quality of PBIS programs can be improved with the proper teacher training. The study showed that if teachers are properly trained on the overall knowledge and concepts of PBIS, then when they go to create PBIS programs at their own schools, the programs that they put into place will be of greater quality (Wu, 2017). Additionally, it was found that teachers that went through training on PBIS programs as pre-teachers, through teacher preparation university courses as part of their programs of study, have shown the ability to implement effective teaching practices in all three tiers of PBIS programs within evidence-based systems of student support. What these studies show are that if common barriers, in this case training, are taken on then the outcome is a higher quality PBIS program for their schools.

Some research on overcoming these perceived barriers can also happen as part of research looking at different aspects of PBIS. McIntosh, Kim, Mercer, Strickland-Cohen, & Horner (2015) conducted a study to see if school demographic characteristics or school team actions related to sustained implementation of SWPBIS programs. The study looked at 860 schools across 14 states. Each school in the study was represented by one individual with knowledge regarding each school's SWPBIS program. The results of the study showed that

school demographic characteristics were not significantly related to sustainability, but school team actions, such as the frequency of sharing data with the whole school staff, were statistically significantly related to the sustainability of the SWPBIS programs. This quantitative research shows the effectiveness of disseminating information gained in the data-based decision making process has on successfully implementing a PBIS program. This relates back to the research questions and implications of this overall paper in that if there are consistent themes across successfully sustained PBIS programs, then if they are utilized in the correct way, more and more PBIS programs will be able to be successfully sustained with fidelity as well.

Sustaining PBIS programs

While much research has been done on implementing PBIS programs successfully, there is a lack of research out there on sustaining successful PBIS programs (Johnson, 2014). That is the main focus of this research study, to see what common themes emerge with PBIS programs that have already been implemented with fidelity. It is important to look first at some of the little research that is out there on sustaining PBIS programs. A study was published in 2015 using school personnel that covered 860 schools. This study looked at the responses from two main questions, "What is the most important factor for sustaining SWPBIS?" and "What is the most significant barrier to sustaining SWPBIS?" to yield thirteen main themes (Pinkelman, McIntosh, Rasplica, Berg, & Strickland-Cohen, 2015). The main eleven factors that enable a school to successfully sustain PBIS programs are (in order from most commonly stated to least): staff buy-in, school administrator support, consistency, training, teaming, effectiveness, PBIS philosophy, data, fidelity of implementation, time as a resource, and money as a resource. Among the barriers to successfully sustain PBIS programs, there were ten main factors (in order from most commonly stated to least): staff buy-in, time as a resource, money as a resource, consistency,

integrating other initiatives, training, fidelity of implementation, student buy-in, PBIS philosophy, and school administrator support (Pinkelman et al., 2015). Seeing as most of the common themes were stated as both contributing factors to the success and as barriers, such as staff buy-in, money, time, and consistency, there is the need for further research in to what makes the PBIS programs sustained with fidelity. Additionally, this study looked at a large amount of PBIS programs without being concerned if the programs were implemented or sustained with fidelity, just that they were in place. Through the study of this overall paper, it common themes will be looked at over only sustained with fidelity programs.

Summary of the literature and transition into Chapter III

Overall, the purpose of a PBIS program is to constantly emphasize the positive behaviors that the school desires to help encourage the students to show more of those behaviors and less of the disruptive behaviors. The amount of time put in to the development of the program and the data analysis, beforehand as well as throughout, will make the program that much more successful. It is important not to forget other important, necessary aspects of the program as well, such as simplifying the program (to get staff buy-in, efficiency, consistency, and student buy-in), using the proper supports and interventions that can be easily and effectively done by the people that will be in charge of handling them, using the right people in the right places along the way, and constantly making sure that the positivity is being stressed. The more and more literature that is coming out on the topic of the school-wide positive behavior programs are backing this up to hold true in many different settings, grade levels, and by different levels of staff. Positive Behavior Intervention and Supports programs are having a positive effect on our students, our staff, and our school atmospheres. Given this, however, there seems to be a need for more research looking at the sustainability of these programs. There is more literature on this

that has come out more recently, but it is an area that does not have as much in place as why, and how, these PBIS and SWPBIS need to be put in place. Additionally, there is even less research on what changes schools put into effect to keep the PBIS and SWPBIS programs effective and sustainable over time. This sets up possible future research to try to identify what keeps these programs from becoming stale and outdated as schools keep them in place over longer and longer time periods.

Chapter III

Methodology

Restatement of Purpose

Significant research has been done on the importance of Positive Behavioral and Interventions Supports (PBIS) programs in today's schools as well as research done on how to implement these types of programs effectively and successfully. However, once the programs have been designed and put into place, there is less research on following through with the program. Many programs fail within a couple of years and need to be redone while some programs continue to be implemented well. A 37 state, 5,331 school study showed that 58% of schools that implemented a PBIS program abandoned the program within the first three years (McIntosh et al., 2016). The research of this study will focus on the key elements to successful programs over time. With the research question identified as looking for the commonalities of successful PBIS programs, that have been identified as having sustained fidelity by the state of Pennsylvania, from the teachers' perspectives, there are many steps that need to be taken to collect and analyze the data.

Research Question and Subquestions

1. What do successful PBIS programs, that have been identified as having sustained fidelity by the state, have in common, from the teachers' perspective?
    1.1. What are the most important enabling factors about PBIS programs to maintain sustained fidelity?
    1.2. What are the biggest barriers facing PBIS programs to maintain sustained fidelity?
    1.3. Do the teacher perceptions and opinions about the critical components of these sustained PBIS programs align with the state recognition based on Likert-type responses?

Description of participants

The first challenge was to identify potential participants. Initially, it had to be established what sustained fidelity meant so that schools could be found that met this criterion. As previously mentioned, the state of Pennsylvania uses a scoring system identified as the Benchmarks of Quality (BoQ) when assessing the implementation of PBIS programs (PAPBS, 2018). The BoQ is a 53 question evaluation tool with a total score of 107. The BoQ has been established as a valid assessment tool in several studies as well as being revised (Kincaid, Childs, & George, 2005; Cohen et al., 2007; Childs et al., 2011; Matthews et al., 2014). Pennsylvania identifies a school as having implemented a PBIS program with fidelity if they score at or above 70% on the BoQ. A school is identified as having sustained fidelity with their PBIS program with a score of 80% or higher (PAPBS, 2018). Using the Pennsylvania site on PBIS, the following schools were identified as having sustained fidelity in Allegheny County (PAPBS, 2018):

School	School District
Chartiers Valley Primary School	Chartiers Valley School District
Kerr Elementary School	Fox Chapel Area School District
Dr. Cleveland Steward Jr. Elementary School	Gateway School District
Fairmount Primary School	Highlands School District
Fawn Primary Center	Highlands School District
Avalon Elementary School	Northgate School District
Bellevue Elementary School	Northgate School District
Quaker Valley Middle School	Quaker Valley School District
Tenth Street Elementary School	Riverview School District

Homerville Elementary School	West Mifflin Area School District
Clara Barton Elementary School	West Mifflin Area School District

These schools, and their teachers, were identified as being possible participants in this study.

Description of instrumentation/measurement procedures

The researcher conducted a pilot study in the spring of 2018, looking at common themes among PBIS programs that had been in place for at least three years (Pfeiffer, 2018). The revised interview guide from that pilot study will be used in this study. The original interview guide had seven main questions with twenty-two sub-questions. As a result of the pilot study, some changes were made to the interview guide. The revised interview guide has eleven main questions with thirty-three sub-questions. In question 1A, the identifier of a token economy was added for clarity. In questions 3B and 3C there were additions looking for specific incidents that influenced the interviewee's previous answer. Finally, the last section was added with one main question and five sub-questions pointing out to the interviewee that his/her school had been identified as having sustained fidelity in implementing the school's PBIS program, asking if the interviewee was aware of this, if they knew the team members that completed the BoQ tool, if the results of the tool had ever been shared with the staff, if the interviewee felt that the school's PBIS was effective from their perspective, what made the interviewee feel it was effective or not, and if there were any specific incidents that influenced the previous answer. These additions were added for clarity, to get information about if the teachers are aware of their school's score on the BoQ, and if they personally agreed that the program was successful or not along with reasoning and/or specific incidents that made influenced their decision. To add a quantitative

aspect to the study, Likert-type questions were also added to the interview guide to assess the teachers' perceptions of their PBIS program and how it aligns with the state's identification of the program as being sustained with fidelity. The interview guide is included in the Appendix. The interview guide's questions correlate to the main research question and subquestions as is shown in table 3.1.

Table 3.1
Interview Guide to Research Question Breakdown

Research Question/Subquestion	**Interview Guide Question/Topic**
Research Question 1 – What do successful PBIS programs, that have been identified as having sustained fidelity by the state, have in common, from the teachers' perspective?	2 – Token Economy 3 – PBIS Team 4 – Evaluation Plan 5 – PBIS program consistency 9 – Data Evaluation Team/Data Presentation
Research Subquestions - 1.1 - What are the most important enabling factors about PBIS programs to maintain sustained fidelity? 1.2 – What are the biggest barriers facing PBIS programs to maintain sustained fidelity?	6 – Student Buy-In 7 – Staff Buy-In 8 – Barriers/Contributors
Research Subquestion – 1.3 – Do the teacher perceptions and opinions about the critical components of these sustained PBIS programs align with the state recognition based on Likert-type responses?	10 – Rating (Likert-Type) the importance and 11 – Rating (Likert-Type the effectiveness of • Token Economy • PBIS Team • Expected Behaviors Matrix • Expected Behaviors Lessons • Staff Buy-In • Administrative Support • Data for Evaluation • Data for Maintaining Program

While all of the questions will cover the main question looking for commonalities, from the teachers' perspectives, of PBIS programs sustained with fidelity, the interview guide can be broken down more specifically with the subquestions. The questions listed under the main research question will look specifically for the narratives from the teachers about what makes their PBIS work and be effective. These questions will also look for teacher perceptions of effectiveness, the effect of changes made throughout the sustainment of the program, and how/if the data is shared with the staff. The questions listed under the subquestions 1.1 and 1.2 will look specifically at teacher perceptions of sustained buy-in from teachers and staff while also looking directly for the narrative from the teachers on what they perceived as enabling factors and barriers that helped or hindered the sustainment of their program. This data, broken down into these subquestions will enable the teachers to give their direct perceptions of enables and barriers, in addition to the data that emerges from the narrative from the other questions. Lastly, the last two questions on the interview guide are the Likert-type questions that will bring in the quantitative data for this study. This data will look to see if the teacher perceptions of these programs, that have been identified as exemplary by the state of Pennsylvania, align with what the state has identified as critical components to sustaining PBIS programs as well as what the state has identified with these specific schools.

Research design and description of procedures

The next process for the study is to establish the procedure for the collecting of the data. To collect the data, the researcher will first reach out to the Superintendents of the schools identified above to see if they would be willing to have their teachers be a part of the study. It will be noted that the teachers will have participated in the study anonymously to ensure confidentiality, but the results can be shared back with the district if they so choose. If the

superintendents were willing to have their teachers participate, then the school principals were contacted for approval as well. Once approval was obtained, then an email was sent out to the teachers seeking participants in the study along with consent forms. Teachers were interviewed by email, with a link to an online survey, as this has been shown as effective in producing credible findings, helping the feasibility of the study by getting more willing participants that might be too busy to participate via in-person interviews, and getting clear and precise responses (Hawkins, 2018; James, 2007; Ratislavova & Ratislav, 2014). Follow-up emails were used in the case of needed clarification. In an effort to increase the number of participants in the study, the teachers were made aware that any participants were entered into a drawing for a $50 Amazon gift card if they completed the interview guide in a two-week time period.

Once the data was collected, the next stage of the study will be to analyze the data. A mixed methods approach will be taken with this study, using a qualitative, grounded theory approach in addition to a quantitative analysis of Likert-type responses. An email questionnaire was used as the interview process where the questions were open-ended enabling the participants to expand on what they perceived the contributing factors, and barriers, are in sustaining successful PBIS programs. The Likert-type responses at the end of the questionnaire looked at teachers' perceived notions on importance and effectiveness of common PBIS enablers/barriers. As data is collected, the researcher used thematic analysis to first compare the data with the themes from the pilot study as original focus points while also looking at any additional themes that arose as the study was being conducted. Additionally, the data was used to look to see if there were any specific themes relating to changes or modifications that schools made to their PBIS and SWPBIS programs to maintain, or improve, their effectiveness over time or if there are any specific contributing factor or barriers that have impacted the effectiveness over time. In the

previously mentioned pilot study done in the spring of 2018, the following themes emerged: consistency, with a subcategory of administrative support; funding; data-based decision making; and changes to the program, with two subcategories of what the changes were based on and who decided to make the changes (Pfeiffer, 2018). These themes were used for deductive coding along with an additional theme of monitoring and evaluating staff and student buy-in. Those are some of the focal points that were set up as a result of the pilot before the interview process started and will be used to originally help setup preset codes and organize the data. Testing data against empirical data using preset codes is often insisted upon with grounded theory researchers (Elliott, 2018). In reviewing the research, new codes were looked for, as is common in the course of a single research study. Utilizing new codes as they emerge ensured that all data was considered through the analysis (Elliott, 2018). As these codes were eventually narrowed down into bigger categories, themes started to emerge from the data. These themes were used to tell the story of the data to put the research in a more meaningful order (Yi, 2018). After the themes have been analyzed for importance relating to the original research question and subquestions, the data was then reduced to the point of the main influential contributing factors of sustained fidelity in PBIS programs along with barriers that could possibly hinder the sustaining of these programs. For the quantitative analysis, the Likert-type questions will be coded (1=1, 2=2, 3=3, 4=4, 5=5). This data was then evaluated by looking at central tendencies with the medians and modes of the responses to determine common themes in the teachers' responses and perceptions on the importance and effectiveness of key common PBIS enablers and barriers.

Data analysis

The purpose of this study is to look for contributing factors of successfully sustained PBIS programs. Through the analysis and break down the the data, this study will look to serve

as a guide for school districts to proactively plan and design a framework to maintain their PBIS program. While the data of this study is specific to the teachers of the school districts involved in this study, the intent is to give schools more information in the area of sustaining programs to build upon the growing amount of data on implementation of PBIS programs.

This study used a mixed-methods approach. Mixed methods research refers to the method of collecting and analyzing data in a combination of both qualitative and quantitative approaches throughout the research process (Creswell & Plano Clark, 2007). A survey was sent to teachers with open-ended questions and Likert-type questions. The data was collected and analyzed with a complementarity purpose focus. A complementarity purpose for mixed-methods evaluation design clarifies and illustrates results from one method with the use of another method (Greene, Caracelli, & Graham, 1989). In this study, the use of qualitative data, through the use of the Likert-type questions, was used in concurrence with the qualitative data collected through the open-ended questions.

The last stage of the data collection was to summarize the data and finalize the theories that have emerged from the study. To do this, the qualitative data was analyzed through an open coding process will be used to help summarize the findings of the main contributing factors to make sure that the focus is not on all of the commonalities, but the what the data shows as the most important factors. Open coding helped build a descriptive narrative of the data as a multi-dimensional framework to help with the later analysis and narrowing of data (Blair, 2015; Khandkar, 2009). The data was then compared to the original themes from the pilot study to see if the new data agreed with, expanded upon, disagreed with, or pointed towards new emergent themes. The themes that emerged from the pilot study were consistency of the program, funding, data-based decision making, and changes made to the program to keep it align to the changing

needs of the school (Pfeiffer, 2018). While preset codes were used to compare the data to the pilot study themes, new codes were developed to ensure that all of the data is being analyzed. In this inductive process, the researcher coded potential themes and continually revised these coded themes while sorting through the data through axial coding where more precise explanations can be formed (Blair, 2015). This process was then continued as all of the data was reviewed and analyzed until all of the codes, new and preset, were then narrowed down into major categories. This enabled the data to emerge into themes along the process of selective coding to organize the data around a central explanatory narrative, or concept (Blair, 2015). Additionally, the qualitative data was compared to the Critical Elements of a PBIS program as identified on the BoQ. These Critical Elements are the PBIS Team, Faculty Commitment, Effective Procedures for Dealing with Discipline, Data Entry & Analysis Plan Established, Expectations & Rules Developed, Reward/Recognition Program Established, Lesson Plans for Teaching Expectations/Rules, Implementation Plan, Classroom Systems, and Evaluations (Childs et al., 2011). In looking for new themes to emerge, as well as comparing to themes from the pilot study, as well as comparing to the Critical Elements identified in the BoQ, commonalities were identified in successfully sustained PBIS programs. This is how the qualitative data was analyzed.

Quantitative data was collected and analyzed through the inclusion of Likert-type questions on the teacher survey. These questions looked to evaluate teacher perceptions of importance and effectiveness of important aspects of PBIS programs. Again, these important aspects come from both the pilot study and the BoQ. Likert-type questions measure data based on a greater or less than relationship with no implication of how much greater or less than. This makes Likert-type questions best placed in the ordinal measurement scale. For ordinal measurement scales, descriptive statistics recommends the use of central tendency and

frequencies for variability. The Likert-type data in this study was analyzed in this method, looking at central tendency with median or mode, and frequencies for variability.

This data was used to look for common themes among teachers' perceptions of the effectiveness of their PBIS program as well as the importance of major factors of PBIS programs relating to implementation and sustaining of the programs, as determined by the literature review, the pilot study, and the BoQ. These results were then be used to theorize what schools and districts need to continually focus on with their PBIS programs to make sure that they continue to be successful and effective and do not need to be continually overhauled, whether completely or partially. This goes back to the purpose of the study, to help schools maintain, with fidelity, successful PBIS programs over time, instead of having to revamp, completely change, or start over with a new program. Additionally, these results will point toward possible future research, such as expanding the study to include more teachers across more parts of the country to look for if the contributing factors continue to follow the same major themes, or looking at newer sections of PBIS for further analysis.

Chapter IV

Findings

Restatement of Research Questions

The purpose of this research study is to look at sustaining successful PBIS programs. This study was set up to look at teacher perceptions of successfully sustained PBIS program, as identified by the state of Pennsylvania, to determine commonalities with these successful programs. To do that, the following research questions were posed.

1. What do successful PBIS programs, that have been identified as having sustained fidelity by the state, have in common, from the teachers' perspective?
    1.1. What are the most important enabling factors about PBIS programs to maintain sustained fidelity?
    1.2. What are the biggest barriers facing PBIS programs to maintain sustained fidelity?
    1.3. Do the teacher perceptions and opinions about the critical components of these sustained PBIS programs align with the state recognition based on Likert-type responses?

Results were looked at qualitatively and quantitatively. Teachers filled out a questionnaire involving two main parts, open ended questions and Likert-type questions. The open ended responses focused on the overall structure, setup, and maintenance of the school's PBIS program as well as giving the teachers the chance to give their perceptions of critical components of PBIS. These responses were then used to look at the data for themes as well as major contributors or barriers leading to the successful sustainment of PBIS programs. Likert-type questions were included in the questionnaire to evaluate the teachers' perceptions of

importance and effectiveness of 8 critical components of PBIS; the token economy, PBIS team, expected behaviors matrix, expected behaviors lessons, staff buy-in, administrative support, use of data in evaluating the program, and the use of data in making changes to the program. The Likert-type questions were used to determine the perceived importance and effectiveness of specific attributes identified as being paramount to the implementation of successful PBIS programs.

Demographics

There was an original list of 11 schools that were identified as having successfully sustained fidelity with their PBIS program, by the state of Pennsylvania, for this study (PAPBS, 2018). Due to the effects of the COVID-19 pandemic on the 2020-2021 school year and changes in school settings during this year, there was one school that the research study was approved for, Dr. Cleveland Steward, Jr. Elementary School in the Gateway School District. Various attempts were made to include more schools and teachers for this study, but were unsuccessful. Initial phone calls and emails were made to all districts along with follow up emails and reminders were sent to superintendents and principals in attempts to get approval to survey more teachers. Superintendents declined to participate in the study in an effort to not add to the work load of, in their words, their overworked and stressed staff. With guidance of the dissertation committee, the researcher was advised to move forward with the one school. At the approved school, email reminders were sent to staff members that had not responded to the survey on numerous occasions over a six month time period in an attempt to survey as many teachers as possible at Dr. Cleveland Steward, Jr. Elementary School.

Dr. Cleveland Steward Elementary School is a Kindergarten through Fourth grade school that averages around 300 students in the suburbs of Pittsburgh in Allegheny County that serves

the communities of Monroeville and Pitcairn. Teachers from Cleveland Steward Elementary School were surveyed in the fall of 2020 and the spring of 2021. The PBIS program that school uses is Great Gator and the teacher participants have been involved with the program for an average of around 6 years. The school has a student breakdown as shown in table 4.1 and 4.2 below.

Table 4.1

Percent Enrollment by Race/Ethnicity

Race/Ethnicity	Percentage
American Indian/Alaskan Native	0%
Asian	6.7%
Black	34.2%
Hispanic	6.3%
Native American or other Pacific Islander	0%
White	41.2%
2 or more Races	11.6%

Table 4.2
Percent Enrollment by Student Groups

Student Group	Percentage
Economically Disadvantage	63.7%
English Language Learner	2.8%
Special Education	16.2%
Foster Care	0.7%
Homeless	1.1%
Military Connected	0%

Data Collection

The purpose of this study is to look at commonalities in teachers' perceptions of PBIS at schools that have successfully sustained PBIS programs. To collect data for this project, teachers at Dr. Cleveland Steward Elementary School were surveyed in the fall of 2020 and the spring of 2021 with 12 teachers participating in the study. The teachers that participated covered grades kindergarten through fourth grade, learning support/special education, and the school's library media specialist. The teaching experience of the teachers that participated broke down as shown in the table below.

Table 4.3
Respondent teaching experience

Years of Teaching Experience	Percentage of Respondents
11-15 years	33.3%
16-20 years	16.7%
21-25 years	33.3%
26+ years	16.7%

Respondents were sent the survey electronically to respond to at their convenience with a deadline for completion. They were sent an email from their principal explaining an opportunity to participate in a research study and that it was optional, but that it would be appreciated if they took the time to participate. Attached to the email was the recruitment letter that also contained a link to the informational letter on potential risks/benefits, that teachers participating would be entered into a drawing for a $50 Amazon gift card, and a link to the survey in February of 2021. With the approval of the principal, follow up and reminder emails were sent to the staff that had not yet participated in April of 2021 and again in June of 2021. Respondents were assigned codes to assist the researcher in data analysis. Demographics on the interview respondents are included in the table below.

Table 4.4

Respondent Profiles

Code	Years of Experience	Teaching Position
T1	11-15 years	1st grade
T2	11-15 years	1st grade
T3	11-15 years	3rd grade
T4	21-25 years	3rd grade
T5	21-25 years	2nd grade
T6	26-30 years	Library Media Specialist
T7	11-15 years	1st grade
T8	16-20 years	3rd grade
T9	16-20 years	Kindergarten
T10	21-25 years	Learning Support
T11	21-25 years	Kindergarten
T12	31+ years	Learning Support

Qualitative Data Findings

The qualitative data was analyzed to look for commonalities, from the teachers' perspectives, of PBIS programs sustained with fidelity. When looking at the teacher survey, question 1 and subquestions 1.1 and 1.2 looked at narratives from the teachers to find these commonalities. Question 1 looked specifically for what teachers' perceptions were on what makes their PBIS program work effectively. Subquestions 1.1 and 1.2 looked at teacher perceptions of enabling factors and barriers that either helped or hindered the sustainability of

their PBIS program. This data was then compared to the themes from the BoQ that the state of Pennsylvania uses to assess PBIS programs as well as themes that emerged from a pilot study completed in 2018. As outlined in chapter 3, themes that emerged from the pilot study were consistency of the program, funding, data-based decision making, and changes made to the program to keep it align to the changing needs of the school (Pfeiffer, 2018). The breakdown of the questions and subquestions for the qualitative data is shown in table 4.5.

Table 4.5

Interview Guide to Research Question Breakdown for Qualitative Data

Research Question/Subquestion	Interview Guide Question/Topic
Research Question 1 – What do successful PBIS programs, that have been identified as having sustained fidelity by the state, have in common, from the teachers' perspective?	2 – Token Economy 3 – PBIS Team 4 – Evaluation Plan 5 – PBIS program consistency 9 – Data Evaluation Team/Data Presentation
Research Subquestions - 1.1 - What are the most important enabling factors about PBIS programs to maintain sustained fidelity? 1.2 – What are the biggest barriers facing PBIS programs to maintain sustained fidelity?	6 – Student Buy-In 7 – Staff Buy-In 8 – Barriers/Contributors

Research Question 1 Findings

Research Question 1 focused on use of token economies, the PBIS team itself, evaluation measures, program consistency, and data evaluations as variable contributing to detracting from overall program sustainability. As discussed earlier, Pennsylvania uses the BoQ when assessing PBIS program implementation and sustainment. The BoQ has been shown to a credible resource to measure progress in these areas (Balu & Malbin, 2017; Childs, et al., 2011; PAPBS, 2018).

Looking at the survey data for research question 1, there were some clear themes that stood out from the teacher perspectives. These themes dealt with the token economy, the PBIS team, and the use of data. All of these themes directly relate to importance concepts of PBIS, as identified by the BoQ.

Token Economy. Token economies have a long history in education and is a research-based program to help reinforce positive behaviors in students. The overall concept of a token economy is that through rewarding desired behaviors consistently, students will replicate those behaviors more often and the undesired behaviors will decrease (Miltenberger, 2008).

The token economy that the school used was Great Gator (their school mascot is the Gator) where the students got Gator Dollars for demonstrating correct behavior and then those could be spent on prizes in the school store. There was also a monthly prize for one student per class and whole school rewards, such as a movie day or assembly. When going through the teacher responses, a noticeable theme that emerged was the use of this token economy and how it would adapt to meet current needs of the school. Some of the changes were the types of prizes that were offered or giving more rewards in specific areas, such as the cafeteria or bus. T11 responded, "the principal and the team as a whole uses the data to make changes. For example, if so many discipline referrals are coming from the cafeteria, then we have staff to monitor more closely and give out more Gator Dollars when we determine an area that is in need of more reinforcement." T9 stated, "A new reward system (book vending machine) was added. T4noted that they "added more rewards and student input, documentation forms for teachers and parents." Finally, T6 stated, "Prizes in the store may be tweaked to promote interest and specific behaviors school-wide may be addressed as needed." Not only does this fall in line with how a token

economy should be adjusted and adapted, but also relates to the use of data in sustaining a successful PBIS program.

PBIS Team. The PBIS Team is the group of faculty and staff members at the school that have a wide range of responsibilities dealing with the PBIS program. These responsibilities can be the actual development and design of the program, analyzing the data from the implementation of the program, and making changes to the program. The PBIS team is typically made up of 6-10 members of the staff covering a variety of the faculty, such as the principal, classroom teachers, learning support teachers, guidance, and other representatives of the school (OSEP, 2010).

The PBIS team was seen as an important part of the program with team member from each grade level, learning support teachers, the guidance counselor, the principal, and any other volunteers that wanted to be on the team. Yearly changes were able to happen with the team, but the team generally stayed the same from year to year, even through three changes in principals over the last several years. T5 stated that the team can change yearly and that "anyone is allowed to attend the meeting but there has been a core team for consistency from the beginning of when it was started." T6 responded, "On occasion, a member may switch up, but in general it stays the same, but with input from all staff members, as needed." The team also had opportunities to check in with a consultant from the local intermediate unit. Changes made in the PBIS program, such as what school settings needed more focus with a push to give out more Gator Dollars for positive behaviors, came from this team.

Use of Data. The use of data to evaluate and adapt a PBIS program is a crucial aspect of a successful program. PBIS program data is typically retrieved from office referral forms and the token economy reward system. This data can then be used to evaluate the effectiveness of

the program as well as help to make changes, if needed, in the focus of the token economy system or the expected behaviors matrix and lessons (PBIS.org, 2019). The use of data can be used to show a visible and more concrete effectiveness of the program and can be effectively used for motivation as well as influencing a staff's opinions of PBIS programs overall (Mathews et al., 2014).

A major theme that emerged was the use of data by this PBIS team throughout the implementation of the school's PBIS program. Data, such as office referrals, office visits, write ups, and Gator Dollars given were used to analyze the effectiveness and needs of the program from within the school. It was this data that led the school to make cafeteria behavior a principle focus before moving onto bus behavior next. T10 and T11 both referenced the use of data specifically in making adjustments on the area of focus. Another use of data was a year-end survey of teachers as well as an outside evaluation of the program from outside of the school. T6 stated, "tweaking the program from year-to-year is effective to address behaviors." Other teachers agreed stating that "it is quieter in there" about the cafeteria, that there are "less student intervention referrals," "it is very effective," and "our PBIS program really is a well-run part of our school and how we address behavior as a group." All of this data was regularly shared with the rest of the staff, not just the team, through faculty meetings and emails. This data was used to look for trends and make adjustments, such as noticing how many referrals were coming from the cafeteria leading to more cafeteria monitors and a focus on giving more Gator Dollars for positive behavior in that setting. T12 responded that "We are always striving to improve. If something isn't effective, we ramp up to create effectiveness." The use and availability of this data to make changes was seen as positive from the staff in that frequent rewards from the staff created positive reactions from the students which then creates and even more positive reaction

from the staff. Teachers expressed this numerous times in statements such as "we have increased the variety and quality of items in the school store with positive results," "more frequent rewards and better selection can only have a positive reaction from the students," "improved student behavior in order to earn rewards can only have a positive reaction from staff," "students love the changes – more chance for reward," and "both staff and students seem to appreciate its effectiveness. While not all teachers surveyed had seen the actual document showing the school's evaluation on the BoQ (42% of teachers surveyed said they had seen the BoQ results), the staff showed that data was regularly shared to all and easily accessible by the staff.

Research Subquestions 1.1 and 1.2 Findings

Research subquestions 1.1 and 1.2 both dealt with four major topics, student buy-in, staff buy-in, major barriers to successfully sustaining a successful PBIS program, and major contributors to successfully sustain a successful PBIS program. These four topics are viewed as being critical to short and long-term success of any PBIS system (Pinkelman et al., 2015). The results of the teacher's surveys were broken down into these different topics to see what related themes emerged for a school to being able to maintain a successful PBIS program over time after a successful implementation period.

Student Buy-In. In this study, student buy-in was asked about specifically. The main themes to come out of the teacher surveys talked about the token economy reward system, class meetings, and staff buy-in in relationship to student buy-in. The token economy reward system was the most mentioned tool for getting student-buy in, but was discussed deeper as also a way to sustain student buy-in. A major theme in the teacher surveys dealing with the token economy rewards system was that it worked and was able to keep the student interest, motivation, and drive in working toward the rewards. Multiple teachers mentioned this with statements such as

"they love the rewards, but higher value incentives might be beneficial," "rewards speak to them and always have," and "students still want to earn the gator dollars, cash them in for prizes, and also want to be chosen as the Great Gator." However, there were a few factors that impacted the effectiveness of the rewards system. Multiple teachers talked about changing up the rewards available to the students throughout the year with adding in newer items as the year went on to keep the system new and exciting for the students. Several teachers talked about how they will add new rewards available to the students towards the end of the school year. T9 responded that they would "introduce some rewards later in the year so my students do not get bored with it." Additionally, it was mentioned by T12 that rewards do not always need to be monetary, but students were more than happy with some non-monetary value rewards as well, such as "pajama days, device day, or offer extra recess, lunch with the teacher or principal."

Other themes that emerged when talking about student-buy in were the class meetings and staff buy-in. One of the main components of PBIS is the use of behavior matrixes and teaching lessons on expected behaviors in different school settings. One way to implement these lessons, as well as circle back to them throughout the year, are with classroom meetings where these behaviors can be reviewed and discussed. It was mentioned on teacher surveys that the students embraced the classroom meetings and enjoyed being able to discuss topics that affected school atmosphere with their teachers and their classmates. T6 responded that the student, "like the class meetings and the monthly skill (goal), as well as the reward system." Staff buy-in was also discussed on the teacher surveys as having an impact on student buy-in. If the teachers fully buy-in to the program, then they are going to talk about the program with more positivity which leads to higher student buy-in. T10 responded, "I feel that the student buy-in increased as the teachers became more comfortable implementing it." Teachers that implement the program with

more futility and consistency, another sign of full buy-in, also led to a perceived increase in student buy-in of the PBIS program at this school and the opposite can be true as well, such as how T3 responded, “inconsistency of implementation decreases student buy-in.”

Staff Buy-In. Staff buy-in has often been seen as a critical component for the success of a PBIS program. Typically, at least 80% of the staff needs to support the program and buy-in for it to be successfully implemented and has been shown to be just as important in sustaining a PBIS program as well (Mathews et al., 2014; PBIS.org, 2019; Pinkelman et al., 2015).

In regards to staff buy-in on the teacher surveys, three main themes emerged from their answers, comfortableness of teachers implementing the program, seeing positive results, and the need for lots of support and resources. As teachers implement the program more and more, get more comfortable with the program, especially with aspects such as the token economy, it was perceived that the teachers bought into the program more progressively. Not only did the consistency lead to higher staff buy-in, but it was also perceived that as the teachers bought in to the PBIS program more and got better at implementing it, there was a direct correlation with an increase in student buy-in to the program. T6 responded that “as teachers saw student behaviors change for the better, all were happy,” and other teachers agreed stating, “improved student behavior in order to earn rewards can only have a positive reaction from staff,” and “student buy-in increased as the teachers became more comfortable implementing it.” Another perception that led to more staff buy-in was seeing more positive results. Teachers were able to not only see the data and the results of discipline referrals, rewards given out, and other parts of the PBIS program, but could see how the behavior, attitude, and overall atmosphere of the school got better with their own eyes and interactions with the students in the school. It was noted that even teachers that did not fully buy-in to the program or ideals at first, where influenced by seeing a

lot of positives. T12 remarked, "At first we had several old school teachers who did not see the value of rewarding students for expected behavior. Slowly several of these teachers have seen that the positive strategies have worked and have changed their perspective." It was stated by one teacher, T8, that the school's atmosphere was not great before implementing PBIS and that things were going bad. After the implementation of the PBIS program and being able to sustain it, a lot more positives were seen by the teachers and the total level of staff buy-in increased. This teacher's responses stated, "We work in a tough building and without PBIS we were a sinking ship. We have seen a lot of positive things. We are not perfect, but in a much better position that we were." One of the most mentioned themes of the questions geared toward staff buy-in was the importance of lots of supports and resources needed to not only implement, but sustain a quality PBIS program. This support covered many different aspects, such as administrative support, support of the entire staff of the school – not just the teachers, and monetary support. The need for resources, such as academic and behavioral interventions, professional development, rewards for the token economy, outside mentors/advisors, and other resources was perceived as having a big impact on being able to successfully sustain a PBIS program. Teacher responses included statements that "it is hard to fund items for the store," "higher value incentives might be beneficial," and the need for "more in-person support with the program." Seeing that the school staff, administration, and the district were willing to provide the support and resources needed to properly implement the program had a positive effect on staff buy-in for the PBIS program.

Major Barriers and Contributors of Successful PBIS Programs. In looking at research on implementing PBIS programs successfully, there are typical components seen as major barriers and/or contributing factors to having a successful PBIS program. Many of theses have

already been discussed, such as administrative support, staff and student buy-in, and the use of data. In a study from 2010, there were four main themes of barriers and contributing factors; consistency and adaptability, rewards, data-based decision making, and professional development and support (Ackerman et al., 2010). Additional research has also pointed to consistency, clear implementation strategies, systematic data collection, student-input, training for new teachers, external support and expertise, parent and community involvement, PBIS team effectiveness have all also been shown to be barriers and/or contributing factors to the success of PBIS programs (Ackerman et al., 2010; Andreou et al., 2015; McDaniel, Kim, & Guyotte, 2017).

There were several questions in the teacher survey that gave the teachers an opportunity to discuss what they felt were significant barriers and contributors to successfully sustaining a quality PBIS program. The themes that emerged from these questions deal with a lot of previously mentioned concepts of PBIS programs. That these questions were more open-ended than others on the surveys showed the importance that teachers put on these themes by expanding their discussion and explanation.

While many of the specific barriers and contributors pointed out by the teachers are related to the themes above, there were also some new topics pointed out. The major themes that emerged from the teachers giving their perception of barriers were teacher buy-in, administrative support, inconsistency, newness wearing off, and additional training to go along with PBIS. Along with staff buy-in being a big concern to sustain a successful PBIS program, teachers specifically pointed out buy-in with new teachers being a concern. While the teachers that had been there for the creation/implementation of the program that had seen the program produce positive results from the previous atmosphere of the school, new teachers that came to the school after these positive changes might not buy-in to the program as quickly. Additionally, in the

initial implementation, a barrier discussed was getting more experienced teachers to buy in to the token economy aspect of giving rewards to students for expected behaviors. This was perceived as a possibly barrier for more old-school teachers that saw discipline in a different way. This leads into the new perceived barrier of getting teachers to buy in that do not have a special education or behavioral background. Several teachers noted difficulty in getting teacher buy-in for rewarding expected behaviors, stating that "at first we had several old school teachers who did not see the value of rewarding students for expected behaviors," "others need to be encouraged to reward "expected behavior," and "it's different for teachers that do not have a behavior/special education background to buy into a program that focuses on rewarding the positive." PBIS can be a completely different behavioral approach than teachers are used to and if teachers do not have a background in behavioral interventions and supports, it was perceived that they could have a harder time buying into a dramatically different approach to discipline than an older approach of punishing, not teaching behavior. Similarly with teacher buy-in, administrative support was seen by many teachers as a possible barrier to sustaining the program. Specifically at this school, where three different principals were present during the school's PBIS program, it was mentioned that a new administrator may want to come in to the school and change the PBIS program that was already in place to do things more their own way. With a successful program already in place, teachers saw that as a potential barrier that a new principal may want to come in and put their twist on a program even though it was already successful. Another major theme from the teacher surveys that was perceived as a possible barrier was the PBIS becoming old and stale for the students. Respondents remarked "I believe the new wears off a bit," and "inconsistency of implementation decreases buy-in." Earlier it was pointed out that some teachers tried to overcome this by changing up the rewards as well as using data to

change target settings of the school for possible double rewards, but it was a concern mentioned by teachers. Finally, the last major theme that emerged from the teacher surveys was that of additional training needed for the teachers and staff to successful sustain a PBIS program. It was perceived that a barrier could be the lack of training in such topics as running classroom meetings, behavioral interventions, anti-bias, and anti-racism. T6 expressed that more training could have happened on running the classroom meetings and stated that "classroom meetings at first were a concern," and T1 stressed that "PBIS will not be equitable or completely effective if anti- bias/anti-racism work is not done first." Teachers felt that if professional development did not include training on these topics along with the overall PBIS program, then it would make it much more difficult to sustain a successful PBIS program over time. Those were the major themes for teachers' perceived barriers of sustained successful PBIS programs.

While contributors and barriers to any program are going to be closely related, there were also some new themes that specifically arose from the teachers when talking about contributing factors to maintaining a PBIS program. The biggest themes that emerged were the rewards system, funding, administrative buy-in, community support, the formation of the program, and modifications. As was mentioned in the barriers, the rewards system was similarly pointed out as a contributing factor. Having a wider variety of rewards, introducing new rewards as the school year goes on, and uniformity in implementing the rewards system were all seen as factors that could help to sustain a program. "Higher value incentives," "some rewards later in the year," "time to restock [the rewards]," and "monetary funds" were all specifically stated by teachers. Directly tied to the rewards system is the theme of funding. Having the proper funding for the program was seen as a big contributing factor for success, specifically with purchasing the rewards system, but also for training and professional development as well. Another aspect

of funding seen as a possible contributing factor was having teachers that have a high knowledge of getting resources and grants to help implement, support, and sustain a successful PBIS program. T11 stated that one teacher in their building was very effective at getting supplies, saying, "she is always getting resources from outside donations to help our school in many ways. She gets donations for the store, money for things such as assemblies and our new book vending machine," and stating that this staff member " is an extremely valuable member of our team." Administrative support was also a theme that was mentioned as a barrier and as a possible contributing factor. While not having full administrative support could be a barrier, having a principal that completely supports and buys in to the program is perceived by the teachers as being just as big of a contributing factor. Community support also emerged as a theme from the surveys. It was perceived by the teachers that having the full support of parents and the PTO would be a big contributing factor. Teachers also saw how the program was started as a contributing factor in that it would be more beneficial for the school to build it own program from scratch to properly meet the specific needs of the school, its students, and its staff. We built the program from scratch and it helped," was stated by T5 as a contributing factor. Finally, the last contributing factor theme was modifications and changes to the program. Teachers perceived that a big contributing factor to sustaining a successful PBIS program over time was the knowledge that changes would need to be made as the program grew and progressed, as well as how those changes happened. As the school atmosphere and culture changes through the implementation of a PBIS program, modifications need to keep the program fresh, focused, and successful. Teachers specifically pointed out the need to make yearly adjustments as well as being able to make adjustments on the fly, such as when a pandemic can change the complete structure of the school year. T5 replied that a contributing factor was "making modifications

even during a pandemic and virtual instruction," and that "yearly adjustments are needed and we do that." These topics were what the teachers perceived as having the biggest positive contributing factor for a school to sustain a successful PBIS program after implementation, over a period of time.

Summary of Qualitative Findings

When looking at the qualitative data, specific themes emerged from the respondent narratives. The results for Research Question 1 revealed teacher perceptions of the importance of a quality and evolving token economy, the make-up and work of the PBIS team, and the use of data to evaluate the program as well as make modifications and changes. The results for Research Subquestions 1.1 and 1.2 divulged the importance of student buy-in, staff buy-in, and major barriers or contributors to successfully sustaining a quality PBIS program, through the teacher perceptions. Some of the barriers and contributing factors were getting staff to buy in that did not have a behavioral background, adjusting and adapting the program to meet the current needs of the school, teacher training, and keeping the incentive programs updated to meet the desires of the student population.

Quantitative Data Findings

Along with the teacher questionnaires for qualitative data, this study also utilized likert-type questions to help quantify teacher percepts on sustaining a successful PBIS program. The quantitative data was collected through Research Subquestion 1.3. This question looked at previously established critical components of successful PBIS programs and if teacher perceptions and opinions aligned with this, specifically looking at importance and effectiveness of these components through the lens of the teacher. This question was broken into two sections with the first section looking at teacher perceptions of importance of specific PBIS components.

The second section looked at teacher perceptions of effectiveness of the same components. This included token economy, the PBIS team make-up, the expected behaviors matrix, the expected behaviors lessons, staff buy-in, administrative support, using data to evaluate the PBIS program, and using data to make changes to the PBIS program. This subquestion expanded on the components looked at in subquestions 1.1 and 1.2 to broaden the data to align more with all of the components of the BoQ. Teachers rated the importance and effectiveness of these components using the following scale: 1 = not at all important/effective; 2 = less important/effective, 3 = neutral, 4 = important/effective, 5 = very important/effective. The results of the questions broken down by importance are displayed in table 4.6 for frequency and median in table 4.7. As outlined in chapter 3, the Likert-type data in this study was analyzed looking at central tendency with median or mode, and frequencies for variability.

Table 4.6

Teacher Perceptions on Importance of PBIS Components - Frequency

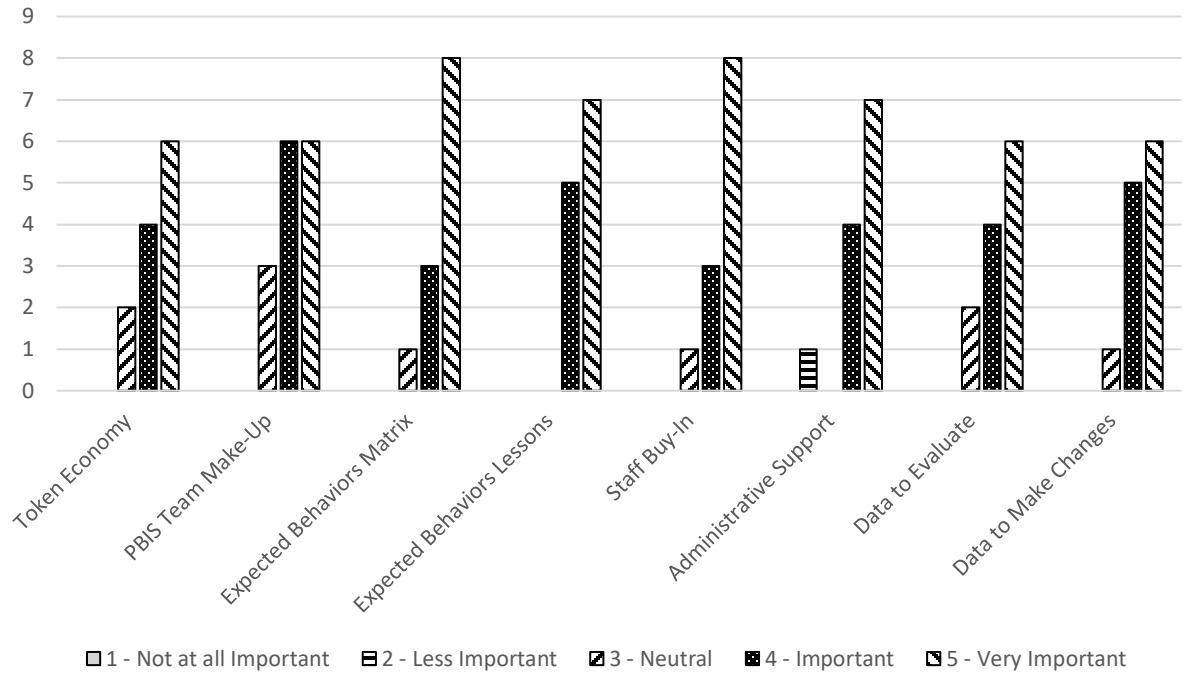
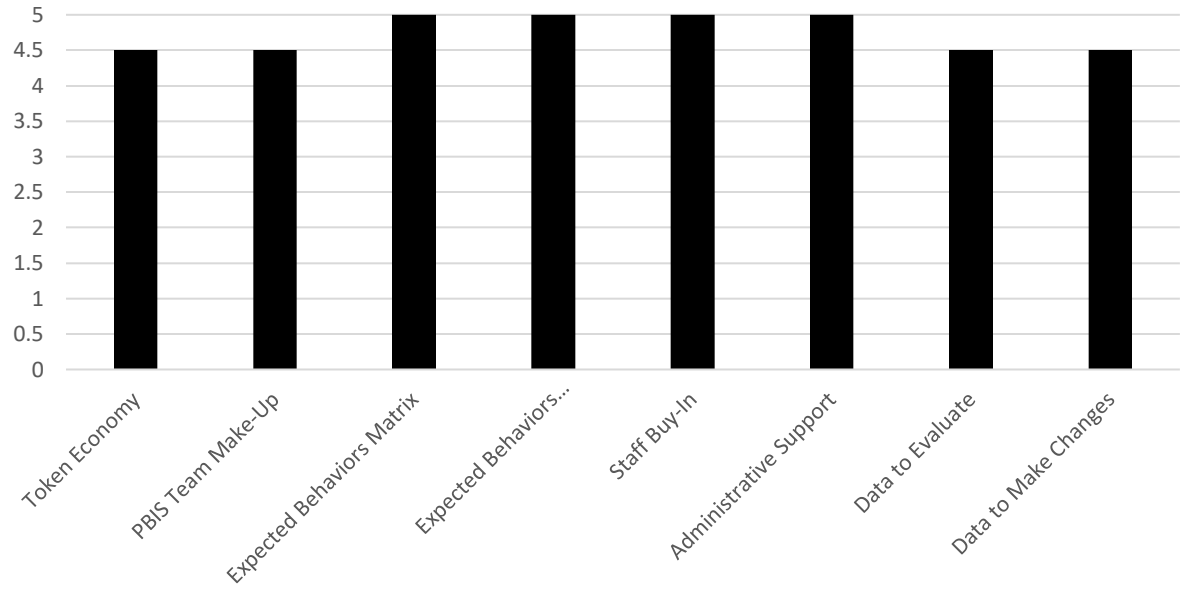


Table 4.7

Teacher Perceptions on Importance of PBIS Components - Median



From these tables, it is shown how the teachers perceive the importance of these main PBIS components. Every component had a frequency rate of the highest scale (a 5 out of 5) on at least 50% of the teacher surveys and either a 4 or a 5 on over 83% of the teacher surveys on all of the components, with an exception of the PBIS team makeup, which was rated either a 4 or a 5 on 75% of the surveys. This illustrates that the teachers perceive these components as being important to being able to sustain a successful PBIS program. This is backed up even further by looking at the median scores. Each median rating was at least 4.5 with half of the components having a median of 5, the highest rating for importance. The only score that was given that was less than a 3, was one rating of 2 for administrative support. This could be traced back to the fact that this school had seen three different principals at the school for the duration of the program.

Next, the second section of subquestions 1.3 was based on teacher perceptions of the effectiveness of these PBIS components in sustaining their program over time. Teachers rated the effectiveness of these components using the following scale: 1 = not at all effective; 2 = less effective, 3 = neutral, 4 = effective, 5 = very effective. The results of the questions broken down by frequency and median for each of the components rated on effectiveness are displayed in table 4.8 and 4.9.

Table 4.8

Teacher Perceptions on Effectiveness of PBIS Components - Frequency

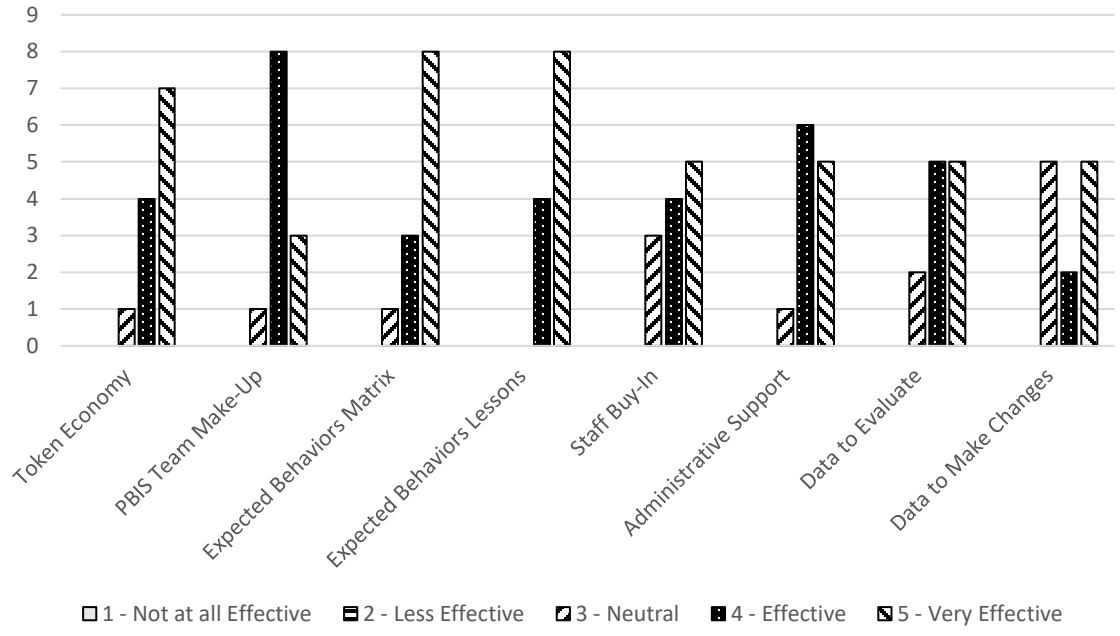
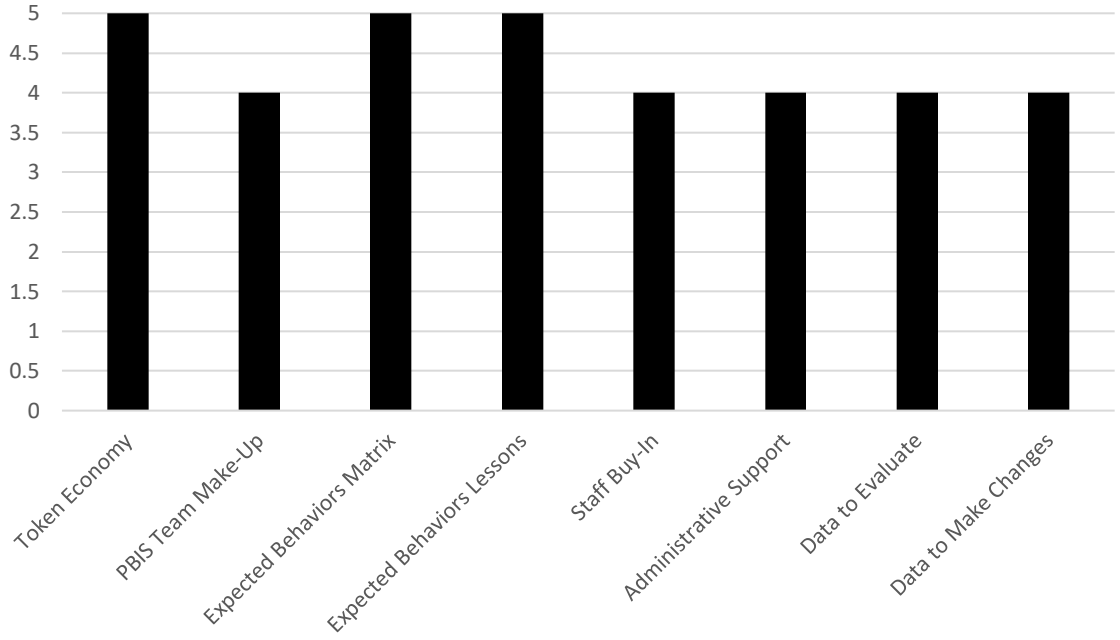


Table 4.9

Teacher Perceptions on Effectiveness of PBIS Components - Median



Again, in looking at the results of the teacher surveys, it can be seen that the teachers perceive these components to be more effective than not, across the board. While the frequencies of a rating of 5 given, are less than when looking at teacher perceptions of importance, there are still more 5 scores given than 4 (46:36 total frequencies) and only 14 scores that were below a 4, with all of them being a score of a 3. This shows, along with seeing a median score of at least a 4 out of 5 for each of these components, that teachers generally rate the PBIS components of token economy, PBIS team make-up, expected behaviors matrix, expected behaviors lessons, staff buy-in, administrative support, the use of data of evaluate the program, and the use of data to make changes as effective in helping them successfully sustain a successful PBIS program over time.

Summary of Quantitative Findings

When looking at the results of the quantitative data, Research Subquestion 1.3, there were specific key takeaways shown. Teachers rated components of PBIS programs on their perception of importance and effectiveness using Likert-type questions. The data showed that teachers' perceptions of token economy, PBIS team make-up, expected behaviors matrix, expected behaviors lessons, staff buy-in, administrative support, using data to evaluate the program, and using data to make changes to the program were rated consistently at very important and important. The median score for token economy, PBIS team make-up, using data to evaluate, and using data to make changes were all at 4.5 out of 5 and the median score for expected behaviors matrix, expected behaviors lessons, staff buy-in, and administrative support was 5 out of 5. Similarly, teachers' perceptions were consistently rated at very important and important for effectiveness of these components. The median score for token economy, expected behaviors matrix, and expected behaviors lesson were all at 5 out of 5 and the median score for

PBIS team make-up, staff buy-in, administrative support, data to evaluate, and data to make changes were at 4 out of 5.

Conclusion

The PBIS program and staff at Dr. Cleveland Steward Jr. Elementary School were chosen for this study because they have been by the state of Pennsylvania as having successfully sustained their PBIS program over time. In looking at the reasons the program was able to be maintained over time, teachers were surveyed to find out their perceptions with regard to this success. Teachers were electronically sent open-ended questions to look at data qualitatively. Additionally, teachers were asked to rate their perception of the importance and the effectiveness of PBIS components to see if their perceptions align with what the state says in important in implementing and sustaining PBIS programs, based on their use in the BoQ evaluation process.

In looking at the qualitative data, there were definitive themes that emerged from the teachers' responses. Having successful token economies that were adapted by staff keep the students interested and motivated was seen as an important theme. Another theme was PBIS team that was representative of the interests and values of the school staff, such as different grade levels, learning support, specialists, the guidance department, and administration. Contributing factors to sustaining a successful a PBIS program included using data effectively to not only evaluate the successfulness of the program, but also as a guide to making changes to the program to match the changes happening at the school were all deemed as important by the teachers. Additionally, the teachers affirmed the importance of student and staff buy-in as critical to a successful and ongoing PBIS program. There were also some specific barriers that emerged from the teachers. Some of the barriers were the need for additional professional development on behavioral approaches to discipline and rewards, funding for the program and

rewards, and getting staff buy-in from all teachers. Some of the contributing factors were building on successes seen in the school to help increase staff buy-in, administrative support, and the ability for the PBIS program to adapt and make changes as the needs of the school changed.

For quantitative data, teachers had to rate their opinion of the importance and the effectiveness of specific PBIS components. These components came from the BoQ evaluation form that the state of Pennsylvania uses to evaluate PBIS programs for implementation and sustaining programs. The components were the token economy system, the PBIS team make-up, the expected behaviors matrix, the expected behaviors lessons, staff buy-in, administrative support, the use of data to evaluate the program, and the use of data to make changes to the program. In this data, teachers definitively agreed on the importance of the main components with medians almost always near the top of the scale. All of the medians were either 4.5 or 5 on a 1-5 Likert-type scale with 5 being extremely important. This trend continued when looking at the teachers' perception of the effectiveness of these same components, with all the medians being either a 4 or a 5 with 5 being very effective. This data showed that the teachers' perceptions and opinions about the critical components of PBIS programs do align with the state evaluation.

Chapter V

Conclusions and Recommendations

Summary of the Study

The purpose of this study was to look at commonalities from teachers' perspectives of successfully sustained PBIS programs. The researcher looked at schools that were identified by the state of Pennsylvania as having sustained fidelity with their PBIS program. While many schools were identified, one school participated in the study. The study used a mixed-methods approach, using both qualitative and quantitative data. Teachers answered open-ended questions on a variety of PBIS concepts and topics to look for common themes. Teachers also answered Likert-type questions to see how their perceptions of the importance and effectiveness of key PBIS components aligned with the state's recognition. The researcher intended to provide a narrative of teacher perceptions of a successfully sustained PBIS program. To fulfill the purpose of this study, the following research question and subquestions were addressed:

1. What do successful PBIS programs, that have been identified as having sustained fidelity by the state, have in common, from the teachers' perspective?
    - 1.1. What are the most important enabling factors about PBIS programs to maintain sustained fidelity?
    - 1.2. What are the biggest barriers facing PBIS programs to maintain sustained fidelity?
    - 1.3. Do the teacher perceptions and opinions about the critical components of these sustained PBIS programs align with the state recognition based on Likert-type responses?

Summary of the Results

The researcher analyzed the answers of 12 teachers from Dr. Cleveland Steward Elementary School in Gateway School District. In looking at the qualitative data, several themes emerged in regards to research question 1. These themes were the importance of the token economy being run consistently and adapted to continually meet the changing needs of the school, the importance of the PBIS team being comprised of a diverse representation of the school, the use of data in making changes to the program, and the use of data to show successes.

Token economies have long been an effective behavioral intervention used in education throughout history and have specific characteristics that make them practical and effective tools in the field of ABA and PBIS (Hackenberg, 2009). Schools with clear behavior expectations and strategies for rewarding students demonstrating the desired behaviors are perceived as having successful and effective learning atmospheres (Akin-Little, Eckert, Lovett, & Little, 2004). In order for PBIS to be effective, the token economy incentives and rewards must be enticing to students. These incentives can also be non-monetary activities, such as extra recess, computer time, or lunch with a teacher or principal (Martin, 2013). Teachers in this research study stated their perception in the importance of keeping the rewards updated and varied to meet the desires of the students.

The PBIS team makeup and selection process is a crucial aspect of a successful PBIS team. A successful PBIS team should be made up of a variety of staff and faculty members representing the many different areas of a school staff, such as classroom teachers, learning support teachers, specialists, guidance counselors, and administrators (OSEP, 2010). The school used in this study had a PBIS team that covered all of these position areas and teachers noted that new teachers were always welcome to join the team. Their team was paramount in analyzing the data of the program as well as developing and implementing changes to the program as needed.

Research shows that the selection of an effective team is an important factor in sustainability of a PBIS program (Mathews et al., 2014).

The collection, analysis, and use of data in evaluating and in making changes to a PBIS program is another crucial aspect of a successful PBIS program. In PBIS programs, data is used in a variety of ways, such as identifying problem areas, track progress, look for areas of concern, increasing or decreasing the token economy system, and evaluating the overall effectiveness of programs (PBIS.org, 2019). In this study, teachers specifically noted the use of data in noting areas of concern and making changes to their program. Respondents expressed the importance of data to specifically target the areas of cafeteria and bus behaviors that were a concern. These areas then became focal points where the token economy was increased. Eventually, successes were evaluated through the collection of data to show that behavior referrals decreased in these areas. Teachers also expressed that these successes, shown in the data, were helped to obtain higher level of teacher buy-in to the programs.

For subquestions 1.1 and 1.2, the importance of specific PBIS components unfolded. These themes were the importance of student-buy in and maintain it through an evolving token economy, the importance of staff-buy in, training of new teachers, continued professional development for all teachers, the importance of continued administrative support, and the use of data. Overall, some major common themes from the teacher perceptions on maintaining a successful PBIS program also dealt with the need to be able to adapt and make changes to the PBIS program to continually meet the changing needs of the school.

Staff buy-in and administrative support are paramount to a successful PBIS program. It can be one of the biggest contributing factors in the initial implementation of a PBIS program with at least 80% of the staff buying in as a minimum expectation for success (PBIS.org, 2019).

Additionally, the continued support, commitment, and buy-in from staff has been shown to be critical when sustaining successful PBIS programs as well (Mathews et al., 2014; Pinkelman et al., 2015). The respondents in this research study pointed to staff buy-in being a big perceived factor in being able to sustain their program. Initially, some teachers noted that it was harder to get more experience teachers on board with rewarding expected behavior, but as successes were seen, those teachers bought in and saw the merit of the program. The school also saw three different principals come to their school during the maintaining of their PBIS program. Although each principal had a different way of handling certain aspects of the program, as noted by the teachers, each principal supported and believed in the program. Teachers and staff seeing administrative support, at both the building and district-level, has been shown as an important strategy for implementing PBIS programs and continued administrative support has also been shown to be important with sustaining a successful program (George et al., 2018; Mathews et al., 2014).

Providing staff with professional development in regard to aspects that coincide with PBIS programs is important to the success of the program. This was also pointed out as a perceived important piece to implementing and sustaining by the respondents of this research study. Teachers pointed out that training dealing with behavioral interventions, ani-bias, and anti-racism professional development would help teachers from different philosophical and diverse backgrounds better implement and sustain their PBIS program. Supporting these perceptions, studies have shown that providing ongoing professional development to teaching staff on positive interventions, implementation of Behavior Intervention Plans, understanding underlying causes of disruptive behaviors, and reviewing office referrals to see if there is a relationship in regard to race, gender, and age all have a positive effect on school atmospheres

(Christofferson and Callahan, 2015). Additionally, literature supports that teachers that are properly trained on the overall concepts of PBIS programs will create better quality programs at their own school (Wu, 2017).

In looking at contributing factors and barriers, the biggest themes in common across teacher responses were the rewards system, funding, administrative buy-in, community support, the formation of the program, and modifications to the program. These could all be seen as either contributing factors or barriers based on how effectively they were supported or utilized during the sustaining of the PBIS program.

Incentive programs, funding, administrative support, community support, how the program was formed, and changes to the program over time were all pointed out as contributing factors by the respondents of this research. These themes are also backed by research on PBIS. Seeing these themes implemented and supporting correctly and adequately has been shown to result in satisfaction in the overall program by staff as well as a perceived improvement in school climate and atmosphere (Martin, 2013; Psanos, 2013). Teachers in this study specifically noted the support of parents and their PTO organization of having a positive effect on sustaining their program as well as making changes to the rewards available to the students. Additionally, it was perceived by the respondents that the fact that they created their own PBIS program from scratch had a positive effect on them implementing and sustaining the program. Research has shown that when the creating of a PBIS program aligns with the needs of the school, the program will be more successful (Balu & Malbin, 2017). Comparatively, when these aspects of PBIS programs are not properly supported or put into place, they can be major barriers in the successful sustaining of successful PBIS programs.

For the quantitative data, subquestion 1.3, teachers rated the importance and also the effectiveness of main PBIS components. These components, as identified by the state through their evaluation program and the BoQ, were the token economy, the PBIS team make-up, the expected behaviors matrix, the expected behaviors lessons, staff buy-in, administrative support, the use of data to evaluate the PBIS program, and using data to make changes to the PBIS program. The results showed, overwhelmingly that teachers perceptions agreed with the state recognition of the importance of these components. The rating scale was 1-5 with 1 being not at all important and 5 being very important. With importance, teachers rated each of the components with a median of 4.5 or 5. The expected behaviors matrix, expected behaviors lessons, staff buy-in, and administrative support all had a median of 5. When looking at effectiveness, teachers again agreed with the state, although slightly less than with importance. Teachers rated each of these components with a median of at least 4 on each component and a 5 on token economy, expected behaviors matrix, and expected behaviors lessons. Teachers rating these aspects of PBIS as being highly important and effective coincide with current studies. In research looking at properly implementing and maintaining a successful PBIS program, the PBIS team, the expected behaviors matrix, the expected behaviors lessons, staff buy-in, administrative support, the use of data to evaluate the program, and the use of data in making changes to the program are all critical to successful PBIS programs (Anderson et al., 2013; Cooper et al., 2007; Dunlap et al., 2018; Mathews et al., 2014; Pinkelman et al., 2015). While this specific study is small in sample, it still helps confirm teacher perceptions align with the BoQ and state evaluation program on PBIS.

Limitations

There are limitations to this research primarily dealing from the size of the sample and the overall design of this study. The study used a sample of only one suburban elementary school in western Pennsylvania. Due to the COVID-19 pandemic, school superintendents were reluctant to have their teachers participate in this study to not overwork them during turbulent times in education. Many schools, at least temporarily, changing their approaches between online, hybrid, and in-person schooling. Therefore, this study was only able to obtain responses from 12 teachers. Results of this study cannot be generalized to a larger sample, or a different educational setting. Another limitation is that the survey questions asked respondents to reflect in their answers over a period of multiple years, since they first started at the school or since the school first implemented their PBIS program. Answers relied on the memory of the respondents and could be affected by the time gap, or possibly missing important details about the progression of the program. A final limitation to this study is the possibility of researcher bias. Due to personal experience in developing and working with PBIS program, the researcher is a firm believer that PBIS is an effective behavior and school atmosphere program, when implemented correctly.

Implications of the Results

This research study has implications for schools and districts that are implementing PBIS programs or might be planning on implementing PBIS programs in the future. McIntosh et al. (2016) published a study that showed that 58% of 5,331 schools across 37 states abandoned their PBIS program with the first three years. With money and resources being put aside by school districts, this research study looked to find commonalities of teacher perceptions on successfully sustained PBIS programs so that other school could continue to maintain and grow their own PBIS program instead of abandoning it for something else. In looking at the results, five main

aspects for school districts to focus on would be the ability to make changes and adapt, the use of data, continued professional development, funding, and continuing to use the BoQ to evaluate programs.

Ability to Make Changes and Adapt. Repetitively teachers' responses in this study talked about the need and positive effect had from continually making changes and adaptations to their PBIS program. Some of these changes dealt with the token economy. Teachers felt that the rewards available to the students needed to say fresh and be updated throughout the year to keep the students interested in earning the tokens. Another change in the token economy, noted as effective and important by the teachers, was changing the token economy to meet the changing atmosphere of the school. If behaviors in the cafeteria were the first main focus of the program with double rewards there, then the school had to be able to make changes as the behavior improved in that area to change to focus, and rewards system, to meet the next area of focus. Additionally, being able to adapt and make changes to the rewards available, types of rewards, and focus areas of concern in the overall school atmosphere, will help to maintain the PBIS program as it reflects the school's needs (Martin, 2013). These changes not only tie in the token economy, but also the use of data, another cornerstone of a successfully sustained PBIS program.

Use of Data. Through this study, it was seen that teachers valued the use of data in a variety of ways. The use of data directly ties back to the token economy to be able to evaluate the program successes and challenges. Through analyzing data from office referral forms, PBIS teams can see the effectiveness of the program. They can see where successes have occurred, such as drops in referrals, as well as see where focuses may need to shift as the program matures and is maintained over time. Data can show trends in behaviors in specific month, such as

September and January seeing upticks in cafeteria referrals or May seeing upticks in bus behavior referrals, or other trends that then can be addressed by the PBIS team to continually adapt and improve the atmosphere of the school. Another way that data can be use, as raised by the teachers in this research study, is to grow staff buy-in. Having concrete examples of successful data can be very beneficial to share with the entire staff of the school, not just the PBIS team, to show that it is working and grow the staff buy-in to PBIS programs. This also aligns with other studies that have shown that teachers that did not originally buy-in to the program, bought in more after they were able to see the changes the program helped make in their school atmosphere, student discipline problems, and respectfulness towards others (Martin, 2013; Psanos, 2013). Teachers, in this study, discussed how seeing the positive effects of PBIS helped to win over staff that was reluctant to buy-in at first. The use of data in making changes is a critical component in implementing and sustaining PBIS programs to make sure that the focus of the program is reaching its intent (PBIS.org, 2019). Data-drive decision making has been shown as a key factor in PBIS sustainability (Coffey & Horner, 2012; Sugai & Horner, 2006; McIntosh et al., 2016) This will help a school be able to successful sustain their PBIS program over a longer period of time.

Continued Professional Development. Another implication for school districts wanting to sustain PBIS programs is the need for continual professional development. In this study, professional development was noted as crucial by teachers in two different ways. The first way was for consistent training for new teachers coming into a school. This training would bring the new teachers up to speed on the school's already in-place PBIS program including how it was developed, how it is implemented, how it is evaluated, and how changes are made to it to keep it consistent with the needs of the school. Knowing how the program was developed was noted by

several teachers to help with staff buy-in if the teachers were not involved in the actual development of the program. Quality professional development has been identified in literature as a common factor in sustaining PBIS (Sugai & Horner, 2006). Schools wishing to sustain their PBIS program need to dedicate time and money for continued professional development for refreshers as a whole staff, or as study groups for the PBIS team, to revisit issues and topics surrounding PBIS (Sparks, 2007). Another implication of how professional development can help a school sustain a PBIS program successfully is by continuing to provide behavioral approach to discipline based training for teachers. It was noted by several teachers in this study that teachers that did not have a special education or learning support background might be more prone to not agree with some of the approached of PBIS that focus on rewarding the positive behaviors over a more historical approach of heavily disciplining negative behaviors. Along with behavior focused professional development, trainings on best practices for academic aspects of the PBIS three-tiered system of interventions and supports would be beneficial for schools looking to maintain a successful program over time as well. There is also a need to proactively be prepared to provide professional development on the overall aspects of PBIS in regard to new teachers and teacher turnover (Sparks, 2007). Continually providing teachers with support and professional development that aligns with the needs of the school and, in turn, the needs of the PBIS program will help a school be able to sustain a successful PBIS program.

Funding. The last implication from this study to help a school maintain a PBIS program successfully from the qualitative results of this study have to do with the importance of proper funding. While funding is always mentioned as a potential barrier or contributing factor to successfully implement a new PBIS program, the teachers in this study repeatedly pointed it out as having just as big of an impact on maintain the program over time as well. Proper support and

funding are critical to sustaining successful PBIS programs (Sugai & Horner, 2006). Funding goes along with several of the already discussed implication as well. Funding is needed for the token economy for rewards. Funding is also needed for the continued professional development. It is imperative that schools and school districts must secure funding for research-based intervention materials and PBIS professional development, which has been shown in studies to directly correlate with teacher motivation for the sustainability of PBIS programs (McIntosh, 2016). This funding can be obtained in multiple ways though, not always just as a budget line for schools. Teachers in this study brought up the fact that some of their staff was proficient in writing grants and getting donations from local businesses to help fund their PBIS program. No matter how the funding is obtained, however, it is clear of the importance of funding to a successful PBIS program, not just in the implementation stages, but throughout the life of the program as well. Schools and districts need to know the importance of funding for the program specifically and include ways to get the funding for their program to be successfully maintained.

Continue to evaluate the use of the BoQ to evaluate PBIS programs. From the quantitative portion of this research study, one big implication was shown. Teachers were asked to rate, in their opinion of importance and effectiveness, of core aspects of PBIS, as identified on the BoQ. This was done by having teachers rate these components on Likert-type questions. The teachers at this school showed that their perceptions agreed with the state of Pennsylvania's identification of important components of PBIS programs. Through its use of the BoQ to evaluate PBIS program in the state, Pennsylvania shows that it recognizes the importance of these components and teachers definitively agreed. The implication here is that the state, as well as schools and districts, should continue to evaluate the use of the BoQ as an evaluation tool for

PBIS programs. However, given the size of the sample in this research study, more research should be done.

Recommendations for Future Research

Future research on how to sustain successful PBIS programs will benefit schools and districts as well as the teachers and students that work at or attend those schools. Similar studies including more schools and districts in a wider variety of locations, demographics, and grade levels would be beneficial. This would help to develop a more complete narrative on best practices to sustaining PBIS programs and helping them be more successful for the students, the staff, the school, and the community. A limitation to this study was that it was done during a pandemic where schools were, understandably, reluctant to put more work on their teachers by having them participate in a research study. Conducting similar research studies during non-pandemic times would also be beneficial to be able to get more participants. PBIS has shown its effectiveness to help improve behaviors and atmospheres at schools as well as helping academically through its three-tiered approach to behaviors and academics through intervention and support. More research on best practices to keep schools from abandoning PBIS programs early on, but instead adapting and growing their programs to continually meet the changing atmosphere and needs of their students and school is the biggest recommendation for future research. Studies and literature that expand on this growing positive trend in schools will help to further embed its use in schools around the world to better help the needs of our future students as much as possible.

Another avenue for future research would be to look at perceptions of PBIS programs through the lens of more experienced teachers compared to less experienced teachers. In the quantitative section of this study, a theme emerged that more experienced teachers rated (21 or

more years of experience) than less experience teachers (20 or less years of experience). When looking at those two groups of teachers, both being exactly 50% of the participants, the data broke down as follows in table 5.1.

Table 5.1
Teacher Ratings of Importance and Effectiveness of PBIS Components by Years of Experience - Median

	Importance – Median Ratings		Effectiveness – Median Ratings	
	Teachers with 11-20 years exp.	Teachers with 21+ years exp.	Teachers with 11-20 years exp.	Teachers with 21+ years exp.
Token Economy	4	5	4	5
PBIS Team Make-up	3	5	4	4.5
Expected Behaviors Matrix	4	5	4	5
Expected Behaviors Lessons	4	5	4	5
Staff Buy-In	4	5	4	5
Administrative Support	4	5	4	5
Data Used to Evaluate	4	5	4	5
Data Used to Make Changes	4	5	3	5

While still maintaining high median scores of typically 4 or higher, the results of this table show that there is a difference in the rating scales based on years of teacher experience.

Teachers in the range of 11-20 years of experience, consistently rated the importance and effectiveness of these PBIS components lower than teachers with more than 21 years of teaching experience. The medians score for teachers having 21 or more years of experience teachers were consistently higher than teachers with 20 or less years of experience. Future research could be expanded on this further to look for trends. These trends could then be used in designing specifically tailored professional development for different levels of experienced teachers when a school is implementing or maintaining a PBIS program. Future research on trends of perceptions of PBIS implementation and sustainability broken down by teacher experience could benefit the field.

Conclusion

The purpose of this study was to look at successfully sustained PBIS programs, from the perceptions of the teachers that are implementing the program, to find commonalities. These commonalities can then be further researched and also utilized to help other schools maintain their own PBIS programs. There is a large amount of research on successful implementation techniques and strategies for schools starting a new PBIS program, but not nearly as much research on how to maintain a program once it has been successfully implemented. If more research is done to look at what the schools are doing to properly sustain their programs, then this information will help other schools continue to keep their programs going over longer periods of time. The literature review showed the history and effectiveness of PBIS programs in creating a more effective school atmosphere. As more schools are able to implement and maintain quality PBIS programs, more and more positive effects will, hopefully, be shown. The qualitative part of this study showed common themes that teachers perceived as important to maintaining a successful program, such as the importance of the token economy with evolving

incentives, staff and student buy-in, the make-up and role of the PBIS team, the use of data in evaluating the program, the use of data in making changes to the program, and teacher training on PBIS as well as on behavioral interventions. The qualitative part of this study showed that teachers' perceptions of importance and effectiveness of PBIS components, token economy, PBIS team make-up, expected behaviors matrix, expected behaviors lessons, staff buy-in, administrative support, using data to evaluate the program, and using data to make changes to the program aligned with Pennsylvania's view of these components based on their inclusion of the state evaluation tool, the BoQ. While there were definite limitations to this study based on the size, due to the COVID-19 pandemic, there is value to the findings. The results can be built upon in future research and utilized by school districts looking to successfully transition from the implementation phase of their PBIS program to the maintaining of a quality program.

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APPENDIX A: TEACHER EMAIL SURVEY

Participant Information

Years of Experience:

School and School District:

Years of Teaching at your current school:

Years of Teaching with the current PBIS Program:

Grade/subjects taught:

Purpose of the Study

The goal of this research is to see what do successful PBIS programs, that have been identified as having sustained fidelity by the state, have in common, from the teachers' perspective.

Questionnaire

1. What is the name of your school's PBIS or SWPBIS program?
2. Is there a rewards system in place (a token economy) for individuals? Whole class? Whole grade? Whole school?
3. Is there a main team for your PBIS program? If so, briefly explain who all is on the team, position wise (principal, guidance counselor, etc.)
    a. How was that group decided?
    b. Has there ever been any changes to that group?
4. How is the effectiveness of the program evaluated?
    a. Who collects this information?
    b. Is this information shared with the staff? How? How often?
    c. What is done with this information?
    d. Does this information impact any future decisions? If so, who makes these decisions?
    e. Have there been any changes made because of this information? If so, please explain.
5. Where there any major changes to the program made from year to year?
    a. If so, what were they?
    b. Who made these decisions?
    c. How were these changes introduced to the staff? To the students?
    d. If any of these types of changes were made, how were they evaluated for effectiveness?
    e. What was your opinion of the effectiveness of these changes? Please explain your reasoning.

    f. How did the staff react to the changes, more positive or more negative? Students? Please explain your reasoning.

6. If you have been at the school for several years while the same program has been in place, do you feel that the students continued to buy in at the same rate as the beginning of the program? Please explain your reasoning.
7. If you have been at the school for several years while the same program has been in place, do you feel that the staff continued to buy in at the same rate as the beginning of the program? Please explain your reasoning.
8. Were there any factors that helped/hindered the program that would have been helpful to know at the first implementation of the program?
    a. How about after several years? Please explain your reasoning.
9. Your school has been identified by the state of PA as having sustained fidelity in implementing your PBIS program, based off of a score of 80% or higher out of 107 points on the Benchmarks of Quality assessment tool. Do you know who the team members are that complete this tool?
    a. Have you seen this evaluation tool prior to your schools' evaluation?
    b. Have you ever seen the results of this evaluation tool?

10. How would you rate the importance of the following aspects of your school's PBIS program in sustaining the program?

1 = not at all important; 2 = less important; 3 = neutral; 4 = important; 5 = very important

    a. The token economy system you have in place?
    b. The construction of your PBIS team?
    c. The expected behaviors matrix at your school?
    d. The expected behaviors lessons at your school?
    e. Staff buy-in to the PBIS program at your school?
    f. The administrative support for your PBIS program?
    g. The use of data in evaluating the PBIS program?
    h. The use of data in making changes to the PBIS program?
11. How would you rate the effectiveness of the following aspects of your school's PBIS program?

1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree

    a. The token economy system you have in place is effective.
    b. The construction of your PBIS team was done in an effective manner.
    c. The expected behaviors matrix is effective at your school.
    d. The expected behaviors lessons are effective at your school.
    e. At least 80% of the staff at your school buys-in to the PBIS program.
    f. The administration effectively supports your PBIS program?

g. Data is effectively used in making evaluating the PBIS program?
h. Data is effectively used in making changes to the PBIS program?

APPENDIX B: REQUEST FOR PERMISSION TO CONDUCT RESEARCH WITH FACULTY

Name
Title
School District
District Address

REQUEST FOR PERMISSION TO CONDUCT RESEARCH WITH FACULTY

Dear _____,

My name is Nathan Pfeiffer, and I am a Doctoral student at Slippery Rock University in Slippery Rock, PA. I am reaching out to you to request that I be allowed to conduct research with your faculty for my Doctoral dissertation on looking for common themes, from the teachers' perspectives, of successful Positive Behavior Interventions and Supports (PBIS) programs. This research will be conducted under the supervision of Dr. Ashlea Rineer-Hershey (Slippery Rock University).

I am hereby seeking your consent to conduct email interviews/questionnaires with your faculty. Your school, as of May 2018, was identified by the state of Pennsylvania as having sustained implementation of PBIS at Universal (Tier 1) with fidelity. As PBIS becomes a more crucial part of the educational framework in the state of Pennsylvania, I am looking for common themes of successfully sustained PBIS programs to help schools and educators in their attempts at developing and sustaining programs of their own.

Upon completion of the study, I will be providing Slippery Rock University with a bound copy of the full research report. If you require any further information, please do not hesitate to contact me at 412-680-1481, or at ncp1001@sru.edu. Thank you for your time and consideration in this matter.

Yours sincerely,

Nathan Pfeiffer
Slippery Rock University

APPENDIX C: PARTICIPANT EMAIL

February, 2021

Dear Participant,

I invite you to participate in a research study entitled "Teachers' perceptions of successfully sustained PBIS programs." I am currently enrolled in the Doctorate in Special Education program at Slippery Rock University in Slippery Rock, PA, and am in the process of writing my Doctoral dissertation.

The purpose of the research is to determine common themes in successfully maintained Positive Behavior Interventions and Supports (PBIS) programs from the viewpoint of the teachers. I am seeking your participation because you are currently working at a school identified by the state of Pennsylvania as having sustained implementation of PBIS at Universal (Tier 1) with fidelity, as of May 2018.

Your participation in this research study is completely voluntary. You may decline, or leave blank any questions you do not wish to answer. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential. Data from this research will be kept in a password protected file. No one other than the researchers will know your individual answers to this questionnaire.

An informational letter for participates in this study, as far as reasoning behind it and any potential risks/benefits can be found here: informational letter.

If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately thirty minutes to an hour to complete. Any teacher that completes the questionnaire will also be entered in a drawing for a $50 Amazon gift card. After you have read the informational letter and by clicking on the link to the survey, you are giving consent to participate in this study.

The questionnaire can be found by following this link - click here to complete the survey.

If you have any questions about this project, feel free to contact me at 412-680-1481, or at ncp1001@sru.edu.

Thank you for your assistance in this important endeavor.

Sincerely yours,

Nathan Pfeiffer
Principal Investigator
Slippery Rock University

APPENDIX D: INFORMATIONAL LETTER

College of Education

RESEARCH PARTICIPANT INFORMATIONAL LETTER

TEACHERS' PERCEPTIONS OF SUCCESSFULLY SUSTAINED PBIS PROGRAMS

Nathan Pfeiffer, ncp1001@sru.edu, 412-680-1481

Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be an active teacher at your school and have taught there while your current Positive Behavioral Interventions and Supports (PBIS) program has been in place. Taking part in this research project is voluntary.

Important Information about the Research Study

Things you should know:

- The purpose of the study is to determine commonalities, from the teachers' perspectives, of good PBIS programs that have been sustained over time with fidelity. If you choose to participate, you will be asked to complete an email questionnaire. This will take approximately 30 minutes.
- Risks or discomforts from this research are minimal, but include taking the time to complete the survey and potentially cause changes in relationships with administrators or other teachers on the PBIS committee if they start to question the procedures that the school currently has in place or seek more information about their school's PBIS program.
- The study will lead to possible benefits of becoming more familiar with your school's PBIS program.
- Taking part in this research project is voluntary. You do not have to participate and you can stop at any time.

Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the Study About and Why are We Doing it?

The purpose of the study is to determine commonalities in quality run PBIS programs that have been successfully sustained over time with fidelity. With the rise in popularity of PBIS programs, there has been a lot of research entering the field on implementing programs, but not as much on how to continue sustaining the program well over time. This research will hope to determine factors that can work as enablers and barriers to sustaining PBIS programs.

What Will Happen if You Take Part in This Study?

If you agree to take part in this study, you will be asked to complete a survey in the next two weeks. We expect this to take about 30 minutes. Your answers will remain confidential.

How Could You Benefit From This Study?

Although you will not likely directly benefit from being in this study, others might benefit because the study could help determine procedures and practices for other schools looking to sustain quality PBIS programs. You might benefit from being in this study because it could lead to a greater understanding of your school's PBIS program.

What Risks Might Result From Being in This Study?

We do not believe there are any risks from participating in this research.

How Will We Protect Your Information?

We plan to publish the results of this study. To protect your privacy, I will not include any information that could directly identify you.

We will protect the confidentiality of your research records by keeping all survey responses in a password protected file on a password protected computer.

What Will Happen to the Information We Collect About You After the Study is Over?

We will not keep your research data to use for future research or other purposes. Your name and other information that can directly identify you will be kept secure and stored separately from the research data collected as part of the project.

How Will We Compensate You for Being Part of the Study?

If you complete the survey within the two week period, you will be entered into a drawing for a $50 Amazon gift card. All eligible participants will have a number assigned to their email address and a random number will be selected to determine the winner.

Your Participation in this Research is Voluntary

It is totally up to you to decide to be in this research study. Participating in this study is voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer. If you decide to withdraw before this study is completed, you can contact any of the researchers and we will remove your information from the data collected.

Contact Information for the Study Team and Questions about the Research

If you have questions about this research, you may contact **Dr. Ashlea Rineer-Hershey, principal investigator at a.rineer-hershey@sru.edu, or Nathan Pfeiffer, co-investigator, at ncp1001@sru.edu or 412-680-1481.**

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the following:

Institutional Review Board
Slippery Rock University
104 Maltby, Suite 008
Slippery Rock, PA 16057
Phone: (724)738-4846
Email: irb@sru.edu

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. We will give you a copy of this document for your records [or you can print a copy of the document for your records]. If you have any questions about the study later, you can contact the study team using the information provided above.

I understand what the study is about and my questions so far have been answered. I agree to take part in this study. I understand that I can withdraw at any time. You indicate your voluntary agreement to participate by [add method of research, i.e., returning this survey, beginning this phone interview, etc.].

APPENDIX E: IRB APPROVAL

Slippery Rock University of Pennsylvania

TO: Dr. Ashlea Rineer-Hershey
Special Education

FROM: James Preston, D.Ed., Vice Chairperson
Institutional Review Board (IRB)

DATE: January 28, 2021

RE: Protocol Approved

Protocol #: 2021-018-88-B
Protocol Title: Looking at Successful PBIS Programs That Have Been Identified as Having Sustained Fidelity of the State of PA for Commonalities from the Teachers' Perspectives

The Institutional Review Board (IRB) of Slippery Rock University has received and reviewed the requested modification(s) to the above-referenced protocol utilizing the expedited review process. The IRB has approved the protocol effective January 28, 2021.

You may begin your project as of January 28, 2021. Your approved protocol will expire on January 27, 2022. You will need to submit a Progress/Final Report at least 7 days prior to the expiration date.

Enclosed are copies of the approved consent and assent forms to be copied for participants to sign. (if applicable)

If you complete the study within the next year, please notify the IRB with a Final Report. The Final Report form and instructions can be found on the IRB website.

Please contact the IRB Office by phone at (724)738-4846 or via email at irb@sru.edu should your protocol change in any way.