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The Implementation of Positive Behavior Supports and Interventions to Support and Encourage Appropriate Behavior and a Positive Climate in the School

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The Implementation of Positive Behavior Supports and Interventions to Support and Encourage Appropriate Behavior and a Positive Climate in the School

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A Literature Review Presented in Partial

Fulfillment of the Requirements

For the Degree of Master of Education

Abstract

The purpose of this literature review was to examine the behavioral framework Positive Behavior Interventions and Supports and the effects it has on a school climate. A specific interest was the impact of behavioral strategies on individual students and overall school climate. The question is how can schools positively impact students' behavioral changes while also improving the school environment. As a whole, studies support that when school personnel implement PBIS with fidelity, school-wide expectations established, and behavioral strategies are used explicitly schools see positive impact on students, teachers, and overall climate. The purpose of this literature review is to investigate the implementation, strategies, and sustainability of the PBIS framework and its effects on school climate.

Keywords: PBIS, implementation, behavioral strategies, school climate, staff commitment

Table of Contents

Abstract..... 2

Introduction..... 4

Review of the Literature 5

 PBIS Implementation 5

 PBIS Implementation Strategies..... 11

 PBIS Staff Commitment..... 18

Recommendations for Future Research..... 24

Conclusion 24

References..... 25

The Implementation of Positive Behavior Supports and Interventions to Support and Encourage Appropriate Behavior and a Positive Climate in the School

The climate of a school is a pivotal factor that plays into the academic and social success of students. Positive Behavior Interventions and Supports, otherwise known as PBIS, is a widely known preventative framework that builds on the successes and recognition of positive student behavior and choice. This school-wide application is a three-tiered behavioral support and implementation system that focuses on the academic, behavioral, and environmental success of staff and students. The use of the PBIS framework establishes a set of school-wide expectations that is not punitive but instead stresses the importance and effectiveness of celebrating good decisions and actions made by students. The PBIS framework is a data-driven framework led by a group of school experts and personnel. This framework eliminates the need for multiple behavioral programs and supports, but rather stresses the importance of one collective and effective framework. The question is how can schools positively impact students' behavioral changes while also improving the school environment.

The purpose of this literature review is to investigate the implementation, strategies, and sustainability of the PBIS framework and its effects on school climate. The research studies in this literature review include experts and school personnel who have conducted and implemented PBIS within the school setting. The PBIS implementation process, strategies, and effectiveness are explored in this literature review.

Research for this paper was drawn from the ERIC (Education Resources Information Center) database, the WorldCat discovery tool through DeWitt Library, and Google Scholar. The research criteria included topics of PBIS implementation, research-based behavioral strategies, and the influence and study of teacher commitment to the behavioral framework. Implementation

and research studies were narrowed down based on age, students, and teachers in middle and elementary school. This literature review focuses on three main topics: PBIS implementation, successful research-based behavioral strategies, and school personnel commitment to PBIS implementation as an effective framework in preventing unfavorable student behaviors.

The literature review of this behavioral framework is organized based on topical research findings surrounding PBIS implementation (including the process), use of school personnel, and the positive effects of the framework. The second section will review PBIS research-based strategies that have been found to be effective for students and schools. The final section of the literature review examines and investigate the sustainability of school personnel using and implementing PBIS.

Review of the Literature

The literature review explores the research and findings regarding PBIS, implementation strategies, and the commitment of staff and students, as these factors impact student behavior and school climate. First, the implementation of the PBIS framework will be discussed and the importance of establishing school-wide expectations for implementation success. Next, strategies that have been shown to be successful or need improvement when establishing and creating school-wide behavioral expectations and implementation will be examined. Finally, the importance of staff and student commitment will be investigated, and how this may affect PBIS implementation within a school environment.

PBIS Implementation

PBIS is a behavioral framework that stresses the importance of creating and establishing positive relationships and choices for all students, rather than a program that works to fix a

problem. Goodman-Scott et al. (2018) shares that PBIS is a proven framework that provides student support and prevention strategies for student behavior. Solomon et al. (2012) adds that PBIS was created based on the evidence and foundation behind applied behavior analysis. This framework relies on the positive reinforcement of students' work rather than the alternative punitive type of discipline.

Based on a research study conducted regarding the use of excessive force among students with disabilities, Katsiyannis et al. (2019) suggests that there is a need for a positive-based framework implemented within schools. This research study was conducted using a database that scoured the web finding cases of teachers or other staff personnel using excessive force when dealing with behavioral needs or students labeled with disabilities. Research results found 130 cases of mistreatment of children; of those cases, 26 were studied in depth. Statistics and findings of these cases suggest there was a dire need for a behavioral framework. PBIS implementation is a restorative practice that reduces the need for punitive and unnecessary forms of discipline and teaches verbal and de-escalation skills, resulting in fewer cases of ill-treatment towards students and school personnel frustrations.

Cressey et al. (2015) also saw the need for a preventative approach that positively impacts students and staff. Cressey and her research team conducted a qualitative study of a guidance counselor and school staff's five-year implementation of the PBIS framework at an urban school in the Northeast. Through this process, the school counselor engaged with outside community members and school professionals to form a PBIS success team that oversaw the implementation process. This study confirms that successful implementation is done through a team collaboration effort and the review and study of interventions and data collected.

Goodman-Scott et al. (2018) studied the implementation of PBIS in an urban school district, one known for its higher numbers of students that are socio-economically disadvantaged and students of various backgrounds. Goodman-Scott et al. (2018) explains that the successful implementation process of PBIS within this school district exhibited “three themes: a need for consistent student expectations, a desire to emphasize positive behaviors, and a system that improves the discipline office’s response time” (p. 4). These three themes were seen to help implement and improve the positive behavioral framework.

Taking a bird’s-eye view, Solomon et al. (2012) conducted a meta-analysis of research studies to quantify the change in students’ behavior with the implementation of PBIS. The cases studied were taken from thirteen elementary schools and three middle schools located in various demographic areas, including suburban, urban, and rural districts. Throughout this case study, individual areas of PBIS implementation and the outcome of student behavior were analyzed. Solomon et al. (2012) found that PBIS is a universal design and prevention tool for all types of school districts. Researchers also found this preventative framework to be effective primarily when dealing and preventing problematic behavior.

Bradshaw et al. (2012) can add that in order to successfully implement this framework, there is a need for genuine relationship building between support agencies and school personnel. To stress the importance of balancing priorities, Bradshaw et al. (2012) conducted a cooperative research study with school personnel and professionals, along with medical experts from John Hopkins to observe and improve PBIS implementation in Maryland. Based on its school’s partnerships with John-Hopkins, Maryland is one of the first states to require a school-wide prevention program, in hopes of improving school environments and student behavior. Through this wide-spread effort, schools and agencies have come to learn what is needed to be successful.

Finding's state there is a need for balancing priorities amongst the data collected, use of resources, and needs of students, as well as creating and sustaining authentic relationships amongst staff, students, and support.

Implementation of a prevention framework relies on more than just a set of expectations; the execution of a framework such as PBIS takes time, commitment, and support. McIntosh et al. (2016) studied the pattern of fidelity of PBIS implementation in a group of 5,000 schools throughout the United States. This study aimed to answer the question of how to group schools based on patterns of fidelity and how implementation characteristics predict classification within the groups. Over the course of five years, McIntosh et al. used the SET (school-wide evaluation tool) and other evaluation strategies to test the fidelity of the first five years of implementation. Their findings show that after the first year of implementation, the groups classified as the sustainers and slow starters had a strong sense of participation, resulting in about 80% of implementation with that group of school and staff members. However, the schools in the study that were classified based on patterns of abandonment with PBIS (late abandoners and rapid abandoners) dipped in years 2, 4, and 5 of implementation. Educators from schools that abandoned PBIS, felt there was not enough training, and they were not prepared to positively implement the framework.

Nylen et al.'s (2021) research sheds more insight into the successes and failures of the PBIS framework. This team of researchers studied 59 members of a PBIS team in nine schools in Sweden. There are significant features that enable and hinder the success of a framework such as PBIS. Through the use of qualitative research methods, results demonstrated that the factors that enable effective PBIS implementation include program education, learning and implementation guides, and a school's ultimate goal of desiring to achieve. On the other hand, not enough

adequate training, unclear roles and responsibilities amongst staff members, and high levels of frustration cause schools to abandon ship.

Whereas not all schools are successful with PBIS, researchers Lee and Gage (2020) argue that successful implementation can lead to significant behavioral changes in schools. These researchers studied the effect of implementation of PBIS on student outcomes. Findings suggest that PBIS often has significant positive outcomes with tier one implementation. This research suggests that schoolwide rules/expectations, routines, and physical arrangement help with PBIS implementation and school environment (p. 2). Further success with PBIS implementation shows that there are lower numbers of office referrals and fewer students found to have emotional outbursts or reactions.

Research conducted by Reno et al. (2017) also connects PBIS implementation to academic success, more specifically math and reading assessment. The study was taken from a Midwestern metropolitan suburban school district. While the previous study completed by Lee and Gage's (2020) results were found in tier one implementation, Reno et al.'s (2017) study was conducted on tier two students. After the data collection and analysis, results show no real correlation between implementation and academic achievement. Further review may suggest that students receiving tier two interventions may need further academic evaluation in order to define and understand the problematic behavior that is happening. However, academics may be a part of the underlying behavioral issue. In addition, this research result may also indicate that there can be more instructional and differentiated strategies that teachers can implement in order to improve tier two student achievement in academics.

James et al. (2019) concurs, saying that while PBIS implementation is successful when done with fidelity, findings can show improvements only to students' behavioral outcomes rather than academic success. These results were found through a quantitative study in Ohio that included 100 school-aged students. The study's methodology utilized the TFI (Tiered Fidelity Inventory), which provided an implementation score. Despite the limited finding, James et al. (2019) suggests, "Given evidence that improved classroom behavior predicts future academic outcomes, some theorize that SWPBIS leads to more positive academic achievement over time, as active engagement and instructional time both increase" (p. 2). While this is just a theory, this study may attest to the success and importance of positive behavior implementation to improve the school-wide environment.

While this framework is still somewhat new and continuing to transform, real-world implementation of PBIS can and does look differently from when the framework was originally developed. Differences between real-world implementation and by-the-book execution of strategies may be why some schools struggle with implementing the framework with fidelity, an issue McIntosh et al. (2016) previously addressed. Molloy et al. (2013) aims to share how schools ensure success of implementation through real-world implementation. The research study was done with 166 primary and secondary schools within seven states. The research team aimed to address the implementation quality of schools by identifying the "active ingredients" and the school level factors that may affect the quality of these active ingredients. Rather than just addressing and developing an overall implementation score relating to schools, this quality of study addresses a variety of elements that validate PBIS implementation.

This study uses the school documentation program SWIS, which measures office discipline referrals (ODRs) to determine what are the main factors related to a school's PBIS

implementation. The “active ingredients” of ODRs include aggression, substance use, and defiance. Results found that of participating schools, two-thirds within this study met or exceeded the expectations of the behavioral framework. The study also found that within successful PBIS implementation, reward incentives and school-wide expectations all predicted lower rates of ODR level behaviors. Research also may suggest that primary and smaller-sized schools are having better implementation success than larger and upper-age schools.

The study of McCurdy et al. (2016) also demonstrated success for tier one PBIS implementation. A study was conducted in a self-contained classroom for students with emotional and behavioral disorders in Pennsylvania. There were 64 participants with IEPs and behavioral issues and 11 teachers supporting these students. After evaluation of the school’s PBIS implementation using SET (school-wide evaluation tool), findings suggest that implementation and behavioral outcomes improved after just one year of tier one strategy execution. A lower number of educational services were needed, and the staff were more enthused to promote the use of this framework.

PBIS Implementation Strategies

The implementation of a framework such as PBIS offers flexibility and creativity based on the needs of the students and staff being impacted. Yet, this behavioral framework comes with many strategies that affect success and create more successful opportunities for students.

Pas et al. (2015) conducted a qualitative research study to test the effectiveness of classroom PBIS strategies. The study followed 37 diverse elementary students over the course of four years. The study analyzed the influence of teachers as well as classroom and school level contextual factors that may influence the success of the framework. Using the EBS (Effective Behavior Survey), the researchers found higher success rates with younger students than with older

students. Results showed that teachers with higher levels of training were more likely to show higher levels of support and greater commitment towards the program, resulting in more successful behavioral supports.

While one may argue that contextual factors, such as gender, race, ethnicity, and even age may play a large factor within the success of PBIS, Cook et al. (2015) conducted a mixed measure research study to consider the effects of using PBIS implementation alongside SEL (social-emotional learning). This study took place in two elementary schools located in the Southeast, more specifically, 4th and 5th grade classrooms. Within this analysis, researchers studied classrooms using PBIS only, SEL only, a combination of PBIS and SEL, and a classroom that was not implementing either of these. After a full school year, research findings suggest that students who participated in a classroom of combined PBIS and SEL implementation made significant behavior improvements compared to the classrooms that used only one model of implementation or went without.

Additionally, Soto (2020) also contributed to the study of implementing SEL amongst students and classrooms implementing PBIS. Taken from a research study of a summer camp for teenagers, Soto (2020) sought to evaluate the effectiveness of PBIS and SEL for teaching empathy. During the study, 113 teenagers, ranging in age from 12-17, were measured on their level of empathy that was shown during a summer camp, when counselors and staff effectively implemented PBIS and SEL strategies cooperatively. Based upon observation of the researcher and standard testing, there was a successful correlation between using PBIS and SEL consecutively for building teenagers' level of empathy towards each other. However, Soto (2020) does advise that further research may be needed to study the long-term effect these implementation strategies have on teenagers throughout the school year. Based upon the work of

Pas et al. (2020) and Soto (2015), one may state that there was more found success in classrooms that used a combination of frameworks and theories because students were able to identify and understand their feelings and emotions, while also positively and safely practicing these feelings and ideas within the context of the classroom.

In addition to the successful implementation strategies already described, Cunningham et al. (2020) adds that the use of language support influences the success of PBIS. A study in 2020 was launched to review early childhood care centers and their use of language features and supports when carrying out PBIS concepts and ideas. The study involved 51 teachers in 15 different childcare centers; it evaluated the teacher language support that was supplemented when working with students. In order to examine the claim that strong language implementation features support positive classroom environments, the teacher evaluation tool CLASS was used as the intervention instrument that assesses the environment of the classrooms. Whereas results found that most teachers' scores indicated mediocre language skills, this study does suggest that there is a higher level of success for students when there is a relationship between language supports and PBIS implementation strategies.

Bulotsky et al. (2020) also found that there is a positive correlation between students' behavioral success when strong language skills are implemented. Bulotsky et al. (2020) completed a mixed measured study with Head Start teachers and students, more specifically, 304 lead teachers and students across the country. Within this study, researchers analyzed the interactions between teachers and students, examined results from the literacy and language screeners that were implemented, and used an English Language assessment to determine ability of students. From this study, researchers concluded that there was strong evidence between increased language support and higher levels of literacy skills. Additionally, higher levels of

routine, classroom structure, and language support suggest that students not only have greater levels of literacy success, but teachers may also see lower levels of behaviors.

Research findings from Bulotsky et al. (2020) suggest that when classroom teachers create a highly structured and patterned classroom routine, students may find more success in their literacy and behavioral skills compared to a classroom that may not be as structured. While this research does not claim that supports solve all behavioral problems that may exist within a classroom, one may find that routine, language support and positive reinforcement can improve the environment in which a child learns and thrives. Given the claim that students function more productively and positively when there is a clear set of expectations and routines, one may ask what teachers can do for students who need more behavioral support and differentiation. Within the PBIS framework, there are three tiers based on the needs and supports that the students require. For each tier, there is a growing level of support and services that are provided to individual students.

In 2020, Grasley-Boy et al. facilitated a quantitative study to evaluate the needs of tier one PBIS implementation. This study took place in an alternative education setting for students who were unsuccessful, due to behavioral issues, in a general education environment. Throughout this exploration, researchers studied the intervention characteristics used for tier one students and the effects they may have on outcomes for teachers and students. Findings noted behavioral, academic and staff outcomes. Seven studies indicated that students' behavioral outbursts and incidents decreased and there were more successful and positive days. Five studies reported that PBIS tier one implementation lowered the rate of having to use restraints on a student during behavioral incidents. Whereas behaviors were decreasing, studies did not indicate that any academic change was consequential to implementation. Finally, research noted there

was a moderate change in staff's attitudes and commitment towards the PBIS framework through positive conversations and a willingness to implement PBIS strategies.

Gage et al. (2019) also studied the topic of tier one interventions, specifically, bullying prevention. This research took place during the 2015-2016 school year in over 1,300 elementary schools in Georgia. Researchers collected student surveys and demographic data to test the fidelity and effectiveness of tier one. Results showed that students did not consider bullying to be a substantial event that took place, but neither was their indication PBIS interventions were making a difference in the students' view of bullying and prevention. While neither of these studies indicate clear PBIS success amongst students and staff in alternative education settings and elementary schools, they do suggest that given the framework's strategies and support, students are more likely to make positive changes and not view bullying and behavioral incidents as major events. When implemented purposefully, tier one supports can and do provide students opportunities to develop positive social and behavioral skills.

For the students who may need additional support, Hawken et al. (2015) analyzed and studied the tier two intervention check-in/check-out system (CICO). Crone, a founder of the Behavior Education program states that "CICO's is designed to provide students engaging in minor problem behaviors (e.g., off-task behavior in class, talking back to teachers, etc.) with a structured way to learn appropriate behaviors through positive reinforcement" (qtd. in Hawken et al., 2010, p. 2). In a quantitative research project, Hawken et al. (2015) looked at 44 elementary and 14 middle schools in Illinois that implemented this intervention over the course of four years. The study focused on each school's number of office disciplinary referrals (ODRs) and daily progress reports (DPR) received for tier two students.

In order to quantitate these results, researchers used the system SWIS-CICO, which helped define the percentage of DPR points, along with ISSET (Individual Students System Evaluation Tool) to label and rate tier two and tier three interventions. Taken from these assessment tools, findings show that from 2008-2012, 80% of the students receiving the check-in/check-out intervention were receiving 80 percent of their daily progress points. Participating schools also were found to implement CICO interventions with success when they were given the proper training and support for facilitating these interventions. Finally, cooperating districts had even more success when they were provided with grant-funded resources to help with implementation and support school staff. Given this study, it is evident that the check-in/checkout intervention strategy is of value for tier two and tier three students and provides more opportunities for students to have more successful parts of their school days.

In addition to the study done by Hawken et al (2015), Eiraldi et al. (2020) can shed light on ensuring that tier one and two interventions are done effectively. A key phrase that is thrown around amongst school personnel is the idea of implementing PBIS with fidelity. Eiraldi et al. (2019) created a quantitative pilot study to understand and study the effect of implementing both PBIS and mental health supports in low-income schools. More specifically, researchers sought answers to the acceptability of tier two interventions and a decrease in behaviors and ODRs when mental health supports are set in place. This quantitative study took place over a time span of three years and included selected staff and students in grades K-8 in the Northeastern portion of the country. Based on the evidence seen from acceptability surveys and tier two interventions that have been used, mental health strategies need to categorize and help students who exhibit internalizing behaviors and externalizing outbursts. Findings suggest that tier one and two interventions can be successful for schools who implement mental health supports and include

students who are exhibiting all types of behaviors, including those that may not be clearly visible.

PBIS implementation strategies, such as the CICO, mental health supports, or highly routine classrooms, are important components of a successful behavioral framework. Hirsch et al. (2020) can attest to this statement based on the study conducted. During the 2016-2017 school year, 14 film producers were individually selected based on their work shown in a PBIS film festival. The idea behind PBIS videos is to help support and create learning opportunities for staff and school personnel who are directly implementing PBIS and working with students. Based on these film producers, Hirsch et al. (2020) studied the effect of PBIS video creation on school and staff. Through interviews of video staff and teachers, researcher findings found that video implementation teaching is important for not only staff but is used as a valid learning tool for students as well. PBIS strategy videos teach behavioral concepts and reiterate preferred behavior in the classrooms and schools. The videos are also created by outside support and resources based on the needs of the staff and school.

Tier one and tier two interventions have been studied and analyzed, but there is one vital PBIS implementation strategy that needs mentioning. Garbacz et al. (2018) conducted a quantitative research study based on identifying barriers and facilitators to family engagement. Psychologist Urie Bronfenbrenner, known for the ecological systems theory, says, “The relationships developed at home and at school and interactions between home and school influence child development and learning” (qtd. in Garbacz et al. 2018 p. 1). Participants of this research study included 204 members of a PBIS team from Florida, Colorado, and Illinois. A three-question, open-ended survey was utilized by school personnel in which answers to barriers

of family involvement, school limitations, and effective school practices were answered and analyzed.

Based on these survey questions, Garbacz et al. (2018) came to the conclusion that there is an expressed concern over the lack of resources for multilingual households. Communication is of utmost importance in order to successfully utilize family and parental involvement. Lastly, there is a need for family-school events that invite parental participation with the PBIS framework. This study suggests a need to improve this PBIS implementation strategy and ensure that family involvement is a priority. This point reiterates research claims that in order for a behavioral framework to be successful, implementation strategies must be implemented with fidelity.

PBIS Staff Commitment

In the previous two sections of the literature review, PBIS and strategies have been analyzed and examined. Highly skilled researchers and studies have exhibited evidence that through learned experiences and useful interventions, PBIS is an effective and valuable behavioral framework. Despite the importance of these components, there is a key feature yet to be discussed: the commitment and sustainability amongst school personnel and staff.

In a study of 26 PreK through 12th grade school districts in Minnesota, researchers Brown and Filter (2019) examined the level of staff commitment and level of effectiveness of PBIS implementation. Through a quantitative approach, Brown and Filter (2019) used surveys given to school personnel and staff that invited them to express their opinions of the commitment they shared with the framework. Teachers answered questions based on eight subscales, which

included behaviors and situations that are seen and dealt with when implementing the PBIS framework.

After analyzing and examining survey results, Brown and Filter (2019) found that when staff shared a more positive attitude towards the goals and ideas of PBIS, there was a stronger implementation effect within the school. Of the survey respondents, 80% were committed at a level of 80%. It is also important to note that based on the 24 items that were answered within the eight subscales of the survey, each subscale outcome provides schools with insight on which areas of the framework may be lacking or cause difficulty for staff. With survey results in mind, the more schools understand the needs of their staff and personnel, the better support and training can be provided, with the potential for creating a higher level of commitment.

Within a behavioral framework such as PBIS, there is a need for staff and school personnel to commit and implement the techniques and strategies to benefit students. Chitiyo et al. (2020) generated a quantitative research study to examine the confidence levels of teachers who are facilitating PBIS within their classroom. The research study included 104 school personnel including general education teachers, special education teachers, and paraprofessionals in southern Illinois school districts. Chitiyo et al. (2020) used a three-part-survey based on the school demographics, educator's background knowledge of PBIS and how to implement this framework, and their opinion of the rate of sustainability they thought this framework would provide students.

Evaluating and analyzing the staff surveys led researchers Chitiyo et al. (2020) to mixed results.

Survey findings suggested that most staff did have some sort of background knowledge about

PBIS either through formal training done by schools or through communication amongst peers. Data also supported the claim that staff who shared higher levels of confidence believed that there was a greater level of PBIS. Finally, the research study sought to see whether the position of the staff made a difference on the level of confidence they had in implementing PBIS. Based on the findings, Chitiyo et al. (2020) state that overall, special education teachers exemplify higher levels of confidence and sustainability degree than other teachers. These results suggest staff who have learning opportunities and support are more likely to express staff commitment and a positive outlook for students.

Pinkleman et al. (2015) could argue that there are enabling factors and barriers to the success and sustainability of implementing the PBIS framework. In a study including 14 states around the country, Pinkleman et al. (2015) searched for the main components that help meet the staff needs of the framework and what hinders their ability. The 860 participants in the study completed the SUBSIST, a research tool that analyzes components of success and areas of concern related to key features of sustainability when implementing PBIS. The participants contributing to the results of the study were in their first to third year of experience at each of the associated school districts.

Pinkleman et al.'s (2015) results suggest that the main variables that enable successful PBIS implementation include staff commitment, the support of administration, and stability amongst school-wide expectations and staff effort. On the other hand, factors that obstruct positive implementation include staff buy-in, a lack of time to prepare and practice, as well as a limited budget for training. By identifying components that enable and hinder school-wide PBIS implementation, one may question the use of staff buy-in both categories. In order for PBIS to be successful, the framework needs dedicated and proactive teachers and staff to provide consistent

and positive environments. Without a sense of staff buy-in, the implementation and consistency factor is no longer enabling the framework and limits the growth of students. Further research suggests there may need to be a focused study analyzing staff and school-wide interventions that can promote and problem-solve the major barriers that lead to school-wide PBIS implementation.

McIntosh et al. (2015) provided further support that sustainability beliefs amongst staff and school personnel implementing PBIS can be labeled as an enabling factor and a barrier. Using a quantitative based research design, McIntosh et al. (2015) included 860 schools in 14 different states. A pivotal factor for PBIS sustainability includes school demographics, more specifically, size of school, level of diversity, and socioeconomic status. Another factor that can affect the sustainability of PBIS is the level of school staff communication and collaboration. Through the same assessment tool as noted in the study by Pinkelman et al. (2015), the SUBSIST, a self-assessment done by teachers, was used for each member to rate their school's ability based on the implementation and sustainability of their school's demographics and team collaboration approach.

Results found that school demographics, such as lower socioeconomic status, diversity, and high rates of student mobility, did not affect the sustainability of schools implementing PBIS. Rather, these indicators were more likely to get schools involved and started on implementing a positive school climate using PBIS. Whereas results were somewhat inconclusive regarding the demographics of schools, the SUBSIST results did show that staff collaboration and teamwork did have a major impact on sustainability. Research found that successful school action teams shared and analyzed data to make the necessary adjustments for students. Success also followed access to teacher support by means of coaching and mentoring. Based on these findings, there is evidence that successful PBIS sustainability enablement is

achieved through collaboration of school personnel, data-driven decision making, and an overall sense by teachers that they are supported.

On the subject of teacher support, Tyre et al. (2018) designed a mixed measure study based on the concerns that teachers and supporting school personnel share when implementing school-wide PBIS. The participating members of the study included school members from nine schools in four school districts in the state of Washington. Each of the schools were at various levels of the implementation process. Tyre et al. (2018) were striving to analyze the level of support school staff were receiving, the level and progress of framework implementation, and staff attitudes and opinions towards PBIS. In order to answer these questions, researchers used SET (school-wide evaluation tool) and school-wide surveys. The assessment tools allowed for staff opinions to be shared, and SET defined the indicators of behavior expectations and reward systems that were set in place to reward positive student behaviors. Schools categorized in the planning phase shared that they were less knowledgeable on the background and understanding of PBIS, whereas the schools in the implementation phase recorded a greater level of knowledge. Based on the topic of PBIS support, both schools labeled as planning and implementing stated they felt a strong sense of support and felt the framework was a valuable tool for their schools. The most indicated responses from participating schools were that the staff did not feel as if they were able to balance, organize, and make all the behavioral modifications that were needed to make PBIS successful in their classroom.

While results from the study done by Tyre et al. (2018) vary in terms of teacher opinions, it is fair to conclude that in order to create a more successful framework, feedback, being positive or critical, is a valid learning tool for all. In order to make the changes needed to help these participating schools, there is a need to analyze and collect data from smaller groups of

school personnel and ensure follow-ups. Needless to say, implementing PBIS is a process that can be done with fidelity and success when staff feel educated, supported, and confident in their abilities.

Also studying teachers using PBIS, researchers Kelm and McIntosh (2012) conducted a research study based on teachers' sense of confidence and level of ability they felt they could contribute while implementing PBIS in their classroom. Thomas Guskey of the RAND Corporation, says, "Teacher self-efficacy is defined as teachers' perceptions of their influence on the motivation and learning of all students, including students who are unmotivated or display problem behavior" (qtd. in Kelm and McIntosh 2012 p. 1). Based on this information and importance that has been shed on teacher self-efficacy, researchers Kelm and McIntosh (2012) conducted a quantitative study based on five schools: two schools that did implement PBIS and three schools that did not implement PBIS. This study included 62 teachers and was completed during the 2009-2010 school year. Data collected was using TSES (teacher self-efficacy scale), a set of 24 questions that allows teachers to share their perceptions of how they manage the classroom, student engagement, and other teacher-related skills and techniques. Whereas this study's information may be a bit outdated, it is important to note the significance of teachers' confidence and level of ability they feel and the impact it has on successfully implementing PBIS.

Results from Kelm and McIntosh (2012) indicated that schools implementing the behavioral framework housed teachers who felt more confident in their abilities. Reports from the questionnaire indicated that teachers were better able to engage and keep their students engaged, as well as supplement behavioral support when needed. The teachers participating in the non-PBIS schools indicated they felt they had some influence on the success of their

students, but not near the confidence or sustainability compared to the schools that were implementing PBIS. Teachers in schools implementing PBIS were found to have a greater sense of self-efficacy. Furthermore, participating teachers in this research study reiterated the importance of implementing a positive behavioral framework amongst schools.

Recommendations for Future Research

Recommendations for future research include examining the implementation of PBIS behavioral strategies based on the age and grade level of a group of students, specifically lower elementary school and students with disabilities. This age group could potentially benefit from differentiated and distinct behavioral strategies that mimic the importance of using positive reinforcement. While established research has shown benefits of PBIS implementation, the field would benefit from research analyzing specific behaviors and disabilities and the effectiveness of using PBIS with students of all needs.

Conclusion

The purpose of this literature review was to analyze the implementation of Positive Behavior Interventions and Supports, share specific research-based behavioral interventions, and consider the capacity for staff and school personnel to sustain this type of behavioral framework. Based on the findings of multiple studies, one can conclude that PBIS is a complex framework that can positively affect the atmosphere, climate, and outlook for students and teachers when implemented with fidelity. Decisions and implementation approaches can be executed successfully based on data and the individual needs of students. When teachers and school personnel use school-wide expectations, positive communication and reinforcement, and team

collaboration, PBIS has contributed to academic success, behavioral changes, and hopeful teachers.

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