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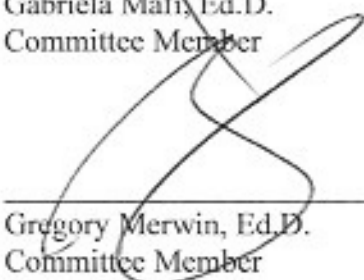
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THE IMPACT OF PERCEIVED FIDELITY OF POSITIVE BEHAVIOR INTERVENTIONS AND SUPPORTS (PBIS) IMPLEMENTATION ON STUDENT BEHAVIOR AND ACADEMIC ACHIEVEMENT

by

Kimberly Cantrell

A Dissertation

Presented in Partial Fulfillment of
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School of Education
Concordia University-Irvine

ABSTRACT

PBIS was designed as a framework to promote a culture that establishes positive behaviors and practices to support staff behavior, student behavior, social competence, and academic achievement through data, systems, and practices. This study examines what factors impact the implementation of PBIS over time. Research has been conducted on related topics, mainly how implementing PBIS benefits student achievement and behavior modification. However, teacher intervention and perception variables still need to be researched, mainly when considering the fidelity and sustainability of PBIS.

Incorporating evidence from teacher and site administrator surveys, interviews, and student academic and behavioral data, this study illustrates that findings largely support that behavior directly correlates with academic achievement. It also supports that teacher perceptions regarding behavior, and academic achievement are linked to fidelity. Implementing PBIS, when done with fidelity, would be expected to be reflected in increased academic assessments such as district benchmarks. Additionally, it was expected that the implementation of PBIS, when done with fidelity, would be reflected in a decrease in behavioral issues monitored through referrals, suspensions, and expulsions. This study can be used to develop sustainable and continuous professional development for teachers and site administrators in implementing PBIS.

Keywords: Positive Behavior Interventions and Supports, student behavior, academic achievement, perceived fidelity

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CHAPTER 1: INTRODUCTION

Countless studies have shown that negative student behaviors disrupt student academic success. The behavioral impact is significant in ensuring academic success (Bradshaw et al., 2008; Burk et al., 2012; Childs et al., 2010; Cohen et al., 2007; Horner et al., 2004; Irvin et al., 2004; Irvin et al., 2006). As schools implement school-wide behavior plans, behavior problems are reported to decrease inside and outside the classrooms, with substantial academic growth. According to The Center on Positive Behavior of Interventions and Support, this is due to a direct link between behavior and academic achievement (Center on PBIS, 2021; Chafouleas et al., 2007; Fairbanks et al., 2007; Salgado et al., 2022; Swoszowski et al., 2007).

Researchers have concluded that some disciplinary practices can heighten negative student behavior (Benner et al.,2012; Bradshaw et al., 2008; Christenson & Havsy, 2004; Martella et al., 2012). Negative student behavior increases when: a school does not have any expectations; educators do not take time to identify individual student needs; educators have not taught behavior expectations to students; and rewards have not been given to those students who have displayed positive behavior (Witwer, 2013). To control behavior issues within school sites, teachers and administrators have used various behavior modification methods, behavior intervention, and behavior models in school systems. According to Hawken & Horner (2003), assumptions are made that behavior models are focused on obedience, implying that educators are to control student behavior by using punishments and reward systems.

Most of the research on PBIS or other school-wide behavior focuses on how programs can impact students' negative behavior (McIntosh et al., 2009; McIntosh et al., 2012; Sobeck & Reister, 2020; Spaulding et al., 2010). However, only a fraction of the research addressed how it can also impact academic success, a vital component of the multi-tiered system of support

behavior programs (Bradshaw et al., 2008; Benner et al., 2012). There is a need for further exploration to show a direct correlation between behavior and academic success. This correlation is a strength of programs such as PBIS within the overarching Multi-Tiered System of Supports (MTSS) umbrella that people often overlook. PBIS is designed as a three-tiered system of support. Tier I establishes a foundation of regular support for all students. Tier II supports students at risk for developing more severe problem behaviors or academic challenges. Tier III is set as individualized support to improve behavioral or academic outcomes for specific students. Unfortunately, tier II is the most common tier implemented incorrectly, impacting at-risk students with severe academic and behavioral challenges (Bruhn & Hirsch, 2014; Debnam et al., 2012; Fairbanks et al., 2007; Lehr et al., 2003). In order to have the most significant impact on any behavior system, fidelity in the implementation by all adults must be present (Center of PBIS, 2022; Sugai et al., 2015).

Statement of the Problem

According to George & Kincaid (2008), the primary process in beginning a PBIS program is to obtain 'buy-in' from school site staff, administrators, parents, and students. Primary stakeholders within PBIS would include teachers, school site administrators, school psychologists, and other school staff members. According to the Center on PBIS, 2022, 80% of stakeholders must agree to implement PBIS at the school site. If stakeholders adhere to the program, according to the Center on PBIS, fidelity is preserved. (Acosta et al., 2019; Bradshaw, et al., 2008; Bruhn, et al., 2013; Center on PBIS, 2022).

In order to achieve this, schools need to be willing to make significant changes that lead to gains across the board. Educators and leaders need to deepen their knowledge of learning about behavioral changes and how they impact achievement rather than focusing on only the

instructional component. Fullan (2016) discusses the Stratosphere Agenda, where students are so engaged in learning that behavior problems disappear entirely. Fullan's listing of the "6-C's" (communication, critical thinking, collaboration, creativity, character, and citizenship) is one approach educators can use to make a systemic reform (Fullan, 2016). Educators and students must work together in the behavioral and academic process to create change (Bruhn et al., 2013; Center on PBIS, 2022; Fullan, 2016).

Implementing change within the organization, such as beginning a new behavior model, creates a greater need for accountability. For internal accountability, leaders must examine changes in student learning. For some districts, this is where teachers on special assignments create and strengthen instructional strategies and practices. Internal accountability brings about the teacher's adage of being a life-long learner while also deepening professional responsibilities (Fullan, 2016). Additionally, external accountability is "any entity that has authority over you" (Fullan, 2016, p. 119). Fullan (2016) used the example of a large, urban school district's handling of external pressures. Educators were told to always continue with their district philosophy because it worked. The superintendent had faith in teachers and administrators. She took a stand and defended practices (Fullan, p. 124). The "freedom-from" and "freedom-to" process still works in the district today under the current superintendent.

Principals, school leaders, superintendents, and board members may view program changes differently. However, according to Fullan, unless those changes fit the needs of students to grow, it will not work. Following Fullan's work within Transformational Leadership, the large, urban school district has a Keynote presentation every August to ensure teachers can deepen their understanding of the district direction and programs being implemented. The current superintendent told stakeholders at the 2020 keynote address, "You are the voice. You are the

success" (personal communication, anonymous superintendent, southern California school district, 2020). However, she does not just say this to educators but to all employees, parents, and students. Their superintendent steps outside her office and mentors several groups of grades 6-12 students each year. She wants to know what motivates them and keeps them involved as lifelong learners. As educators and leaders within the district, this is the insight that students should gain to find perspective and direction. Educators teach and lead by the standard "every child is my child; every parent is me" (personal communication, anonymous superintendent, southern California school district, 2020). This support from the superintendent is crucial because it focuses on direction and, as Fullan states, involves the engagement of all stakeholders (Fullan, 2016).

Purpose of the Study

PBIS was designed as a framework to promote a culture that establishes positive behaviors and practices to support staff behavior, student behavior, social competence, and academic achievement through data, systems, and practices. PBIS focuses on the connection between social competence and academic achievement, supporting staff behavior, supporting student behavior, and supporting decision-making (Center on PBIS, 2022).

Figure 1. 1

Critical Features of School-Wide PBIS

Center on PBIS, 2022
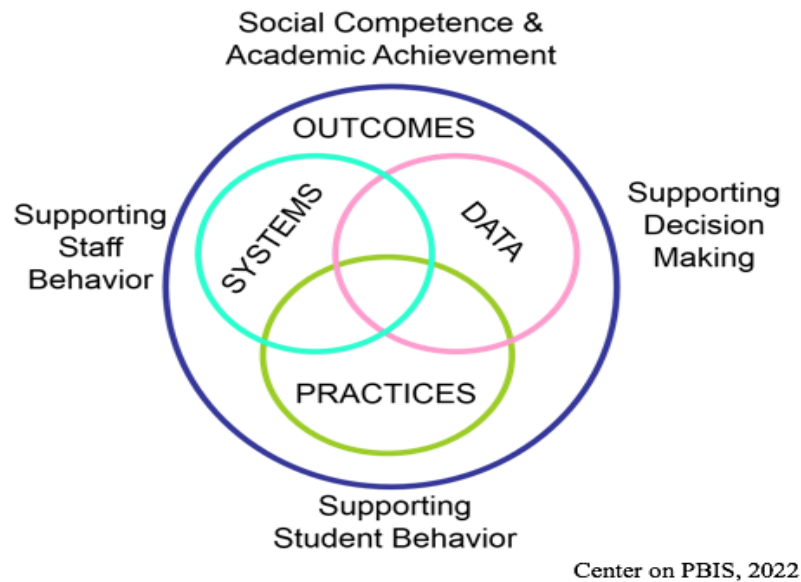
This phenomenological study aims to discover what factors impact the implementation of PBIS over time. At this stage in the research, the educators' perceptions and student results will be used to interpret the fidelity of the PBIS program. As illustrated in the literature review, research has been conducted on related topics, mainly how implementing PBIS benefits student achievement and behavior modification. However, teacher intervention and perception variables still need to be researched, mainly when considering the fidelity and sustainability of PBIS.

<div align="center">

Research Questions

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The following research questions will be addressed in this study:

1) What factors impact the perceived fidelity of PBIS implementation over time?

a) What is the site administrator/leader's role?

b) What is the teacher's role?

i) What is the teacher's perception of the parent's role in PBIS?

c) What is the district's role?

2) What is the correlation between the perceived fidelity of PBIS implementation and student behavior?

3) What is the correlation between the perceived fidelity of PBIS implementation and academic achievement?

a) Does positive behavior directly impact student achievement?

Expected Outcomes

Teacher perception of the program should significantly impact the behavioral and academic outcomes of students in a PBIS setting. If teachers do not believe the program will work and consequently are not implementing the program with fidelity, students cannot achieve at the highest level behaviorally and academically. Therefore, it is expected that teachers' perception of fidelity will significantly impact behavior and academic outcomes despite the number of years of PBIS implementation.

In addition, it is expected that administrators who offer support to teachers and follow through with the implementation of PBIS should have a significant impact on both the behavioral and academic outcomes of students in a PBIS setting. If support and training are not part of the implementation, maintaining fidelity is not possible (Center on PBIS, 2022).

<div align="center">

Theoretical and Conceptual Framework

</div>

It is critical to assess how the PBIS blueprint fits into the Organizational Change Theory model by John Kotter when considering organizational changes. Like Kotter's Organizational Change Theory, Sugai's PBIS blueprint (Sugai et al., 2015) was created with specific conditions and objectives. However, while organizational change theory aims to change a company

successfully, PBIS aims to alter student and school community behavior and academic achievement.

According to Sugai (2015), changes in school practice, organization, and functions are necessary to maintain the fidelity of the PBIS program. In addition, the PBIS Blueprint (2015) shows that varying levels of support for organizational change in academics and behavior must be established early, with positive reinforcement provided frequently and constantly. The theoretical framework for this study is based on the system described by Sugai et al. (2015) and the Center on PBIS. Figure 1.2 demonstrates the three-tiered approach to PBIS within the school system.

Figure 1. 2

PBIS Tiers
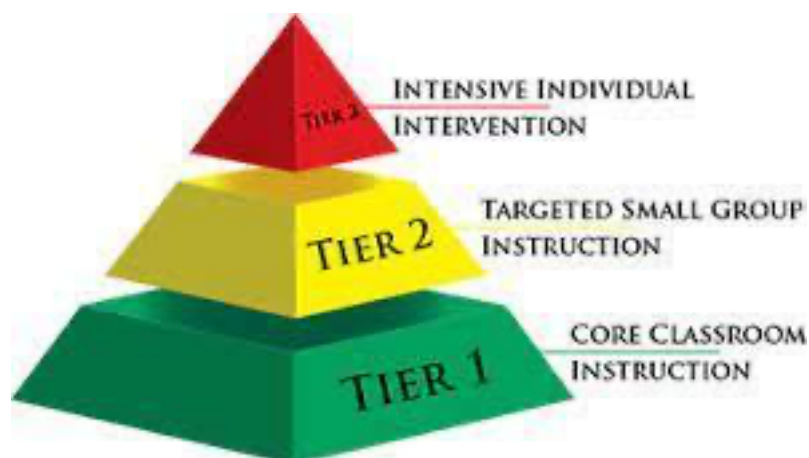
Center on PBIS, 2022

In order to maintain fidelity and be potentially effective, PBIS needs to rely on a review of student behavioral and academic data to problem-solve and create change at the site and district levels (Lewis et al., 2010). According to research conducted by Horner et al. (2010), the development of schools' capacity to administer behavioral and academic interventions depend on their continued utilization of data. When PBIS is implemented, the emphasis should be on encouraging children to behave as expected and gathering and analyzing data to determine whether PBIS is succeeding in its intended goal. Therefore, it is crucial to comprehend how PBIS teams use data to solve problems and make defensible decisions regarding student behavior and academic progress. Strong knowledge of data, procedures, and support systems is necessary to participate in the fundamental problem-solving required to sustain implementation efforts in PBIS for change to be successful in an organization while sustaining program fidelity (Lewis et al., 2010).

Theoretical Framework

While this study will be designed to follow Kotter's (2002) Organizational Change Theory, the pertinent aspect of Sugai's PBIS blueprint is necessary to review due to its systemic nature. Implementing PBIS within the school requires a complete understanding of changing the system of an organization from all stakeholder aspects: leaders, teachers, students, parents, and community members. According to Kotter and Cohen (2002), organizational change occurs when an organization, such as a school site or even an entire district, requires a shift in perspective and practice. Because education is continually growing and evolving, educators need to create change. Kotter's organizational change theory is organized into an eight-step process: 1) a sense of urgency (understanding the problem and reducing complacency); 2) building a team; 3) setting the vision (moving beyond the traditional plans to develop strategies that work for the organization); 4) communicating buy-in; 5) empowering action (removing the barriers that prevent the buy-in from embracing the vision); 6) creating short term wins (allowing 'wins' that diffuse cynicism within the organization; 7) perseverance (making the vision a reality); and 8) making the changes stick (Burke, 2018; Kotter & Cohen, 2002; Kotter, 2014; Kotter & Rathgeber, 2016; Kotter & Rathgeber, 2017).

Organizational change theory is an optimum theory to follow when implementing PBIS. The program is designed to change behaviors in students by following a methodical process similar to the steps used in John Kotter's Model of Change. PBIS offers systems-level support through a team-based decision-making process. PBIS is built on a tiered system, allowing time to set a vision to ensure school culture is maintained. The program also has built-in 'short-term wins' as the implementation proceeds. These components of PBIS are designed to create fidelity

and support within the program to ensure that schools enter sustainability after three to four years of implementation (Center for PBIS, 2022; Bradshaw et al., 2008; Lewis-Palmer et al., 1999).

Conceptual Framework

The conceptual framework for this study is transformational leadership. Northouse (2016) defines a transformational leader as someone who "engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower" (p. 164). In other words, transformational leaders help their followers reach their full potential. Transformational leadership encourages a team for long-term success (Fullan, 2020; Kouzes & Posner, 2017; Northouse, 2016; Rais et al., 2022). Raising a team's self-confidence can then adjust to a shared vision. Transformational leadership is used to inspire people to work together as a team. A leader must also be skilled in challenging people's preconceived ideas about specific topics regarding the change (Fullan, 2020; Kouzes & Posner, 2017; Northouse, 2016; Rais et al., 2022). Leaders can change opinions on a topic as long as there are clearly defined goals and present ideas by stimulating conversation. This can be a challenge, but it is best to solicit ideas from the team beforehand (Afsar & Umrani, 2019; Kouzes & Posner, 2017; Northouse, 2016; Rais et al., 2022).

There is a striking commonality between transformational leadership standards and the goals of PBIS. As with PBIS, a transformational leader encourages motivation and positive development of team members (Center on PBIS, 2022; Fullan, 2020; Kouzes & Posner, 2017; Northouse, 2016; Rais et al., 2022). They develop an environment with explicit values and standards that builds culture by encouraging the team to work toward a common goal. PBIS provides coaching and mentoring but allows students to take ownership of tasks, as a

transformational leader would do with their team (Afsar & Umrani, 2019; Center on PBIS, 2022; Fullan, 2020; Kouzes & Posner, 2017; Northouse, 2016).

Significance of the Study

The significance of this study is to determine the factors that impact the fidelity of PBIS implementation over time. If educators perceive the program to be effective, they are more likely to implement it with fidelity (McIntosh et al., 2009; McIntosh et al., 2012). If educators implement with fidelity, according to the PBIS blueprint, there should be a correlation between behavior and academics (PBIS, 2022). As illustrated in the literature review, research has been conducted on related topics, mainly how implementing PBIS assists student achievement and behavior modification. However, the teacher intervention and perception variables still need to be researched more when considering the fidelity and sustainability of the program. For example, there is a correlation between perception and student success. In that case, behaviorally and academically, the fidelity of PBIS implementation can be strengthened through further professional development and training at school sites, raising both academic achievement and behavior awareness (Bruhn et al., 2013; Canter & Canter, 2001; Center on PBIS, 2022; Chard et al., 2008; Garnett et al., 2020; Irvin et al., 2004; Sinclair et al., 2002; Sobeck & Reister, 2020).

Assumptions

1) The participants genuinely answered all survey and interview questions by sharing accurate information based on their interactions with school-wide PBIS.

2) The participants understood the concepts associated with PBIS and are currently implementing the program in their schools and classrooms.

Delimitations and Limitations

Delimitations:

1) The location of the study included one large urban school district in southern California where the researcher is employed, potentially creating researcher bias.

2) The study sample was limited to only elementary schools within the district currently implementing PBIS at a school-wide level, which could affect the generalizability of the study.

3) For this study, it was intentional to use teachers' perception of fidelity, which may result in the effective implementation of PBIS.

4) If educators regard the program as effective, they are more likely to implement it with fidelity. Additionally, according to the PBIS blueprint, the program is more likely to show effectiveness if the program is done with fidelity.

Limitations:

1) The participants may not answer honestly.

2) Results may only be generalizable to some districts with differing socioeconomic populations.

Definition of Terms

The definition of key terms used in the current study have been provided:

Administrator: principal or assistant principal of a school site.

Behavior Specialist: PBIS team member who is competent with behavioral principles and assists in analyzing data. This is generally a staff with a background in behavior such as a special education teacher or a school psychologist.

California Assessment of Student Performance and Progress (CAASPP): California achievement test consisting of English Language Arts and Math. CAASPP is administered once per year for grades 3-6.

Data Specialist: PBIS team member who is trained in entering and accessing data from SWIS (*School-Wide Information System)* data system; this system may be something that the district has developed or can be a system the school has developed but must be maintained at the school site level.

Discipline Referral: Made by a teacher and/or staff member to refer a student to the school administration for disciplinary action.

Every Student Succeeds Act (ESSA): The ESSA (2015) replaces No Child Left Behind Act and includes provisions that help to ensure success for all students and schools.

Fidelity: Faithfulness to the program. Consistent implementation will be used interchangeably with fidelity.

Illuminate Education: Student information system portal to maintain and house student data.

Multi-Tiered System of Support (MTSS): A framework that helps provide strategies for students with behavioral and academic needs.

PBIS Communication liaison: A PBIS team member who acts as the point person for communication between the team and staff regarding PBIS and behavior issues.

PBIS Coach: A district-level (external) or school-based (internal) individual that facilitates the team through the process, and becomes the school's main contact and trainer for the staff.

Positive Behavior Interventions and Supports (PBIS): A three-tiered framework designed to improve student behavior and academic performance.

Recorder: Takes notes during PBIS meetings, transcribes the team's responses on google documents, flip chart paper, notes, etc., to be shared with the staff and kept as a record for the next meeting.

Stakeholder: Any person with an interest or concern in a school system (i.e. parents, students, teachers, administrators, community members).

Suspension: The temporary action of removing a student from the classroom and/or school site.

Team Leader: Leader of the PBIS team; starts the meeting, reviews the purpose of the meeting, facilitates the meeting by keeping the team focused on each step, and serves as the team's main contact.

Timekeeper: Monitors the time during the PBIS meetings, and keeps the team aware of time limits by giving 'warnings' (i.e., "10 minutes left").

Summary

Student academic progress is hampered by negative student behaviors (Irvin et al., 2004). According to the Center on Positive Conduct of Interventions and Support, behavior and academic accomplishment are closely related. Most studies concentrate on how PBIS or other school-wide behavior management programs can improve behavior. PBIS is intended to be a three-tiered support system.

PBIS tier I lays the groundwork for ongoing assistance for all pupils. Tier II provides assistance to students who may experience more severe behavioral behaviors or academic

difficulties. Finally, Tier III is designed as individual support to enhance particular kids' academic or behavioral outcomes.

Using data, systems, and practices, PBIS was created as a framework to support a culture that develops positive behaviors and practices to support staff conduct, student behavior, social competency, and academic accomplishment. PBIS emphasizes how social competency and academic accomplishment are related and how to support staff behavior, student behavior, and decision-making (Center on PBIS, 2022). This phenomenological study aims to identify the variables that influence PBIS implementation over time. The perception of instructors and student outcomes will be used to interpret the fidelity of the PBIS program at this point in the research. As demonstrated in the literature review, research has been done on related subjects, including how PBIS adoption helps with student achievement and behavior management. By researching the question 'What factors impact the perceived fidelity of PBIS implementation over time', school sites can show that perceived fidelity will significantly differ from those without. If there is a correlation between perception and student success, with organizational change and transformational leadership, the perceived fidelity of PBIS can be strengthened through professional development, raising student academic achievement and behavior awareness.

The literature review will analyze the history of behavior programs, including PBIS, the implementation and process of PBIS, and the impact behavior has on academic achievement.

CHAPTER 2: LITERATURE REVIEW

Teachers and administrators have used various behavior modification methods, behavior intervention, and behavior models in school systems since children have been in classrooms. Some of these models include the Reality Therapy Model, the Love and Logic Model, the Ginott Model, the Kounin Model, the Jones Model, Character Education, Positive Behavior Interventions and Supports (PBIS), along with Assertive Discipline, Logical Consequences, and other school-wide behavior plans (Martella et al., 2012). While behavior plans help modify behavior in students, teachers' attitudes toward the program itself also have a direct impact on how the children perceive their behavior as well as how well they perform in school settings (Hawken & Horner, 2003; Reschley & Christiansen, 2006; Morse et al., 2004; Sinclair et al., 2002).

The Impact of Behavior on Academics

According to Chafouleas et al. (2007), several types of behaviors impact academic achievement, with the primary behavior being disruptive. Disruptive behavior is any behavior that distracts from learning from students and can be presented in many ways, such as tardiness, arguing, talking, or ignoring instruction (Chafouleas et al., 2007; Christenson & Havsy, 2004; Fairbanks et al., 2007). With this type of behavior, a classroom teacher is required to interrupt a lesson to discipline the student, which can have a negative academic effect on an entire classroom (Chafouleas et al., 2007; Christenson & Havsy, 2004; Fairbanks et al., 2007; Salgado et al., 2022).

Another form of behavior that directly impacts academic performance is impulse control. According to Lehr et al. (2003), students with impulse control have more difficulty motivating themselves to study, do assignments, or do homework. These students do well in classrooms

with structured rules and guidelines (Hawken & Horner, 2003; Lehr et al., 2003; Reschly &
Christenson, 2006; Salgado et al., 2022). However, in class, a student with impulse control often
has frustration that can lead to an outburst when not receiving adult or peer attention. In this
case, teaching coping strategies for behavior is helpful (Hawken & Horner, 2003; Lehr et al.,
2003; Reschly & Christenson, 2006; Sobeck & Reister, 2020).

The final form of behavior indicated by Chafouleas et al. (2007) that directly impacts
academic performance is a specific learning disability such as Oppositional Defiant Disorder
(ODD), Attention Deficit Hyperactivity Disorder (ADHD), dyslexia, or other disorders. These
cases usually require more intervention or individualized instruction (Christenson et al., 2000;
Morse et al., 2004).

Models of Behavior Support

If children perceive that their teacher does not believe their behavior can change, a
behavior program may not succeed (Martella et al., 2012). Behavior programs assist students in
establishing healthy connections with adults, cultivate positive behavior, and promote a sense of
community among peers. Each of these elements contributes to a school atmosphere that is more
productive to students' individual academic success (Greene, 2014; Freeman et al., 2016). Over
time, several behavioral models have been developed and used in the classroom.

The Assertive Discipline Model

The Assertive Discipline model, created by Canter, 1976, focuses on how the teacher
responds to students' misbehavior and keeps the teacher in charge of the class by making them
the only classroom leader. According to Martella et al. (2012), the primary focus is force and
coercion. Punishment brings control to the classroom through assertive discipline. However, over

time, disruptive behavior was shown to worsen using this model, according to the analysis of research done by Martella et al. (2012) in the 1990s.

The main components of this model are: 1) the student's right to learn, 2) the teacher's right to teach, 3) the teacher is in control, 4) there are clear boundaries set for students, 5) there need to be firm consequences, 6) teachers must be able to teach challenging students, and 7) anticipate poor behavior with a plan (Canter & Canter, 1976; Canter & Canter, 1993; Canter,1996; Canter & Canter, 2001).

The tailored plans for students with special needs and individual differences are sometimes disregarded, which is one of the areas for improvement of the assertive discipline model. When enforcing a strict and unbending punishment policy, a teacher frequently fails to consider the underlying causes of misconduct. When it comes to behavior, students are expected to be passive learners rather than actively participating in discussing rules (Garnett et al., 2020; Greene, 2014).

The Logical Consequences Model

The Logical Consequences model was developed in the late 1960s by Rudolf Dreikurs. With this method, a teacher used a logical consequence as a behavioral modification. The Logical Consequences model asserts that students will change their behavior when they experience "reasonable, related, and respectful" consequences for their behavior. This method of behavior modification is meant to teach students how to behave correctly (Chard et al., 2008; Debnam et al., 2012; Horner et a., 2004). Therefore, it is essential that logical consequences are not meant to be punishments but instead logical responses to specific behaviors (Martella et al., 2012). For example, if a student misbehaved at recess, the logical consequence would be for the student to miss recess. Dreikurs based this model on the principles of human behavior: everyone

wants to 1) get along with others, 2) be accepted and appreciated, and 3) feel important (Adamson et al., 2018; Bohnenkamp et al., 2021). However, it was again discovered that this was ineffective, and behavior was not modified (Martella et al., 2012). Logical consequences are punishments.

Reality Therapy

Reality Therapy, developed by Glasser in 1965, states that everyone makes behavioral choices based on five needs survival, freedom, fun, power, and belonging or love. This theory means that behavior is a choice, and students can only control their behavior, not respond to it.

If students fail and breach the trust by not following rules, teachers should remove them from class until they demonstrate a commitment to regaining trust. According to the Reality Therapy method, students who cannot follow the rules are to blame for suffering the consequences. Students are the ones who suffer penalties when they are not as prepared as expected. All classroom participants should voice their ideas and unhappiness if an unacceptable action is taken since this method respects everyone and encourages students to be responsible citizens (Greene, 2014; Lodi, 2021).

Models of the 1970s and 1980s

Finally, the Ginott Model, developed in 1971, focuses on interpersonal communication. Ginott's model (1971) is structured around positive communication between an adult and a child. In this model, the teacher is considered a role model and needs to focus on mutual communication, independence of the student, and avoiding praise. The Love and Logic, developed by Fay in 1985, teaches character building based on mistakes, empathy from an adult, and the student learning to change their behavior through compassion from an adult.

The Curwin and Mendler Model, developed in 1988, the Kounin Model, developed in 1970, and the Jones Model, developed in 1987, were ineffective and lacked research validation for behavior modification. Curwin and Mendler (1988) focus on student dignity. Students should be treated with respect even during negative behavior because responsibility is more important than obedience (Martella et al., 2012). Kounin's (1987) model attempts to prevent discipline from occurring before it happens. Kounin focuses on classroom management rather than disciplinary action. The Jones Model (1987) is based on engagement, communication between educators, students, and parents, and maintaining a positive environment. However, students in this environment displayed more significant behavioral issues outside the classroom (Benner et al., 2012; Bradshaw et al., 2008; Christenson & Havsy, 2004; Martella et al., 2012).

Current Behavior Models

Acosta et al. (2019) focused on restorative practices in middle school settings and their impact on behavior modification and the climate of the school culture. Students were given surveys and then participated in a restorative practice intervention focusing on school relationships, peer relationships, and adult relationships emphasizing social skills, bullying/victimization, and peer attachment. They followed the Theory of Restorative Practice Intervention, which is a form of disciplinary action that seeks to restore relationships by having students take ownership (Charney, 1997). Still, they mentioned how multiple truths could impact how students participate in the study, leading the researcher to believe that the worldview is a transformative-participatory perspective (Decuir-Gunby & Schutz, 2016).

Character Education has developed slightly and has become a more positive component for schools. Character Education takes a more philosophical approach to examining a student's behavior. It is often used as a component of many new behavior programs, including Cal State

Los Angeles's "Transform Your School" (CSULA.org, 2022) and Positive Behavior Interventions and Supports (PBIS). Character Education focuses on "teaching students respect, being fair and trustworthy, caring for others, being responsible, and being a better citizen" (Martella et al., 2012) and has shown significant improvement in student behavior and academic performance when compounded with teacher interaction in the classroom. McCart and Turnbull (2002) found that when children are given different rules by other staff, they struggle to follow those rules. However, when children are given three to five behavioral expectations consistent among staff, they are more likely to follow them.

The 1980s brought forth a need to improve the implementation of interventions for students with behavior problems (Sugai & Simonsen, 2012), leading to the development of programs to aid in the prevention of issues based on data-driven decisions. The Individuals with Disabilities Act of 1997 provided best practices for dealing with behavioral disorders and explicit social skills and communication procedures for behaviors that lead to higher academic achievement (Sugai & Simonsen, 2012).

PBIS

In 1998, districts began adopting a design of Positive Behavior Interventions and Support (PBIS) as a model for school improvement. At this point, a grant was established to form a national Center on Positive Behavior Interventions and Support. PBIS, which Sugai et al. (2005) defined as "a broad range of systemic and individualized strategies for achieving important social and learning outcomes while preventing problem behavior with all students," is more likely to be a successful method to improve academics and behavior when done with fidelity (Horner et al. 2009, Bradshaw, et al., 2012, Bradshaw, et al. 2008, Benner, et al., 2012).

Intending to intervene early so that students can catch up with their peers, many schools adopt the multi-tiered system of support (MTSS) framework to offer tailored support to struggling students. By ensuring that every student's needs are satisfied, MTSS is intended to give teachers the flexibility to use resources thoughtfully and effectively. It also uses data to continuously assess and improve the program's effectiveness (Adamson et al., 2018; Freeman et al., 2016; Harris, 2020). MTSS focuses on academics and the whole child, which means it supports students in socio-emotional growth, behavioral growth, and absenteeism (Eagle et al., 2014; Febrianti & Jufri, 2022; Steed & Shapland, 2019).

The good work and best practices already being implemented in a school site or district are streamlined and given cohesiveness by MTSS so that they are no longer carried out in isolation. Additionally, MTSS aids in bridging any gaps in best practices that may emerge due to issues, including scarce resources, trouble cooperating, and a lack of visibility of program success. MTSS is mentioned in the *Every Student Succeeds Act* (ESSA) as a strategy to improve teacher effectiveness (Department of Education, 2015). ESSA provides states with cash for professional development that teachers can utilize to implement MTSS.

Figure 2. 1

MTSS Implementation

All students will be screened as part of MTSS, which strives to address behavioral and academic difficulties by addressing the "whole child." The phrase MTSS is an umbrella term. It includes several multi-tiered systems of support: Response to Intervention (RTI), Socio-Emotional Learning (SEL), Mental Health, and PBIS (Center on PBIS, 2022). MTSS targets academic demands and behavioral, social, and emotional concerns. The support tiers make up a sizable portion of MTSS. MTSS is a framework rather than a particular curriculum. Key components of the MTSS framework include (Bohnenkamp et al., 2021; Eagle et al.; 2014; Freeman, 2016; Steel & Shapland, 2019):

- Early in each school year, all students should have a screening.

- Increasing levels of specific assistance for those who need it

- Plans considering a student's academic, behavioral, social, and emotional requirements.

• A school-wide strategy for student assistance in which teachers, psychologists, and other professionals collaborate to assess pupils and provide solutions.

• Professional development so that personnel can successfully intervene and track progress

• Regular evaluation of student's progress to determine whether they require interventions

• The application of evidence-based approaches at each level of assistance

The three tiers of MTSS are as follows (Center on PBIS, 2022):

Tier I-Whole Class. This category includes every student in the general education class. Teachers utilize proven methods of instruction. Students may work in small groups depending on their areas of need and where they excel. The school tracks each student's development. A struggling student will progress to Tier II.

Tier II- Small Group Interventions. Students in Tier II continue to participate in class activities for Tier 1 lessons. Nevertheless, through small group instruction, they receive more specialized support. It may be referred to as specialized instruction, or interventions. If a student is still not improving, that student can either stay in Tier II or advance to Tier III, depending on teacher discretion. Hawken et al. (2015) focused on implementing what is now a Tier II intervention, Check-In, Check-Out (CICO) on a large scale and how this portion of Tier II within PBIS modifies students' behavior. For this, however, the fidelity of PBIS is a factor in how well the Tier II CICO system works to modify behavior, and they noted several limitations. While the researchers did not mention a specific theory of study, they did mention many facets that narrowed the focus, such as fidelity of the program, training and coaching of teachers, and participation of the students. This led the researcher to believe that the worldview would be a transformative-participatory perspective (Decuir-Gunby & Schutz, 2016).

Tier III-Intensive Individualized Support. This tier may include one-on-one instruction or small group activities. Most students in Tier III still spend most of their day in general education classes. However, they might spend more time than before in a resource room with a specialized teacher.

Early screening and prompt support are the objectives of MTSS. Additionally, it can assist schools in differentiating between children who have received inadequate instruction and those who require special education. If students do not advance to Tier III, the next step is a special education review (Eagle et al., 2019; Harris, 2020).

Figure 2. 2

MTSS Umbrella

PBIS Tiers

Positive Behavioral Interventions and Supports (PBIS) is also a three-tiered framework used to improve student behavior and academic success through the use of data, systems, and practices affecting student outcomes every day. First, PBIS is a dedicated approach to improving positive behavior in schools rather than having a focus on punishment. The core aspect of PBIS

is to teach students strategies through positive behaviors in all areas of the campus, such as in classrooms, on the bus, and at the lunch tables, so students understand what is expected of them. Because of this understanding, students' behavior improves, leading to fewer suspensions (Horner et al., 2020).

School sites gradually follow tiers as they implement PBIS yearly (year one-Tier I, year two-Tier II, year three-Tier III) until the site becomes a school in sustainability. At this point, the school should be implementing all tiers with fidelity.

Tier I practices and establishes a foundation of regular support while preventing unwanted behaviors. All students in the school should be included in Tier I interventions. These are universal for both behavior and academics.

Tier II practices and systems support students at risk for developing more severe problem behaviors or academic challenges. Tier II supports help students develop the skills they need before behavior or academic problems begin. Tier II interventions are selective for both behavior and academics.

In Tier III, students receive intensive, individualized support to improve their behavioral or academic outcomes. Tier III relies on formal assessments to determine a student's needs. Only a few students should be included in Tier III interventions, and they are targeted for both behavior and academics (Center on PBIS, 2022).

Figure 2. 3

PBIS Three-Tiered Model
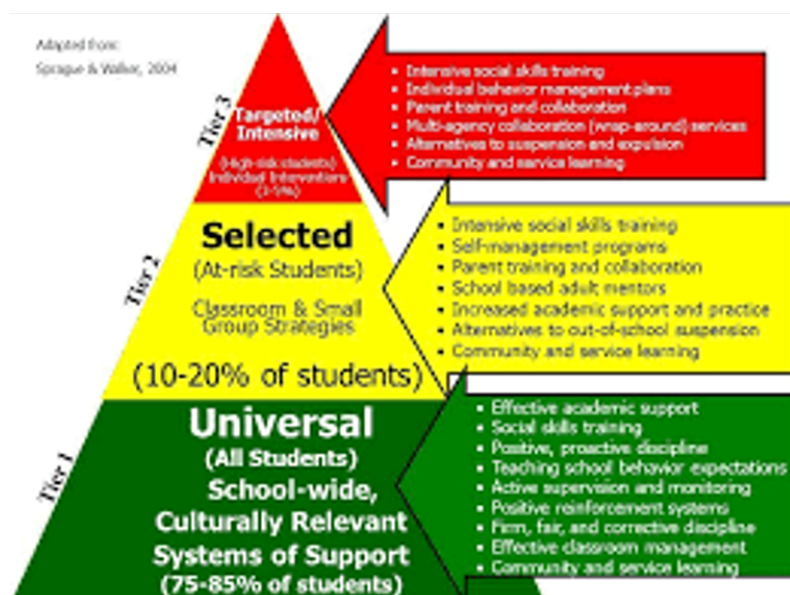
Implementation and Strategies

In order to implement PBIS with fidelity at a school site, specific procedures must be taken. The most critical step in implementation is to create a PBIS Leadership team. The PBIS Leadership team should consist of staff (teachers, administrators, and other school staff members) and parents within the school who are willing to and committed to establishing PBIS (Center on PBIS, 2022). The team should convene monthly and have specific goals and roles.

The roles of the leadership team should include: (Center for PBIS, 2022)

- Team Leader-starts, the meeting, reviews focus, facilitates, and is the primary contact for the team

- Recorder-takes notes for the team

- Timekeeper-monitors the time during the meeting

- Data Specialist-has access to the data from the school-wide system

- Behavior Specialist-assists in analyzing data with data specialist

- PBIS Communications liaison-person who communicates between team and staff

- PBIS Coach-external, a district-level specialist who aids in facilitating

- Administrator-provides planning time, feedback, and support

- Parent liaison should be a part of the team to assist in Tier 1 support

The PBIS Leadership team should meet once a month to do the following (Center on PBIS, 2022)

- Analyze data that has been collected regarding behavior and academic performance

- Make changes to the database for collected data and change based on what is working

- Create solutions for serious issues based on data collected

- Outline actions for the development of a plan

- Monitor progress levels of students in Tier II or Tier III

- Review best practices

- Create or review goals for the future based on staff suggestions

- Review anything that is not working well or changes to be made to the PBIS plan

When implementing PBIS, data must be reviewed by the team to know if the rate of misbehavior is declining among students. School districts have behavioral systems, such as office referrals, behavior charts, or classroom management systems. This data should be used when initially implementing PBIS. After initial implementation, PBIS data should continually be reviewed (Bradshaw et al., 2012). PBIS is designed for the team to identify unwanted behaviors and create positive support systems that motivate students to improve their behavior. The teams can localize the issues by looking at data trends and finding the undesired behavior in each setting. Research also suggests that teachers keep written records of behavioral changes that

occur under PBIS to assist the team with identifying incentives to strengthen the system (Mitchell et al., 2018; George & Kincaid, 2008; Lewis & Sugai, 1999).

Once the PBIS team is set, there must be staff buy-in. If the school site staff does not believe PBIS can work, the initiative to implement the program will falter. Buy-in begins with the administration and with the entire staff and students. The administration must listen to the staff's concerns and supply information to manifest how PBIS can change the school culture. Without staff buy-in, the fidelity of the PBIS is in jeopardy (Chafouleas et al., 2007; Spaulding et al., 2010).

Establishing school-wide expectations and goals for a school site can be complex. Expectations and goals should be explicit and observable (Fairbanks et al., 2007; Lewis & Sugai, 1999; Swoszowski et al., 2007); all students should be able to achieve goals independent of grade level. PBIS goals may be adaptable within classrooms, but students should be involved in the planning of these goals in order to take ownership. Because of this, teaching behavior expectations to students should be intentional. While behaviors look different in various situations, they should continue to reflect the school's goals (Christenson & Havsy, 2004).

The recognition of positive behaviors expressed by students needs to be effortless. To establish an efficient rewards system, school sites must develop a policy and procedure to be implemented among all staff. The policies and procedures should list and define each behavior, stating how they are rewarded. According to Debnam et al. (2009), one of the most effective ways to build reinforcement for behavior is to include students in the decision-making process for rewards. Understanding the motivation of the students involves taking into account the ages of the population, interests, and community background (Bruhn, Lane & Hirsch, 2014; Debname, Pas, & Bradshaw, 2009; George & Kincaid, 2008). School sites may hold assemblies,

question students, or hold votes to determine what reinforcements students prefer. This is one of

the reasons PBIS is different from other behavioral models.

Once reinforcements are set, staff and leadership can set short-term and long-term

attainable student goals. George and Kincaid (2008) state that educators need to be cautious not

to move on to new goals quickly. Introduce students to goals, incentivize them, and develop

them into habits before moving forward. Pay close attention and give students plenty of time to

learn the basics through repetition and reinforcement. Start with target behaviors and work on the

behaviors until significant improvements are observed. The main idea, as presented by The

Center on PBIS and other researchers (Cheney et al., 2008; Kutash et al., 2006; Lehr et al., 2003;

Lewis & Sugai, 1999; McIntosh et al., 2009), is that students must be rewarded quickly and often

for achieving goals. Always reward positive behavior in school when meeting expectations; that

is the only way to obtain results.

A PBIS initiative is a commitment and needs consistent implementation to maintain

fidelity. Administration, teachers, and staff need to apply the principles of PBIS throughout the

school year (Morse et al., 2004; Reschly & Christenson, 2006). This will include coaching for

school staff who struggle with implementation. Fidelity in implementation is essential if the

program is to be successful. Establish routines and procedures for the PBIS initiative, so students

know what to expect.

Teaching stakeholders about Tier I, Tier II, and Tier III should include instruction on

school-wide expectations, acknowledging positive behavior, correcting negative behaviors, and

seeking assistance (Christenson et al., 2000; Lewis & Sugai, 1999). Making this part of a

professional development calendar will help ensure that every staff member is on the same page.

One key to maintaining fidelity with PBIS is continuous training of the Leadership team or staff, even when the school site has entered sustainability. There are always new things to learn and new PBIS incentives to try. The best way to build a robust PBIS system within a school system is to invest in making it stronger as often as possible by following the critical guidelines as laid out in the PBIS blueprint (Hawken & Horner, 2003; Lehr et al., 2003; Lewis & Sugai, 1999). For example, one of the long-term goals of PBIS is the reduction of discipline referrals. Proper management of PBIS will eventually get a school site to this position, but administrators must deal with behavior in a positive manner (Lewis & Sugai, 1999; Wolfe et al., 2016). One goal is to create specific processes that move challenged and challenging students toward an explicit goal.

Understanding how well the PBIS initiative performs is practically only possible with reliable data since data is necessary to make decisions. During this process, questions must be continually asked: reward systems, reduction in discipline referrals, student point redemptions, what is working, what needs to change, and where improvement is needed. Monitor school progress throughout the year to maintain fidelity. School site administrators should conduct surveys of staff, teachers, students, families, and community members regularly. Stakeholders' input regarding the initiative will help to see where adjustment is needed and what is working (Lewis & Sugai, 1999; Wolfe et al., 2016).

Misconceptions of PBIS

The research follows the guidance of the transformative-participatory perspective. For example, both Acosta et al. (2019) and Hawken et al. (2015) believe in the multiple truth that additional factors can play an essential part in the role of behavior modification for a child. It does not necessarily lie solely within a school-wide behavior plan, even though that may be the

primary factor that makes the most significant impact on their behavior. Lotfizadeh et al. (2018) also followed the transformative-participatory perspective. Children must participate in their journey to transform their behavior, but there are multiple truths to make this a reality. However, several misconceptions about PBIS are brought to light through Sugai & Simonsen's data (2012).

The first misconception is that PBIS is an intervention. While PBIS consists of interventions that help to improve both behavioral and academic performance, it should be considered a framework that includes data-driven decision-making. PBIS is comprised of interventions that have been shown to improve behavior and academic success. However, the program's design is to provide the means of selecting, organizing, and implementing these practices through student outcomes and problem-solving (Center on PBIS, 2022; Sugai & Simonsen, 2012).

Another misconception is the fact that extrinsic rewards lessen intrinsic motivation. Sugai & Simonsen (2012) found that although intrinsic motivation is difficult to understand and analyze from a behavior-analytic viewpoint, there is minimal evidence that positive reinforcement, prizes, acknowledgments, and recognition have detrimental consequences on academic and social behavior accomplishment.

The third misconception is that PBIS was developed for students with disabilities. Although it came about with the IDEA Act of 1997, practices implemented within PBIS have been used since the 1960s for behavioral therapy (Colvin et al., 1993; Lewis et al., 1999; Simonsen et al., 2008).

Additionally, under the PBIS framework, educators assume discipline is not allowed, which is a primary concern (Adamson et al., 2018; Garnett et al., 2020; George & Kincaid, 2008; Gresham, 1991; Irvin et al., 2006; McCart & Turnbull, 2002). Many feel that adopting a PBIS

program will require them to alter their professional practices drastically. PBIS is not designed to replace disciplinary measures but to complement them to minimize long-term misbehavior. The objective is to establish a school environment where discipline is less of a worry (Adamson et al., 2018; Center on PBIS, 2022; Garnett et al., 2020; George & Kincaid, 2008; Gresham, 1991; Irvin et al., 2006; McCart & Turnbull, 2002).

Theoretical Framework and PBIS

Organizational Change

For an organization beginning to implement PBIS, the shift in perspective is evolutionary (Burke, 2018). However, it can also be timid unless done appropriately. According to Burke, "systemic change is often the organization's culture," not the individual itself (p. 61).

Kotter implements his theory of Organizational Change in methodical steps to ensure this change is systemic.

Figure 2. 4

Kotter's Model of Change
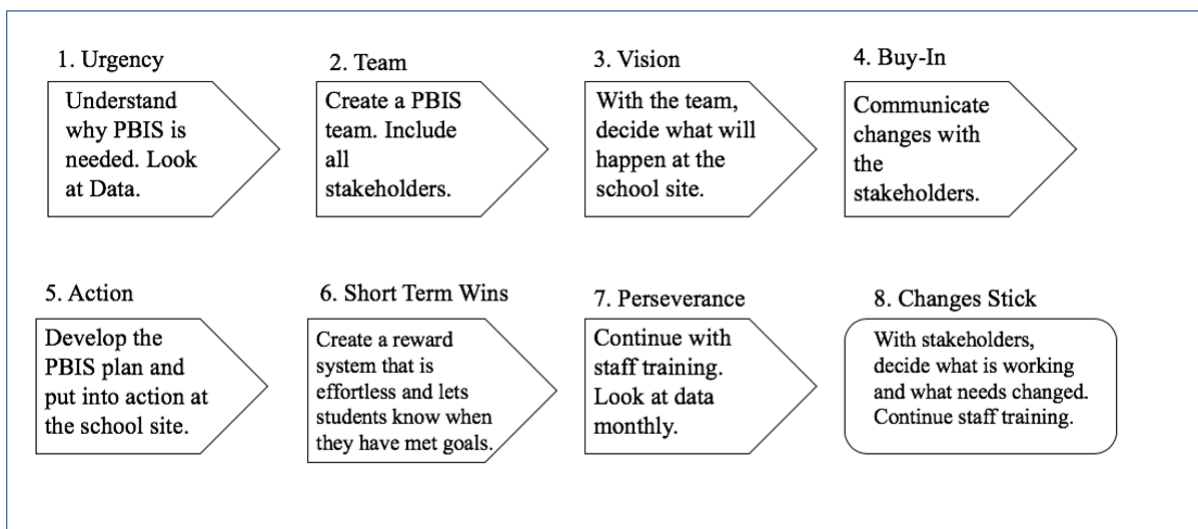
Step 1: Create a Sense of Urgency

The first step in creating a successful change within an organization is to identify where changes need to be made due to future problems that may or may not be foreseen by the whole group. Next, leaders should keep open communication and seek opportunities to convince others of the urgency. Next, they need support through data with a plan of action in mind (Burke, 2018; Kotter & Cohen, 2012; Kotter & Rathgeber, 2017).

A school district should meet to review and discuss the rise in suspension rates across the district prior to implementing any behavior programs (Center on PBIS, 2022). They should begin to discuss the issue with the correct departments, noticing patterns and sensing a need to solve this problem. Patterns such as high suspension rates in elementary and middle schools could lead to other disciplinary actions in high school and high dropout rates. In order to combat that issue, decisions can be made for a district to begin the implementation of a behavior program under the guidance of the Depart of Education (Center on PBIS, 2022; Sugai & Simonsen, 2012).

Showing others the need for change through evidence, such as data, creates a sense of urgency for the district to move forward (Kotter & Cohen, 2012). However, the lack of immediacy leads to complacency or lack of urgency. People feel that urgency is only necessary if there is a possibility for solutions. (Kotter & Cohen, 2012). Additionally, showing others the need for change through evidence such as data creates a sense of urgency (Kotter & Cohen, 2012). Keeping that line of communication open presented options for people skeptical about change.

Step 2: Form a Team

Step two in the Organizational Change process is to build an effective guiding team (Burke, 2018; Kotter & Cohen, 2012; Kotter & Rathgeber, 2017). In order to do this, an organization should look at who the change leaders are and involve key stakeholders.

In order to move forward, schools needed to build their PBIS teams. However, an effective team is "made up of the right people, and it demonstrates teamwork" (p. 43, Kotter & Cohen, 2012), so they could not just choose people who wanted to be part of a team. "Leadership skills, a sense of humor, knowledge of data interpretation, a basic understanding of behavior change principles, and the ability to delegate tasks, that is sometimes a lot to look for in a group." Suppose a school site needs to help particular model prerequisites of leadership skills. In that case, it will need help drawing in the right people. (Kotter & Cohen, 2012).

Step 3: Ensure the Vision is Defined

The purpose of step three is to determine the organization's core values when the changes take place. In other words, how can the organization see the future? Visions must be clearly defined and well-articulated (Burke, 2018; Kotter & Rathgeber, 2017). They should be easily understood so everyone can follow them.

One of the biggest challenges for schools comes in time management. School sites want to see change happen immediately and expect the vision to be immediate. In analyzing challenges, it should be noted that the vision often needs to be clearer to withstand the naysayers. Kotter and Cohen (2012) pointed out that visions should be clear enough for people to see how they will impact the future.

Step 4: Buy-in is Necessary

Change brings in a certain level of skepticism. Because of this, it is essential to communicate the change convincingly for team buy-in. In order to do this, both Kotter (2017) and Burke (2018) suggest connecting the vision through clarity and logic through step four; communication should be as "clear, simple, and accurate as possible" (Kotter & Cohen, 2012, p. 84).

Part of the challenges can begin when school staff is faced with the overabundance of information—too much information adds to the confusion in communication. Information needs to be narrowed down, allowing staff to obtain only the critical information necessary for the changes (Sugai & Simonsen, 2012). Leadership needs to listen to shared anxieties, help ease tensions, and create a path (Kotter & Rathgeber, 2017, p. 58). When the staff's concerns/feelings are addressed, they will take ownership and are willing to change direction (Burke, 2018; Kotter & Cohen, 2012).

Step 5: Put the Plan into Action

In step five, an organization wants to find individuals who have the confidence to empower confidence in others and can begin to create change. Step five is where organizations see the bulk of the change in action. There should be inspiration and recognition to boost morale and continue the movement (Burke, 2018; Kotter & Cohen, 2012).

The biggest challenge is when a school site or district needs to see the movement. When people are discouraged, they do not feel empowered. However, Kotter & Cohen mention on page 119, "Do not try to do everything at once" (Kotter & Cohen, 2012). In order to combat that "barrier of the mind," as Kotter calls it, PBIS requests administrators to use that to create a

feeling of accomplishment and give action (Kotter & Cohen, 2012, p. 110; Center on PBIS, 2022).

Step 6: Celebrate Small Wins

The purpose of step six is to reward people as they move forward through the process of change. By feeling a sense of victory in small goals, an organization can understand that achieving a larger vision is possible and rid itself of the negativity of possible failure. However, the process requires small targets and making it meaningful for everyone. Kotter and Cohen explain that all persons need to be part of the team to appreciate the win; it should not just be "meaningful to us, but much less to others" (Kotter & Cohen, 2012, p. 132). However, the more visible the win is, the more valuable the change will be. (Burke, 2018; Kotter & Cohen, 2012).

Step 7: Keep Moving Forward

While it is important to celebrate small achievements along the way, an important idea to realize is not to stop. Kotter (2017) and Burke (2018) remind us that we must keep moving forward in step seven. Nevertheless, sometimes this can fail due to exhaustion. Organizations must be aware of those pitfalls and prevent them from occurring (Burke, 2018; Kotter & Cohen, 2012). For PBIS to work, it has to continue following the same path for several years (Center on PBIS, 2022).

Step 8: Make Changes Stick

The final step in Kotter's theory is to ensure that all changes are allowed to continue to grow and stay. In other words, changes have to "stick." For the organization to become successful in its change growth, they need to allow the change to become part of its everyday culture. A crisis like COVID can destroy a successful change and never let it "grow roots" (Burke, 2018; Kotter & Cohen, 2012). The challenge facing schools during the 2020 school year

was overwhelming. "Successful change is more fragile than we often think…" (Kotter & Cohen, 2012, p. 160).

<p align="center">**Conceptual Framework and PBIS**</p>

Transformational Leadership

Transformational leadership encourages a team for long-term success (Afsar & Umrani, 2019; Fullan, 2020; Kouzes & Posner, 2017; Northouse, 2016) as is needed to ensure the fidelity of PBIS. Transformational leadership inspires people to work together with a shared vision as a team. Fullan (2020) adds methodical steps in creating transformational leadership within a changing organization (Fig. 2.5). A leader must also be skilled in challenging people's preconceived ideas when it comes to implementing a behavioral plan change within an organization (Fullan, 2020; Kouzes & Posner, 2017; Northouse, 2016; Rais et al., 2022). Leaders can change opinions as long as there are clearly defined goals and present ideas by stimulating conversation. Fullan's (2020) nine steps for implementing change through transformational leadership influence enthusiasm, hope, and energy in a team (p. 9).

Figure 2. 5

Fullan's Process of Change Leaders

1. Be right at the end of the meeting.
2. Relationships first (too fast, too slow).
3. Acknowledge the implementation dip.
4. Accelerate as you go.
5. Beware of fat plans.
6. Behaviors before beliefs.
7. Communication during implementation is paramount.
8. Excitement prior to implementation is fragile.
9. Become a lead learner.

Fullan, 2020, p. 46

Step 1. Be Right at the End of the Meeting

The leader creating change within the organization needs to have all of the facts upfront rather than waiting to learn facts throughout the meeting. This is decisive leadership needed to create change. When implementing PBIS strategies, a transformational leader should start with all facts before deciding to implement the program (Fullan, 2020). Kouzes and Posner (2017) identify these as "clarifying values" for a leader (p. 69). In addition, a transformational leader must be authentic in their direction. "You cannot do what you say if you do not know what you believe" (Kouzes & Posner, 2017, p. 69).

Step 2. Relationships First

A transformational leader needs to be cautious when implementing a new strategy, such as a behavior program, but also listen and learn from people who have been in the school culture. Create a joint problem-solving team and make any changes a team effort. When buy-in for a program is necessary, such as PBIS, a transformational leader should listen to the concerns of stakeholders rather than create decisions for them (Fullan, 2020). Transformational leaders must

show "inspirational motivation" when communicating with stakeholders to create this shared vision and maintain buy-in (Northouse, 2016).

Step 3. Acknowledge the Implementation Dip

When a new change has been introduced, even if the planning has been thorough, it can take time to implement. There are new skills to learn and a learning curve to adjust for. Superficial changes can lead to the downfall of a great program. Transformational leaders must envision the future by allowing their staff to see what is ahead when changes occur (Kouzes & Posner, 2017; Rais et al., 2022).

Step 4. Accelerate as You Go

Even though there may be a dip during implementation, leaders must move their team forward. A transformational leader is not waiting for the 'dip' to occur but is adjusting for a successful turnaround (Fullan, 2020). Northouse (2016) states that a transformational leader is not a leader who waits but empowers their staff and stakeholders to move beyond what they believe is impossible.

Step 5. Beware of Fat Plans

Overplanning can not only impact the implementation but can also destroy student learning. A transformational leader needs to be aware of the size of plans as opposed to the quality of plans (Fullan, 2020). Kouzes and Posner (2017) reiterate this fact by saying, "don't change history" but invite other initiatives into the planning process. Look for innovative ideas from stakeholders that are not part of the planning process but arise as the moment presents itself (Kouzes & Posner, 2017, p. 167).

Step 6. Behaviors Before Beliefs

Just as a new teacher coming out of college enters a classroom with a set of beliefs, behaviors can change those beliefs quickly. Beliefs should be followed, not set aside, but also consider how implementation needs to adjust due to the behaviors of staff, students, parents, and school culture. Transformational leaders should look for behaviors when creating change (Fullan, 2020). For change to be successful, enlist others to share beliefs. A common vision should become a long-term interest for the school site when implementing a program (Afsar & Umrani, 2019; Kouzes & Posner, 2017).

Step 7. Communication During Implementation is Paramount

Once a change has been started, communication should also start (Fullan, 2020). Fostering collaboration creates a culture of trust. A transformational leader must spend time getting to know and understand the needs of the stakeholders and the school culture (Kouzes & Posner, 2017). If communication is strong, the leader will know two things: how the implementation is going and what is working (Fullan, 2020, p. 58).

Step 8. Excitement Prior to Implementation is Fragile

Look for small successes. Celebrate those successes and move forward when creating change. However, do not be afraid to admit mistakes and adjust plans (Fullan, 2020). Change can be overwhelming. Everyone needs to understand the direction of change in order to alleviate fear. Transitional leaders use small wins to move change forward (Kouzes & Posner, 2017; Rais et al., 2022).

Step 9. Become a Lead Learner

Fullan (2020, pg. 60) explains that leaders need to "listen, learn, and lead, in that order." Being an expert is great for leadership and is expected, but being an apprentice is necessary

when creating lasting change (Fullan, 2020).   Leaders should direct energy toward developing the group, building the capacity of educators to improve teaching while learning alongside what works and what does not. Becoming a lead learner is about helping others create change and innovation.

Summary

While behavior plans help modify behavior in students, teachers' attitudes toward the program also directly impact how the children perceive their behavior and how well they perform in school settings. Some of those include the Reality Therapy Model, the Love and Logic Model, the Ginott Model, the Kounin Model, the Jones Model, Character Education, Assertive Discipline, Logical Consequences, and other school-wide behavior plans. However, the most recent is Positive Behavior Interventions and Supports (PBIS).

While the research can continue to focus on how PBIS can maintain students' behavioral function within the school setting, additional research should be completed to see how teacher interactions and perceptions about the program impact fidelity. The true fidelity of the program needs to be maintained when teacher standards are at 85% or higher according to the program protocol (Center on PBIS, 2021), or else behavioral and academic success in students cannot be attained. Administrators must consider this as they begin and implement the program. Additionally, district personnel need to hold these standards accountable if this is something that they want to see changed in the future.

CHAPTER 3: METHODOLOGY

Mixed-Method Design

This research study is significant in education because understanding the fidelity of PBIS and the impact of behavior on academic achievement will directly impact the future of education. Researching the fidelity of PBIS implementation and the impact on student behavior and academic achievement is essential because education's primary focus is to ensure student success (Every Student Succeeds Act, 2022). The design that worked best with this research study was a modified version of the Convergent Parallel Design. The researcher saw the need to work with both teachers and administrators. According to DeCuir-Gunby & Schutz (2016), the benefit behind the Convergent Parallel Design is that quantitative and qualitative data are designed to support each other through the findings. In this case, the researcher examined whether the fidelity of PBIS impacted behavior and academic success quantitatively and qualitatively.

Figure 3. 1

A Modified Convergent Parallel Design
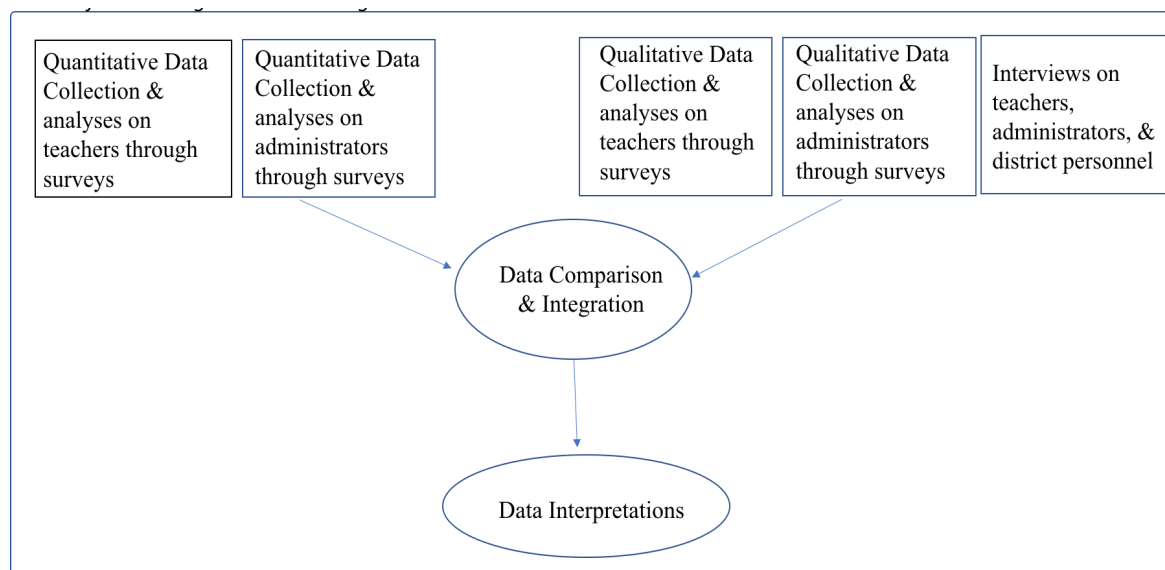
DeCuir-Gunby, Schutz, 2017

Research Design and Rationale

This study adopted a phenomenological research design within the parameters of a modified Convergent Parallel design. A Convergent Parallel design allowed the qualitative and quantitative data to be gathered in parallel. However, the different data types did not interact with each other but instead were analyzed separately to triangulate the results. This aided in supporting the claims made using various forms of data (Deguir-Gunby & Schutz, 2017). The aim of collecting the qualitative data was to study the common thread of lived experience by several teachers and administrators in their experiences with PBIS and how it related to the fidelity of the program (DeCuir-Gunby & Schutz, 2016). The purpose of the quantitative data was to study how this phenomenon interacted with student behavior and directly impacted student achievement. The qualitative data was used to indicate trends in variables showing fidelity among educators for behavior and academic performance within PBIS settings for academic success, personal skills, and students' lifelong success. The quantitative data examined

the correlation between a set of variables within student academic data and behavioral data in a PBIS setting.

Participants

Within a large urban district in southern California, the research focused on elementary schools implementing PBIS. The district has 30 out of 45 elementary schools participating in the PBIS program. From there, schools were sorted into current PBIS tiers: 12 in tier 1, 7 in tier 1.5, 4 in tier 2, 4 in tier 3, and 3 in sustainability. These schools comprised 579 teachers within grades TK-6 and 33 administrators. Of these participants, 378 teachers and 18 administrators participated in the study. Student academic data from these sites was obtained at the district level, while student behavioral data were obtained from the school site administrators.

Instrumentation and Measures

The instruments used to measure students' test scores were the district benchmarks for trimesters 1, 2, and 3. District benchmarks are available for kindergarten-sixth grade and are comparable to the California Assessment of Student Performance and Progress (CAASPP) exams. However, CAASPP data is only available for grades third-sixth. Data also looked at referrals and suspension rates, as noted by administrators. The instrument used for the self-measurement of PBIS fidelity for teachers and administrators was a survey through google forms based on research questions developed by the researcher.

In addition to the teacher and administrator surveys, additional qualitative data will be accomplished through volunteers, as noted on the survey. One additional district personnel who deals with the PBIS program was requested to be interviewed. In order to gain a deeper understanding of the direction the district is headed with PBIS for the future, district personnel were additionally interviewed. Interviews were scheduled voluntarily and held individually on

Zoom without participant video. Interviews were recorded by consent to ensure correct qualitative coding.

Survey

A survey was generated through Google Forms. The survey consisted of 3 sections: Student Behavior, Academic Achievement, and Teacher Training and Perceptions. Each section consisted of four-six questions on a Likert scale with four open-ended questions. The last section of the survey was demographics. There are separate surveys for teachers and administrators with an option to select to be added for an interview (See Appendix A, B). The survey contained questions specific to quantitative data and open-ended questions for qualitative data.

Table 3. 1

Survey Questions by Collection Method

Research Questions	Instrument	Data Collection
PRQ: What factors impact the fidelity of PBIS implementation over time?	Teacher Survey Questions 1, 6, 8-10, 16-23, 26-28 Administrator Questions 1, 6, 8-12, 18-28	Quantitative • Teacher Survey: 1, 8, 9, 10, 16, 17,18, 19, 20, 21, 26 , 29 • Administrator Survey: 1, 8, 9, 10, 18, 19, 20, 21, 22, 24, 25, 26, 29 Qualitative • Teacher Survey: 6, 22, 23, 27, 28 • Administrator Survey: 6, 23, 27, 28
SQ1: What is the correction between the fidelity of PBIS and student behavior?	Teacher Survey Questions 2-5, 7, 8, 24, 25 Administrator Questions 2-5, 7-10	Quantitative • Teacher Survey: 2, 3, 4, 8 Administrator Survey: 2, 3, 4, 8, 9, 10 Qualitative • Teacher Survey: 5, 7, 24, 25 • Administrator Survey: 5, 7
SQ2: What is the correlation between the consistent use of PBIS and academic achievement?	Teacher Survey Questions 9-15, 24, 25 Administrator Questions 11-17	Quantitative • Teacher Survey: 9, 10, 11, 12 • Administrator Survey: 11, 12, 13, 14 Qualitative • Teacher Survey: 13, 14, 15 • Administrator Survey: 15, 16, 17

Changes to Survey from Pilot

A pilot study was conducted outside of the testing district using the same parameters to ensure the validity of the survey. The pilot study ran from March 21,2022-April 1, 2022. It

included 25 teachers and ten administrators. Questions were edited per recommendations from participants of the pilot survey.

Interview Questions

Those teachers and administrators who volunteered were interviewed through Zoom on an individual basis to retain anonymity. In addition, district personnel who work directly with PBIS were offered an interview in lieu of a survey. (See Appendix C). Since interviews were recorded, participants were asked to turn off their cameras and change their screen names to ensure anonymity. Informed consent was given verbally after the researcher had shared it on screen for the participant to read.

Validity and Reliability

Validity is generally defined as the trustworthiness of the assessment whereas reliability is defined as credibility (DeCuir-Gunby & Schutz, 2016). A traditional way to look at validity and reliability is that assessments measure what they say they are measuring and can be used multiple times in the same way.

District Benchmarks have been compared to the CAASPP exams for multiple years, showing the validity and reliability of their data to analyze academic performance over a prolonged period. The district benchmark and the CAASPP correspond to the skills and material that students learn and perform daily in the classroom. Each grade level has specific standards that outline what students must know and comprehend by the school year's conclusion, and tests are aligned with these objectives. The results reveal where students require further assistance to reach grade-level standards and where they excel.

Questions developed on surveys as well as the interview questions were adapted from similar questions used on the School-Wide Positive Behavior Interventions and Supports

(SWPBIS) Tiered Fidelity Inventory Walkthrough Tool Interview and Observation Form (PBIS,

2019) used to analyze the school fidelity of the PBIS program and a review of the literature to

ensure that answers are given help to inform the research. The SWPBIS tool has been analyzed

throughout the United States for performance and has proven valid and reliable as a tool for

fidelity. To confirm the reliability and validity of this study, the researcher applied a

triangulation of multiple data sources, mainly through subjects (such as teachers, administrators,

and district personnel) who are all involved with the use of PBIS (Creswell & Poth, 2018).

Triangulation of data is essential because it improves data validation by cross-verification from

different sources by assessing the consistency of data collected.

Data Collection

Academic student data were collected from these sites through a secondary source.

Secondary data consisted of district trimester benchmarks for grades first through sixth. In

addition, behavioral student data regarding referrals, suspensions, and expulsions were collected

from site administrators through an Aeries query using a set parameter of dates.

All interviews were given in August 2022 after the researcher reviewed the data. Surveys

were sent through email to administrators requesting their staff to take five minutes during a staff

meeting to complete the survey (Appendix D). All open-ended questions allowed participants to

give detailed explanations regarding the program. If there was not a staff meeting allotted, a

request was made to have the administrator forward information to staff.

Surveys were administered through Google Forms. This meant that participants had to

read all the questions themselves and provide answers. Additionally, because Google Forms is a

web-based program, it allows all data to be stored digitally in a secure database. Therefore, all

data was easily transferable to Google Sheets or Excel format and Google Docs for Analysis.

Data Analysis

Qualitative Data

Qualitative data was collected through interviews and surveys. After data collection from surveys and interviews, the researcher input open-ended responses into Delve. Delve identified emergent ideas based on responses regarding academics and behaviors within the fidelity of the PBIS program. Then, the data were classified into themes using the Delve program. Upon finding themes, the researcher analyzed interpretations and combined themes as needed to locate the phenomenon. The survey and interview transcripts were coded by hand through the online program Delve to ensure that the researcher codes to the same themes.

Figure 3. 2

Creswell & Poth Data Spiral

Data collection

1) Gather data from teacher and administrator surveys/interviews

2) Memo emergent ideas based on responses regarding academics and behavior within fidelity of the program

3) Classify into themes not already set by PBIS codebook

4) Develop and assess interpretations and combine as needed

5) Examine the themes to locate the phenomenon

Account of findings

Creswell & Poth, 2018

Quantitative Data

Quantitative data was gathered from surveys and analyzed for comparison to qualitative data through connecting themes. Data were directly downloaded from Google Forms into an Excel spreadsheet and analyzed with StatsPlus. Stats Plus transformed the data into displayable

data. In this study, descriptive univariate and multivariate data were analyzed to determine the facets of the quantitative data. Survey data for quantitative data was linked to a five-point Likert scale regarding participant beliefs on the PBIS program at their school site. The researcher could link this data to qualitative data to produce the phenomena.

Univariate data, such as frequency tables and measures of central tendency, was used to describe variables such as demographic data, including the number of years teaching or in administration, gender of participants, participants who plan on going into administration, and amount of PBIS training as well as how participants are trained prior to implementation.

Multivariate data, such as correlations and one-way ANOVA data, was used to describe variables such as the number of years implementing PBIS and Likert scale answers for fidelity, behavior, and academic success; the number of years teaching with Likert scale answers for fidelity, behavior, and academic success; student achievement scores from district benchmarks and answers to Likert scale answers for behavior; student achievement scores from district benchmarks and answers to Likert scale answers for academics; the correlation between site administrator reports of behavior data and Likert scale answers for behavior; demographic data to Likert scale answers for fidelity, behavior, and academic success.

Ethical Issues

During each stage of the study, ethical issues were considered. In compliance with the Institutional Review Board (IRB) regulations, permission to conduct research was granted (Appendix E). Informed consent was supplied to all participants digitally, and they were allowed to opt out of participating in the study. Participants agreed by selecting a checkbox marked yes or no on the survey. This form provided information regarding participants' rights, involvement in the study, and how their rights and data will be protected (Appendix F). Since participation

was voluntary, this means that participants were not coerced in any way. By selecting yes, participants were aware of their rights to participate in the study. Participants were free to withhold information or seek clarification on any item that was not clear.

Confidentiality was maintained throughout the study. Participants did not provide names on any surveys and were assigned based on school site location. Confidentiality was maintained so participants could not be linked to specific classroom data. In addition, all qualitative data used in coding was confidential and coded as "[school site] participant A-Z."

Many teachers were concerned about the adverse effects of co-worker discussion within the district, and without confidentiality being at the forefront of the research, it would not be completed. This is one reason the CITI website clearly states that "Consent forms should clearly explain who will have access to identifiable data, both in the present and in the future, and describe any future uses of the data." (Hicks, 2019). In addition, maintaining confidentiality lessened the risk of participants feeling that data would be released to district administrators, school site administrators, or school staff.

School site administrators must understand that the researcher would not release teacher-specific information or site-specific data. As a step further with confidentiality, Hicks explains, "To ensure that potential subjects can truly make informed decisions about whether to take part in research, issues of comprehension, language and culture need to be considered in addition to the elements of information provided in the regulations." (Hicks, 2019).

The location of the study included one large urban school district in southern California where the researcher is employed, potentially creating bias. One of the biggest problems that the researcher faced was the issue of confidentiality. During the survey or interview, participants were instructed not to disclose their identity or school location. The use of confidentiality

ensures that the information provided cannot be traced back to the individual who submitted it. In addition, participant anonymity was strengthened by encoding their replies. Participants were informed that the data summary would be given to the professional community, but replies would be kept anonymous.

Summary

When done with fidelity, it was expected that the implementation of PBIS would be reflected in increased academic assessments such as district benchmarks. Additionally, it was expected that the implementation of PBIS, when done with fidelity, would be reflected in a decrease in behavioral issues monitored through referrals, suspensions, and expulsions. Therefore, this study adopted a phenomenological mixed-method Convergent Parallel design. The study was conducted in a large urban school district in southern California and sampled 378 teachers and 18 administrators from 30 elementary schools with varying levels of PBIS implementation.

The academic instrument used in this study for student test scores was district benchmark data. Teachers and administrators were given a survey and interviewed on a volunteer basis, as noted on the survey. Since many in the district knew the topic, the researcher was approached by school site administrators requesting data to 'help their school sites' with improvement. While the researcher would appreciate helping the improvement of the district and the many sites implemented, informed consent clearly states that confidentiality ensures that any information obtained during this process is to remain anonymous and cannot be used for that purpose.

Qualitative data were collected and analyzed by hand through Delve to locate themes and find the phenomena. Quantitative data was collected and analyzed to connect to qualitative data

through the connection of themes. Confidentiality was established and maintained throughout the

process in accordance with the Institutional Review Board (IRB).

CHAPTER 4: DATA AND ANALYSIS

This chapter contains the results of the phenomenological, mixed methods study

conducted to answer the research questions:

1) What factors impact the perceived fidelity of PBIS implementation over time?

a) What is the site administrator/leader's role?

b) What is the teacher's role?

i) What is the teacher's perception of the parent's role in PBIS?

c) What is the district's role?

2) What is the correlation between the perceived fidelity of PBIS implementation and

student behavior?

3) What is the correlation between the perceived fidelity of PBIS implementation and

academic achievement?

a) Does positive behavior directly impact student achievement?

This chapter also examines how the analysis was consistent with organizational change

theory and transformational leadership. The methodology used to examine survey and interview

transcripts to identify themes is further discussed in depth as it was discovered from the data.

The chapter also includes anecdotes from the individual interviews that highlight significant

themes and tables that offer key data.

Description of Participants

The administered questionnaires were completed by 396 participants (378 teachers and

18 school site administrators) at K-6 school sites that were identified as PBIS participating

schools during the district's 2021-2022 school year. Of the 378 teachers, 22 were further self-

classified as Special Education teachers. Figure 4.1 and Table 4.1 detail the demographics of the

participants. The sample population for teachers was 92.8% females (n=351) and 7.2% males (n =27). The sample population for administrators was 50% female (n =9), 44% male (n =8), and 6% decline to state (n =1). The mean years for teaching was 17.622 years and the mean years in administration was 10.111 years. Teacher participants consisted of grades from kindergarten through 6th grade. Of those participants, 11.6% reported teaching Kindergarten (n =44), 13.8% taught 1st grade (n =52), 17.2% taught 2nd grade (n =65), 14% taught 3rd grade (n =53), 14.3% taught 4th grade (n =54), 13% taught 5th grade (n =49), and 16.1% taught 6th grade (n =61).

Figure 4. 1

Participants by Grade level N=378
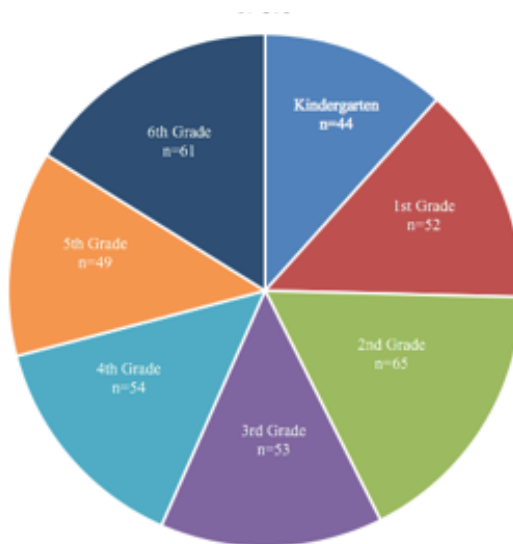
Table 4. 1

Years in Teaching or Administration

Grade	n	μ Mean	$\overline{X}$ Median	σ Standard Deviation
K	44	17.727	16.500	6.701
1	52	16.327	16.000	6.330
2	65	19.031	20.000	6.612
3	53	18.151	18.000	6.374
4	54	16.981	16.000	7.115
5	49	15.367	15.000	7.274
6	61	19.066	19.000	7.033
Teachers	378	17.622	17.000	6.853
Admin	18	10.111	9.500	7.623

Research Question 1

Research Question 1 was: What factors impact the perception of fidelity of PBIS implementation over time? The sub-questions were: What is the site administrator/leader's role? What is the teacher's role? What is the teacher's perception of the parent's role in PBIS? What is the district's role?

The first aim of this study was to discover which factors impacted the perception teachers and administrators had of fidelity regarding PBIS implementation at their school sites over time. Table 4.2 details the breakdown of implementation years reported by teachers, school site administrators, and the district. Teacher participants reported their school sites to be in either planning stages (6.9%, $n =$26), Year 1 (41%, $n =$155), Year 2 (9.5%, $n =$36), Year 3 (14.8%, $n =$56), or Year 4+ (6.6%, $n =$25). However, 21.2% of participants reported needing clarification

on which year of implementation they were currently participating in (n =80). School site administrators reported planning stages as 11.11% (n =2), 11.11% for Year 1 (n =2), 22.22% for Year 2 (n =4), 11.11% for Year 3 (n =2), and 44.44% for Year 4+ (n =8). No school site administrators reported unsure responses. The district did not report any school sites in the planning stages. The district reported 63.33% of schools in Year 1 or Year "1.5" (currently repeating Year 1 or had not yet completed implementation). Of these schools, 40% were Year 1, and 23.33% (n =12) were Year 1.5 (n =7). The district reported 13.33% to be in Year 2 (n =4), 13.33% in Year 3 (n =4), and 10% in Year 4+ (n =3). District personnel (Coordinator, Office of Student Services) that was interviewed reported a variation in the years of implementation due to an eight-year training cycle instead of a six-year training cycle. While some school sites may consider themselves in the "planning stages" of PBIS, those sites are still considered Year 1 by the district since they are currently being trained and are implementing some form of PBIS, such as giving tickets to students for positive behavior.

Table 4. 2

Years of PBIS Implementation

Variable	Category	Frequency	Percentage (%)
Teacher	Planning	26	6.88%
	Year 1	36	9.52%
	Year 2	56	14.81%
	Year 3	25	6.61%
	Year 4	80	21.16%
	Unknown	155	41.01%
Site Administrator	Planning	2	11.11%
	Year 1	2	11.11%
	Year 2	4	22.22%
	Year 3	2	11.11%
	Year 4	8	44.44%
	Unknown	0	0%
District	Planning	0	0%
	Year 1 or 1.5	19 (12 in 1, 7 in 1.5)	63.33% (40% in 1, 23.33% in 1.5)
	Year 2	4	13.33%
	Year 3	4	13.33%
	Year 4	3	10%
	Unknown	0	0%

Administrators and Teachers

School site administrators were asked which strategies were used at their sites to involve teachers who were not supportive of PBIS implementation. Table 4.3 details the site administrators' qualitative responses, and Table 4.4 details the district's qualitative responses.

Table 4. 3

Site Administrators Support of Teachers During PBIS

Site Administrator Survey Question: In what ways do you support teachers who are not supportive of PBIS?	
Administrator W	*Spotlight on PBIS strategies at monthly staff meetings.*
Administrator Z	*Grade level teams work together to plan and support PBIS. There is one person per grade level responsible for working with their team in implementing the expectations and positive practices that create a positive learning environment.*
Administrator EE	*They have lengthy conversations with the principal. Basically, we have a discussion as to why they are not supportive and how I, as the principal, can help them be successful.*
Administrator L	*Professional Development, Collaboration, Reminders/Discussions with individual teachers*
Administrator F	*We revisit the "why" of whatever it is that teachers might not be supporting - sometimes at a meeting or occasionally I just meet with a teacher. Usually, it is the protocol for giving referrals.*
Administrator R	*Conversations with teachers, provide opportunities for teachers to participate in PBIS activities such as Flag Friday and CICO mentoring.*
Administrator D	*We have a PBIS team, and each staff meeting has time dedicated to it.* Administrator X *through additional training, and support from TOSA.*
Administrator C	*We will continue to work with them by equipping them with the tools to be successful with PBIS.*
Administrator W	*There is no PBIS team at my site - just me. I try to involve the teachers as much as possible through reminders at staff meetings since nobody is interested in being trained and leading a team. I generally can't bring myself to ask teachers to do one more thing after this busy year of staff shortages and carrying extra weight to cover classrooms and playgrounds.*

Table 4. 4

Support of Administrators for Staff

District Personnel Interview: In what ways do support administrators who are having difficulties supporting staff with PBIS?	
District Personnel	Use strategies like we use in instructional support Peer teachers Staff meetings (intentional meetings planned around PBIS, spotlight teachers around PBIS) Have your PBIS team come up with a strategy or plan to support teachers Think of what doesn't work and how it can be changed Go back to the research; 80% buy in is what is needed for PBIS Do what you normally do to make sure to make sure it's worth while, invite the district in if necessary. Think: Are you doing the intended outcome

When asked if PBIS helped improve teacher interactions during the school year (with peers), site administrators were 16.67% neutral, 50% agreed, and 33.33% strongly agreed. When teachers were asked the same question, 19.33% strongly disagreed, 13.76% disagreed, 26.98% were neutral, 35.19% agreed, and 4.76% strongly agreed (Table 4.5). Site administrators can

walk classrooms and observe teachers in action with students using PBIS. However, teachers observe peers' interactions in different ways (collaboration, staff meetings, trainings).

Table 4. 5

Perceived Improvement of Teacher Behavior (n=396)

Scale	Site Administrator Frequency	%	Teacher Frequency	%
Strongly Disagree	0	0	73	19.31%
Disagree	0	0	52	13.76%
Neutral	3	16.67%	102	26.98%
Agree	9	50.00%	133	35.19%
Strongly Agree	6	33.33%	18	4.76%

Perception of Parent Involvement

According to the guidelines of PBIS, parent involvement is critical in Tier I. Therefore, a parent should be an active member of the PBIS team during these meetings (Center on PBIS, 2022). However, when asked if parents participated in PBIS, 47.09% of teachers said no, 14.55% said yes, and 38.36% were unsure (Figure 4.2). In addition, teachers and site administrators stated that parents were not involved on the PBIS team due to either a language barrier or lack of time to be a team member (due to work or child care).

Figure 4. 2

Perceived Parent Involvement
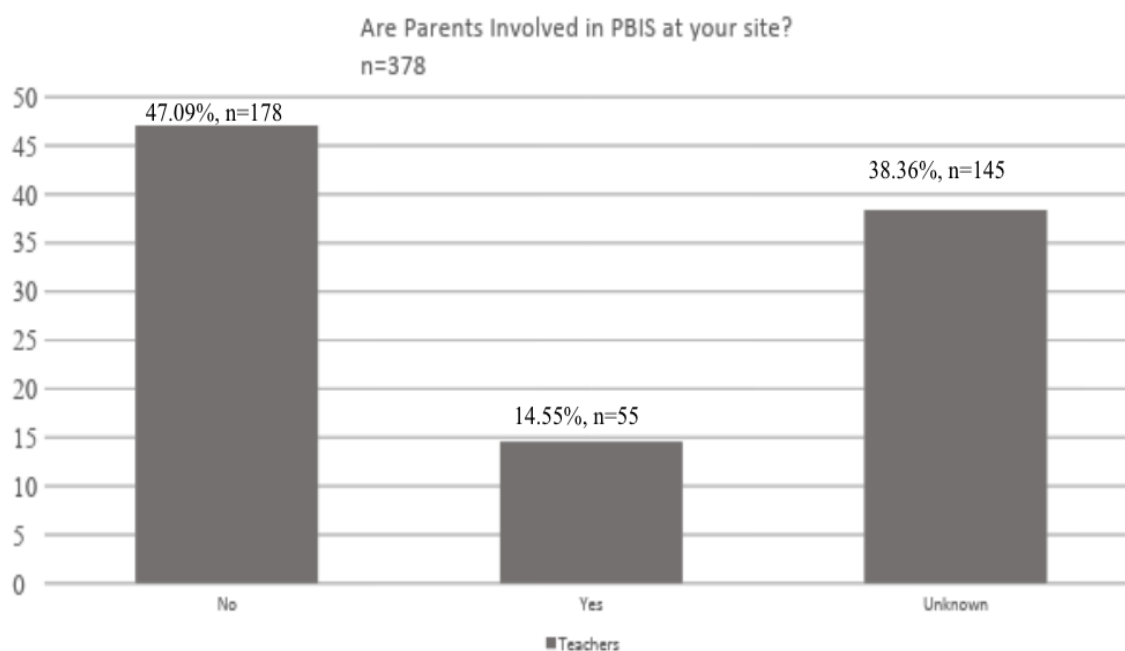
Table 4.6 displays qualitative data from site administrators and teachers as to how parents were informed of PBIS at the sites and how they could become involved.

Table 4. 6

Perceived Parent Awareness

Teacher and Site Administrator Survey: Are parents involved? How are parents made aware of the PBIS program at your school site?	
Teachers	Administrators
It's explained at [Back to School Night] and parent conferences Teacher C	*They are made aware of it through school newsletters.* Administrator X
The expectations are shared with parents. Teacher R	*This area needs more work. Parents are currently aware of our system, but not involved.* Administrator T
Very little involvement, if any. Teacher X	*Currently, parents are not participating in PBIS as we are struggling to implement it this year.* Administrator S
Not at this time Teacher S	*A parent is on our PBIS team, parents are given the opportunity to provide feedback through parent surveys.* Administrator I
	Thus far, I have shared our plan during my Parent-Principal chat and elicited feedback from them. I've also elicited feedback from my PTO. Administrator E
	Parents get info about PBIS through parent meetings and Parent Square. More parent education for the implementation of PBIS is our next step. Administrator L

Perception of District Involvement

For professional development, 5.56% of site administrators and 7.41% of teachers had been trained through the district on PBIS. The remainder of the participants were trained at the school site (administrators 16.67%, teachers 48.41%), through the county Department of Education (administrators 72.22%, teachers 8.73%), or other sources (teachers 0.26%). Only 5.56% of site administrators had not been trained, but 35.19% of teachers still need to be trained (Table 4.7).

Table 4. 7

Professional Development Status (N=396)

Training	Site Administrator	%	Teachers	%
Yes, through my district	1	5.56%	28	7.41%
Yes, through my school site	3	16.67%	183	48.41%
Yes, through the local county Dept. of Education	13	72.22%	33	8.73%
Yes, through other sources	0	0%	1	0.26%
No	1	5.56%	133	35.19%

School site administrators stated that the district offers support in PBIS (94.44%) when needed. However, teachers were unsure if support was offered (53.17%). District personnel stated that support was available for sustainability but was at capacity and not ongoing. Instead, training and support were offered upon request by the site administrator (Figure 4.3). Additionally, teacher professional development and initial training were lower due to teacher transfers and new hires.

Figure 4. 3

Perceived District Support (n=396)
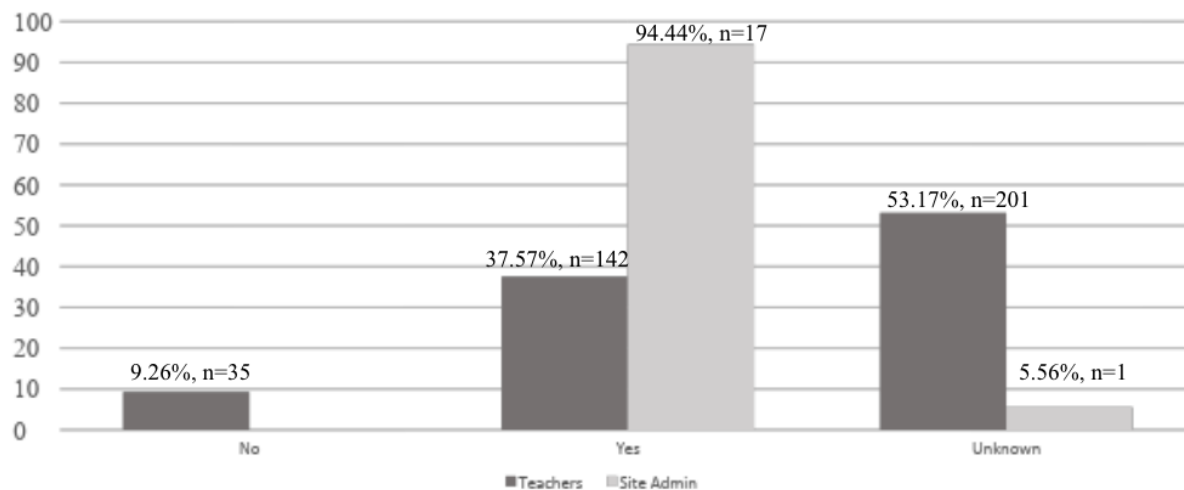
Perception of Fidelity

When asked how the school site was implementing PBIS with fidelity, administrators

responded:

Table 4. 8

Perceived Actions of Fidelity (Site Administrators)

How is your school site implementing PBIS with fidelity?	
Admin I	Not consistently used
Admin T	Slips are given to students meeting schoolwide expectations.
Admin D	GRIP program, Check-in and check-out with IBI aide, mentors, counseling; all staff use caution slips and Slips for positive behavior
Admin X	Minor and major infractions are supported in multi-tiered (contracts, mentors, GRIP, and counseling); Students are expected to be responsible, respectful, and safe; We have monthly meetings of the PBIS team and try to keep staff informed and engaged. Share updates at monthly staff meetings.
Admin L	Tier 1 - all students are expected to follow the behavior expectations on the matrix. Students are given tickets when noticed showing excellence. Tier 2 - students check in with their identified adult in the morning. Throughout the day, the classroom teacher marks on the student's goal sheet to indicate how well they met their goal at various points in the day. Then the student checks out with their identified adult to discuss their day.
Admin F	Morning Walk & Talk and Check-In Check-Out, say school pledge, teacher reminders, social skills groups, active, structured recess for primary, reminders and positive tickets/points given, Check-Out at end of the day.

When administrators were asked to explain how they perceived fidelity, most answered with what they were doing to show fidelity, such as "tickets for behavior"; these tickets are valid for a student store as means of positive reinforcement for behavior modification. There was no mention of frequency or the process of how tickets are given out. Other sites mentioned positive items such as a campus Kindness Club, Spin the Wheel, and teacher mentors to create positive reinforcement and bonuses for students. When interviewed and surveyed, teachers could not respond with specifics showing how their school site was completing PBIS with fidelity other than offering tickets as a means of behavior rewards.

When asked if school sites were implementing PBIS with fidelity, Figure 4.4 shows 10 % of teachers strongly disagreed (n=37), 45% disagreed (n =170), 5% were neutral (n =20), 30% agreed (n =112), and 10% strongly agreed (n =37). When site administrators were asked, Figure 4.4 shows that 5% disagreed (n =1), 17% neutral (n =3), 61% agreed (n =11), and

17% strongly agreed (*n* =3). No site administrator strongly disagreed. Teachers' perception of

fidelity had a mean of 2.836 (*SD*=1.236), and site administrators had a mean of 3.889

(*SD*=0.758).

Figure 4. 4

Teacher Perception of Fidelity (n=378)
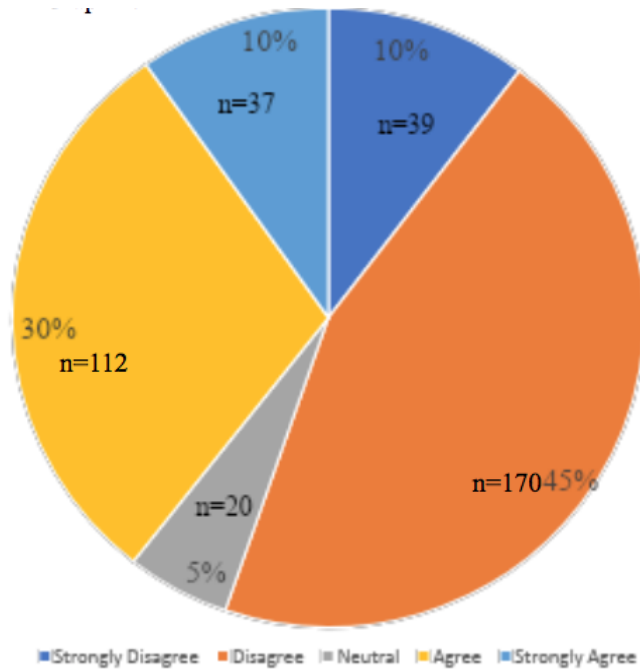
Figure 4. 5

Site Administrator Perception of Fidelity (n=18)
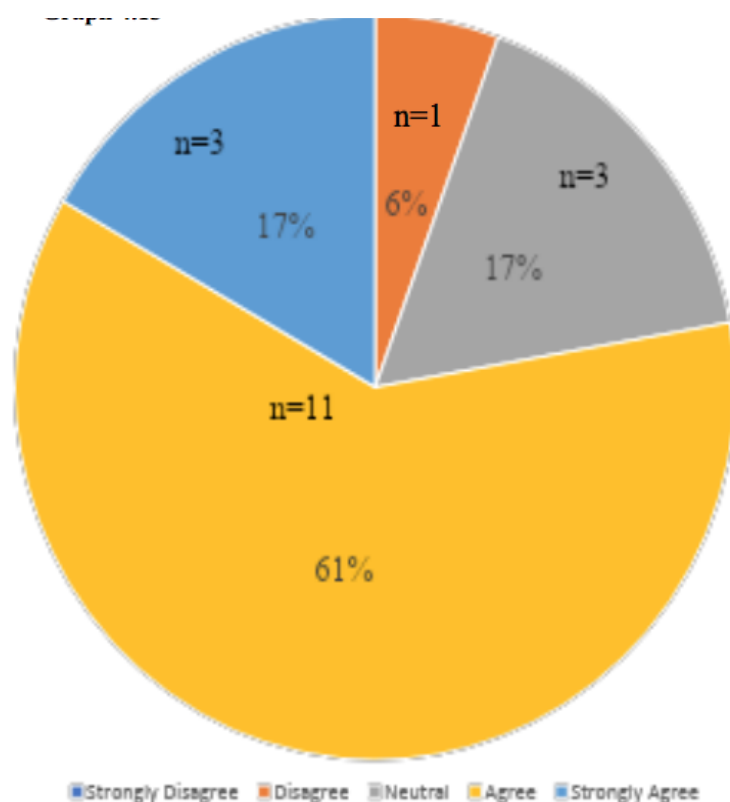
Table 4.9 shows the perception of fidelity by grade level when surveyed as well as administrators. Using a Likert scale of 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5-strongly agree, the average answer for teachers that they are implementing PBIS with fidelity in their school sites was 2-disagree. However, administrators answered 4-agree. When a district administrator was interviewed regarding the difference, the subject stated, "Administrators tend to compare whole year and whole school as opposed to teachers who compare whole class." That subject stated, "Administrators operate on a 'joy quotient'-less referrals means more fidelity." Teachers do not see this big picture if they are not analyzing data through monthly PBIS data meetings.

Table 4. 9

Perception of Fidelity by Grade Level (N=396)

Grade	n	μ Mean	$\bar{X}$ Median	σ Standard Deviation
K	44	2.795	2.000	1.268
1	52	2.885	2.000	1.215
2	65	2.954	2.000	1.255
3	53	2.736	2.000	1.347
4	54	2.852	2.000	1.250
5	49	2.633	2.000	1.202
6	61	2.934	3.000	1.153
Teachers	378	2.836	2.000	1.236
Admin	18	3.889	4.000	0.758

Likert Scale

1: Strongly Disagree

2: Disagree

3: Neutral

4: Agree

5: Strongly Agree

PBIS requires behavioral data to be reviewed monthly by the PBIS team (Center on PBIS, 2022). When asked how often PBIS data is reviewed, 14.55% responded 'at each trimester' (n=55), 25.96% 'monthly' (n =98), 38.10% responded 'we do not review PBIS data at this time' (n =144), and 21.43% were unknown (n =81). In addition, teachers responded that the data reviewed was academic rather than behavioral when data was reviewed at these times and did not associate any data reviewal with PBIS (Figure 4.6).

Figure 4. 6

PBIS Data Review (N=368)
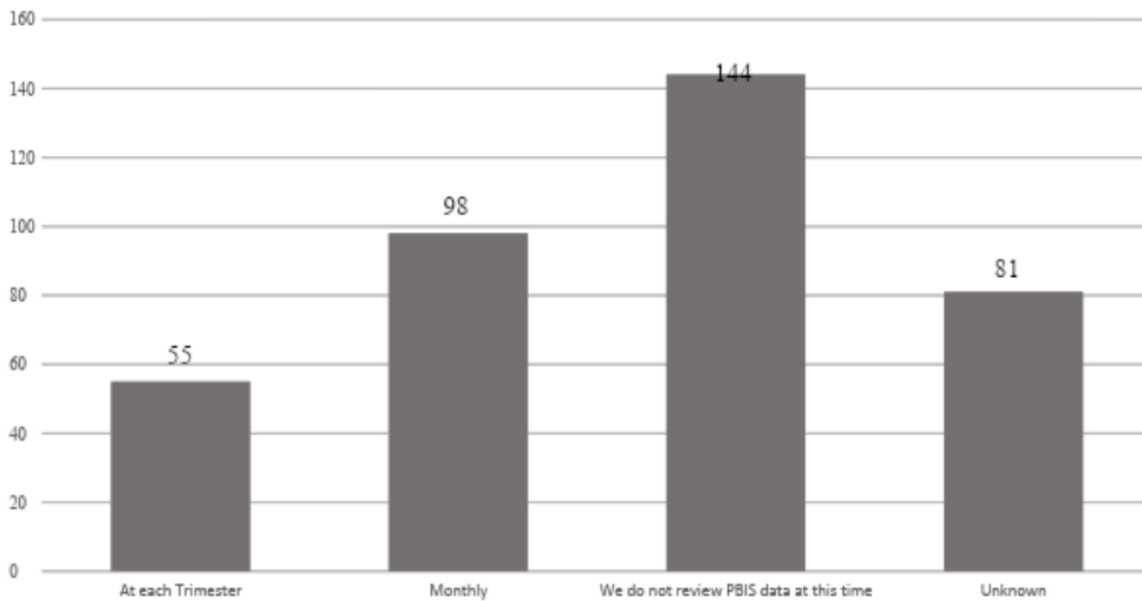
Through a one-way analysis of variance (ANOVA) shown in Figure 4.7, teachers who were not trained in PBIS answered that their school site was not implemented with fidelity. In contrast, teachers trained at the local department of education answered the survey with a much higher rating. There was an effect for perceived fidelity with teacher training, $F(4, 373) = 2.395$, $p = 0.0$.

Figure 4. 7

Teacher PBIS Training and the Perception of Behavior Improvement
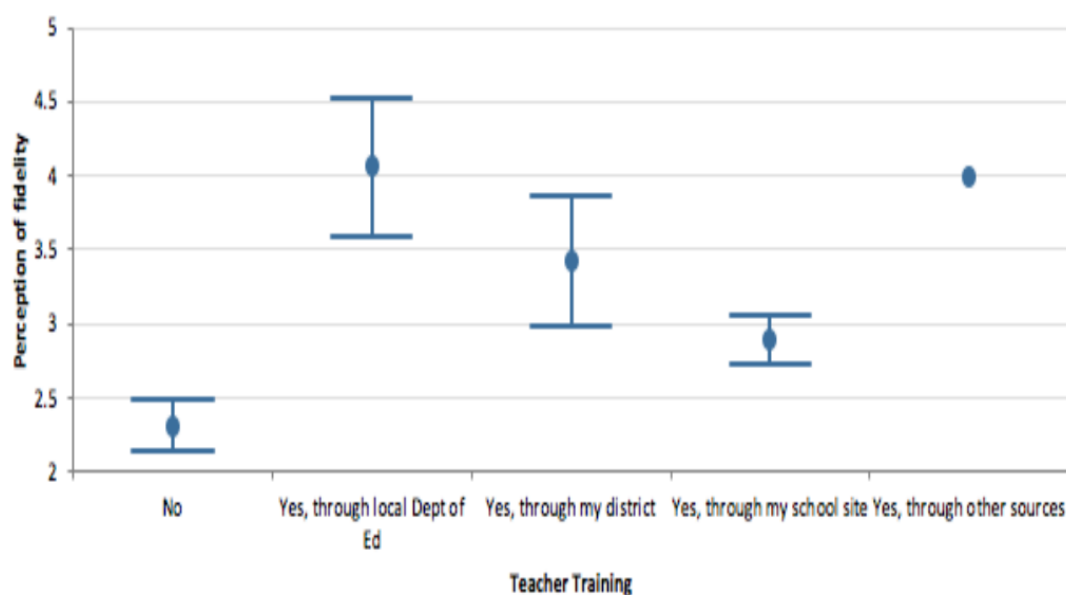
Research Question 2

What is the correlation between the perceived fidelity of PBIS implementation and student behavior?

Three questions were asked about student behavior: behavior improvement, respect for peers, and respect for adults during the implementation of PBIS. Table 4.10 shows that teachers strongly disagreed (16.93%, n=64) or disagreed (39.95%, n =151) that behavior did not improve with PBIS, whereas 94.44% (n =17) of site administrators strongly agreed that behavior had improved. When it comes to peer-to-peer relationships, teachers were primarily neutral (34.39%, n =130), and site administrators agreed (50%, n =9) or strongly agreed (27.78%, n =5). For student-to-adult relationships, teachers were neutral (36.24%, n =137) or agreed (29.37%, n =111) that there has been improvement, and site administrators agreed (50%, n =9) or strongly agreed (22.22%, n =4).

Table 4. 10

Perception of Behavior (N=396)

Variable	Category	Teacher Frequency	%	Administrator Frequency	%
Behavior Improvement	Strongly Disagree	64	16.93%	1	5.56%
	Disagree	151	39.95%	0	0.00%
	Neutral	42	11.11%	0	0.00%
	Agree	109	28.84%	0	0.00%
	Strongly Agree	12	3.17%	17	94.44%
Respect to Peers	Strongly Disagree	45	11.90%	2	11.11%
	Disagree	97	25.66%	0	0.00%
	Neutral	130	34.39%	2	11.11%
	Agree	89	23.54%	9	50.00%
	Strongly Agree	17	4.50%	5	27.78%
Respect to Adults	Strongly Disagree	42	11.11%	2	11.11%
	Disagree	87	23.02%	0	0.00%
	Neutral	137	36.24%	3	16.67%
	Agree	111	29.37%	9	50.00%
	Strongly Agree	1	0.26%	4	22.22%

Table 4.11 shows survey results by grade level of teachers' perception of behavior improvement. Grades 4 and 6 were the highest reporting with 2.889 and 2.820, respectively. Overall, teacher perception of behavior improvement was 2.614 (disagree) with a standard deviation of 1.160. Site administrator surveys showed a mean of 4.722 (agree) with a standard deviation of 1.179.

Table 4. 11

Perception of Behavior Improvement (N=396)

Grade	n	μ mean	$\bar{X}$ median	σ standard deviation
K	44	2.341	2.000	1.160
1	52	2.442	2.000	1.162
2	65	2.523	2.000	1.161
3	53	2.566	2.000	1.135
4	54	2.889	3.000	1.058
5	49	2.653	3.000	1.234
6	61	2.820	3.000	1.176
Teachers	378	2.614	2.000	1.160
Admin	18	4.722	5.000	1.179

Likert Scale

1: Strongly Disagree

2: Disagree

3: Neutral

4: Agree

5: Strongly Agree

PBIS additionally states that when the program is implemented with fidelity, items such as referrals, suspension, and expulsion should decrease (Center on PBIS, 2022; Colvin et al., 1993; Simonsen et al., 2008). In this study, there was a significant correlation between the teacher's perception of student behavior improvement and the number of referrals issued by the teacher (n =378, r =0.233, $p < 0.0004$). However, no correlation was found between administrators with referrals, suspension, or expulsion rates. It is possible that teachers and

principals at the same school site would have more similar perceptions of the number of referrals, but it is also possible that there could be discrepancies within the same school. It is important to note that perceptions and subjective experiences can vary even among individuals working at the same school site, and can be influenced by various factors such as the specific grade level, subject area, and students being taught, especially if data is not reviewed frequently.

It is important to carefully consider the data and context in which it was collected in order to accurately interpret and understand the results. To gain a more nuanced understanding of the situation, site administrators must share data gathered with all staff members in order to get a more comprehensive and multi-faceted perspective on the issue.

Additionally, there was a significant correlation between the teacher's perception of PBIS fidelity at a school site and improvement in student behavior ($n = 378$, $r = 0.51985$, $p < 0.0001$).

However, there was no correlation between site administrator perception of PBIS fidelity and improvement in student behavior.

Through a one-way analysis of variance (ANOVA) shown in Figure 4.8, teachers who were not trained in PBIS answered that behavior was not improving. In contrast, teachers trained at the local department of education answered the survey with a much higher rating. There was an effect for perceived behavior improvement with teacher training, $F(4, 373) = 2.395$, $p = 0.0$.

Figure 4. 8

Teacher PBIS Training and the Perception of Behavior Improvement (N= 388).
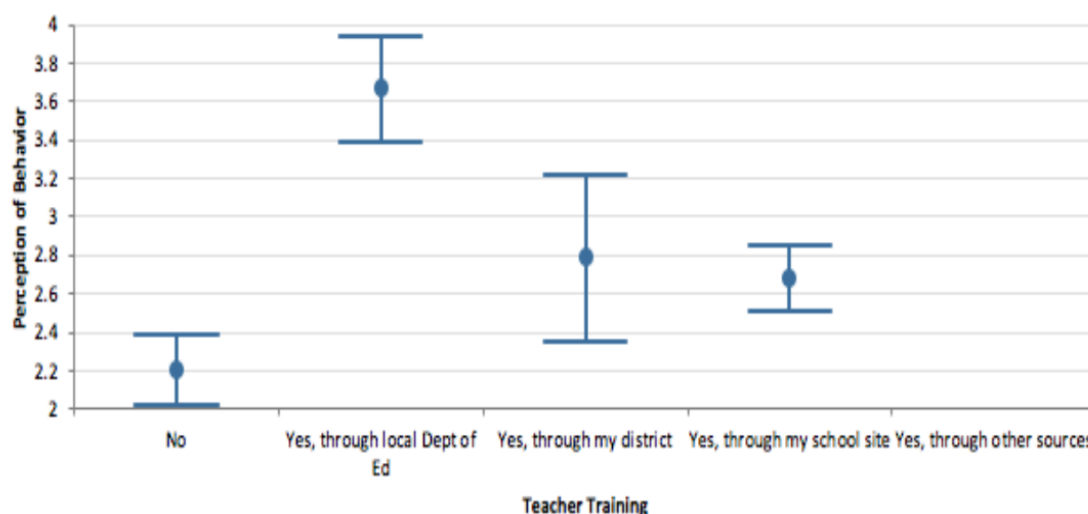
Research Question 3

What is the correlation between the perceived fidelity of PBIS implementation and academic achievement?

a) Does positive behavior directly impact student achievement?

Teachers and site administrators were surveyed about perceptions of academic improvement when implementing PBIS. Table 4.11 shows the results. Based on a Likert scale of 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly Agree, the teacher average was 2.656 with a standard deviation of 0.920. The highest trending grade level was third grade at a mean of 2.830 (*SD*=0.871), and the lowest trending grade level was fifth grade at a mean of 2.367 (*SD*=0.951). The mean for site administrators was 3.833, with a standard deviation of 0.618.

Table 4. 12

Perception on Academic Improvement (N=396)

		μ	$\overline{X}$	σ
Grade	n	**Mean**	**Median**	**Standard Deviation**
K	44	2.705	3.000	0.954
1	52	2.577	3.000	0.871
2	65	2.738	3.000	0.973
3	53	2.830	3.000	0.871
4	54	2.759	3.000	0.845
5	49	2.367	2.000	0.951
6	61	2.590	3.000	0.938
Teachers	378	2.656	3.000	0.920
Admin	18	3.833	4.000	0.618

Likert Scale

1: Strongly Disagree

2: Disagree

3: Neutral

4: Agree

5: Strongly Agree

Impact of Behavior and academics

Kindergarten was left out of Table 4.13 due to the grade level not taking benchmark exams. There was a correlation between students who did not meet academic grade level skills and the teachers' perception of behavior improvement ($n = 333$, $r = 0.14887$, $p < 0.006$). However, there was no correlation found with site administrators.

Table 4. 13

Academics "Does Not Meet" in Percent (N=396)

Grade	n	μ Mean	$\bar{X}$ Median	σ Standard Deviation
1	52	21.579	21.880	10.305
2	65	34.110	35.870	14.872
3	53	57.905	59.810	17.150
4	54	51.262	55.700	14.793
5	49	53.739	61.430	17.770
6	61	50.595	48.245	13.591
Teachers*	333	44.580	44.500	19.424
Admin*	18	53.057	53.752	10.675

does not include K

Teacher perception of fidelity impacts how a teacher also responds to academic improvement. There was a correlation between perceived fidelity and academic improvement (r (332) = 0.46335, p < 0.00001). However, there was no correlation found with site administrators.

There was also a significant correlation between the teacher's perception of student academic improvement and the number of referrals issued by the teacher (r (332) = -0.37156, p < 0.00001). However, there was no correlation found with site administrators.

Through a one-way analysis of variance (ANOVA) shown in Figure 4.9, teachers who were not trained in PBIS answered that academic success was not improving, whereas teachers who were trained at the local department of education answered the survey with a much higher rating. There was an effect for perceived academic improvement with teacher training, F (4, 373) = 2.395, p = 0.0.

Figure 4. 9

Teacher PBIS Training and the Perception of Behavior Improvement (N=388)
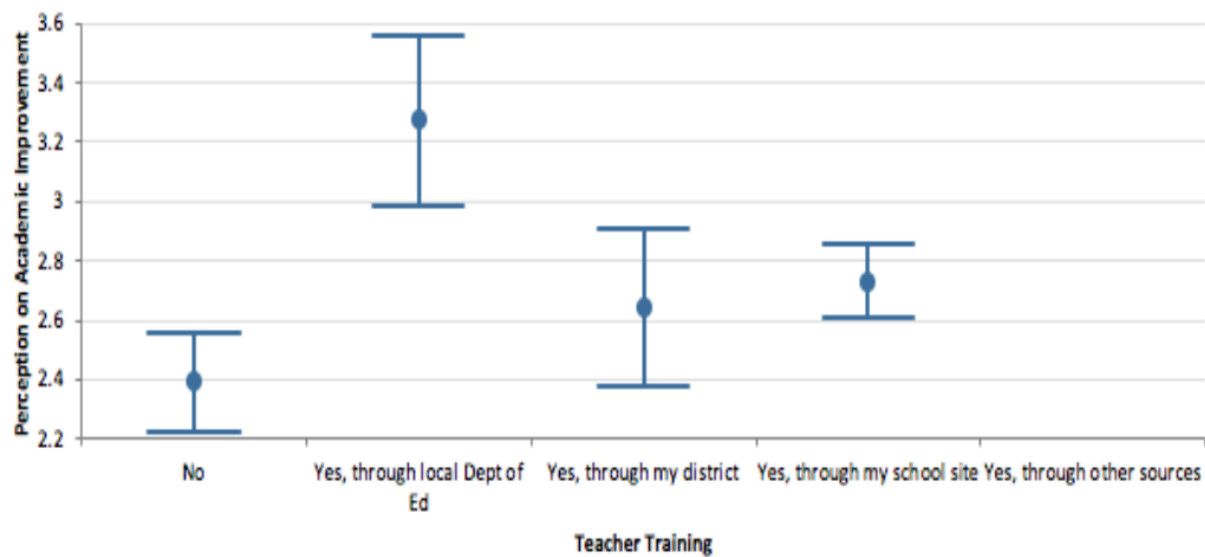
Qualitative Themes

Seven qualitative themes emerged through interviews and surveys with site administrators and teachers. These themes were: 1) training, 2) fidelity, 3) administrators, 4) teacher workload, 5) student behavior, 6) disrespect, and 7) referrals.

Table 4. 14

ANOVA Teacher PBIS Training and Perception of Academic Improvement

Qualitative Themes	
Teachers	Administrators
I just don't feel like I'm getting any training. Teacher T-5th	No one at my school wants to do this so it's only me. Administrator L
There's just so much to do. Adding PBIS on is just another thing we have to worry about. Teachers are overloaded. Teacher R-3rd	I can't ask my teachers to do anything else. They're too overworked as it is. Administrator P
My admin doesn't seem to be able to help when there's trouble. They either gone or busy. Teacher Q-2nd	I try to help my teachers, but things keep piling up. Administrator S
Student behavior is out of control. Nothing works. Teacher X-6th	I hear about student behavior being out of control, and there are a few incidents. Administrator G
It's like the kids just don't respect us anymore. Can we get training to help us fix that? Teacher B-4th	Respect seems to be the biggest problem. Administrator
I give referrals and the kids just come right back to class. Teacher R-5th	We seem to have a lot of referrals, but I will say they trend from certain grade levels. Administrator Q

Summary of the Results

Analyses, correlations, and one-way analysis of variance were conducted to answer the research questions. These confirm that there were statistically significant correlations between the two variables of behavior and academic performance as well as teacher perception and the fidelity of PBIS implementation in a school site with variables of behavior and academic achievement. In addition, statistics confirmed a significant relationship between a teacher's perception of behavior improvement when implementing PBIS and academic performance ($R= 0.14887$, $p < 0.006$).

The ANOVA clearly showed that training was associated with how teachers' perception was related to behavior improvement, academic improvement, and fidelity of the program at the school sites. This was significant because 35.19% of teachers responded to the survey, being

untrained in the program and teaching at a school site where PBIS was currently being implemented.

In this study, the data triangulation involved using multiple data sources: interviews with teachers and administrators were compared and cross-checked with quantitative and qualitative surveys and then compared to district data and interviews with district personnel. The data showed consistency of findings obtained through the different instruments.

CHAPTER 5 DISCUSSION

The primary purpose of this study was to discover which factors impacted the perception teachers and administrators had of fidelity regarding PBIS implementation at their school sites over time and the correlation of these perceptions between behavior and academic performance in students. The research focused on three questions: the site administrator's role in PBIS and teachers' roles in PBIS as well as teachers' perceptions of the parent's role in PBIS; the correlation between the perception of fidelity of PBIS implementation and student behavior; the correlation between the perception of fidelity of PBIS implementation and academic performance.

Summary of the Study

This study focused on the perceived fidelity of PBIS and its impact on behavior and academic achievement. When the PBIS is perceived to be implemented with fidelity, school sites should see a decrease in student discipline and an increase in student achievement (Center on PBIS, 2022). However, if there is a perceived loss of fidelity with any portion of the PBIS program, it will be more likely to lose effectiveness (Bradshaw et al., 2012; Gentrup et al., 2019; Horner et al., 2009; Sanjaya et al., 2020; Wickham & Mullen, 2020). Therefore, fidelity, or perceived fidelity, is fundamental to success. Teachers and school site administrators reported the perceived fidelity regarding behavior and academic success. However, the literature review identified a gap between the perceived fidelity relating to the behavior and academic success. This current study sought to bridge this gap.

Data was collected through a researcher-created survey administered on Google Forms and through interviews. Participants were chosen focused on elementary schools currently implementing PBIS in a large urban school district in southern California. These schools

comprised 579 teachers within grades TK-6 and 33 administrators. Of these participants, 378 teachers and 18 administrators participated in the study. Student academic data from these sites was obtained at the district level, while student behavioral data were obtained from the school site administrators. Site administrators were emailed surveys requesting that teachers take five minutes during a staff meeting to complete the surveys. All open-ended questions encouraged subjects to provide comprehensive program-related explanations of the day-to-day examples of PBIS at their school site. Surveys were administered through Google Forms. Participants had to read all the questions themselves and provide answers.

Additionally, because Google Forms is a web-based program, it allows all data to be stored digitally in a secure database. All data was easily transferable to Google Sheets or Excel format and Google Docs for Analysis. All interviews were conducted through Zoom after the researcher had examined the survey data.

Discussions

Research Question 1

Research question 1 and the sub-questions asked: What factors impact the perception of fidelity of PBIS implementation over time?

The study revealed that continuous training was one of the most significant factors impacting the fidelity of PBIS over time. The fidelity of PBIS implementation can be strengthened through further professional development and training at school sites, raising both academic achievement and behavior awareness (Bruhn et al., 2013; Canter & Canter, 2001; Center on PBIS, 2022; Chard et al., 2008; Garnett et al., 2020; Irvin et al., 2004; Sinclair et al., 2002; Sobeck & Reister, 2020). This study showed that 5.56% of site administrators and 7.41% of teachers had been trained through the district on PBIS. The remainder of the participants were

trained at the school site (administrators 16.67%, teachers 48.41%), through the county

Department of Education (administrators 72.22%, teachers 8.73%), or other sources (teachers

0.26%). Only 5.56% of site administrators had yet to be trained; however, 35.19% of teachers

remained untrained even though the schools were implementing PBIS.

According to the Center on PBIS (2022), the site administrator is to provide planning

time, feedback, and support at all levels of implementation, while district administrators are to

offer support for training and implementation. Administrators responded qualitatively that

support was being provided through collaboration and time during staff meetings. However, no

mention was made of planning time for PBIS implementation or monthly meetings with the

PBIS team to develop plans of implementation, which is key to the fidelity of the program

(Center on PBIS, 2022).

Teachers, school psychologists, and support staff make up most of the PBIS team in some

capacity. At this time, 87% ($n = 332$) of the subjects responding to the survey said they were not

involved in the PBIS team and were unaware of decisions made by the PBIS team. Another key

team member is the parents (for Tier I). According to the guidelines of PBIS, parent involvement

is critical in Tier I. Therefore, a parent should be an active member of the PBIS team during

these meetings (Center on PBIS, 2022). While parents were not actively involved, they were

made aware of the program through various methods of communication.

Research Question 2

Research question 2 asked: What is the correlation between the perceived fidelity of

PBIS implementation and student behavior?

In this study, teachers perceived that that behavior did not improve with PBIS (strongly

disagreed, 16.93%, $n = 64$ and disagreed, 39.95%, $n = 151$). However, 94.44% ($n = 17$) of site

administrators strongly agreed that behavior had improved. PBIS states that when the program is implemented with fidelity, items such as referrals, suspension, and expulsion should decrease (Center on PBIS, 2022; Colvin et al., 1993; Simonsen et al., 2008). There was a significant correlation between the teacher's perception of student behavior improvement and the number of referrals issued by the teacher (n =378, R=0.233, p<0.0004). On average, teachers issued six referrals during the year (SD =6.69). Site administrators received, on average, 83 referrals during the year (SD =92.63); two of these referrals resulted in expulsion from the school site. Additionally, there was a significant correlation between the teacher's perception of PBIS fidelity at a school site and improvement in student behavior (n=378, R= 0.51985, p<0.0001). Therefore, it can be inferred that if a teacher does not perceive PBIS being implemented with fidelity, it will not improve behavior.

Research Question 3

The last research question and its sub-questions asked: What is the correlation between the perceived fidelity of PBIS implementation and academic achievement? Does positive behavior directly impact student achievement?

Teachers and site administrators were surveyed about perceptions of academic improvement when implementing PBIS. When asked about academic improvement, teachers had a neutral response (mean=2.656; SD= 0.920). The highest trending grade level was third grade, and the lowest trending grade level was fifth grade. Site administrators were neutral that PBIS improved academic achievement (mean=3.833; SD=0.618). When looking at whether behavior impacted academic achievement, there was a significant correlation between students who did not meet academic grade level skills on district benchmark exams and the teachers' perception of behavior improvement (n=333, R= 0.14887, p < 0.006). There was also a significant correlation

between the teacher's perception of student academic improvement and the number of referrals issued by the teacher ($n = 378$, $R = 0.37156$, $p < 0.0001$). Therefore, it can be inferred that if a teacher does not perceive PBIS to improve behavior, those students will not achieve academically.

Implications for Practice

The findings of this study largely support that behavior has a direct correlation with academic achievement. It also supports that teacher perceptions regarding behavior, and academic achievement are linked to fidelity. Therefore, the results of this study can be used to develop sustainable and continuous professional development for teachers and site administrators in implementing PBIS to achieve fidelity as outlined in the PBIS blueprint. Teachers and site administrators would benefit from relearning the process and procedures included in the implementation of PBIS, even at the sustainability level (year 4+), to ensure all students are receiving the academic skills necessary to graduate, the personal skills necessary for life, and to achieve lifelong success after graduation.

Secondly, site administrators would benefit from additional training to incorporate those teachers who are not 'buying in' to the program. Rather than having a discussion or one-on-one meeting, administrators and teacher leaders would learn additional ways to build staff morale and allow those who do not buy in to have a voice and become part of the PBIS community in other ways.

Accountability at the district level should be more prevalent, including using PBIS evaluations for school sites in implementation phases and the use of school sites as 'mentor sites' for other schools who are beginning the PBIS implementation and practices.

Organizational Change Theory

Because of its systemic structure, Kotter's (2002) design of Organizational Change Theory is relevant to PBIS. Implementing PBIS in the school necessitates a thorough grasp of modifying an organization's structure from all stakeholder perspectives: leaders, educators, students, and parents. According to Kotter and Cohen (2002), organizational change happens when a school site necessitates a shift in vision and practice. Because education is continually changing and developing, educators must be change agents.

The first step in creating a successful change within an organization is to identify where changes need to be made due to future problems that may or may not be foreseen by the whole group. At this time, a sense of urgency has been recognized as a need for continual training in PBIS to ensure fidelity. Next, an organization should look at who the change leaders are and involve key stakeholders.

In order to move forward, schools needed to build their PBIS teams. School sites should develop a consistent PBIS team with the following members:

- Team Leader

- Recorder

- Timekeeper

- Data Specialist

- Behavior Specialist

- PBIS Communications liaison

- PBIS Coach

- Administrator

- Parent liaison (Tier I)

Additionally, district personnel should create a district-level team available for training and support at all levels of implementation. "While we often look for leadership at the head of the table, leaders often emerge from the foot." (Greene, 2014, p. 228). In other words, traditionally, the leadership roles are site administrators such as principals and assistant principals. However, in the case of PBIS, other leaders can bring about change in a school site. A classroom teacher who has lost faith in a program and sees a failing disciplinary system, a psychologist who has been counseling students they feel need structure, a classified staff who wishes to expose others to new ideas, or even a superintendent who is responsive to district staff members who are asking for guidance. There is no set leader within a school site (Rais et al., 2022).

The Organizational Change Theory is also necessary to determine the organization's core values when changes occur. Visions must be clearly defined and well-articulated (Burke, 2018; Kotter & Rathgeber, 2017). They should be easily understood so everyone can follow them. Each school site needs to develop a vision unique to its culture and community. However, the district should also develop an overarching vision for all schools currently implementing PBIS to ensure consistency across the district.

Change brings in a certain level of skepticism. Because of this, it is essential to communicate the change convincingly for team buy-in. In order to do this, both Kotter (2017) and Burke (2018) suggest connecting the vision through clarity and logic; communication should be as "clear, simple, and accurate as possible" (Kotter & Cohen, 2012, p. 84).

The Center of PBIS, 2022, only states that 80% of staff is needed for buy-in for the program to remain in fidelity. However, with support from site administrators and district personnel, any staff outside the PBIS buy-in should receive assistance in implementation.

An organization wants to find individuals who have the confidence to empower confidence in others and can begin to create change. There should be inspiration and recognition to boost morale and continue the movement (Burke, 2018; Kotter & Cohen, 2012). Since schools are currently implementing the program, the plan is already in action. Progress monitoring should be completed, monthly meetings held, and data reviewed. Greene, 2014, states, "…if you're trying to help kids with behavioral challenges, you're going to need [a philosophy], it's your philosophy of kids that's going to guide your beliefs and actions in your interactions with them…" (p. 10).

Recommendations for Future Research

In this study, none of the subjects relayed the variable of COVID and learning loss due to the pandemic, and there appeared to be no connection with PBIS or other school-wide behavior programs. Future research would be needed to see the impact of the pandemic on learning loss with PBIS. Likewise, it is suggested in this area to see if current trends can follow the behavioral path of students for socio-emotional learning (SEL) and academic gaps. Another suggestion for further research is to locate trends within online learning with the implementation guidelines of behavioral programs. Additionally, further research is recommended for site administrators, such as looking into how administrators are trained and held accountable. At this time, only 18 site administrators were available to survey. A more extensive selection of subjects would be necessary to see if a correlation exists between the variables. Furthermore, a more extensive sample base should be done in future research to include middle and high schools to see if similar data exists. Additionally, special education teachers should be involved in a future study.

Conclusion

Negative student behaviors hamper student academic progress. Academic achievement can be affected by disruptive or distracting conduct, as well as impulse control (Chafouleas et al., 2007; Christenson & Havsy, 2004; Fairbanks et al., 2007; Lehr et al., 2003; Salgado et al., 2022). However, teaching behavioral coping methods is beneficial (Hawken & Horner, 2003; Lehr et al., 2003; Reschly & Christenson, 2006; Sobeck & Reister, 2020). PBIS was created to support a culture that develops positive behaviors and practices to support staff conduct, student behavior, social competency, and academic accomplishment. This phenomenological study aimed to identify the variables influencing PBIS implementation over time. Teachers' attitudes toward behavior plan directly impact how children perceive their behavior and performance in school settings. Administrators must consider this as they begin and implement the program. The true fidelity of the program needs to be maintained when teacher standards are at 85% or higher according to the program protocol (Center on PBIS, 2021), or else behavioral and academic success in students is less likely to be obtained.

PBIS is a method devoted to increasing good behavior in schools instead of focusing on punishment. Students are taught skills for positive conduct in various locations on the campus, including classes, on the bus, and at lunch tables, so they know what is expected of them. As a result of this comprehension, pupils' conduct improves, resulting in fewer suspensions (Horner et al., 2020). Therefore, implementing PBIS, when done with fidelity, is more likely to increase academic assessments such as district benchmarks. Additionally, it was expected that the implementation of PBIS, when done with fidelity, is more likely to decrease in behavioral issues monitored through referrals, suspensions, and expulsions. The study was conducted in a large urban school district in southern California and sampled 378 teachers and 18 administrators from

30 elementary schools. Teachers and administrators were given a survey and interviewed on a volunteer basis. Quantitative data was collected and analyzed to connect to qualitative data through the connection of themes.

Analyses, correlations, and one-way analysis of variance were conducted to answer the research questions. Statistics confirmed a significant relationship between a teacher's perception of behavior improvement when implementing PBIS and academic performance. This was significant because 35.19% of teachers responded to the survey, being untrained in the program and teaching at a school site where PBIS was currently being implemented. This study can be used to develop sustainable and continuous professional development for teachers and site administrators in implementing PBIS. The findings of this study largely support that behavior has a direct correlation with academic achievement. It also supports that teacher perceptions regarding behavior, and academic achievement are linked to fidelity.

REFERENCES

Acosta, J., Chinman, M., Ebener, P., Malone, P. S., Phillips, A., & Wilks, A. (2019). Evaluation of a whole-school change intervention: Findings from a two-year cluster-randomized trial of the restorative practices intervention. *Journal of Youth and Adolescence, 48*(5), 876–890. https://doi.org/10.1007/s10964-019-01013-2

Adamson, R. M., McKenna, J. W., & Mitchell, B. (2018). Supporting all students: Creating a tiered continuum of behavior support at the classroom level to enhance schoolwide multi-tiered systems of support. *Preventing School Failure: Alternative Education for Children and Youth*, *63*(1), 62–67. https://doi.org/10.1080/1045988x.2018.1501654

Afsar, B., & Umrani, W. A. (2019). Transformational leadership and innovative work behavior. *European Journal of Innovation Management*, *23*(3), 402–428. https://doi.org/10.1108/ejim-12-2018-0257

Benner, G. J., Nelson, J. R., Sanders, E. A., & Ralston, N. C. (2012). Behavior intervention for students with externalizing behavior problems: Primary-level standard protocol. *Exceptional Children*, *78*(2), 181–198. https://doi.org/10.1177/001440291207800203

Bohnenkamp, J. H., Schaeffer, C. M., Siegal, R., Beason, T., Smith-Millman, M., & Hoover, S. (2021). Impact of a school-based, multi-tiered emotional and Behavioral Health Crisis Intervention on school safety and discipline. *Prevention Science*, *22*(4), 492–503. https://doi.org/10.1007/s11121-020-01195-3

Bradshaw, C. P., Debnam, K., Koth, C. W., & Leaf, P. (2008). Preliminary validation of the implementation phases inventory for assessing fidelity of schoolwide positive behavior supports. *Journal of Positive Behavior Interventions*, *11*(3), 145–160. https://doi.org/10.1177/1098300708319126

Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., & Leaf, P. J. (2008). The impact of
school-wide positive behavioral interventions and supports (PBIS) on the Organizational
Health of elementary schools. *School Psychology Quarterly*, *23*(4), 462–473.
https://doi.org/10.1037/a0012883

Bruhn, A. L., Lane, K. L., & Hirsch, S. E. (2013). A review of Tier 2 interventions conducted
within multitiered models of Behavioral Prevention. *Journal of Emotional and
Behavioral Disorders*, *22*(3), 171–189. https://doi.org/10.1177/1063426613476092

Burke, W. W. (2018). Organization change: Theory and practice. SAGE.

Canter, L. & Canter, M. (1976). Assertive discipline: A take-charge approach for today's
educator. Seal Beach: Lee Canter & Associates.

*Canter, L. & Canter, M. (1993). Succeeding with difficult students: New strategies for reaching
your most challenging students. Santa Monica: Lee Canter & Associates.

Canter, L. (1996). First, the rapport – then, the rules. *Learning 24*(5), 12-14.
https://eric.ed.gov/?id=EJ525401

Canter, L. & Canter, M. (2001). Positive behavior management for today's classroom. Seal
Beach: Lee Canter & Associates.

Center on PBIS. (2022). Getting started. Center on PBIS. Retrieved March 13, 2022, from
https://www.pbis.org/pbis/getting-started.

Chafouleas, S. M., Riley-Tillman, T. C., Sassu, K. A., LaFrance, M. J., & Patwa, S. S. (2007).
Daily behavior report cards: An investigation of the consistency of on-task data across
raters and methods. *Journal of Positive Behavior Interventions*, *9*(1), 30–37.
https://doi.org/10.1177/10983007070090010401.

Chard, D., Harn, B., Sugai, G., & Horner, R. (2008). Core features of multi-tiered systems of

    academic and behavioral support. In C. R. Greenwood, T. R. Katochwill, & M. Clements,

    (Eds.), *Elementary school-wide prevention models: Real models and real lessons*

    learned. Guilford.

Charney, R. (1997). Teaching children to care: Management in the responsive classroom. Center

    for Responsive Schools, Inc.

Childs, K. E., Kincaid, D., & Peshak George, H. (2009). A model for statewide evaluation of a

    Universal Positive Behavior Support Initiative. *Journal of Positive Behavior*

    Interventions, *12*(4), 198–210. https://doi.org/10.1177/1098300709340699

Christenson, S. L., & Havsy, L. H. (2004). Family-school-peer relationships: Significance for

    social-emotional and academic learning**.** In J. E. Zins, R. P. Weissberg, M. C. Wang, &

    H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What*

    does the research say? (pp. 59-75) Teachers College Press.

Cohen, R., Kincaid, D., & Childs, K. E. (2007). Measuring school-wide positive behavior

    support implementation. *Journal of Positive Behavior Interventions*, *9*(4), 203–213.

    https://doi.org/10.1177/10983007070090040301

Colvin, G., Kame'enui, E. J., & Sugai, G. (1993, November). School-wide and classroom

    management: Reconceptualizing the integration and management of students with

    behavior problems in general education. *Education and Treatment of Children, 16,* 361-

    381. https://www.jstor.org/stable/42899326

Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry & research design: Choosing among

    five approaches. SAGE Publication Inc.

Debnam, K. J., Pas, E. T., & Bradshaw, C. P. (2012). Secondary and tertiary support systems in schools implementing school-wide positive behavioral interventions and supports: A preliminary descriptive analysis. *Journal of Positive Behavior Interventions*, *14*(3), 142–152. https://doi.org/10.1177/1098300712436844

Decuir-Gunby, J. T., & Schutz, P. A. (2016). Developing a mixed methods proposal: A practical guide for beginning researchers. SAGE.

Eagle, J. W., Dowd-Eagle, S. E., Snyder, A., & Holtzman, E. G. (2014). Implementing a multi-tiered system of support (MTSS): Collaboration between school psychologists and administrators to promote systems-level change. *Journal of Educational and Psychological Consultation*, *25*(2-3), 160–177. https://doi.org/10.1080/10474412.2014.929960

Every Student Succeeds Act, 20 U.S.C. §6301 (2015). https://www.ed.gov/essa?src=rn

Fairbanks, S., Sugai, G., Guardino, D., & Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Exceptional Children*, *73*(3), 288–310. https://doi.org/10.1177/001440290707300302

Febrianti, A. M., & Jufri, N. S. (2022). Examining the predictors of firm performance. *International Journal of Research in Business and Social Science (2147- 4478)*, *11*(4), 131–139. https://doi.org/10.20525/ijrbs.v11i4.1788

Freeman, J., Sugai, G., Simonsen, B., & Everett, S. (2016). MTSS coaching: Bridging knowing to doing. *Theory Into Practice*, *56*(1), 29–37. https://doi.org/10.1080/00405841.2016.1241946

Fullan, M. (2020). *Leading in a culture of change* (2nd ed.). Jossey-Bass.

Fullan, M., & Quinn, J. (2016). *Coherence: The right drivers in action for schools, districts, and systems.* Corwin.

Garnett, B. R., Kervick, C. T., Moore, M., Ballysingh, T. A., & Smith, L. C. (2020). School staff and youth perspectives of Tier 1 restorative practices classroom circles. *School Psychology Review*, *51*(1), 112–126. https://doi.org/10.1080/2372966x.2020.1795557

George, H. P., & Kincaid, D. K. (2008). Building district-level capacity for positive behavior support. *Journal of Positive Behavior Interventions*, *10*(1), 20–32. https://doi.org/10.1177/1098300707311367.

Greene, R. W. (2014). *Lost at school: Why our kids with behavioral challenges are falling through the cracks and how we can help them*. Scribner.

Gresham, F. M. (1991). Conceptualizing behavior disorders in terms of resistance to intervention. *School Psychology Review*, *20*(1), 23–36. https://doi.org/10.1080/02796015.1991.12085530

Harris, J. (2020, January 16). *What is MTSS* [Blog]*?* Renaissance. https://www.renaissance.com/2020/01/16/blog-what-is-mtss-how-to-explain-mtss-to-almost-anyone/

Hawken, L. & Horner, R. (2003). Evaluation of a targeted group intervention within a school-wide system of behavior support, *Journal of Behavioral Education, 12*(3)*,* 225-240*.* https://www.jstor.org/stable/41824308

Hicks, L. (2019, January). *Informed Consent*-SBE.CITI.

Hicks, L. (2019, January). *Privacy and Confidentiality*-SBE.CITI.

Horner, R. H., Todd, A. W., Lewis-Palmer, T., …& Boland, J. B. (2004). The School-Wide

Evaluation Tool (SET): A research instrument for assessing school-wide Positive

Behavior Support. *Journal of Positive Behavior Interventions*, *6*(1), 3–12.

https://doi.org/10.1177/10983007040060010201

Irvin, L. K., Horner, R. H., Ingram, K., Todd, A. W., Sugai, G., Sampson, N. K., & Boland, J. B.

(2006). Using office discipline referral data for decision-making about student behavior

in elementary and middle schools: An empirical evaluation of validity. *Journal of*

Positive Behavior Interventions, *8*(1), 10–23.

https://doi.org/10.1177/10983007060080010301

Irvin, L. K., Tobin, T. J., Sprague, J. R., Sugai, G., & Vincent, C. G. (2004). Validity of office

discipline referral measures as indices of school-wide behavioral status and effects of

school-wide behavioral interventions. *Journal of Positive Behavior Interventions*, *6*(3),

131–147. https://doi.org/10.1177/10983007040060030201

Kotter. J. & Cohen, D. (2012). The heart of change: Real-life stories of how people change their

organizations. Harvard Business Review Press.

Kotter, J. & Rathgeber, H. (2017). *Our iceberg is melting: Changing and succeeding under any*

conditions. Pan Macmillan.

Kouzes, J. M., & Posner, B. Z. (2017). *The leadership challenge*: *How to make extraordinary*

things happen in organizations (6th Edition). Wiley.

Lehr, C. A., Hansen, A., Sinclair, M. F., & Christenson, S. L. (2003). Moving beyond dropout

towards school completion: An integrative review of data-based interventions. *School*

Psychology Review, *32*(3), 342–364. https://doi.org/10.1080/02796015.2003.12086205

Lewis-Palmer, T., Sugai, G., & Larson, S. (1999). Using data to guide decisions about program

implementation and effectiveness: An overview and applied example. *Effective School

Practices*, *17*(4), 47–53. https://www.nifdi.org/research/esp-archive/volume-17/1363-

effective-school-practices-vol-17-no-4-spring-1999/file.html

Lodi, E., Perrella, L., Lepri, G. L., Scarpa, M. L., & Patrizi, P. (2021). Use of restorative justice

and restorative practices at school: A systematic literature review. *International Journal

of Environmental Research and Public Health*, *19*(1), 96.

https://doi.org/10.3390/ijerph19010096

Lotfizadeh, A. D., Kazemi, E., Pompa-Craven, P., & Eldevik, S. (2018). Moderate effects of

low-intensity behavioral intervention. *Behavior Modification, 44*(1), 92–113.

https://doi.org/10.1177/0145445518796204.

Martella, R. C., Nelson, J. R., Marchand-Martella, N. E., & O'Reilly, M. (2012). *Comprehensive

behavior management: Individualized, classroom, and schoolwide approaches*. Sage.

Maxwell, J. A. (2013). *Qualitative research design*. Sage.

McCart, A., & Turnbull, A. (2002). The issues: Behavioral concerns within inclusive classrooms.

Retrieved from http://www.pbs.org/teachersource/prek2/

McIntosh, K., Campbell, A. L., Carter, D. R., & Dickey, C. R. (2009). Differential effects of a

Tier Two behavior intervention based on function of problem behavior. *Journal of

Positive Behavior Interventions*, *11*(2), 82–93.

https://doi.org/10.1177/1098300708319127

McIntosh, K., Fisher, E. S., Kennedy, K. S., Craft, C. B., & Morrison, G. M. (2012). Using office

discipline referrals and school exclusion data to assess school discipline. *Handbook of

School Violence and School Safety*. https://doi.org/10.4324/9780203841372.ch23

Morse, A. B., Anderson, A. R., Christenson, S. L., & Lehr, C. A. (2004). Promoting school completion. *Principal Leadership, 4*(6), 9-13.

Northouse, P. G. (2022). *Leadership: Theory and practice*. SAGE.

Rais, S., Rubini, B. & Herfina, H. (2022). Increasing teacher creativity through strengthening transformational leadership, teamwork, and work engagement. *Pegem Journal of Education and Instruction*, *12*(1), 232-241 https://doi.org/10.47750/pegegog.12.01.24

Reschly, A., & Christenson, S. L. (2006). School completion. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 103-112). Bethesda, MD: National Association of School Psychologists.

Salgado, J. F., Cuadrado, D., & Moscoso, S. (2022). Counterproductive academic behaviors and academic performance: A meta-analysis and a path analysis model. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.893775

Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children*, *31*(1), 351–380. https://doi.org/10.1353/etc.0.0007

Sinclair, M., Hurley, C., Evelo, D., Christenson, S., & Thurlow, M. (2002). Connections that keep kids coming to school. In R. Algozzine & P. Kay (Eds.), *Preventing problem behaviors: A handbook of successful prevention strategies* (pp. 162-182). Corwin Press.

Sobeck, E. E., & Reister, M. (2020). Preventing challenging behavior: 10 behavior management strategies every teacher should know. *Preventing School Failure: Alternative Education for Children and Youth*, *65*(1), 70–78. https://doi.org/10.1080/1045988x.2020.1821347

Spaulding, S. A., Irvin, L. K., Horner, R. H., …& Sugai, G. (2010). Schoolwide social-behavioral climate, student problem behavior, and related administrative decisions:

Empirical patterns from 1,510 schools nationwide. *Journal of Positive Behavior Interventions*, *12*(2), 69–85. https://doi.org/10.1177/1098300708329011

Steed, E. A., & Shapland, D. (2019). Adapting social emotional multi-tiered systems of supports for kindergarten classrooms. *Early Childhood Education Journal*, *48*(2), 135–146. https://doi.org/10.1007/s10643-019-00996-8

Sugai, G., & Simonsen, B. (2012, June). *Positive behavioral interventions and supports: History, defining features, and misconceptions.* Center on PBIS. https://www.pbis.org/

Swoszowski, N. C., Jolivette, K., & Fredrick, L. D. (2007). Addressing the social and academic behavior of a student with emotional and behavioral disorders in an alternative setting. *Journal of Classroom Interaction, 48*(1), 28-36. https://eric.ed.gov/?id=EJ1015533

Witwer, D. (2013). Case studies of the school-wide positive behavior support approach (Unpublished doctoral dissertation). Pepperdine University

Wolfe, K., Pyle, D., Charlton, C. T., Sabey, C. V., Lund, E. M., & Ross, S. W. (2016). A systematic review of the empirical support for check-in check-out. *Journal of Positive Behavior Interventions*, *18*(2), 74-88. https://eric.ed.gov/?id=EJ1092482

APPENDICES

APPENDIX A: Teacher Survey

Teacher Survey

Likert Scale

       1-Strongly Disagree

       2-Disagree

       3-Neutral

       4-Agree

       5-Strongly Agree

Behavior

1.   Student behavior has improved since PBIS has been implemented.

2.   PBIS has improved students' respectfulness toward peers.

3.   PBIS has improved students' respectfulness toward adults on campus.

4.   Students are aware of behavior expectations at my school site.

5.   How are students made aware of behavior expectations at your school site?

6.   How do you encourage/reinforce behavior expectations at your school site?

7.   What behavior consequences do students have at your school site?

8.   How many referrals have you issued this year for administrator assistance on behavior?

Academic

9.   PBIS has improved students' academic achievement at our school site.

10. Behavior has a direct impact on students' academic achievement.

11. Students are recognized for improved academic success.

12. Students believe they can accomplish academic goals.

13. How do you encourage/reinforce academic progress with students?

14. How are students made aware of academic goals at your school site?

15. What academic consequences do students have at your school site?

Professional development

16. I believe PBIS is a successful program for behavior modification.

17. I believe PBIS is a successful program for academic success.

18. PBIS has a positive impact on teacher/staff behavior.

19. I am satisfied with the decisions of my school's PBIS team.

20. I teach PBIS expectations/consequences to students.

21. I am aware of the PBIS reward system in place at my school site.

22. I reward students using the PBIS reward system in place at my school.

23. How do teachers support PBIS at your school site?

24. In what ways does your school support teachers/staff who are not supportive of

PBIS?

25. How are parents involved in the implementation of PBIS at your site?

26. Does the district offer support in PBIS implementation at your site?

27. How often is PBIS data (behavior and/or academic) reviewed with the staff?

28. List the targeted interventions that are available in your school. *Targeted

interventions may offer predictable adult/peer attention, organizational structure, options for

accessing choices through the day, opportunities for instruction, practice on skills, choice, peer &

individualized support, and/or options to avoid aversive situations.

29. Describe the day-to-day implementation of PBIS at your school site.

30. We are implementing PBIS with fidelity.

Demographics

1.   Gender

2.   What grade do you teach? (If you teach more than one grade, ie. combo teachers,

select all that apply) TK, K, 1, 2, 3, 4, 5, 6

3.   How many years have you been teaching?

4.   Do you see yourself going into administration in the future?

5.   Have you been trained in PBIS? (if you have been trained through multiple

sources, select all that apply: No, Yes-through my school site, Yes-through my district, Yes-

through the county, Yes-through other sources, Unsure)

6.   What year of PBIS implementation is your school site?

7.   Are you on the PBIS Team at your school site?

8.   Current School (for demographic purposes only)

9.   If you are willing to be interviewed further, please leave your name below so you

may be contacted. Thank you for your participation! (This is optional. You do not need to be

interviewed. All interviews will be conducted on Zoom and will be confidential.)

APPENDIX B: Administrator Survey

Likert Scale

 Strongly Disagree

 Disagree

 Neutral

 Agree

 Strongly Agree

Behavior

1. Overall student behavior has improved since PBIS has been implemented.

2. PBIS has helped to improve students' respectfulness toward others.

3. PBIS has helped to improve students' respectfulness toward adults on campus.

4. Students are aware of behavior expectations at our school site.

5. How are students made aware of behavior expectations at your school site?

6. How do you encourage/reinforce behavior expectations at your school site?

7. What PBIS behavior 'consequences' do students have at your school site?

8. How many disciplinary referrals have you received this year?

9. How many students have you suspended at your site this school year?

10. How many students have you expelled at your site this year?

Academic

11. PBIS has improved students' academic achievement at our school site.

12. Behavior has a direct impact on students' academic achievement.

13. Students are recognized for improved academic success.

14. Students believe they can accomplish academic goals.

15. How do you encourage academic success with students?

16. How are students made aware of academic goals at your school site?

17. What PBIS academic 'consequences' do students have at your school site?

Teacher Training

18. PBIS has had a positive impact on teacher/staff behavior.

19. I am satisfied with the plans and decisions of my school's PBIS team.

20. Staff consistently teach PBIS expectations/consequences to students.

21. Staff consistently reward students using the PBIS reward system in place at my school.

22. How do teachers support PBIS at your school site?

23. In what ways does your school support teachers who are not supportive of PBIS?

24. How are parents involved in the implementation of PBIS at your site?

25. Does the district offer support in PBIS implementation at your site?

26. Does PBIS factor into any evaluative process at your site?

27. List the targeted interventions that are available in your school. *Targeted interventions may offer predictable adult/peer attention, organizational structure, options for accessing choices through the day, opportunities for instruction, practice on skills, choice, peer & individualized support, and/or options to avoid aversive situations.

28. Describe the day-to-day implementation of PBIS at your school site.

29. We are implementing PBIS with fidelity.

Demographics

29. Gender

30. How many years have you been in administration?

31. Have you been trained in PBIS? (if you have been trained through multiple sources, select all that apply: No, Yes-through my school site, Yes-through my district, Yes-through the county, Yes-through other sources, Unsure)

32. What year of PBIS implementation is your school site?

33. Are you on the PBIS Team at your school site?

APPENDIX C: Interview Questions

1. How do you define the fidelity of PBIS?

2. How can a school tell they are following the framework of PBIS?

3. What advice would you give a school that is not following the framework of PBIS?

4. Do you believe behavior has an impact on academic performance?

    a. Why or why not?

    b. How can you tell?

5. What key factors within PBIS should a school use daily to ensure fidelity?

6. How is fidelity measured?

7. What do you want to tell me about your experiences with PBIS?

APPENDIX D: Email to administrators

Dear administrator,

My name is Kimberly Cantrell. I am a teacher in GGUSD and am currently finishing my doctorate at Concordia University. I have been approved to complete my research within GGUSD. The purpose of my study is to discover what factors impact the fidelity of PBIS implementation over time. Additionally, I am looking into the correlation between the fidelity of PBIS implementation and student behavior and academic achievement. Your school has been selected because at one point you were a PBIS site or currently are a PBIS site. If you could encourage teachers to take 5-10 minutes to complete this survey at your next staff meeting it would be greatly appreciated! If you do not have a staff meeting scheduled, please forward this link to your teachers. The teacher link is:

bit.ly/CantrellTeacherSurveyA-EE

It will remain open until June 30, 2022.

Additionally, I would like to gain insight from administrators as well. If you could take the administrator survey at your convenience, I would greatly appreciate it. Again, the administrator survey will remain open until June 30, 2022. The administrator link is:

bit.ly/CantrellAdminSurveyA-EE

Please let me know if you have any questions. Additionally, let your teachers know that all surveys are confidential. Names will not be documented and data is not shared with the district.

Sincerely,

Kimberly Cantrell

Peters 4-6 Elementary

APPENDIX E: Site Authorization Page 1

CONCORDIA UNIVERSITY IRVINE

Title of the Study	The Impact Of Fidelity Of Positive Behavior Interventions and Supports (PBIS) Implementation on Student Behavior and Academic Achievement
Researcher/s	Kimberly Cantrell
Researcher/s' Affiliation with Site	Employee (Teacher, Peters 4-6)
Researcher/s' Phone Numbers	████████████
Researcher/s' CUI Email Address (or other if non-CUI affiliated)	kimberly.cantrell@eagles.cui.edu
Researcher/s' University Supervisor	Dr. Deborah Collins
University Supervisor's Phone & E-mail	deborah.collins@cui.edu; ████████
Location/s where Study will Occur	Elementary schools, GGUSD

Purpose of the Study (1-2 paragraphs):

The purpose of this study is to discover what factors impact the fidelity of PBIS implementation over time. At this stage in the research, the educators' perception and student results, will generally be defined as the maintenance of the fidelity of the PBIS program. As illustrated in the literature review, research has been done on related topics, particularly how the implementation of PBIS aids with student achievement and behavior modification. However, the variable of teacher intervention and perception remains largely unresearched when considering the fidelity and sustainability of the program.

Procedures to be Followed:

Anonymous surveys will be given to teachers and administrators through Google Forms between May, 2022 and June, 2022. Voluntary interviews may take place between July 2022 and September 2022. Survey links will be sent to administrators with the request for their staff to take five minutes during a staff meeting to complete the survey. Student achievement data (Benchmark scores) will be obtained through the department of Evaluation and Research.

Time and Duration of the Study: May 2022-October 2022

Benefits of the Study:

The significance of this study is to determine the factors that impact the fidelity of PBIS implementation over time. The variable of teacher intervention and perception remains largely unresearched when considering the fidelity and sustainability of the program. If this can be proven, the fidelity of PBIS implementation can be strengthened through further professional development and training at school sites raising both academic achievement and behavior awareness.

Persons who will have access to the records, data, tapes, or other documentation (see Application Process Step C.3 of handbook): Kimberly Cantrell, Dr. Deborah Collins

Date when the records, data, tapes, or other documentation will be destroyed: July 2023

KCantrell
Researcher's Signature

04/16/2022
Date

Site Authorization Page 2

CONCORDIA
UNIVERSITY IRVINE

---Authorization---

I understand that participation in this study is confidential. Only the researcher, collaborators, and supervising professor will have access to participants' identities and to information that can be associated with their identities. Please check the appropriate box below and sign the form:

__X__   I **give permission** for my organization to participate in this project. I understand that I will receive a signed copy of this consent form. I have read this form and understand it.

_____   I **do not give permission** for my organization to participate in this project.

_____   4/19/22
Authorized Signature   Date

Dr. Gabriela Mafi, Superintendent, Garden Grove Unified School District
Printed Name and Title

APPENDIX F: Participant Consent Form

Informed Consent to participate in The Impact of Fidelity of Positive Behavior Interventions and Supports (PBIS) Implementation on Student Behavior and Academic Achievement

Consent to Participate:

I am asking you to participate in a research study titled The Impact of Fidelity Of Positive Behavior Interventions and Supports (PBIS) Implementation on Student Behavior and Academic Achievement. The main researcher of this study is Kimberly Cantrell, Concordia University.

All answers provided on this survey will be held in absolute confidentiality and will not be supplied to any persons other than the researcher. No names or site names will be used in the study. While site names will be collected, this will be used for demographic purposes only.

Please note that the survey is being conducted with the help of Google, a company not affiliated with Concordia University, and with its own privacy and security policies that you can find on its website. We anticipate that your participation in this survey presents no greater risk than your everyday use of the Internet.

Your participation in this project is completely voluntary, and you are free to stop or withdraw participation at any time, without any penalty.

Interviews will be voluntary. Should you wish to be interviewed, please contact the researcher. Interviews will be held on Zoom and recorded. You will be asked to turn off your camera and change your name prior to recording in order to maintain anonymity.

If you have any questions about this study or want more information, you are free to contact:

Doctoral Student: Kimberly Cantrell at kimberly.cantrell@eagles.cui.edu, Concordia University

Doctoral Chair: Dr. Deborah Collins at deborah.collins@cui.edu, Concordia University