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Count Me In: A Study of Social Validity, Positive Behavioral Interventions and Supports, and a High School

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Count Me In: A Study of Social Validity, Positive Behavioral Interventions and Supports, and a High School

by

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DEDICATION

This work is dedicated to the faculty and staff at “Sunnydale High School.” Your commitment to supporting students through a multi-tiered system of support that was not just academically focused but saw the importance of supporting students' social, emotional, and behavioral needs, is worthy of many more praises than just my own. Your work not only positively impacted the lives of your students, but I believe it can serve as a model for other high schools to do the same in the future. Thank you.

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LIST OF ABBREVIATIONS

Abbreviation	Definition
ABA	Applied Behavior Analysis
APBS	Association of Positive Behavior Supports
BEP	Behavior Education Program
CICO	Check-In/Check-Out
DPR	Daily Progress Report
ESSA	Every Student Succeeds Act
EWS	Early Warning System
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Plan
MTSS	Multi-Tiered System of Supports
ODR	Office Discipline Referral
OSEP	Office of Special Education Programs
PBIS	Positive Behavioral Interventions and Supports
PLC	Professional Learning Community
PIRS	Primary Intervention Rating Scale
RTI	Response to Intervention
SRSS-IE	Student Risk Screening Scale-Internalizing/Externalizing
SWPBIS	Schoolwide Positive Behavioral Interventions and Supports
TFI	Tiered Fidelity Inventory

ABSTRACT

The implementation of Positive Behavioral Interventions and Supports (PBIS) has been attributed to a decrease in office discipline referrals (ODRs) and suspensions and to increase academic performance, and engagement, as well as staff, family, and student perceptions of a safe and positive school climate. High schools have had more significant issues than elementary sites with implementing PBIS and garnering staff support due to larger faculty, staff, and student size, multi-faceted organizational culture, and the age of the students served. In addition, factors that have also been cited as inhibiting successful implementation at the high school level are lack of student involvement in the creation of the system itself, as well as the potential predisposition of adults on campus who believe at this age, students should already have grasped social, organizational, and self-management skills. In this study, I examined a high school that exhibited successful implementation of PBIS. During the years 2017-18 through 2020-21, "Sunnydale High School" showed a marked decrease in office discipline referrals and until the COVID-19 pandemic, an increase in Tiered Fidelity Inventory (TFI) scores, while maintaining social validity or staff support. This phenomenon was explored through a retrospective case study, which incorporated analysis of archival documents, staff survey responses, and interviews with school leaders. Findings suggest that elements of the work for Feuerborn, et al. (2013) on garnering staff commitment were evident in the rollout of PBIS as well as shared leadership and the use of processes and protocols such as using a universal screener for behavior and application of the Tier II behavioral intervention CICO. Additional research areas are suggested to advance meaningful practice and student outcomes at the secondary level.

CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE STUDY

The research study examined the implementation of Positive Behavioral Interventions and Supports (PBIS) in a suburban public high school located in the Southern United States. Due to the dearth of research on successful staff commitment at the high school level, the purpose of the study was to determine what factors contributed to the relative success of implementation across these dimensions: staff commitment to the behavioral multi-tiered framework, decrease in office discipline referrals (ODRs), increased Tiered Fidelity Inventory (TFI; 2.1) scores, graduation rates, student achievement, and firsthand accounts from PBIS team leaders.

In Chapter One, the background of the problem, the statement of the problem, and the research questions are discussed. These sections are followed by an exploration of the purpose and significance of the study, as well as an explanation of the theoretical framework through which this work was shaped. At the end of this chapter, the definition of terms are provided.

In Chapter Two, a review of the literature regarding PBIS implementation with a deeper look specifically in the high school setting is explored. Related literature relative to the measurement and indicators of social validity are investigated. In Chapter Three, the proposed methodology to explore the research questions is delved into. Discussion includes instrumentation and procedures, data analysis, quality considerations, and the role of the researcher with regard to reflexivity and ethical considerations. Chapters Four provides findings relative to each of the two research questions. Finally, in Chapter Five a review of findings from both research questions and discussion implications for meaningful coherence across these

findings is shared. Additional areas of research are suggested in the hopes that there is continued advancement in the field of meaningful practice and student outcomes at the secondary level.

Background on the Problem

Adolescent mental and behavioral health has become a growing national concern, research indicates that one in five children has a diagnosable and treatable mental health concern that is evident before the age of eighteen (Cooper, 2008; Werner-Seidler, et al., 2017). It has been established that students who demonstrate poor social and/or behavioral skills as early as kindergarten through third grade and are not provided intervention are at significant risk of building momentum toward long-term detrimental effects (Daly, et al., 2014). The effects of continuing behavioral challenges can lead to poor classroom participation which can coincide with bullying and negative peer relationships, low levels of academic achievement and school engagement, school dropout, diminished economic outcomes in adulthood, and more distressingly, an increased likelihood of substance abuse and/or suicide (Cook, et al., 2015; Weist, et al., 2014).

One means of assuaging this critical area of need in education, modeled after the three-tiered public health model, is the application of Response to Intervention (RTI), folded within an overall Multi-Tiered System of Supports (MTSS) framework (Filter, et al., 2016; Weist et al., 2014). RTI was established as part of the 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA), students are provided a continuum of academic, social-emotional, and behavioral supports based on need (National Center on Response to Intervention, 2010). The tiers are established as Tier I (universal) evidence-based educational practices that are provided to all students (e.g., 100% of students). If universal measures indicate that there is evidence of need beyond Tier I supports, Tier II (secondary) interventions are layered on top of

Tier I instruction to provide more targeted teaching to small groups of students with similar learning needs (roughly 10-15% of the total student population). Should a student indicate a need beyond the supports of Tiers I and II, Tier III (tertiary) targeted, intensive, and direct instruction is individualized to meet student needs (approximately 3-5% of the total student population) (Evanovich & Scott, 2016; National Center on Response to Intervention, 2010). It is suggested that to see strong student outcomes, all three layers of support are implemented by applying a data-based problem-solving model, with an emphasis on instruction that provides culturally responsive and evidence-based practices (Horner, et al., 2017; Kincaid, et al.,2007; Sugai & Horner, 2002, 2006).

Since 1997, Positive Behavioral Interventions and Supports (PBIS) have been cited by the Office of Special Education Programs (OSEP) as an evidence-based practice that provides proactive and preventative behavioral support for students (OSEP, 2015). Now embedded within the MTSS framework, there are two sides or two arms that hold up the framework of support for student learning in schools. PBIS is described as the behavioral arm of the system of supports for schools, or the sister to the academic arm of tiered supports.

While research on its implementation has shown positive effects for students, including decreased time out of the classroom due to punitive disciplinary actions, increased academic engagement, and higher reports of positive school climate and culture (Evanovich, & Scott, 2016; McIntosh, Mercer, Frank, et al., 2013), there are roadblocks to implementation and sustainability (George, et al. 2018; Horner, et al.,2019; Kincaid, et al., 2007). These roadblocks appear to be more profound in high school settings than in elementary or middle schools due to size, organizational culture, and age of the students (Martinez, et al., 2019). Moreover, at the secondary level, staff support for PBIS averages about 30% and is identified by leadership teams

as one of the top implementation barriers (Feuerborn, et al., 2013). These factors are further explained in Chapter Two.

Statement of the Problem

The implementation of PBIS is described as not being a one-size-fits-all program or curriculum, but rather, a framework that is tailored to the unique climate and culture of a school and the individuals who comprise it (Bradshaw, Koth, Thornton, et al., 2009; McIntosh, et al., 2013). The *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint* (OSEP, 2015; 2023) was derived to guide the implementation of PBIS and utilizes the components of Fixsen, et al.'s (2005) monograph on implementation science to provide a fluid framework for implementation. However, in Fixsen et al.'s work (2005) one can ascertain that the monograph does little to distinguish how exactly one can come to understand the motivations and perspectives of all the individuals who comprise the system to implement a framework, such as PBIS. Each school has its own unique ecology. Understanding this ecology requires knowledge of the spoken and unspoken rites, norms, history, connections, and subgroups of professional and personal connections of the school staff (Adler, & Kwon, 2002; Deal, et al., 2009). In the literature on PBIS, this critical element is described under the umbrella term of "staff buy-in" (Filter, et al., 2016; George, et al., 2018).

"Staff buy-in" sometimes referred to as staff commitment or social validity is the social acceptability of a plan, initiative, or framework and the degree to which the participants commit to its implementation. It is not a one-time measure that remains static, rather it needs to be nurtured and assessed regularly to ensure practices and policies are sustained to remain socially significant over time (Filter, et al., 2016). Research on PBIS implementation suggests that support of 80% of the school staff (instructional and non-instructional) is a key indicator for

long-term success (McIntosh, Predy, Upreti, et al., 2013; Sugai & Horner, 2006; Tyre & Feuerborn, 2017). The concept of "buy-in" draws from elements of leadership that assume a top-down directive approach. Moving forward the terms "staff support" and "social validity" will be used interchangeably as the literature indicates the goal of implementation is not a transactional or authoritarian decree. Rather, that implementation will not be achieved or sustained if the staff are not in support (McIntosh, et al., 2013; Tyre & Feuerborn, 2017).

Historically, high schools have had more significant issues with installing PBIS and garnering staff support due to larger faculty, staff, and student size, multi-faceted organizational culture, and the age of the students served (Martinez, et al., 2019). In fact, as of August of 2020, over 29,000 schools were actively implementing PBIS, of those only around 3,000 were high schools (George, H.P., personal communication, 2021, April 19). In addition, factors that inhibit implementation success at the high school level are lack of student involvement in the creation of the system itself, as well as potential stance of adults on campus who believe at this age, students should already have grasped social, organizational, and self-management skills (Flannery & Kato, 2017; Meyer, et al., 2021). A program with the most evidence base can flounder while one with little to no evidence can thrive; systems can live or die based upon the social influence of who is endorsing or installing programs, policies, or reform efforts (Fixsen et al., 2005), especially in high schools (Flannery & Kato, 2017; Martinez, et al., 2019). Thus, making social validity a critical element to consider for high school implementation of PBIS.

Purpose of the Study and Research Questions

The purpose of this study was to investigate perspectives from a school-based leadership team and faculty members who were on staff at a high school between 2017-18 to 2020-21. This high school exhibited data that indicated the successful implementation of PBIS. An objective of

my study was to gain knowledge of how the staff came to understand and see the relevance of the model to then commit to implementation. Archival data were reviewed, these data were discussed, and firsthand accounts from those who have lived this implementation experience were gathered to provide insights for future research in this area. The archival data that was explored included office discipline referrals during the first three years of implementation, graduation rates, Tiered Fidelity Inventory, social validity measures, and student achievement scores in addition to archival documents such as staff's implementation manual, presentations, and emails regarding PBIS.

The following research questions guided this study:

1.) In what ways did the school leadership team garner staff support through the proposed strategies of Feuerborn, Wallace, and Tyre (2013):

a. How did the leadership team ascertain staff perspectives of behavior and discipline as related to their school?

b. What resources were provided to aid the implementation process?

c. What professional development or materials were provided to build skills and knowledge?

d. What rationale did the leadership team provide for the adoption of PBIS?

e. How did the leadership team facilitate a shared vision and ownership?

2.) What factors contributed to the installation and implementation of PBIS?

Examples of questions that were posed to further explore this second question included:

What staff support was provided to introduce, coach, reinforce, and maintain engagement with PBIS implementation?

Were there staff who did not embrace the initiative, if so, for what reasons?

What means of differentiated support were provided to these staff, if any?

What challenges and barriers occurred along the way, and how were they addressed?

Significance of the Study

Schools that implement the PBIS framework as a comprehensive approach to discipline see marked decreases in office discipline referrals, increased academic achievement, and higher reports of positive school climate (Evanovich, & Scott, 2016; McIntosh, Mercer, Frank, et al., 2013). High schools that implement with fidelity (i.e., Tiered Fidelity Inventory or School-wide Evaluation Tool scores of 70% or higher) have also seen reductions in the frequency of tardy behaviors, in and out-of-school suspensions, increased attendance, and improved student perceptions of school safety, which are correlated with reducing the risk of dropout (Freeman, et al., 2016).

As a researcher, the culminating goal of my study was to identify potential factors to serve as recommendations for other high schools to utilize in their installment and implementation of PBIS. I hoped that by delving into the historical documents and accounts of those who were a part of what has been deemed a "successful" (i.e., staff social validity scores of over 80%; TFI scores of over 80%; reduction of office discipline referrals) high school implementing PBIS for more than two years that I would contribute to the research on and practice of PBIS implementation. These findings will perhaps shed some insight into how to approach staff involvement, effective means of engaging in professional development that garners support, or even specific strategies that could be replicated in other high schools. Determining effective means to encourage staff support of PBIS at a secondary level can also provide perspectives that can inform high school reform efforts. Identifying ingredients used in

this case study could ultimately lead to a recipe for success for greater overall student success in high schools.

Conceptual Framework

When centering on a conceptual framework, the work of the body of research by Feuerborn, et al. (2013) will serve as the analytical frame for my first research question. Coming to understand this phenomenon and capturing any additional factors that contributed to the installation and implementation of PBIS, is at the heart of my second research question. If the school-based leadership team did not rely on the a priori framework, then how did this school achieve implementation success? Both research questions are influenced by the overall implementation science conceptual framework of Fixsen, et al. (2005), my lens for viewing these questions was born from this foundational work. Therefore, the following is a description of a seminal piece to help center my perspective for answering the two research questions.

Literature on PBIS implementation from a national, state, district, and school-based level was reviewed as well as Fixsen, et al.'s (2005) monograph on implementation science, which was showcased as the conceptual framework to structure and view the overall system. This framework is studied in coursework and professional work surrounding the changing of systems and practices in educational organizations. The monograph observes the qualitative and quantitative research from 1970 through 2005 in the fields of, "agriculture, business, child welfare, engineering, health, juvenile justice, manufacturing, medicine, mental health, nursing, and social services" (Fixsen, et al., 2005, p. 3). Scouring these fields Fixsen et al. 1) determined that there was a lack of common definitions and journals that cater to the science of implementation and implementation research, 2) developed a definition for implementation: "a specified set of activities designed to put into practice an activity or program of known

dimensions," p.5. 3) defined three degrees of implementation: paper, process, and performance, and 4) established that implementation seems to move through six stages (exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability).

Have you ever seen or developed a process, procedure, or manual that was designed to impact work, but it never became more than a written document that lived on a shelf or within a Microsoft Word document? Many initiatives live and die in paper implementation. "One estimate is that 80-90% of the people-dependent innovations in business stop at paper implementation" (Fixsen et al., 2005, p. 6). "Paper implementation" is a recorded artifact of change but one that may not impact the operations of an organization (Fixsen et al., 2005, p. 6).

With some initiatives, implementation may go as far as to provide training, create roles for supervision, and tools for collecting information on the procedures and fidelity of implementation. The disconnect may occur when the information collected is not used to make impactful decisions about the needs and direction of implementation. It may also be something that is spoken about, and time was put into creating the system, however, the application of the initiative is noticeably absent, and this is considered "process implementation" (Fixsen, et al., 2005, p.6).

Ideally, organizations that have gone through the creation of paper and process implementation will drive it home to achieve "performance implementation." Here there is power behind the words and the actions of organization members that show the initiative is not only woven into the fabric of everyday work but also producing prosperous benefits for students and staff. This has also been referred to as the "integrated theory of change" (Fixsen et al., 2005).

Based upon Fixsen et al.'s (2005) seminal review of the literature on how organizations implement change, there is the proposal that there are six distinct phases or stages of implementation that occur: exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability. In recent literature by Fixsen, Blasé, and Van Dyke and the National Implementation Research Network (2019), these six phases of implementation described above have been condensed to four: exploration, installation, initial implementation, and full implementation. However, the *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint* (OSEP, 2015) which guided training and technical assistance for schools and school districts to reference throughout the period of study followed these original six phases. To understand the intricacies of each of these six phases, an outline of each follows.

First, *early exploration and adoption*, this phase is interested in the "social marketing" of the initiative (p. 9). This is where an implementation team would make the natural connections between the evidence base and contextual fit of the initiative to the already established climate and culture of a school. They would rally support while also actively assessing and problem-solving any potential barriers to implementation (i.e., funding, logistics, personnel, etc.).

Once barriers have been managed and support has been garnered, the next phase of implementation is *program installation*. This is where the foundation is carefully laid for the program or initiative to be built. It entails securing things such as funding streams, hiring necessary personnel, developing any policies or procedures to support the work, and providing training to current and newly hired personnel. These steps are considered essential in any new venture that an organization takes on be it human services or business.

The third stage is one that organizations often jump the gate on, *initial implementation*, "Implementation is a process, not an event. Implementation will not happen all at once or proceed smoothly, at least not at first" (Fixsen et al., 2005, p. 21). Typically, implementation requires people, processes, and environments to change, and change is something that requires patience, training, practice, and time for people to get comfortable to take on the change. Here organizations may have difficulty launching beyond this phase and may even enter times when they may need to re-engage in initial implementation.

Full operation is the stage where an initiative may have made it up the mountain and is looking at an easy ride back down. With full operation, the new learning is now becoming a part of the daily operations. Policies and procedures are flowing as they were designed and intended to flow. The people within the organization have adapted and accepted the initiative as part of their routine.

Once the practice has been accepted and is moving as it was intended, organizations can move into the stage of *innovation*. This is where an organization can use the data collected on current implementation to solve problems and begin to improve upon policies, practices, and procedures. The ideal innovations would not seek to alter the evidence-based practice but instead, look for ways to make the system run more smoothly and efficiently for all those involved in implementation.

Fixsen et al. (2005) suggest that for full implementation to occur it can take between 3-5 years. Along the way, the organization should reach a stage of *sustainability*. When things like staff turnover occur, the newly hired personnel are welcomed into the already established system. When new programs or initiatives are explored, the organization finds ways to embed those new pieces into the fabric that is already established with the sustaining program. When

funding or political issues arise, the organization finds ways to protect and preserve the program as it is a part of the organization's identity.

It is important to note that in July of 2023, a revised version of the *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint* (OSEP, 2023) was released. In personal discussions with the primary authors at the Association of Positive Behavior Conference on March 7, 2024, a simplified version of the stages was developed to provide a more palatable introduction to implementation science that is practitioner friendly. These were adapted into the phases of: "Getting Ready, Getting Started, and Getting Better" (OSEP, 2023, p. 52).

In the "Getting Ready" stage aligns with the *exploration and adoption* stage in that time is spent setting up the system before implementation kicks off. This includes aspects like securing resources and funding, as well as planning for professional development for all staff (OSEP, 2023, p. 53). "Getting Started" aligns with the *implementation* stage as all personnel engage in running the system (OSEP, 2023, p. 53). This can include supporting students with understanding practices and procedures or providing additional professional development to course-correct any areas where implementation may not be running as smoothly. The phase of "Getting Better" aligns with *innovation* and *sustainability*, here implementation is reviewed and adjusted regularly driven by data such as system fidelity and student outcome data (OSEP, 2023, p. 53). It also includes reexamining that the "right people" are a part of the leadership team to better influence the operation of the overall system (OSEP, 2023, p. 55).

The authors pointedly discuss that just as Fixsen et al.'s (2005) seminal work conveyed, PBIS implementation can be more cyclical in nature than linear. This is enumerated in the "Getting Better" phase as the authors address avoiding the "project mentality" in which faculty

and staff see implementation as something that is a one-time achievement and then it is time to look for the next thing to implement. It is stated that "For implementation to get better, we need to ensure that the work continues promoting sustainability, such as ongoing staff commitment, continuing allocation of time and money, consistency in support and integration with other initiatives" (OSEP, 2023, p. 55).

Feuerborn, Wallace, and Tyre's Guide for Gaining Staff Support

The work of the body of research by Feuerborn, et al. (2013) served as the analytical frame for my first research question. Given the number of articles (e.g., McIntosh & Goodman, 2016; Pinkelman, et al., 2015; Tyre, et al., 2018) and my own firsthand experience with professional development activities that have been connected to these five key strategies, the work of Feuerborn, et al. serves as a guidepost for my first research question and functions as my a priori analytical framework in approaching data analysis. Since publication, these strategies have also been cited in the research literature (McIntosh & Goodman, 2016; Pinkelman, et al., 2015; Tyre, et al., 2018) as significant in garnering staff support. Building from firsthand school-based implementation knowledge as well as a "comprehensive review of the systems change and SWPBIS literature bases" Feuerborn, et al. (2013) provide a guide for teams that includes five key strategies for fostering staff support of PBIS. These key strategies are: (1) develop a clear understanding of staff perspectives of behavior and discipline, (2) secure resources, (3) provide a strong rationale for SWPBIS, (4) build skills and knowledge, and (5) facilitate a shared vision and ownership (p. 27). These key strategies harken to Fixsen et al.'s stages of implementation, as it relates to *program installation* and *implementation*, paying attention to the people and processes in place to allow for the systems change to commence.

Honig (2006) suggests that the "implementability" of a policy or program is a result of the "interactions between policies, people, and places" (p. 2). This suggests that research should not simply center around what is implementable but add the context (e.g., who, where, when, why) as noteworthy for successful replication. This perspective supports answering research question two, which sought to address how practitioners made adjustments to enhance the implementation experience.

This thread is connected to the foundation of Fixsen, et al.'s work as addressing staff support in the stages of implementation. Fixsen et al. (2005) define the people in implementation as "purveyors," those who represent the policy or program and actively work to ensure its successful implementation (p. 14). When discussing intervention implementation, Fixsen et al. mention these purveyors as being essential in monitoring support and regularly seeking and accepting feedback on the plan. This suggests that support or social validity is not a one-time measure that remains static throughout the stages of implementation, rather it needs to be nurtured and monitored regularly to ensure practices and policies are sustained (Filter, et al., 2016). Lane, et al. (2009) describe social validity as "the extent to which consumers (e.g., teachers, parents, and students) view a given practice as addressing socially significant goals, socially acceptable treatment procedures, and socially important intervention outcomes" (p.136). To me, this underscores the importance of continually seeking to understand how purveyors are making sense of the process, policies, and practices so that the system can be refined to encourage the most staff support. Simply put, without the support of those who run a system in place, the system ceases to exist.

Overview of Methodology

The research study conducted was a qualitative case study. Yin, Stake, and Merriam are considered the foremost experts on case studies, their respective definitions suggest that a case study is the study of a specific phenomenon (program, person, process initiative, institution) that has specified boundaries (i.e., what will or will not be included in a study) (Merriam, 2010, 2015; Yazan, 2015).

The study was retrospective, bound by the span of four years from the 2017-18 school year through the 2020-2021 school year. This period reflects the time in which PBIS was implemented before the COVID-19 pandemic. Historical and archival data were explored to observe factors of implementation across time. These data included: discipline data specifically, office discipline referrals (ODRs) and incidents of threats, bullying, and harassment, student demographic data, Tiered Fidelity Inventory (TFI; 2.1), Primary Intervention Rating Scale (PIRS), graduation rates, universal behavior data from the Student Risk Screening Scale-Internalizing/Externalizing (SRSS-IE), and academic data (i.e., course performance on statewide assessments). In addition, I reviewed artifacts including the Tier I Implementation Manual, presentations, Twitter posts, emails delivered to staff that spoke to PBIS implementation, and open-ended responses on the Primary Intervention Rating Scale (PIRS). These data were reviewed to see if indications of staff support could be identified. The final method employed was interviews with members of the school based PBIS leadership team and instructional staff who served at least one year within the period of 2017-18 through 2020-21. The purpose of these interviews was to discuss findings and explore perspectives on how social validity or staff commitment to implementation was garnered over the course of four years. Interviews were

transcribed and reviewed using a constant comparison method to identify themes related to garnering staff support and commitment to the implementation of PBIS at a high school level.

Limitations and Challenges

This study was the exploration of a singular phenomenon, occurring in one environment, while the findings are not readily applicable as process steps, they can be transferrable to other schools in a similar context. I hope that it can be generalized toward further larger-scale studies. Reflecting on potential weaknesses and limitations, the first that comes to mind is that it is primarily perceptual data from myself as the researcher and also from the research participants. Those reporting on this phenomenon may have had their own intentions and interpersonal dynamics that may alter the information that is shared (O'Leary, 2014). In addition, this research is post-hoc so summaries may be unsystematic, overgeneralized, or may reflect back either favorably or unfavorably based upon the personal experience of the individuals reporting, making the self-report of data potentially unreliable.

With my own positionality, my professional history is storied with seeking successes in PBIS implementation and coaching others. As a teacher, I was part of my elementary school's leadership team receiving training from the Florida PBIS project and then building a PBIS system within my school site. From there opportunities within the MTSS and PBIS field have comprised the bulk of my career; serving as a trainer, consultant, coach, and director of a technical assistance center for individual schools and school districts in two states- seeking to implement PBIS as a multi-tiered behavioral framework. Research and publications that I regularly reviewed were often written within an echo chamber of PBIS researchers and practitioners like me who are employed by centers whose sustained funding is reliant on evidence of implementation success. Authors work with and regularly cite one another in

publications. However, more personally, in my research and 14 years observing the installation and consequent implementation of PBIS, I wanted to provide a glimpse into a phenomenon where implementation success has been reported in the secondary setting, a setting that has had little in-depth research on contributing factors to success. As Chapter Two will discuss, there are some reasons why high schools have fewer case studies and models of success, but more personally, as a daily practitioner and a researcher, I wanted to take what has been considered a model high school for successful PBIS implementation with strong staff social validity and study what elements contributed and can be used to examine future recommendations for high schools.

The information gathered was retrospective in nature. Data provided were dependent upon the archives of the district's educational consultant and the school-based leadership team, therefore some pieces of archival data are missing or incomplete. These data were derived from the firsthand accounts of those who had a commitment to seeing this system become successful. I sought a comprehensive sample of participants to interview (e.g., four to twelve) that was reflective of the experiences of those staff who had led implementation as well as those who were not associated with the school-based leadership team (e.g., leadership team members, instructional, and non-instructional staff). Interview participants erred on the side of being a part of or working closely with the leadership team in some capacity. Two participants served on the leadership team, one served on the RTI academic leadership team, and the fourth participant was asked to provide some leadership to support implementation during her first year on campus. Having the perspective of staff who did not work closely with the school-based leadership team would provide a more well-rounded and credible depiction of the staff's perception of how engagement was approached. Those who were interviewed felt a close tie to the co-lead of the team and responded to my requests for an interview after receiving an email from him. Having

perspectives from those who did not feel a connection with the co-lead may have brought out other perspectives and themes to explore regarding this phenomenon.

Additionally, a weakness is limited time in the field, this research was conducted during the second wave of the COVID-19 pandemic, and opportunities for observation and in-person interaction are not permissible at this time. During the time of study and interviews the school studied had a reduced number of students, approximately one-third of the typical population on campus, and faculty in positions of virtual teaching. Therefore, the faculty and staff did not engage in implementation that was consistent with the previous three years. Interviews and communications were held via a web-based platform making the opportunity to build rapport and see the school function in a natural setting did not occur. This may have led to some misinterpretation on the part of the researcher. It could also have led to a lack of interest in full participation in the interviews and data collection as the researcher has not proven to show a deep interest in the school teams by remaining at a distance.

The fourth limitation, I interviewed members of the PBIS school-based leadership team, by utilizing purposeful recruitment this team is comprised of individuals that represented different departments, grade levels, and roles on campus so that varying voices have representation on the team, these individuals naturally had a vested interest in the success of this initiative. Therefore, their perspectives may have erred on the side of more positive portrayals of the work done by this team. Additional data sources (i.e., open-ended responses to staff surveys) and interviews with instructional personnel who were not part of the leadership team were pursued to strive for a more balanced representation.

Definition of Terms

Fidelity is the degree to which there is adherence (i.e., consistent and exact use) of key practices outlined within a procedure or plan (Dariotis, et al., 2008; Fixsen et al., 2005).

Implementation Science is the art of engaging in the ongoing activities necessary for people, processes, and environments to make systemic change. "Implementation is a process, not an event. Implementation will not happen all at once or proceed smoothly, at least not at first" (Fixsen et al., 2005, p. 21).

Multi-Tiered System of Supports (MTSS) is a three-tiered prevention system designed to ensure students' opportunities for success are maximized by supporting the academic and behavioral needs of all. Employing regular data review and the integration of academic or behavioral intervention as needed (American Institutes for Research, 2020).

Positive Behavioral Interventions and Support (PBIS) is an evidence-based, three-tiered framework that seeks to improve the data, systems, and practices that affect students' daily school-based outcomes (Center on PBIS, 2020).

Social Validity is sometimes referred to as staff commitment or in PBIS literature as "buy-in." Social validity is the social acceptability of a plan, initiative, or framework and the degree to which the participants commit to its implementation. It is not a one-time measure that remains static, rather it needs to be nurtured and assessed regularly to ensure practices and policies are sustained to remain socially significant over time (Filter, et al., 2016).

CHAPTER TWO: REVIEW OF THE RELATED LITERATURE

The previous chapter provided some introduction to the concept and educational trends that are interconnected and relevant to this research, a more formal background and context will be provided within this section. A broader explanation of the systems and research behind Positive Behavior Interventions and Supports (PBIS) as it relates to a Multi-Tiered System of Supports (MTSS), Response to Intervention (RTI), and professional practices associated with implementing PBIS, followed by a more specific review of the literature tied to high school implementation of PBIS is included. This chapter culminates in a review of the literature related to social validity, specifically the Primary Intervention Rating Scale (PIRS) a measure used to gauge staff support; as well as a body of research by Feuerborn, et al. (2013) that will serve as the analytical frame for my research. These two pieces of work will steer the course of Chapter Three.

A literature search was conducted reviewing texts and peer-reviewed journal articles published within the last twenty years, as well as seminal works in the fields of Positive Behavioral Interventions and Supports, Implementation Science, and Multi-Tiered Systems of Support. Peer-reviewed articles available in the University of South Florida library which includes access to databases such as ERIC, Google Scholar, PsycINFO, JSTOR, and Emerald were utilized. In addition, texts were loaned from the Peabody Library at Vanderbilt University.

Multi-Tiered Systems of Support (MTSS)

To address social, emotional, behavioral, mental health, and academic areas of need, three levels of layered support are built into the overall systems framework of a school, referred to as a Multi-Tiered System of Support (MTSS). This framework was not born overnight, rather several iterations of laws have molded and shaped what we now consider this umbrella which covers all things academic and behavioral about student learning, support, and success. The seed was planted in 1977 with the passing of Public Law 94-142, Education for All Handicapped Children Act which over time evolved into the Individuals with Disabilities in Education Improvement Act (IDEA) of 2004. The former was designed to ensure that students with disabilities were afforded a free and appropriate public education with student and family rights protected to engage in special education and related services that meet an individual's unique needs. The latter was reauthorized to fix issues that included the poor outcomes for students receiving special education services, a discrepancy model that left many students far behind peers before intervention was provided, and the disproportionate number of students of color identified for special education services. In this reauthorization, the discussion of a Response to Intervention (RTI) with a continuum of services to meet the needs of all students resulted and iterations of a multi-tiered system of supports were created (Batsche, et al., 2006; Bradley, et al., 2005). However, it was not until 2015 in the Every Student Succeeds Act (ESSA) that MTSS was mentioned as an overarching framework in which RTI sits (McIntosh, & Goodman, 2016).

This framework is considered the house within which the operations, curriculum selection and integration, and data-based decision-making for the whole school occurs (McIntosh, & Goodman, 2016). The first layer, or Tier I of support, is the use of universal measures of prevention that are integrated into school settings. When universal approaches to

supporting the social, emotional, behavioral, and mental health needs of students are integrated, the selected programs, curriculum, or strategies are used with the entire student population (i.e., 100%), regardless of indicated risk (American Institutes for Research [AIR], 2021; National Center on Response to Intervention [NCRTI], 2010; Weist et al., 2014; Werner-Sedler et al., 2017). The second layer of support, or Tier II, is intervention focused. Tier II support is intended to teach or remediate selected small groups of students with similar needs, (i.e., 10%–15%) who may not be responding to the universal support alone. The third layer of support within the MTSS framework, Tier III, often provides targeted, intensive, individualized support to approximately 3%–5% of students who may not respond to Tiers I and II or who have indicated the need for individualized behavior plans due to the severity of their problem behaviors (i.e., indicated risk to self or others) (National Center on Response to Intervention, 2010; Weist et al., 2014). For successful student outcomes, all components must be implemented using culturally responsive and evidence-based practices.

Response to Intervention (RTI)

Within the overall systems framework of MTSS, there is a system that uses assessments and other relevant student data (e.g., attendance, course failures, tardiness, office discipline referrals) to identify and monitor students at risk of school dropout (AIR, 2021; NCRI, 2010). Response to Intervention helps to employ evidence-based interventions that are tailored to fit student needs and further incorporates four essential components: 1) a school-wide, multilevel behavioral and instructional system aimed at prevention of school failure; 2) screening; 3) progress monitoring; and 4) making decisions based on data for instruction, level of student need, and identification of disability (NCRI, 2010; Werner-Sedler et al., 2017). This support system helps to guide the level of intervention intensity a student should be receiving.

Additionally, the system assists with early identification of learning and behavioral problems and can lead to more prompt interventions for students who may be at risk for school failure (McIntosh, & Goodman, 2016; Weist et al., 2014).

Students who are struggling are identified by implementing a two-stage screening process. The first stage, universal screening, is a brief assessment for all students conducted at the beginning of the school year; however, some schools and districts use it 2-3 times throughout the school year (Romer, et al., 2020; Weist et al., 2014.) For students who score below the cut-point (i.e., the set score for average performance) on the universal screener, a second stage of screening is then conducted to more accurately predict which students are truly at risk for poor learning outcomes. This second stage involves additional, more in-depth diagnostic testing or short-term progress monitoring to confirm a student's level of need. Screening tools must be reliable, valid, and demonstrate diagnostic accuracy for predicting which students will develop learning or behavioral difficulties (NCRI, 2012a; Romer et al., 2020).

If identified as needing more intensive intervention, progress monitoring is used to examine student performance, identify the rate of student improvement or responsiveness, and evaluate intervention effectiveness. These tools are designed to be given frequently (i.e., once a week or even daily), are sensitive to incremental rates of growth, and should provide an accurate representation of academic or behavioral development. The information acquired from progress monitoring should be utilized to inform student learning and intervention planning (e.g., fade, intensify, or graduate the student from the intervention; NCRI, 2012b; Weist, et al., 2014, Levy, n.d.).

Throughout the entire MTSS/RTI process collecting, analyzing, and using data to inform decision-making is essential. Data should be used to examine the effectiveness of interventions

and instructional strategies used school-wide and with small groups or individual students (McIntosh, & Goodman, 2016; NCRI, 2010). Data-based decision-making is the essence of good MTSS/RTI practices and can ensure that adequate resources (i.e., time, personnel, curricula, mental health supports) are allocated to school sites (Center on PBIS, 2020).

Positive Behavioral Interventions and Supports (PBIS)

It was behavioral psychologist Burrhus Frederic Skinner, better known as B.F. Skinner studied the use of reinforcement as an intervention technique to shape behavior. Skinner (1974) suggested that these techniques could be applied to student behavior in schools. He described that desired behaviors that occur in response to a stimulus are called reinforcers as they are likely to increase in frequency or duration of a behavior (Ormrod, 2019; Skinner 1974). Skinner's work contributed to the initiation of over 30 years of research on altering the climate, culture, and approaches to supporting how we teach behaviors in schools called Positive Behavior Interventions and Support (PBIS). Deep-seated in the field of Applied Behavioral Analysis (ABA) this method relies on providing proactive and positive responses to change undesirable behavior in students with disabilities and challenges the former approaches that were highly punitive and reactive to student behaviors (Barry, 2015; Sugai & Horner, 2002). The research was replicable with positive effects not only for students with intellectual and developmental disabilities but could be generalized to general K-12 education settings. Rob Horner and George Sugai are considered the originators of PBIS, in the late 1990s their work at the University of Oregon centered on applying PBIS to the whole school setting. The success of this intervention framework continued in 1997 when the Office of Special Education Programs (OSEP) began providing funding to establish the Technical Assistance Center on Positive Behavioral

Interventions and Supports (OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports, 2015; PBIS.org, 2017).

The Center on PBIS (PBIS.org) indicates that there are state coordinators to support this work in all 50 states plus the territories of Guam, Puerto Rico, the Virgin Islands, and Washington D.C. These statewide projects are grant-funded to provide training and technical assistance to schools and school districts seeking to implement PBIS. Each project has an assigned partner at the Center on PBIS to serve as a point of contact should the need arise. State project personnel will often collaborate with one another via networking opportunities and PBIS-focused conferences (e.g., Association of Positive Behavior Supports, PBIS Leadership Forum) to support the advancement of research and evidence-based resources, professional development materials, and practices.

Overview of School-wide PBIS

As part of the overall MTSS framework for student learning in schools, PBIS is a preventative and proactive approach to building a consistent disciplinary framework in schools. It is grounded in four interdependent elemental components: evidence-based practices, systems, data-based decision-making, and valued outcomes (Center on PBIS, 2020; Sugai & Horner, 2002). As a Tier I, universal approach, schools that implement PBIS develop a foundation that is engrained in the field of behavior analysis. This is seen in how schools establish a leadership or implementation team that supports analyzing schoolwide data on a regular (often monthly) basis. This team determines if there are environmental antecedents that can be addressed to ensure students are displaying the expected behaviors; this way time spent on academic engagement can be optimized (Center on PBIS, 2020; Elrod, 2022; Sugai, & Horner, 2006; Weist, et al., 2014;).

Schools establish, teach, and re-teach behavioral expectations (usually 3-5) across all settings. Staff consistently reinforce or acknowledge these expected behaviors. Should problem behaviors occur, staff apply a continuum of responses to manage specific behaviors. For example, all staff (i.e., teachers, administrators, custodians, bus drivers, cafeteria workers, front office staff, etc.) will work together at the beginning of the school year to define and describe what constitutes "disrespectful behavior" and the response that will occur (e.g., classroom-managed or office-managed; Horner, et al., 2010). When implemented with fidelity (i.e., consistently executing a defined set of procedures to enact an initiative; Fixsen et al., 2005) PBIS has been attributed to a decrease in office discipline referrals and suspensions and to increased academic performance, engagement, as well as staff, family, and student perceptions of a safe and positive school climate (Cook, et al., 2015; Horner, et al., 2010; Weist et al., 2015).

PBIS Systems, Practices, and Implementation

The *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint* (OSEP, 2015; 2023) was developed as a guide for the implementation of PBIS. Systems are the vehicle through which implementation is driven. In it, the Tier I systems are defined as (a) Establish a leadership team that includes an active administrator; (b) structure, efficient, and regularly scheduled team meetings; (c) cultivate a statement or vision that is shared regarding the establishment of a positive school culture; (d) engage in ongoing data-based decision-making and the dissemination of data; (e) develop a way of work for identifying, training, and coaching personnel; and (e) distinguish methods for evaluating implementation.

Practices are the evidence the universal PBIS system is in place. The *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint* (2015; 2023) suggests that when these critical practices are put into place, they evidence that the overarching system is

functioning. These practices include establishing and teaching a set of school-wide expectations that are positively stated and clearly defined, confirming that classroom rules and expectations are aligned with the school-wide expectations, ensuring there is a continuum of responses that discourage problem behavior and encourage the expected behaviors, and that there is a procedure for engaging family and community partnerships with the school (OSEP, 2015; 2023). These practices are part of the paper and process implementation that is used in hopes of achieving and maintaining performance implementation (Fixsen et al., 2005).

In Tier I PBIS training, school-based leadership teams are asked to bring five to seven members who represent the overall school network. This is often described as an administrator, representatives of student support services (e.g., school counselor, school psychologist, RTI facilitator), grade level and/or department level representatives, and in some instances family, community, and student representatives (Daly et al., 2014; Sugai & Horner 2002; 2006). This leadership team is then appointed as what Adelman and Taylor (1997) and Fixsen et al. (2013) refer to as the implementation team. This team is responsible for diffusing the innovation, training, sustaining, and monitoring the implementation of PBIS.

To support this team in sustaining the systems and practices associated with PBIS, the *Positive Behavioral Interventions, and Supports (PBIS) Implementation Blueprint* connects to the work of Fixsen et al.'s monograph (2005) to describe the stages of implementation with a lens that pinpoints how each stage would look in a PBIS system. Readiness and commitment are gauged as "understood commitments" that must be established before engaging in implementation activities. These are further defined as: "leadership approval (e.g., superintendent, commissioner, principal), participant commitment to implement ("buy-in") (e.g., >80% agreement), initiative and program integration, collection of local data for decision-

making, leadership teaming and coaching" (OSEP, 2015, p. 16). In the revised version of *the PBIS Implementation Blueprint* (OSEP, 2023) the importance of securing commitment continues. In the revision, it is described as "partner engagement" which serves as a reoccurring action item for the leadership team to assess as part of what is described as their "executive functions" (OSEP, 2023, p. 36).

Once readiness has been established and key collaborator commitment criteria have been met, the phases of implementation are then considered a fluid process that schools may move throughout in a non-linear fashion. During the period of study, these came directly from the monograph and are defined as exploration and adoption, installation, initial implementation, full implementation, sustainability, and scaling (Fixsen et al., 2005; OSEP, 2015). A statement of these phases is followed by a description of the responsibility given to the leadership team who serve as the coordinators of this implementation process. Examples of the items established are, "policy and decision-making authority," "recurring and sufficient resources (funding personnel) based on 3-5 years of committed local resources," and "an across initiative and program organization that is unified based on student outcomes" (OSEP, 2015, p. 16). The last three sections in this blueprint entail specifics regarding the long-term maintenance of implementation, building local capacity (i.e., data-driven decision-making, leadership coordination, ongoing professional development, etc.), and the development of a data-based action plan that looks at long-term goals (e.g., 3-5 years). It is implied that all aspects of this blueprint are necessary and meaningful for guiding schools through the process of implementing PBIS.

Tier II Social and Behavioral Interventions

Part of the core training provided to schools in the state, once Tier I PBIS practices were installed at a school for at least one year and shown to have an efficacy of 70% or higher as

indicated on the Tiered Fidelity Inventory, then professional development was provided on the layering of Tier II social and behavioral interventions. Tier II is layered in addition to Tier I for an estimated 10-15% of the student population that is not responding to Tier I instruction alone (Bradshaw, Koth, Bevans, et al., 2008; McIntosh & Goodman, 2016). Tier II interventions can be described as small groups of students with similar needs that receive a standardized intervention. Students receiving Tier II for behavioral skills have not responded to the Tier I behavioral system and may need additional re-teaching, practice opportunities, feedback, and reinforcement (Hawken, et al., 2007). It should be noted that the behaviors exhibited have not warranted intervention individualization or functional behavioral analysis (Cambell & Anderson, 2011; Crone, et al., 2010).

In this case study, Tier II training provided to the school of study aimed to support a school-based leadership team of five to seven team members to understand the key components of evidence-based interventions. The goal was to help teams be able to identify evidence-based Tier II social and behavioral interventions and utilize the components to structure any Tier II intervention. The components they were trained to review included program logistics, criteria for student identification and matching interventions to student needs, data management, evaluating intervention outcomes, daily/weekly progress reports, reinforcement systems, training for interventionists, students, and families, and planning for self-management, fading, and graduation from an intervention. In addition, teams were asked to explore all materials they have access to on-campus and virtually to resource map, or catalog: a) the material's purpose, b) the tier it could support, c) evidence-base, d) specific skills it addresses, e) time needed for lessons, f) progress monitoring tool and frequency, g) entrance and exit criteria, and h) type of instructional support needed to implement (e.g., highly qualified teacher vs. any adult on campus

as long as they receive training). They were also asked to practice using multiple pieces of data such as universal behavioral screener data, teacher nomination, office discipline referrals, attendance, number of nurse visits, etc. to identify and select appropriate intervention groupings.

As a means of illustrating an evidence-based Tier II intervention, teams were introduced to Check-In/Check-Out (CICO) also known as the Behavior Education Program (BEP). This intervention was outlined in the manual *Responding to Problem Behavior in Schools: The Behavior Education Program, 2nd Edition* (Crone, et al., 2010). The intervention was designed to "address the needs of students who demonstrate consistent patterns of problem behavior across multiple settings" (Missouri PBIS, 2018). Examples of these behaviors that indicate CICO is an appropriate intervention could include out-of-seat behaviors, tardiness, and calling out. In addition, these behaviors are observed in more than just one setting, by more than one adult (e.g., bus, cafeteria, special area, math, language arts, etc.), and the students are motivated by adult attention (Todd, et al., 2008). The intervention is deemed successful if the students increase self-management and have been scaffolded to monitor and manage their behavior (Crone, et al., 2010; Missouri PBIS, 2018).

In this intervention, a mentor is identified for the students, often this adult is someone that the students themselves have identified as someone they would like to connect with regularly. This may be a current or former teacher, a member of the office staff they feel connected to, a coach, or even an adult on campus they have wanted to know better. This adult serves as the interventionist, meeting with the student before and after school briefly to review schoolwide expectations and behaviors to be explicitly practiced by the student (Crone, et al., 2010). This person may also set the student up for success for the day by ensuring the student has eaten breakfast or has all the materials necessary to be ready to learn. At the end of the day, this

adult reviews how the student has performed in meeting these expectations through each period or learning block of the day. A CICO interventionist can serve up to 10 to 15 students as each check-in is meant to become a brief and predictable touchpoint (Campbell & Anderson, 2011).

To provide repeated opportunities to practice and receive feedback, each student is provided with a Daily Progress Report (DPR) this sheet of paper or electronic form is meant to be completed at regular intervals throughout the day (Crone, et al., 2010; Flannery, et al., 2024). An adult that supports each learning block (e.g., language arts teacher, science teacher, P.E. teacher, etc.) reviews and rates each period with the student, letting them know positive observations, and if applicable, areas to target in the next learning session (Missouri PBIS, 2018; Miller, et al., 2015). The CICO interventionist will also review these data points and provide coaching and reinforcement as appropriate. To provide the connection between home and school, guardians are also educated on this intervention and encouraged to serve as a "cheerleader" for the student at home as weekly summaries are often sent home.

Check-In/Check-Out has shown positive outcomes in four areas: 1) decreased problem behavior, 2) increased academic engagement time, 3) ease of intervention fidelity, and 4) positive response to intervention when implemented with fidelity. More recently in a series of high school specific studies on CICO (Kato, et al, 2022; Kittleman, et al., 2018) observed strong rates of social validity from the students and interventionists. Historically, students who have participated in CICO demonstrate a reduction in office discipline referrals and referrals for special education services (Filter, et al., 2007; Hawken & Horner, 2003; Hawken, et al., 2007; March & Horner, 2002; Miller, et al., 2015; Todd, et al., 2008). In addition, studies conducted on academic engagement, the implementation of the intervention showed an increase in time spent

engaged during academic instruction (Campbell & Anderson, 2011; Hawken & Horner, 2003; Miller, et al., 2015).

In addition, when studies were conducted on the ease of implementation fidelity, as well as the consistent follow-through, those who typically serve as interventionists (e.g., school counselors, homeroom teachers, paraprofessionals, etc.) were able to exhibit reliability and consistency in intervention delivery (Hawken & Horner, 2003; Todd, et al., 2008). Finally, when studies were conducted on the number of students who responded positively and were able to successfully exit the intervention, 60-75% of students who received the intervention with fidelity showed success (Fairbanks et al., 2007; Filter et al., 2007; Hawken 2006; Hawken & Horner, 2003; Hawken, et al., 2007; Kato, et al., 2022; March & Horner 2002).

Critiques of PBIS

As previous sections have highlighted research indicating the positive outcomes associated with the implementation of PBIS, there are also criticisms of its application. The largest bodies of research that critique this framework center around (a) critiques of the overall three-tiered approach being designed from an inequitable foundation (Kim & Venet, 2023; Kramarczuk Voulgarides, et al., 2017; McCart & Miller, 2020); (b) the need for adaptation to be culturally responsive to the student population (Amemiya, 2020; McIntosh, et al., 2018; Skiba, et al., 2011; Vincent & Tobin, 2010; Wilson, 2015); (c) the exclusion of students with disabilities (Bornstein, 2017; Gillies, 2016; Tobin, et al., 2012; Wilson, 2015).

Research on the multi-tiered approach to supporting students has had some criticisms regarding the system itself being set up for equitable support for all students (Kim & Venet, 2023). Some of these criticisms reflect on the way funding structures and school boundary lines are drawn within school districts. They question whether those schools with more resources are

in higher socioeconomic areas than others (McCart & Miller, 2020). For example, a local public elementary school determined that they would like to lower the student-to-teacher ratio for reading intervention groups. This school reached out to the parents and guardians of students and asked that they raise money to fund the salary of an additional interventionist. This allows the school to be more responsive and fluid in the supports that are offered to students. This leads critics to wonder if all students no matter where they are located have access to resources (e.g., curricula, funding strands, highly qualified instructors, etc.) that are matched to their identified area of need (McCart & Miller, 2020). In addition, multi-tiered systems are criticized for not placing an emphasis on developing a culture that welcomes and actively includes all students and families regardless of race, ability, native language, gender and sexual orientation, socioeconomic status, and culture. Kim and Venet (2023) provide a commentary from reading articles offered on PBIS.org that often in systems such as these, the burden of change is placed on students who are different than middle-class white students. Moreover, engaging in these practices can enhance the "savior narrative" (p. 6) which positions white female educators as "well-intentioned, caring, and generous" (Sondel et al., 2019) rather than having these educators focus on addressing their own biases and imposing those beliefs inherent in their own culture and upbringing upon those who differ.

Looking further into cultural responsiveness, when implemented there is often a top-down approach in which administrators will select the behavioral practices to be reinforced (most frequently: be respectful, be responsible, be safe; Lynass, et al., 2012). These desired behaviors and the operationalized definition of these behaviors are often indicative of the administration's cultural norms (i.e., Eurocentric) rather than reflective of the cultural expectations of the student body (Wilson, 2015). It is suggested that before establishing

schoolwide expectations the families of students should be allowed to share what they identify as most important for their student to become a successful well-rounded individual.

A 2010 review of the exclusionary discipline data of 77 K-12 schools found that while overall disciplinary data showed an overall decrease when those data were further disaggregated by ethnicity and race, white students saw a marked decline while students of color remained over-represented in exclusionary disciplinary practices (Vincent & Tobin, 2010). However, in a follow-up study conducted in 2016, promising results for equitable discipline practices occurred when PBIS was not used in isolation but rather coupled with restorative disciplinary practices (Vincent et al., 2016). Gregory, et al. (2017) and Carter, et al., (2017) also found that PBIS alone is not the antidote, rather it was most effective when paired with a pointed effort to overtly address racial injustices. To this point, it has been suggested that PBIS does little to address the inherent biases about students of color and of lower socioeconomic status that may contribute to the continued disparity in the number of students of color documented with disciplinary actions compared to white peers (Amemiya, et al., 2020; Baule, 2020). In response, calls for papers and presentations have been added to PBIS-specific conferences (e.g., Association of Positive Behavior Supports, PBIS Leadership Forum) seeking to remedy this identified disparity. More recently, the 2024 APBS conference has added an "equity" strand to categorize presentation types (APBS.org). In addition, the revised *PBIS Implementation Blueprint* (OSEP, 2023) added "equity" as one of the five core values of the Center on PBIS (p. 7). Equity is defined as, "actions that elevate historically marginalized voices, honor individual, family, and community identities, and reflect equitable learning opportunities through meaningful participation of each student, family, and educator in the systems we promote" (OSEP, 2023, p. 7).

Criticisms are not only regarding the exclusion of students of color. Additional critiques center around the exclusionary practices related to students with disabilities. Often school-wide expectations are designed for able-bodied and neurotypical students, students who may be unable, due to physical or mental disability, to exhibit the expected behaviors at all times in all environments may suffer consequences such as social isolation from peers, lack of access to school-wide celebrations and events, and disciplinary action (Bornstein, 2017; Gillies, 2016; Tobin, et al., 2012; Wilson, 2015). In an OSEP (2012) brief that studied the effects of PBIS implementation on disciplinary actions on students of color and those with disabilities, it was indicated that "the percentage of all students with ODRs who are students with IEPs may tend to increase slightly over time, possibly reflecting the reality that it may be easier to resolve general education students' behavior problems than those of students in special education" (Tobin, et al., 2012, p. 5).

PBIS in High Schools

It is no secret that there are fewer high schools than middle and elementary schools across the country. High schools often serve as a hub in which multiple feeder schools unite, so to have fewer high schools represented in implementation data compared to their counterparts is not shocking (Elrod, et al., 2022). "Based on the numbers reported to the national PBIS network in August of 2020, there were 29,083 schools actively implementing PBIS across all of the states and territories" (George, H.P., personal communication, 2021, April 19). This represents about 25% of all U.S. schools, of the data that were reported from each state, not all were disaggregated by school type. Of those that were, 3,292 were high schools. In the state of Tennessee, there are 518,011 schools, of that number 684 are implementing Tier I, 78 of which were high schools (TBSP Annual Report, 2019).

Historically data indicate strong effects on student performance in elementary schools (Bradshaw, Koth, Bevans, et al., 2008; Bradshaw, Reinke, Brown, et al., 2008). Quasi-experimental scale-up studies (Pas, et al., 2019) suggest positive effects of school-wide PBIS across all grade spans. However, research on national trends suggests a latency in the training and implementation of PBIS in high schools relative to elementary schools (Freeman, et al., 2017). In fact, in 2016, data indicated that while 34% of U.S. schools were high schools, only 7% implemented PBIS (Freeman, et al., 2016). Therefore, the literature on implementation in high schools is limited. More recently (e.g., fewer than ten years) research has focused on a line of studies that focus on the unique characteristics of high schools relative to elementary and middle school settings (e.g., Flannery et al., 2013; 2014; Flannery & Kato, 2017; Freeman et al., 2016).

Unique Characteristics of High Schools

The 2018 monograph *Lessons Learned on Implementation of PBIS in High Schools*, states that the first key theme is that "practitioners should recognize the differences associated with high school implementation" (p. 3). PBIS implementation, relying on the pivotal work of Fixsen et al. (2005), recognizes that while key features of an initiative such as data use and leadership are foundational, the context (e.g., people, places, culture, resources) in which it is being implemented is equally critical to the success of the initiative. One of the main differences cited as the influencing factor for implementation at the high school level is context (Bohanon, et al., 2009; Flannery & Kato, 2017; Flannery, et al., 2009; Swain-Bradway, et al., 2015).

Context is a variable that is essential to consider in any school. For example, the location and community surrounding the school, the ethnicity and socioeconomic status of families, and the languages spoken are important contextual factors (Flannery & Kato, 2017; Horner &

Smolkowski, 2014). Context, as it relates to high school implementation, considers those variables and then layers in three additional influences: 1) size, 2) organizational culture, and 3) age of the students (Flannery, et. al., 2018; Flannery & Kato, 2017; Meyer, et al., 2021).

Size is the first variable. High schools are the sites where multiple feeder schools integrate into one larger building. The environment is more expansive and thus houses a larger student and staff population than elementary and middle school sites. In fact, with regards to discipline, as the student population increases and time to establish relationships with students decreases (e.g., due to block or period-incremented schedules,) high school administrators report having higher discipline referral rates relative to middle and elementary sites (Flannery, et al., 2018). As a natural result of being larger in square footage and population, staff and students may only interact with a smaller circle of their overall colleagues on a daily basis. These smaller circles may grow into silos as staff are naturally grouped into academic departments. Within each department, there is an established culture that is created such as a unified way of work, and shared philosophies on teaching, learning, and behavior. These inter-department cultures are often longstanding. So, when a high school adopts the PBIS framework with the central aim of establishing a universal approach towards student behavior and classroom management, this can buck a culture. Adopting a universal behavior system relies on consistency and predictability throughout campus. Therefore, if a means of two-way communication and data collection are not purposefully planned for amongst departments and the leadership team, the system's fidelity will falter.

The second contextual variable for consideration is organizational culture. Literature suggests that this variable is defined as, "values, expectations, attitudes, and beliefs that are held by the people within the organization" (p. 5). Just as in the workplace, the organizational culture

and how it is perceived by those within it can directly influence how individuals behave and treat one another. The organizational culture drives what is perceived as primary goals, how goals are accomplished, and how business is conducted. It also determines the degree to which staff and students are given voice, vote, and ultimately decision-making authority. Educators who work within the high school setting are described as having common values or beliefs when it comes to learning. For example, research suggests a common belief is that by high school, students should "know how to behave" (Flannery & Kato, 2017, p.70). In addition, high school teachers work under the auspice of being content experts (e.g., algebra, chemistry, English literature, etc.) and therefore may not feel a responsibility or as if they have the time to support social-emotional skill development (Meyer, et al., 2021). Another organizational culture element that is important to consider is the increased use of exclusionary approaches and even stricter zero-tolerance policies in high schools. Because there are often multiple placement options available for high school, such as different levels of math (e.g., regular, advanced, honors, advanced placement, remedial) as well as different options for placement (e.g., career and technical school, alternative school, virtual school) there is a belief that if students are not experiencing success in their current setting, they can simply find another class, program, or school to fit their needs (Flannery, et al., 2018). In that same vein stricter zero-tolerance policies found in high school codes of conduct suggest that should a student commit an offense, rather than provide school-based interventions and supports, the student is removed from the current setting and provided an alternative site to complete coursework. These redline policies often create a covert or underlying belief that should a student misbehave, their behavior cannot be remediated within the current school setting. Instead, the student should be moved to another more equipped setting.

The age of the students is the third contextual variable that impacts high school implementation of PBIS. Developmentally, high school-aged students show stronger influence by peers than adults, and students seek increased autonomy from adults (Wentzel & Ramani, 2016). In this phase of development, students also have a stronger desire to have greater input into the decisions that will impact their daily lives (Flannery, et al., 2018; Wentzel & Ramani, 2016). Student voice, be it via survey, vote, or as part of the PBIS committee for planning and implementation, can help to ensure that the overall system and practices are meaningful and relevant to students. However, with the age of students and their desire for meaningful involvement in systems, rules, and structures that impact them, staff can often have a misconception about students' inherent knowledge of what expectations and rules look like. Therefore, staff may be less likely to see the need for continuous opportunities to teach and acknowledge appropriate student behavior. With this in mind, personnel training for high school staff often includes a discussion of the adolescent frontal lobe development noting that this area of the brain which accounts for memory, emotions, impulse control, problem-solving, and social interaction does not fully develop until age twenty-five (Kato & Flannery, 2017; Steinberg, 2012).

Variations of Research on PBIS in High Schools

While there is a dearth of research specifically on high school implementation, the research that has been conducted is promising and spans a variety of topics. For example, the research on the effects of PBIS on student success indicates reductions in student dropouts, office discipline referrals, and students identified as needing more intensive behavioral and social-emotional support. In addition, these data indicate overall increased student attendance,

positively impacting graduation rates (Flannery, et. al., 2014; Freeman, et al., 2016; Tyre, et al., 2011).

In 2018 research conducted on high schools by Swain-Bradway, et al. studied the fidelity data of 996 high schools implemented across 31 of the states. The study was conducted to identify patterns of strengths and areas of need in implementation fidelity. The purpose of the research was to find out the underlying causes for the latency noted between initial training and reaching school-wide installment. Of the schools with both high, partial, and low fidelity of implementation, the key finding was the development of an acknowledgment system for students. Findings regarding acknowledgment systems can be attributed to the aforementioned concern about the difficulty some high school teams face when asking staff to engage in regular reinforcement delivery to students (Swain-Bradway, Loman, & Vincent, 2014). Conversely, these schools at all levels of fidelity indicated the highest scores in having established violation systems. The researchers concluded that the robust violation codes and protocols that are long-standing in high schools would make the establishment of a proactive reinforcement system more difficult. Implications for high schools would be to thoroughly review the two in tandem to identify ways the two sides of a discipline system (i.e., reinforcement and consequences for violations) could better align with one another.

Student voice and involvement in PBIS has been another line of research for high schools. Feuerborn et al. (2016) conducted a qualitative study with middle and high school educators, as some teachers mentioned the lack of meaningful student involvement as a barrier to implementation. The teachers felt that students might not understand the significance of a schoolwide system and therefore have ill perceptions of the acknowledgment systems and be less likely to participate. In addition, Flannery and Kato (2017) discuss that developmentally students

may know what is expected of them but may engage in violations of that expectation as a means of garnering greater social payoffs. With this in mind school teams will need to consider "an increase in the frequency and intensity of acknowledgment for students choosing to do what is expected," (p. 72). Because students are more peer-centric at this stage of life, recommendations include balancing teaching students self-monitoring skills, how to recognize when and how to appropriately ask for help, and the active involvement of students by soliciting input from students to guide how to make the system more supportive of their needs and interests (e.g., considering cultural norms and background of the students, needs of transfer students and incoming freshmen, opportunities for peer mediation, input on the expectations, lesson content, and design, etc.; Flannery & Kato, 2017; Meyer, et al., 2021). This research has shown that students who are included in the discussions around the overall system and who are given some ownership in the implementation are more likely to engage (Martinez, et al., 2019).

One of the recent strands of research on PBIS implementation in high schools are studies that look into high schools that are initiating and implementing advanced tiers of support for behavior (i.e., Tiers II and III; Grasley-Boy, et al., 2021; Meyer et al. 2021). Providing some insight into how relatively new research on PBIS is in high schools is, for one study on advanced tiers being implemented at a high school level only three school-level group design studies had been found (Grasley-Boy, et al., 2021). In this research the need for strong fidelity of Tier I was re-emphasized explaining that data is well-established that if implemented with fidelity disciplinary exclusions are reduced; especially when compared to other high schools that do not implement some form of a Tier I behavioral system.

In Meyer, et al.'s, (2021) review of data from four high schools in small cities in the state of Massachusetts they indicated areas of strength and challenge for implementation, culminating

in the overall finding that investing in solid foundations of Tier I implementation will result in more impactful advanced tiers. These foundations include: having a school-based leadership team that meets regularly; providing regular communication with staff and other key collaborators on the overall system, changes, needs, successes, and alignment of efforts; regularly conducting progress monitoring assessments on the fidelity of the Tier I system (e.g., Tiered Fidelity Inventory, Benchmarks of Quality, School-wide Evaluation Tool). This will support high school teams in the layering of additional tiers of support and promote "consistency, efficiency, communication, and access" (Meyer et al., 2021, p. 7). To identify and appropriately intervene with advanced tiers for students who may be showing signs of need, a recommended practice is the use of a universal behavior screener.

Universal Behavior Screeners

Early identification of student needs is considered primary prevention in the multi-tiered model of support (McIntosh & Goodman, 2016; Sugai & Horner, 2006). In academics, universal screeners are utilized to cast a wide net to catch any students who might be in danger of academic difficulty. These screeners can range from phonemic awareness, and number sense, to word and number fluency, etc. (Fuchs & Fuchs, 2017; Reddy, et al., 2009). The same holds for behavioral screeners. Early identification of student needs in social, emotional, or behavioral supports and the implementation of strategies to proactively support students can decrease the risk of needing more intensive interventions (Lane, et al., 2016; Young, et al., 2021). These universal data are meant to be utilized for all students, all grades, and all areas. When reviewing universal screening data, a school team should first look from a big-picture perspective, noting if a large number of the student population (at or near 80%) or a certain grade level is indicating a need in an area (e.g., anxiety, word reading fluency, etc.). If data indicates this, then strategies

should be utilized school-wide or grade-level-wide to target that area of need (Young, et al., 2021).

Student Risk Screening Scale-Internalizing/Externalizing (SRSS-IE)

There are many options for universal behavior screeners (i.e., Social, Academic, and Emotional Behavior Risk Screener [SAEBRS], Emotional and Behavioral Screener [EBS], Behavior Assessment System for Children 3rd Edition: Behavioral and Emotional Screening System [BASC-3:BESS], etc.; PBIS.org, 2019). All schools that received Tier I PBIS training in the district where the school of study is located were encouraged by their district to utilize the Student Risk Screening Scale-Internalizing/Externalizing (Drummond, 1994; Lane & Menzies, 2009) as a universal screener for behavior. This K-12 tool is free to access and is completed by teachers during three administration windows each school year (e.g., fall, winter, and spring). It is estimated that it takes a teacher about 10-15 minutes per class to complete the inventory (Lane & Menzies, 2009). Twelve items are organized by two subscales: internalizing (e.g., behaviors such as socially withdrawn, anxious, peer rejection, etc.) and externalizing (e.g., behaviors such as aggression, defiance, lying, etc.) (Lane, et al., 2016). Data are then summarized into a risk category (low, moderate, and high).

SRSS-IE in High Schools

Young, et al., (2021) completed a study on the integration of the SRSS-IE with an Early Warning System (often used to track student progress toward meeting graduation requirements) to better predict student success at the high school level. They indicated that in a review of the literature, the majority of research conducted on screeners is conducted at the elementary level and this is attributed to the "smaller, simpler structure of those settings (Young, et al., 2021).

The area of research on secondary screener use is considered inchoate but research conducted thus far yields encouraging results (Lane, et al., 2017; Lane, et al., 2016; Moulton, et al., 2019.) In Young, et al.'s (2011) book *Positive Behavior Support in Secondary Schools* an entire chapter is devoted to how and why to conduct school-wide screeners at a secondary level, however, there is no research shared on the percentage of high schools utilizing them. In publications regarding the tool's use at the secondary level, instructions and means for collecting the data are offered but little is shared about the prevalence of schools using them (Michigan's Integrated Behavior and Learning Support Initiative, 2020; Rollenhagen, et al., 2021).

Social Acceptability and Validity

Throughout the aforementioned variations of research on high school implementation of PBIS, one variable that is overtly and at times covertly expressed is the need for social acceptance or the social validity of the Tier I system for it to prove successful. In the current review of literature, no studies were identified that looked directly at the social validity of high school faculty and staff as it impacts the implementation of PBIS. While the National Center on PBIS houses one brief on "staff buy-in" at the high school level (Martinez, et al., 2019), it too alludes to studies that had different research questions that showed staff support as one of the contributing variables to overall intervention success (i.e., Flannery, & Kato, 2017; Flannery, et al., 2013; Morningstar, et al., 2017).

"Social validity refers to the extent to which consumers (e.g., teachers, parents, and students) view a given practice as addressing socially significant goals, socially acceptable treatment procedures, and socially important intervention outcomes" (Lane, et al., 2009, p.136). Grounded in applied behavioral analysis, social validity was first described by Wolf in 1978 as the value that society places on a product. Wolf suggested that goals, procedures, and outcomes

can be used not only to evaluate but also to customize a program to better meet the needs of a consumer (Miramontes, et al., 2011; Wolf, 1978). In this behaviorist view, Wolf saw that one could look beyond the quantitative measures and explore the social environment of those whose behavior is being changed. In the current research, social validity assesses the pulse of the individuals who comprise an organization to determine the level of commitment as a means to gauge the likelihood that the intervention will be or is being implemented as intended. "The role of social validity in educational and social inquiry is important because it highlights the extent to which…relevant stakeholders perceive the goals, procedures, and outcomes of that intervention as valid and important" (Snodgrass, et al., 2018, p.168).

Horner, et al. (2017) studying years of research on the application of Positive Behavioral Interventions and Supports (PBIS) in schools reiterate their previous findings that the application of implementation science and evidence-based practice is essential for launch. However, in their 2017 review of PBIS implementation lessons learned, they layer in the concept of "social significance" indicating that not only should implementation be concerned with the application of evidence-based practices, but that the results are deemed meaningful to the practitioners within the context that they are applied. Thus, this work alludes to social validity as being a key indicator of success for any initiative that is being implemented.

Adelman and Taylor (1997) provided a formula for systems change in schools similar to Fixsen, et al.'s (2005) stages of implementation. In their work, they describe a school first needing to be prepared through readiness techniques, which can include measuring initial social acceptance of the initiative. Then, once commitment or staff support has been achieved, applying the initial stages of implementation becomes important (i.e., exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability). Third, making

it an institutionalized way of work that is present in all archival documents and approaches that teachers use. Finally, using feedback to innovate so the initiative remains socially valid over time occurs. This echoes the literature that indicates continually assessing and rallying social support for any initiative is imperative.

Clare (2022) shares, "Quantitative data can reflect measurable behaviors, but the stories participants tell remain the variables that determine whether or not the intervention is practical – whether it is acceptable in that it fits with the client system sufficiently to be implemented and sustained" (p. 18). With this in mind, the data that indicate the health of a Tier I system (i.e., office discipline referrals, attendance rates, graduation rates, etc.) may not be enough to indicate the overall success and sustainability of a PBIS system.

One means of honoring the way meaning was made during the implementation process comes from documenting the perspectives of those actors within the change process. Tyre et al. (2013) highlight the importance of regularly surveying staff on their perspectives of the PBIS plan; Lane, et al., (2002) developed an evaluation measure for assessing the social validity and acceptability of the Tier I implementation of PBIS called the Primary Intervention Rating Scale (PIRS) (Appendix A). This measure was adapted from Witt and Elliott's (1985) IRP-15 which was designed to acquire the opinions of teachers on classroom intervention strategies. The language was adapted to fit the context of PBIS implementation while still keeping the integrity of each question to elicit the thoughts and opinions of the implementers. The PIRS is designed to be an anonymous survey that is taken electronically, it is estimated that it takes around 10 minutes to complete the 17 Likert scale items and four open-ended response questions (Lane, et al., 2009). The Likert scale has six points ranging from (1) strongly disagree to (6) strongly

agree. The four open-ended questions allow for opportunities to suggest changes to the plan, and perceptions of the intervention's overall impact on student performance (Lane, et al., 2014).

The Primary Intervention Rating Scale can provide schools with insights on the degree to which their faculty and staff approve of the Tier I plan, as well as provides some insight into what things their colleagues see as hindrances to the system. When a school is showing strong staff support, it would prove beneficial to the field of research on high school PBIS to explore what aspects of the plan and how it was conveyed make it more readily accepted. With the dearth of research on how to engage in active support of faculty and staff at the high school and given the abovementioned research that indicates the beliefs of high school teachers can directly impact the implementation fidelity of the PBIS system, there is a need to understand social validity beyond this tool.

Research indicates that "staff buy-in" is perceived as the greatest indicator of effective PBIS implementation (Filter, et al., 2016; Kincaid, et al., 2007). In a presentation delivered by Kent McIntosh at the 2019 National PBIS Leadership Forum, he stated, "If you do not have PBIS occurring in all of your classrooms, then frankly, you are not implementing PBIS." So how does a school-based leadership team rally the staff to garner commitment to the implementation of PBIS? When undergoing a system change how does an implementation team engage staff to want to commit to the process?

Simply putting something on paper such as a new mandate is not always enough to compel adults to make changes to their everyday way of work (Fixsen, et al., 2005; George, et al., 2006). Elena Aguilar (2016) states, "You can't hold anyone accountable to anything. People always have a choice about what they do and what they think" (p. 197). Showkier and Showkeir (2008) suggest that adults will respond by either choosing commitment, compliance, or the

appearance of compliance. With this in mind, finding a high school with consistently high social validity scores, over three or more years, as measured by the PIRS, and conducting a deeper look into the variables that may have influenced these scores is of value to research.

Feuerborn, Wallace, and Tyre's Guide for Gaining Staff Support

The literature that I have firsthand experience, in two states, in providing professional development on engaging staff support is that of Feuerborn, et al. (2013). This body of research was utilized in the Tier I training that was provided to the leadership team and a copy of the article was provided. Tennessee and Florida's respective PBIS projects are not alone in their use. Since publication, the strategies have also been cited in the research literature (McIntosh & Goodman, 2016; Pinkelman, et al., 2015; Tyre, et al., 2018) as significant in garnering staff support. Building from firsthand school-based implementation knowledge as well as a "comprehensive review of the systems change and SWPBIS literature bases," Feuerborn, et al. (2013) provide a guide for teams that includes five key strategies for fostering staff support of PBIS. These key strategies are: (1) develop a clear understanding of staff perspectives of behavior and discipline, (2) secure resources, (3) provide a strong rationale for SWPBIS, (4) build skills and knowledge, and (5) facilitate a shared vision and ownership.

Given the number of articles (e.g., McIntosh & Goodman, 2016; Pinkelman, et al., 2015; Tyre, et al., 2018) and my own firsthand experience with professional development activities that have been connected to these five key strategies, the work of Feuerborn, et al. serves as a guidepost for my research questions and serves as my a priori analytical framework. In this work Feuerborn, et al. (2013) share that difficulty with staff perceptions at the secondary level is identified as one of the top challenges leadership teams face. "In fact, only 30% of team members reported they obtained a majority of staff support for implementation" (p. 27). Further,

their research explains that professional development often overlooks the importance of teacher perceptions of a plan, program, initiative, or strategy. The approach towards engaging educators is through simply building knowledge and skills which alone will not remedy resistance to adopting a change. It should be noted that the authors do not see these key strategies as a one-size-fits-all. Instead, these strategies should be aligned with current practices, knowledge, and even beliefs of staff regardless of role or title on campus. Engagement of these strategies should also be tied to relevant data such as needs assessments or climate surveys. To further elucidate these five key strategies each is described below.

Utilizing the research of Hall and Hord (2011) on change initiatives in schools, step one recommends that before engaging in implementation a leadership team should, *develop a clear understanding of staff perspectives of behavior and discipline*. It is recommended that staff are surveyed and/or interviewed to ascertain the current perceptions of any behavior and disciplinary systems that are already in place. This is considered a primary step because staff perceptions can directly affect the success or failure of an initiative. Feuerborn, et al., (2013) explain that questions should help to indicate staff views on a need for change, administrative supports, resources, knowledge and skills, beliefs and philosophy regarding school discipline and behavior practices, the overall school climate, and their level of commitment to PBIS or current behavioral systems and practices (p. 29). Should resistance occur at any point during the implementation process, leadership teams must circle back to this strategy to identify the root cause of the resistance.

The second step is to *secure resources for implementing PBIS*. These resources are described as administrative support, funding, time, and linking to existing capacity. Administrative support has been readily identified in PBIS literature as a core foundation to

consider before engaging in implementation (Lohrmann, et al., 2008; Mathews et al., 2014; McIntosh et al., 2013; 2016). When an administrator is engaged and makes visible efforts to show support and contributions throughout the process, staff are more likely to engage as well. Examples of this visibility include attending trainings and most meetings, leading staff discussions on data and implementation, or making time on staff meeting agendas for these discussions. They also highlight the work being done in regular communications such as newsletters or emails. Additionally, administrators should seek staff input on the decision-making process regarding policies, systems, and practices but also hold staff accountable once those decisions are made.

These building leaders also exhibit commitment by allocating time for implementation. Examples of this include preplanned time on school calendars for internal professional development, re-orientation to the plan, time to teach the plan to students and families, and time for professional learning communities to review implementation data and provide feedback on the plan. Coupled with time comes the securing of funds to support implementation efforts. This can look like, allocating or raising funds for reinforcement materials or activities for students and staff. If the need is illustrated, funding an additional position to support behavioral instruction and interventions and purchasing or procuring curricula related to social, emotional, and behavioral skills to meet student needs at all tiers also can occur.

The final piece of step two is to link time, funding, and resources to existing capacity. This can include conducting an inventory (i.e., resource mapping) of materials, curricula, funds, and staff already on campus to support implementation. Staff should be surveyed to ascertain the staff's current level of knowledge regarding PBIS so adequate time (more or less) is allocated to

professional development. Linking to existing capacity serves as a way to honor what is already in place and, where possible, build onto that foundation.

The third step is to *provide a strong rationale for PBIS*, which is also described as revealing the need for change and a need specifically for PBIS. When a large system like a school already has a steady way of operating, be it good or bad, change is perceived as a disruptor to the status quo and can be viewed as a problem. Feuerborn, et al., (2013) note, "some resistance to change is natural and to be expected" (p. 30). One means to counteract this is to reveal the need for adopting PBIS- be it sharing staff survey data that shows dissatisfaction with current practices or even sharing data that indicates the need such as school climate data or high rates of office discipline referrals. These data should also be shown in comparison to local, state, or national data to better illustrate the need.

As a follow-up, these data pieces should then be tied directly to elements of PBIS that can serve as alternatives or remedies to the identified areas of need. In doing this, particular attention should be given to explaining that investment of time and energy to this new initiative will be advantageous to all parties. Often tying the interrelation of behavior to academics supports this need, (e.g., taking time throughout the year to teach and reinforce behavioral expectations leads to more instructional time resulting in increased academic achievement). Seeing a situation in context and viewing authentic examples in action helps to validate the implementation of PBIS and can increase teacher support for change (Lohrmann, et al., 2008). Schools can accomplish this by sharing success stories, testimonials, and literature, or visiting schools already implementing PBIS that are of similar demographics and characteristics.

Fourth, for staff to feel capable and empowered to implement PBIS leadership needs to *build skills and knowledge.* In a recent training when I was discussing this key strategy, a teacher

shared, “If I don’t feel like I know how to competently do something, then I am going to be resistant to try it.” Feuerborn, et al. (2003) shared that ongoing professional development is critical to ensure the fidelity of implementation. This professional development should be well-planned with careful attention to need, intensity, and format relative to the staff’s role in engaging with students. Thus, it is recommended that differentiated groupings are considered, for example hosting a training for a small group of school bus drivers versus a whole group training for instructional staff. Perhaps offering mandatory versus optional training on topics such as specific behavior strategies or on advanced tiers of support. Either way, adult learners, much like students, benefit from repeated opportunities to learn and practice. Therefore, professional development should be regularly occurring (e.g., a bi-annual refresher on classroom management strategies; providing constructive feedback to students engaged in check-in/check-out, etc.) The aforementioned staff survey data should be reviewed, and professional learning communities surveyed on areas where additional support is warranted in building skills and knowledge.

Facilitating a shared vision and ownership of the PBIS plan is the fifth and final step. Ultimately, each staff member is autonomous and can decide at any point whether or not they want to engage in PBIS implementation. It is the job of the leadership team to seek the perspectives of all staff throughout the process no matter if it is year one or year ten of implementation. Facilitating ownership or the decision to support implementation often comes from feeling like you have been asked to take part in building the system and your voice, experience, and insights on the topic matter. Steps that leadership teams can take along the way include voting on events, systems, policies, and practices. Offering opportunities for feedback such as a comment box or asking professional learning communities to review materials and share their opinions (e.g., definitions of staff-managed versus office-managed behaviors).

Facilitating shared ownership also comes from regularly hearing and seeing the benefits of implementation efforts, as well as feeling recognized for one's part in these efforts. Leadership teams can support this by regularly sharing student outcome data (e.g., attendance data, academic scores, climate surveys, and office discipline referrals). Acknowledging staff for their part in implementation efforts can include holding monthly drawings for staff who participate in recognizing positive student behaviors, sending thank you cards from students, showcasing a staff member who has used proactive strategies on morning announcements or at a faculty meeting, or even earning special privileges like coverage of a morning duty or a V.I.P. snack section of the faculty meeting.

Improvement Science in the Implementation Process

Akin to sensemaking, how organizations contextualize problem-solving and gauge implementation fidelity matters. Having a problem-solving process for implementing an intervention is not a novel concept, in many fields, there are published steps to take when fundamentally seeking to resolve an issue. For instance, *Mind and the World Order: Outline of a Theory of Knowledge,* published by Clarence Irving Lewis in 1929, focused on how people test theories to improve outcomes (LeMahieu, et al, 2017). In 1945, George Polya wrote *How to Solve It* where he explains a methodical sequence for problem-solving mathematical problems (e.g., understand the problem, devise the plan, carry out the plan, look back; Shirali, 2014). Improvement science and its problem-solving process have been present in other sectors for decades (e.g., healthcare, agriculture, manufacturing) however, in the arena of educational leadership it is considered an emerging method for approaching an identified problem (Bryk, et al., 2015; LeMahieu, et al., 2017). "In education, improvement science focuses on addressing challenges in the system of schooling to solve them and thereby improving the system,"

(Cunningham & Osworth, 2023, p. 1). This approach centers around three essential questions: 1) What is the specific problem we are trying to solve? 2) What change might we introduce to solve it (and why)? and 3) How will we know that the change is an improvement? These questions are also framed as the Plan-Do-Study-Act (PDSA) cycle (e.g., "planning a change and a way to test it; carrying out the change and test the same on an appropriate scale; studying the results; and acting upon the knowledge gained;" LeMahieu, et al., 2017, p. 9).

In this field of study one fundamental difference between the four-step problem-solving process used in the field of school psychology (e.g., defining the problem, analyzing the cause, developing and implementing an intervention plan, and evaluating the effectiveness of the intervention; Batsche, Elliott, Graden, et al., 2006) is how implementation fidelity is regarded. In school psychology and embedded within the MTSS framework is the more positivist concept that when a strategy, program, process, or intervention is used it should have a straightforward recipe for how it is done so it consistently yields the desired results thus solving the identified problem. In improvement science, it is understood that when any intervention is applied to a different context this can generate its own host of new problems that will need to be solved before and during the application of the intervention. In this, fidelity is more loosely confined allowing practitioners to "adaptively integrate interventions" that fit the context to obtain the desired outcome more reliably (Bryk et al., 2015, p. 209). Applying this idea of improvement science serves as a means of viewing this study.

Summary

In this chapter, the overarching frameworks of MTSS and PBIS were discussed, and a more direct focus on what research has been conducted on PBIS in the high school setting was established. Noting that three contextual variables are taken into consideration in high school

settings: size, organizational culture, and age. While the research on high schools implementing PBIS is growing, there appears to be a lack of research that delves directly into social validity as a means of increasing staff acceptability of this framework.

In Chapter Three, I discuss the framework used to conduct a case study in which a high school's historical data (e.g., academics, implementation manuals, school-based team artifacts, etc.), as well as interviews from staff, was utilized to gain insight into how a high school was able to overcome the variables of context, size, and age to incur high scores of implementation fidelity (TFI) and social validity with their staff.

CHAPTER THREE: METHODOLOGY

In addition to reviewing the overarching framework of Positive Behavioral Interventions and Supports (PBIS) within a Multi-Tiered System of Support (MTSS) framework, Chapter Two provided background on the research conducted on PBIS in high school settings and the relevance of social validity to overall implementation. In Chapter Three I delve into my research design, approach to data analysis, and ethical and quality considerations.

Research Design

The purpose of this study was to learn about how PBIS was structured at a high school that, based on recommended PBIS measures, showed consistent and strong implementation fidelity as well as high social validity for the framework among staff. From exploring perspectives from the leadership team and a sample of staff, coupled with archival materials, social validity survey responses, and other relevant school-based data, this case study identified themes that contributed to what is considered successful implementation of PBIS at a high school level. Through interviews and archival document review, the following research questions were addressed:

1.) In what ways did the school leadership team garner staff support through the proposed strategies of Feuerborn, Wallace, and Tyre (2013):

   a. How did the leadership team ascertain staff perspectives of behavior and discipline as related to their school?

   b. What resources were provided to aid the implementation process?

c. What professional development or materials were provided to build skills and knowledge?

d. What rationale did the leadership team provide for the adoption of PBIS?

e. How did the leadership team facilitate a shared vision and ownership?

2.) What factors contributed to the installation and implementation of PBIS?

Examples of questions that were posed to further explore this second question included:

What staff support was provided to introduce, coach, reinforce, and maintain engagement with PBIS implementation?

Were there staff who did not embrace the initiative, if so, for what reasons?

What means of differentiated support were provided to these staff, if any?

What challenges and barriers occurred along the way, and how were they addressed?

The research design utilized was a retrospective case study. The study was bound by the 2017-18 to the 2020-21 school years. These were selected because they were years that exhibited, by PBIS measures, strong implementation fidelity, and staff support. This period was also indicative of data before and just at the start of the COVID-19 global pandemic. Data indicated that during and post-COVID the implementation fidelity data and social validity scores began to decrease as the school structure for learning became altered (e.g., virtual learning rather than school-based learning). The administrators also reported that the leadership team decreased the focus on PBIS as students were not on campus, and once students returned to campus, leadership changed (e.g., both the administrator and the co-lead had left the school site). Therefore, the system was not re-engaged.

To become more refined in my knowledge of this approach I set forth by reviewing the seminal works of Stake, Merriam, and Yin. I was grounded in wanting to explore the "why" and "how" of this phenomenon which occurs within a real-life context. Recognizing that quantifiable data alone cannot provide me with the full picture and that places have context and meaning that are derived from human interactions and relationships, it is important to utilize multiple sources of evidence to converge upon research findings (Fixsen, et al., 2005; Honig, 2006). Of the three foundational case study researchers, Yin advocates for a combination of quantitative and qualitative sources working in harmony to guide an inquirer toward evidenced findings (Yazan, 2015). Yin (1994, 2009) describes a case as, "a contemporary phenomenon within its real-life context, especially when boundaries between a phenomenon and a context are not clear and a researcher has little control over the phenomenon and the context." In this case, to be transparent in my interactions with the team, I did provide the initial training of the school-based leadership team and provided feedback on their first draft of the Tier I implementation manual. I reminded them of data windows via email communication, and each semester facilitated two-hour networking opportunities within the district with other school-based team leaders. I had no control over how the information was disseminated among the school staff or rolled out to families, the community, and the students. The school-based leadership team worked exclusively on their own to develop the framework, train their key collaborators (e.g., faculty, staff, students, families, and community partners), and make data-based decisions on how to alter their plan. Contact with their district-based coach and myself was only by way of sharing data or with their district-based coach in facilitating their completion of the Tiered Fidelity Inventory (TFI; 2.1) bi-annually.

From my literature review on high school implementation, this phenomenon is unique and therefore was approached as a single-case design rather than a critical case (Yin, 2009). While this case is unique it does not focus on atypical or reframe hypotheses on a particular study (Yin, 2009). The selection of this narrowly focused case study combined subjective and archival data. I utilized the data pieces (i.e., longitudinal office discipline data, prior TFI scores, PIRS scores, etc.); and archival documents that were available to me such as email communications, presentations, implementation manuals, and PBIS-related emails.

The aforementioned data sources served not only as indicators of the implementation process but also supported question development as I employed participant interviews. The rationale for employing interviews included: identifying concepts and themes, exploring consensus or lack of consensus from the participants as they recall past implementation experiences, meaning-making in that it allowed me to explore interpretive questions, and reducing the time and demands placed on these educators (Gubrium, 2012; Lichtman, 2012). This interview process served the purpose of ascertaining feelings, beliefs, and interpretations that helped me gain insight into the behavior and experiences of individuals within the organization who have lived the experience (Grbich, 2013; Lichtman, 2012; Yazan, 2015).

Epistemology

As the researcher, it is important to be forthright in my epistemology, background, intentions, and potential assumptions in approaching this work. Methodologically, I believe that educational practices should be grounded in validated research. Quantitative data should be utilized to aid in decision-making and objectivity should be the goal, particularly when making decisions about the nature of student support and identification for specialized programs. Because of my work in training school teams over the past fourteen years in a data-based

problem-solving framework that evolved from school psychology, I am inclined to approach research from a post-positivist orientation. Add to that the PBIS framework that I have worked on training and consulting with school teams on for the greater part of my career, which was born from Applied Behavior Analysis- this field is grounded in post-positivism. In my career, there is a need to approach learning and come to understand a phenomenon through a more scientific approach. However, I recognize that we can never fully remove the human factor from research, especially when that research involves other humans. Or as Clare (2022) more pertinently stated, “Science cannot escape the social and personal influences of the humans who generate it" (p. 11). The coupling of quantitative data with the exploration of the human experience can yield powerful evidence-based practices and results that pull my beliefs about knowledge and research into the realm of interpretivism.

To be post-positivist as defined by Lichtman (2013) is “a philosophical doctrine that acknowledges the shortcomings of positivism but strives to attain objective reality” (p. 325). In this doctrine, there is a tie to the former positivist philosophy that has an appreciation for rational applications of scientific inquiry with procedures and protocols for coming to prove facts, knowledge, and reality (Fox, 2008). However, to be post-positivist applies an understanding that no process or protocol is shorn from bias. A researcher’s background, values, experiences, and theories will always loom in the backdrop as potential biases impact data collection and interpretation (Grbich, 2013).

As a researcher, I am quick to latch onto the notion of a rubric, form, process, or protocol to aid the organization and management of data collection and analysis. I would love for data collection and validation to follow a perfectly linear pattern that could be applied to every situation. Being a realist and pulling from inherent interpretivist beliefs, I understand that

research is especially important when involving human interactions, interpretations, feelings, and experiences. Lichtman (2013) simply states interpretivism as, “a doctrine that emphasizes analyzing meanings people confer on their own actions” (p. 24). Thus leading to my method of interviewing participants because how the people involved in a research study perceive the experience and outcomes is of high regard to me, as is the process and procedures involved in studying and identifying a research topic. Or as Merriam (2016) explained, “Qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world” (p.6).

I know that as a researcher I am driven to seek to know more on a subject because it has in some way piqued my interest or stirred feelings on a topic. Therefore, as a researcher, I must acknowledge these personal connections and determine ways to keep them at bay with the primary aim of research to find truth. Thus, sitting on the fence between the doctrines of post-positivist and interpretivist views is how I ground knowing. This was reflected in my two primary research questions, the first question was posed from a post-positivist stance, used an a priori framework, and utilized a more standard approach to the interview protocol and analysis. The second research question was designed to understand the process and make meaning from an interpretivist stance. Converging these two ways of knowing fits the dichotomy of my role as a researcher: one who in career is part of a post-positivist field of work; but in personality prefers to learn from personal accounts and the process of making meaning that each individual goes through when encountering a change. Layering in the lens of understanding to balance my natural inclination to approach this work from a post-positivist stance, allowed me to use an inductive approach to view what other elements were at play beyond the a priori framework.

Reflexivity

When I first learned about reflexivity this definition was one that I often look back on, "A reflexive approach is one where the researcher critically reflects on her academic, race, class or other privileges, and on her methodologies, to be sure that she is not creating knowledge from her own life (mind)," (Briggs, et al., 2014, p. 34). Academically, the majority of my research and professional reading is from the fields of PBIS, MTSS, leadership, special education, social justice, and systems change. Professional conference attendance and networking events have been at PBIS, MTSS, and Coaching-based forums. My degrees are a Bachelor of Arts in Elementary Education and a Master of Arts in Varying Exceptionalities, both from Florida universities with programs more centered in liberal arts.

Reflecting on my background, I recognize as a white, middle-class, heterosexual, female I have representation and privilege that align with the majority of those currently working in the field of education. I was raised in a middle-class, nuclear family structure with both parents being college graduates and employed full-time. My parents instilled the values of having a strong work ethic (you only miss school if you are throwing up or have a fever) and the importance of developing interpersonal relationships (hosting Thanksgiving at the house for those co-workers or friends who do not have family nearby). Parts of my background that may not be as typical in the field include having been in a biracial relationship and being a partner in caring for a biracial elementary-aged child. Having loved someone who has experienced police brutality, and inequities in the justice system, and who has grown up in a household that could nearly be described as the opposite of my own, has only made my intentions as a social justice advocate and a disruptor of inequitable disciplinary school-based practices even stronger. With this in mind, I recognize that I covertly, and sometimes overtly, root for schools that have made

strides in changing their disciplinary practices to be more inclusive of proactive and positive approaches (i.e., trauma-informed practices, PBIS, restorative practices, removal of strict zero-tolerance policies, etc.)

I recognize additional values in my personal connection to PBIS. As an elementary educator working in an urban elementary school with disproportionate disciplinary actions occurring, the implementation of PBIS, not only changed my school's stance on discipline, as well as our discipline referrals; it was a catalyst that created a climate that was more supportive of our students and staff and thus a much more positive work environment. My career path from there included serving as a district-level MTSS/RTI Facilitator, a PBIS District Coordinator, and eventually a trainer, educational consultant, and director of PBIS technical assistance and implementation for the states of Florida and Tennessee. My career has had some aspect of PBIS be a part of it since 2008.

Reflecting on this commitment to PBIS, I want to express what were my research intentions. I have trained and consulted with around twenty to twenty-five high schools that have implemented PBIS. Many of those high schools may have had a triumphant roll-out of a system-wide plan only to later see disengagement from faculty and staff in the implementation. One of the questions I received the most from high school administrators and school-based team leaders is, how do other high schools achieve staff support? While I can list research in other fields and on elementary implementation, I often felt dissatisfied with not being able to give solid answers regarding other high schools. Therefore, by finding a high school that to the PBIS measures of implementation has shown successful implementation and social validity over multiple years, I intended to try to find out any initial reflective pieces that can later be expanded upon. I hoped

that this research could be the start of building a greater understanding of how to achieve successful implementation of a systems change like PBIS at a high school level.

School Selection and Participants

Located about 50 miles outside of a large southeastern city, a public school district serves approximately 12,500 students in 23 schools. This county is described as a rural suburb with a local economy that is chiefly supported by agriculture and one of the largest car manufacturing plants in North America. To drive through this county, one can take in rolling green hills, partitioned by fences marking farm properties, with a classic southern downtown shopping square that hosts local coffee shops and restaurants, all centered around the courthouse built in the early 1900s. Spending time at the local establishments one can observe a sense of pride in being a local. A local historical mascot of sorts is used in the name of shops and restaurants, sported as stickers on cars, or residents can even be seen wearing t-shirts representing this emblem. The town has even claimed the title of being the "capital of the world" for this mascot.

Along with this title comes a week-long celebration complete with a parade, crowning of a beauty queen in its honor, and over a century-long tradition of a livestock show and market. While this image harkens to those sweet southern traditions, it is also important to mention that this area also has roots in the darker side of the south. Since 1992, it has been the home of a national confederate museum and has served as the general headquarters for a large national confederate group. Centering on my aforementioned passion for social justice and reducing disproportionate disciplinary actions against students of color, as I engaged in this research, in the back of my mind was the hope that the school of study showed success in supporting students of all demographic backgrounds.

How the school of study, which will be given the pseudonym of Sunnydale High School, came to implement PBIS started with the regional PBIS project being approached by the school district's Director of Middle Schools in the Fall of 2015. She was concerned about the rising number of office discipline referrals and the self-reported lack of staff knowledge about behavior management systems and strategies. A Memorandum of Understanding was signed by the Superintendent of Schools allowing the regional PBIS project to cultivate a district leadership team for behavior. It was determined, based on office discipline referral data, that the five schools with the highest number of referrals would be provided an overview of PBIS with the option to opt-in for Tier I training in the Spring of 2016. All five schools opted in and shared their successes with other school-based administrators to allow for future cohorts to be developed and trained as interest was expressed.

During the 2018-2019 school year, 19 sites within this district had received training and were actively coordinating the implementation of PBIS. Seven of these sites reported 100% of faculty and staff completing the PIRS. Of those seven sites, three (two elementary schools and one high school) had a social validity score greater than 80%. In the 2019-20 school year 23 sites had received training in Tier I and were actively embedding the PBIS framework. Of these sites, two reported 100% of faculty and staff completing the PIRS with three sites maintaining a social validity score greater than 80%. The table below indicates Sunnydale's PIRS scores over the school years, as well as the number of staff who responded to the survey. The total number of staff went from 109 in 2018-19 to 107 in the following years.

Table 1 Primary Intervention Scores

Primary Intervention Rating Scale (PIRS)	% Acceptability	Number of Staff Responses
Initial Implementation (2017-18)	opt out	opt out
Year 2 (2018-19)	81%	109
Year 3 (2019-20)	81%	107

Table 1 (Continued)

Year 4 (2020-21)	77%	81

With this level of social validity, and from a high school no less, what was the story behind how the leadership team garnered staff commitment to the implementation of PBIS? Furthermore, how did they maintain the momentum throughout the years to encourage continued support?

Sunnydale

Sunnydale was the second high school in the county to opt into training and not part of the initial cohort of five (The first high school did not complete a full rollout of a comprehensive plan but did speak highly of the potential they felt this framework could have on their school once up and running). Sunnydale is considered a "typical" high school, serving grades 9-12, with a standard catalog of courses that include Advanced Placement, dual enrollment, and a Career Technology Education program. The school day consists of seven periods. In this state there are 22 credits required for graduation, each semester counts as half a credit. More prevalent areas that may not be standard in most high schools are the elective offerings in agricultural mechanics (e.g., ag fabrication, ag power, and ag equipment) and agriscience (e.g., horticulture, large animal science). Examples of additional activities offered at Sunnydale include J-ROTC, band, theater, photography, yearbook, rugby, cheerleading, cross country, football, baseball, volleyball, swim team, etc. The schoolwide expectations during the years of study were to Be Ready, Be Responsible, and Be Respectful.

Sunnydale was classified as a Title I school and by the National Center for Education Statistics as rural. It serves a grade span of 9-12 and has an enrollment that has been steadily growing from 1091 students enrolled in the 2016-17 school year to 1182 students enrolled in the

2020-21 school year. The average student-to-pupil ratio has changed from 16:1 to 17:1. The following table indicates the average race/ethnicity of the student population as reported by the National Center for Education Statistics, U.S. Department of Education. Over five years, the state's diversity score has increased to 0.59, and Sunnydale has maintained an average of 0.46. According to Public School Review (2023), diversity scores are based on the chances that two randomly selected students would be members from a different ethnic group. A score closer to 1.0 indicates a more diverse student population (Public School Review, n.d.). [1]

Table 2 Student Demographic Data

Student Demographic Data by Year	White	Black	Asian	Hispanic	American Indian	Pacific Islander	Two or more races
2017	842	154	24	91	1	3	1
2018	850	143	27	117	0	2	3
2019	875	125	26	132	3	3	4
2020	821	115	26	150	3	2	8
2021	845	137	23	149	2	2	15

Of this student population, there has been a fluctuation in data reported regarding students eligible for The National School and Lunch Program (NSLP). According to the National Center for Education Statistics, U.S. Department of Education, "The percentage of students receiving free or reduced-price lunch serves as a marker for poverty, as it reflects the socioeconomic status of families in a given school or district." Socioeconomic status is used as an indicator that additional resources and support may be needed to achieve student success. Students with family incomes below 130% of the poverty line qualify for free lunch. Those who have family incomes that fall between 130% and 185% qualify for reduced-price lunch (National

[1] Staff demographic data was sought for the years of study through the Department of Education and the School District; data were not secured. From visits to the school site during the period of study and administrator accounts, the staff identified as overwhelmingly white.

Center for Education Statistics, 2023). The years 2018, 2019, and 2021 are listed as "n/a" due to not having data reported for those years.

Table 3 Percent of Students Eligible for Free or Reduced Lunch

Year	% of students eligible for free or reduced lunch
2017	41.6%
2018	n/a
2019	n/a
2020	33%
2021	n/a

Academically, in the content area of English, Sunnydale consistently scores higher than other high schools within the district. However, in comparison to other high schools in the state, they trend lower in the percentage of students that have met the standard. The measure of academic performance for English I (often referred to as 9th grade English) was changed in the 2017 school year and in 2020 test score data were not reported, therefore the following data represent school years of 2018, 2019, and 2021.

Table 4 Percent of Students Meeting English I Standard

% met standard in English I (all grades)	2018	2019	2021
School	21.1%	26.8%	23.9%
County	16.1%	23.3%	21.8%
State	25.3%	32.7%	30.1%

The data reported are from English II (also referred to as 10th-grade English). All years are represented except for 2020 as those data were not reported. Sunnydale indicated the trend of performing above other high schools within the district but below the average high schools in the state.

Table 5 Percent of Students Meeting English II Standard

% met standard in English II (all grades)	2017	2018	2019	2021
School	40.5%	24.7%	39.2%	33.8%
County	34.4%	23.5%	33.9%	30.0%

Table 5 (Continued)

State	39.7%	35.2%	42.7%	37.3%

When reviewing data related to mathematics, the data regarding Algebra II (also referred to as 10th grade Algebra) all years are reported except for 2020. The data indicated that Sunnydale outperformed other high schools in the district and state for 3 out of 4 of the years.

Table 6 Percent of Students Meeting Algebra II Standard

% met standard in Algebra II (all grades)	2017	2018	2019	2021
School	62.7%	62.5%	36.2%	37.5%
County	59.3%	51.8%	34.0%	26.4%
State	41.5%	47.2%	46.7%	33.5%

In state high school rankings, Sunnydale had stayed in the top 50% to 60% of all high schools. Like previous data, the 2020 school year was not ranked due to school closures and a lack of adequate testing data. School ranking data was based on calculating the standard scores on state assessment data for English and Mathematics test scores. In addition, the graduation rate, calculated by looking at a cohort of students that graduated within four years is 93%, which was above the state average of 89%.

Table 7 Graduation Rate

Year	2017	2018	2019	2021
Rank in State	146	227	229	218
Total High Schools	273	341	342	347

The universal behavior screener Student Risk Screening Scale-Internalizing/Externalizing (SRSS-IE; Appendix A) was implemented in the Spring of the 2017-18 school year. It was used through the 2020-21 school year as a screener to flag the percentage of the total student population that may be at risk for internalizing or externalizing behavior issues. This measure was intended to be utilized in the Fall and Spring of each year for all students in all grade levels to indicate the relative health of the Tier I system for behavior. It was also intended to support

areas where the core instruction could benefit from an infusion of support based on student needs. These data are meant to mirror the MTSS triangle with the indication of a strong system being 80-85% of students responding to Tier I, 10-15% needing an additional layer of support, and 3-5% requiring more intensive support. These data can also be used as a flag to ensure student behavioral needs are not overlooked. When flagged this indicated that a school leadership team should look at additional pieces of data to indicate if a student may need additional supports (e.g., Tier II or Tier III). Note, that the Spring of 2019-20 data was not collected due to school closure from COVID-19.

Table 8 Student Risk Screening Scale- Internalizing/Externalizing Scores

Year	Behavior	% Low Risk	% Moderate Risk	% High Risk
2017-18 Spring	Externalizing	85	11	4
	Internalizing	83	9	8
2018-19 Fall	Externalizing	87	10	3
	Internalizing	83	7	10
2018-19 Spring	Externalizing	84	12	4
	Internalizing	81	10	9
2019-20 Fall	Externalizing	89	9	2
	Internalizing	84	8	8
2020-21Fall	Externalizing	93	5	2
	Internalizing	88	6	6

Sunnydale completed the pre-implementation Tiered Fidelity Inventory in the Fall of 2017 as a baseline measure of their overall Tier I behavioral framework. They had 43% of the system in place. In the Spring of 2018, with less than six months of implementation under their belts, they moved to up to 57%. By the Fall of 2018, the school increased its overall system implementation achieving 80% on the measure, dropping a few points to 77% in the Spring of 2018 as the team began implementing Tier II. By the Fall of 2019 and Spring of 2020, they maintained 97% of Tier I fidelity in place.

Table 9 Tier I Tiered Fidelity Inventory Scores

Tiered Fidelity Inventory (TFI)	Fall TFI	Spring TFI
Initial Implementation (2017-18)	43%	57%
Year 2 (2018-19)	80%	77%
Year 3 (2019-20)	97%	97%
Year 4 (2020-21)	40%	60%

As Sunnydale increased its implementation fidelity scores on the TFI (2.1), there was also a decline in the total number of office discipline referrals per year.

Table 10 Total Number of Office Discipline Referrals

Years	Total Number of Office Discipline Referrals	Total Student Population
Pre-Implementation (2016-17)	2482	1091
Initial Implementation (2017-18)	1516	1103
Year 2 (2018-19)	714	1150
Year 3 (2019-20)	285	1137
Year 4 (2020-21)	80	1182

Looking deeper into office discipline referrals, the district began, in the 2015-16 school year, to zero in on data trends in the areas of handling incidents of bullying and threat/harassment. Sunnydale indicated the following trends in these areas.

Table 11 Threat/Harassment and Bullying Reports

School Years	Threat/Harassment Report	Bullying Report
Pre-Implementation (2015-16)	5	17
Pre-Implementation (2016-17)	8	7
Initial Implementation (2017-18)	4	1
Year 1 (2018-19)	0	0
Year 2 (2019-20)	0	0
Year 3 (2020-21)	No data reported	No data reported

Participants

For Tier I PBIS implementation to be considered implemented with fidelity, all key collaborators in all environments in which students transition throughout the school day should consistently implement the plan (OSEP, 2015). With this in mind, initially, a comprehensive

sampling of staff was employed. This method was utilized to ensure that voices from each department or subgroup (i.e., cafeteria, front office staff, grade level teachers, special area teachers) as well as the PBIS leadership team are represented in the study.

As a retrospective case study, I asked for participants who had been on staff for at least one or more years during the period between 2017-18 and 2020-21. Specific roles or job titles were not suggested, just that it be open to anyone on staff during that period. Emails were sent to the previous assistant principal and the current school principal seeking potential candidates. Those administrators personally reached out to potential participants who met the study criteria. For those that I was carbon copied on the email that did not initially respond, I followed up with an email two additional times seeking their participation. I had hoped for 4-12 participants who were on staff during the years of study and were comprised of both instructional (i.e., teachers, administrators, etc.) and non-instructional personnel (i.e., cafeteria staff, front office staff, data clerk, custodial, etc.).

I was able to recruit four participants. While each participant served in an administrative or instructional role during the period of study, each brought varied years of experience in education and the area of instruction to Sunnydale High. The staff interviewed comprised two instructional personnel as well as two individuals who had served on the PBIS leadership team. Knowing that the administrator who previously served on this team during that period had since moved into a new role within the district, I asked for this administrator's attendance in an interview. This person had pertinent historical accounts of initiating implementation post-training. Participants' years of experience in education ranged from three years to twenty-seven. Each participant identified as white and between the ages of twenty-eight to fifty-six. The following is a brief description of each participant.

Clark

Clark had worked in education for twenty-seven years and worked specifically at Sunnydale from 1995 through 2021 before moving into a district-level position. His time in education started with serving as a classroom teacher for courses in Career and Technical Education such as Marketing. At one point in time during the late 1990's he was asked to participate in a grant exploring remote learning. This involved setting up media equipment and broadcasting his coursework live on the local television network, allowing his students to connect with other students in real-time through a split screen. He shared stories about how local citizens could tune in to the channel as well and often would call the school to report student misconduct (e.g., finding ways to flip off the camera) or share disagreements with his discussion on lucrative career fields (e.g., don't steer kids away from careers in agriculture).

In 2014, Clark transitioned into the role of Assistant Principal, and among many responsibilities, discipline became the chief duty. When asked about his views on discipline and the foundational beliefs of PBIS, Clark shared, "I am old school, you know, Marine Corps Veteran, old school. But at the same time, I know the importance of relationships." "When I was a classroom teacher, I very seldom had to call parents and very seldom had to turn in ODRs because of those relationships." Clark shared that before receiving professional development on PBIS he was already working with teachers to improve relationships through sharing tips like: "praise in public, criticize in private, don't put on a show in front of your whole class- step into the hallway so you can have a casual conversation." Once he learned about PBIS he felt it was a natural and logical fit for what he had been impressing upon his colleagues for years.
When asked about what he enjoyed about working at Sunnydale he shared,

> It's a very diverse group of students. Both socially, economically, just different academic levels, that sort of thing. And, from my perspective, an environment like that is more enjoyable to work in, because there's not really a sense of entitlement that you might see in a more affluent district or something of that nature. So I can relate to that a lot more.

Clark served as the co-lead of the PBIS leadership team on campus during the years of study (2017-2021). He selected a science teacher to serve as his partner knowing she would balance his lead by providing the teacher perspective and in being data oriented. He knew she was also pursuing advanced work in project management and leadership making her more inclined to want an opportunity to lead an initiative. This individual did enter a new career field during the pandemic and relocated to another state. She was contacted for an interview but declined. As a researcher, it was necessary to mention this individual as the participants, and especially Clark, mentioned her in many of their interviews as being influential in her leadership.

Taylor

Taylor, whose pseudonym was selected as a nod to a very famous former singer-songwriter student whom she had on her roster during her student teaching internship, has been in education for twelve years. Five years have been at Sunnydale as a science teacher. She is a third-generation graduate of Sunnydale and therefore considers herself extremely proud to teach at a place that feels like home. Her family has a lineage in dairy and beef farming, but she broke the mold by becoming the first teacher.

Feeling a deep connection to the community, Taylor headed a community food and supply project for the school. She coordinated a supply closet that students could access for food, school supplies, and clothing. Having this connection to students with a need for advanced tiers of support for attendance or behavior made her feel like stepping into PBIS was a natural fit for

the school. “I was already pretty familiar with a lot of those students that were in that in that program. So I don't know, it didn't take a lot of buy-in for me.”

Her favorite thing about teaching at Sunnydale is the students, the juniors in particular. “They're my happy place. They're little adults. They've got enough responsibility that they understand a little bit of the responsibility. But they haven't quite hit the great unknown yet.”

Taylor was not on the PBIS leadership team however, she was on the Response to Intervention team for academics. Knowing multi-tiered supports for academics made it easy for her to conceptualize the same framework but for behavior. Knowing this, and her interest in building strong relationships with students led the PBIS team to ask her to serve as one of their pilot interventionists for the Tier II behavioral intervention Check-In/Check-Out.

Theodore

Theodore had been in the field of education for eighteen years and had worked for fifteen years at Sunnydale. In his first few years of teaching, he worked at the middle school level and realized it was not his best fit, “I found myself saying, ‘don't do this, don't do that.’ ‘Go sit down.’ Which I say a lot here but at a different level, ‘why did you do this? Why did you do that?’” He was proud to share how enamored with his wife he is as she was “made to teach middle school.”

When asked about what he liked about Sunnydale he shared, “I like the community. It's grown quite a bit, originally there were 800 students now we're up to about 1200. So we've seen some huge growth.” One of his favorite parts about his job was the ability to make connections with different students and families on campus through coaching football and rugby.
When asked about his perspective on being asked to implement PBIS he shared,

> We talked a lot about motivating students and about how we could lead them in the right direction. That's what drew me to teaching trying to get kids where they're supposed to be. I do really like having a set expectation for students that you can point back to and let kids know that you're not meeting this standard.

Theodore served on the PBIS leadership team during the years of study (2017-2021). He cited the pandemic as one of the reasons that the initiative did not sustain, as well as having the co-leads both leave the school site. He had sustained the implementation of the Tier II behavioral intervention Check-In/Check-Out and saw this intervention as impactful in supporting students with behavioral needs. He also intended to bring back the universal screener for behavior that was used during the years of study.

Nicole

Nicole initially set out on a career in the field of public relations and marketing, but the pandemic had brought her to teaching. Teaching had been something she thought about but with the pandemic hurting businesses and layoffs occurring, she was excited to learn about a position as a marketing teacher in the career and technical coursework offered at the high school in her childhood town. She was in the digital marketing field for five years before starting teaching at Sunnydale and at the time of our interview had three years of teaching under her belt. Her instant passion for teaching led her to a master's program in educational leadership and culture turnaround. It was her studies in culture turnaround that made PBIS feel like a natural fit for her. By the time she joined the faculty PBIS had been implemented for three years.

> My first impression was, oh, okay, here's an applicable tool that we can use to fix some of these issues that we have. Especially for me, coming from corporate to public education, I tried to prepare myself with some things that I thought I might know. But

just it's kind of jarring… But my first impression, to be honest, was just like being grateful that there are that there is a system put in place that we can use, even if we might not use it to the best of our ability all the time. It's still there. And it's something it's a foundation to solve more problems.

Like her colleagues, Nicole enjoyed the students the most. She described their population as being diverse in backgrounds including socioeconomically. She appreciated that Sunnydale sits in a middle ground, where the county to the north has more resources and the county to the south has fewer, thus making Sunnydale's student body a mix of students from varied socioeconomic backgrounds. She felt that this spectrum of students allowed for stronger student mentorship and leadership opportunities, "Student leaders to have opportunities to be mentors, which is important. And something that I think is the most fun part about teaching is kind of watching that mentorship and that leadership within a student grow."

Nicole did not serve on the PBIS leadership team during her first year of teaching. Clark, knowing that she was engaging in her master's program, asked her to lead the collection of the universal behavior screener data for the school. He also felt her background in communications would be beneficial in bolstering faculty completion of the data. In addition, Nicole was also asked to serve as an interventionist in the Tier II intervention Check-In/Check-Out. She noted during the interview that she still served as a mentor for students in this intervention.

Study Instrumentation and Procedures

In qualitative case study research, Yin (1994, 2003, 2009) describes six data evidentiary sources: documentation, archival records, interviews, direct observations, participant observation, and physical artifacts. In my research, I used four of the six sources, direct observation, and participant observation were not utilized for the following reasons: 1) This

study was conducted during the COVID-19 pandemic, and district policies and protections are in place to keep non-essential persons from coming in contact with school campuses; 2) This research is retrospective; therefore, participants were not asked to directly observe the phenomena.

Yin (2003) further elaborated on these evidentiary sources to pinpoint guidance for data collection. I used this guidance, which included: relying on the triangulation of multiple sources of data to serve as evidence, determining a database or system for maintaining records of notes and related documents, and I preserved this trail of evidence as I evolved and refined the study.

Documentation, Archival Records, and Artifacts

As a retrospective study, I acquired permission from the school district and school principal to review the archival records specific to the period between the 2017-18 school year through the 2020-21 school year. These data fell into the categories of public records: school improvement plans, student handbooks, mission statements, and assessment records; as well as physical evidence: posters, agendas, implementation manuals, emails, etc. Records purposely included student demographic data (i.e., receiving free and reduced lunch and ethnicity), universal data (i.e., any behavioral or academic screeners), disciplinary data (i.e., office discipline referrals, suspensions), achievement data (i.e., state assessments) and the staff's responses to the PIRS. I also asked long-standing school-based leadership team members to provide any artifacts, documents, or records that evidenced implementation in practice over the years. Specifically, I requested access to PBIS implementation manuals, discipline handbooks, relevant presentations to staff, leadership team meeting minutes, relevant faculty and PLC meeting minutes, communications to families, and the community, or posted on campus. In addition, I reviewed the school site's Twitter social media account for any messages,

advertisements, or acknowledgments relevant to the implementation of PBIS I did not find any archival evidence of posts regarding PBIS implementation. In my exploration, I was able to review Twitter posts that dated back to 2015, this was about 35,000 posts, with an absence of evidence of PBIS-related posts. I later learned that one of the athletic coaches ran the account and therefore the posts were related primarily to athletics events, homecoming, and graduation.

Initially, data collected before the interviews were briefly reviewed to identify consistent messaging and language that would be appropriate to use in conducting sessions to elicit recollections and perspectives on implementation (Bowen, 2009). I also used these artifacts before conducting interviews to adapt the interview questions. These data were also reviewed post-interviews to enhance my interpretation of the information shared. Team members provided me with twenty-six artifacts related to implementation. The following table describes the number and types of artifacts that were received.

Table 12 Number and Type of Artifacts Received

Artifact Received	Number Received
Email about completing the TFI as a team	1
Email about graduation rates and disciplinary rates for the school year	1
Email regarding attending a Tier III PBIS training	1
Email regarding completion of the social validity measure	1
Email regarding end of the year PBIS implementation data	1
Email regarding the plans for rolling the plan out to staff at the start of the school year	1
Emails regarding the check-in/check-out intervention	3
Emails related to schoolwide reinforcer events (i.e., king of the hill competition, food trucks, pep rally, menu of potential rewards)	5
Emails related to the completion of the SRSS-IE	5
Example of the “purple sheet” which was used to track interventions before writing an ODR	1
Example of the ODR Form	1
PBIS Implementation manual	1
Presentation that was shared on how to develop a QR Code-based reinforcement system	1

Table 12 (Continued)

School improvement plan from the 2019-2020 school year which had PBIS listed as one of the means of promoting an environment of safe and healthy students	1
Schoolwide expectations matrix with rules listed for each location on campus	1
State RTI Manual	1

Primary Intervention Rating Scale

In addition to these documents, Lane, et al., (2002) developed an evaluation measure for assessing the social validity and acceptability of the Tier I implementation of PBIS called the Primary Intervention Rating Scale (PIRS; Appendix A). This measure was adapted from Witt and Elliott's (1985) IRP-15 which was designed to acquire the opinions of teachers on classroom intervention strategies. The language was adapted to fit the context of PBIS implementation while keeping the integrity of each question to elicit the thoughts and opinions of the implementers. The PIRS is designed to be an anonymous survey that is taken electronically. It is estimated that it takes around 10 minutes to complete the 17 Likert scale items and four open-ended response questions (Lane, et al., 2009). The Likert scale has six points ranging from (1) strongly disagree to (6) strongly agree. This social validity survey has four open-ended questions. The open-ended questions allow for opportunities to suggest changes to the plan, and perceptions of the intervention's overall impact on student performance (Lane, et al., 2014). The four questions are: 1a) What do you feel is most beneficial about this primary prevention plan's components (Tier 1 efforts)? 1b) What is the least beneficial? 2) Do you think that your and your students' participation in this PBIS plan will cause your students' behavior, social, and/or learning problems to improve? Why or why not? Or if so, how? 3) What would you change about this plan (components, design, implementation, etc.) to make it more student-friendly and

educator-friendly? 4) What other information would you like to contribute about this plan? The full measure can be reviewed in "Appendix A."

Sunnydale had collected PIRS data from the 2017-18 through 2020-21 school years with the majority, (i.e., 75-100%) of the school staff's perspectives recorded. The survey was distributed electronically each year during the month of February, hence responses for the 2019-20 school year reflect implementation for that school year before school closure due to the COVID-19 pandemic. The open-ended responses to this survey were reviewed using the document analyses protocol to support the overall mission of determining how staff support was garnered for PBIS implementation. Participant narrative responses were kept anonymous. To analyze these data, an Excel spreadsheet was developed with one question per tab. For example, the second open-ended question, "Do you think that you and your students' participation in the Tier I plan caused your students' behavior problems to improve/decrease?" had the responses to that question for all three years pulled together in one spreadsheet and separated by year. Therefore, three years' worth of responses to question 2, were placed together so responses could be categorized, and themes identified (Grbich, 2013), and the same for the three additional questions.

Interviews

Two separate sets of questions were designed for participants, one with the leadership team perspective in mind and one with the perspective of staff. This design allowed me to learn about how the perceptions of each respective group are similar and how they are different. These participant interviews are kept anonymous, using pseudonyms, to allow for the staff to share more freely without fear of hurting the feelings of or dealing with any potential repercussions from the leadership team. In this research design, the use of a semi-structured list of questions

was developed ahead of time to give some guidance to the conversation. These questions were shared with the participants before interviews to center the discussion and allow them to recall specific experiences and memories of this implementation process since these interviews were primarily retrospective in nature (Castillo-Montoya, 2016; Roulston, 2010).

Each interview did not last beyond an hour. To accommodate public health guidelines, participant schedules, and transportation needs, individual interviews were held via a web-based video chat application (Zoom). The direction of each session was guided by discussion with the participants, and out of respect for the time of these participants, the caveat was shared that, should the need for additional time to share their experiences, additional follow-up sessions may be requested in subsequent individual interviews. Events were audio recorded using the Otter.ai application as a companion to the Zoom platform. This software afforded me the capability to listen to the recordings and re-visit transcripts to conduct a thematic analysis of the social phenomenon. Each transcript was edited and revisited as the transcription platform had difficulty distinguishing colloquialisms and words that were stated with a Southern accent. Participants were given an opportunity to review the transcripts, and initial themes identified by the researcher, as well as provide any edits or additional information regarding the session (Grbich 2013; Lichtman, 2012).

The use of semi-structured questions allowed for flexibility to probe for further elaboration. The list of semi-structured questions was shared with the participants ahead of time. These questions referenced data from the PIRS survey as a guide for framing some questions as well as the aforementioned research questions. Since this is a retrospective case study, these questions were shared to help the participants begin to recall specific instances that connect to their firsthand experience with the implementation process. The use of semi-structured questions

allowed our conversations to remain on-topic but afforded the freedom to further explore or seek elaboration when a relevant experience or perspective was shared (Lichtman, 2012). These interview questions centered around the research questions as well as the a priori framework of Feuerborn, et al., (2013). Questions were designed for the two different participant categories: 1) leadership team and 2) staff. For example, the component "provide a strong rationale for SWPBIS" was shaped into the overarching question: what rationale did the leadership team provide for the adoption of PBIS? A question for the leadership team was: what was the catalyst of the culminating event that triggered this change process? A sub-question was: how was that shared with the school staff? For the staff participant questions it was adapted to: How was PBIS introduced to that staff? A sub-question was: What rationale was given for this initiative? The full list of questions can be found in Appendix B.

Before the session, each individual was provided the opportunity to complete a demographics survey (Appendix C). As we began our session, I reminded the participant that their engagement was voluntary and at any point, they were free to leave the call without fear of repercussions. I explained that the session would be recorded but access to the recording was for my purposes of review to ensure I had correctly heard or interpreted stories or statements. Transcripts were shared with each person with the opportunity to clarify or correct any statements (Lichtman, 2012; Roulston, 2010). The recordings were housed in a password-protected database (University of South Florida Box Account) of which only I had access. I explained that their identities were protected, and pseudonyms were self-selected by the participants. I explained the purpose of this study and thanked them for allowing me the opportunity to learn from their experiences. I also let them know that I was taking my field notes (i.e., analytic memos) on a notepad which may not be visible in the video conferencing frame, so

they did not perceive me as being disengaged if I was not looking directly into the camera at all times. I also asked that upon review of the session when further questions arose the participants are willing to connect with me for an additional session. My initial questions were simple statement-based questions as a means of warming up the participant (e.g., tell me how many years you have been teaching? What brought you specifically to Sunnydale High School? What do you like the most about working here?) As we carried forward in the session, I paused to ensure the participant had an opportunity to complete a train of thought (Castillo-Montoya, 2016; Grbich, 2013). From time to time, I asked a participant to elaborate on a statement (Lichtman, 2012; Roulston, 2010); for example, if a participant stated that they joined this faculty because of its great reputation, I asked the participant to tell me more about what the reputation had been.

Once the participant was warmed up, we moved into more pointed questions regarding their recollection of past events and experiences. Question prompts included items such as: recall when PBIS was first introduced to you, how was it introduced? What were your initial impressions? What are your impressions now? Positive or negative, what would you say was a catalyst that pulled your opinion that way (e.g., the influence of a peer, student, an event, etc.) For the full list of questions and the interview protocol see Appendix B.

Post-interview I immediately engaged in reviewing my analytic memos noted during the session. A summary and mini-analysis of the key takeaways and impressions from the session were written straightaway. I also noted if any external factors occurred during the session that may or may not have had an impact on the overall session (e.g., interruptions, fire alarm, internet instability, poor sound quality, participant needing to step away, etc.)

In any follow-up conversations, semi-structured questions were utilized to learn more about firsthand accounts, for example: Last time you shared some about how the plan was shared

with faculty and staff, can you recall a specific story from this event? Are there any other events or incidents that you can recall from the implementation of PBIS that you would be able to share with me? What are some of the challenges and issues that you recall occurring? Can you recall a specific story or incident?

Post-analysis and before writing my final chapters, I shared findings, with each participant via email and asked for any elaborations, clarifications, and if these findings reflect their experience. Participants could choose whether they would like to respond or not. Two of the four participants did respond, one suggested that it is expressed that educating the staff on the purpose and current and potential outcomes of PBIS is shared. The second participant responded with a request that the leader who implemented this system know just how impactful he was on the system's implementation success. The other two participants were also contacted again via email to request the opportunity to briefly discuss the initial themes and any additional accounts they would like to share, but they did not respond.

Data Analysis

To answer both research questions, the data (i.e., transcripts, PIRS responses, or archival documents) were read one time through in entirety before any codes or additional notes were taken. During the second reading, I highlighted key phrases and added memos. In addition, any redundancies, or asides unrelated to the research study were crossed out. Then the data were summarized into smaller phrases or "meaning units" (Miles & Gilbert, 2005). As these data were reviewed, similar words or phrases were culled together to form a singular code. These codes were then reviewed to determine if there were common themes (Gubrium, 2012; Miles & Huberman, 1994). Coding was an iterative process that allowed for themes to be noted that are of interest beyond the a priori framework. In my process, I first reviewed documents to seek

information to better shape my interview questions and context for the school's history of implementation. Then I conducted the interviews, and as I completed the interviews- I documented analytic memos. When relevant topics arose, for example, a participant mentioned a particular email that had an impact, I returned to document analysis (Gubrium, 2012).

"Coding is a way of focusing our attention on what matters- incidents, emotions, perceptions, actions, reactions, events, phenomena, and subtext" (Vanover, et al., 2022, p.113). When responding to both research questions, I developed themes and cross-walked these themes with the data and artifacts (Miles & Huberman, 1994). Using both deductive and inductive approaches to guide my analysis I aimed to provide "a more organized, rigorous, and analytically sound qualitative study," (Vanover, et al., 2022, p.134).

Interviews were transcribed and when appropriate my analytical memos were infused. These analytic memos were written in a different font color to distinguish the participant's voice from my own (Miles & Gilbert, 2005). For example, when Nicole shared, "I'm not positive what my role was called then. But I remember having lists of people and having to kind of follow up and making sure that they got that that data submitted," based on previous interviewee data and later discussion with Nicole, I added the memo that this was referencing "hallway captains" and the collection of SRSS-IE data. Using these analytic memos allowed me to make connections across interview participant transcripts, these memos also helped with the formulation of codes. In addition, it distinguished sections of the transcripts that had an area I wanted to explore in other archival documents. For instance, I reviewed the presentation that was delivered by a co-lead on developing QR codes, in context with interview participant transcripts and PIRS responses to triangulate the data to better come to understand the experience (Grbich, 2013).

Research Question One

For research question one, the a priori analytical frame to guide the research was based upon the work of Feuerborn, et al. (2013) which provided a guide for teams that included five key strategies for fostering staff support of PBIS: (1) develop a clear understanding of staff perspectives of behavior and discipline, (2) secure resources, (3) provide a strong rationale for SWPBS, (4) build skills and knowledge, and (5) facilitate a shared vision and ownership. These key strategies were developed from the authors' "own experiences working with schools and a comprehensive review of the systems change and SWPBS literature bases" (Feuerborn, et al., 2013, p. 27). Since publication, these strategies have been cited as keys to garnering staff support in the research literature, (McIntosh & Goodman, 2016; Pinkelman, et al., 2015; Tyre, et al., 2018) and have been embedded in professional development provided to implementation teams, including Sunnydale's leadership team. As I reviewed data and transcripts, I looked for indications that evidenced a finding that connected to any of the five sub-questions.

For the purposes of generalization to theory, data analysis was bound by the a priori framework and thus deductive coding occurred using these five key strategies as initial guideposts. Initially, my analysis and review of these data were tied to the codes already determined by the a priori framework.

Reflecting on my field notes and post-interview impressions, it seems I felt it frustrating to have the participants not tout some of the somewhat linear steps for gaining staff support as the a priori framework suggests. After re-reading my interview transcripts, I realized that I was trying to force codes to fit within the five sub-questions related to the a priori framework. Instead, I stepped back and recalled that I would get to approach these data from a different lens in answering research question two, which allowed for a more inductive approach.

Research Question Two

Not wanting to miss any valuable insights that as a researcher and practitioner I can learn from, I engaged in inductive analysis to answer my second research question. Examples of questions I used to further explore the data included: What staff support was provided to introduce, coach, reinforce, and maintain engagement with PBIS implementation? Were there staff who did not embrace the initiative, if so, for what reasons? What means of differentiated support were provided to these staff, if any? What challenges and barriers occurred along the way, and how were they addressed?

I combed through data, discussion points, or ideas that were not represented by the a priori framework, and time was given to make meaning. The same data that was analyzed for research question one was reviewed but through the means of inductive coding. Thus, in answering research question two, the data was combed through to allow for themes that were not accounted for by the a prioi framework to have a voice too. This was driven by my desire to come to understand how staff support was garnered for installation and implementation of PBIS.

As I performed inductive coding, new codes appeared, which gave the experiences that participants saw as most relevant for making them support PBIS a voice. I allowed the narratives to indicate whether process, values, or In Vivo coding was appropriate for these codes (Saldaña, 2015). In my second analysis, I looked to move these codes into categories and then created subcodes for those codes that appeared axial or similar, for example, codes like, “power of CICO,” and “having an EWS” became values that merged into a theme labeled as “processes aid meaning-making.” Through a constant comparison method and focused coding where a final code list is developed, these subcategories illustrated patterns that can be identified as themes within the research (Saldaña, 2015; Stake, 1998). To further describe the analysis process, I

would center on a topic that seemed to resonate across all data and would purposely move back and forth between transcripts, PIRS responses, and archival documents to determine connections, verify the development of a theme, and broaden my big-picture view of implementation.

Quality Considerations

To ensure the worthiness of this qualitative research I engaged in a purposeful review of Tracy's eight-point "universal hallmarks" (p.839) of quality:1) worthy topic, 2), rich rigor, 3) sincerity, 4) credibility, 5) resonance, 6) significant contribution, 7) ethics, and 8) meaningful coherence (Tracy, 2010). In this seminal work, Tracy (2010), described it best by clarifying,

> This conceptualization is designed to provide a parsimonious pedagogical tool, promote respect from power keepers who often misunderstand and misevaluate qualitative work, develop a platform from which qualitative scholars can join together in a unified voice when desired, and encourage dialogue and learning amongst qualitative methodologists from various paradigms, (p. 839).

Tracy expressed that utilizing these eight hallmarks would allow qualitative researchers to agree on common markers of quality work without having to tie them to practices or protocols specific to paradigms. Thus, affording qualitative researchers of various methodologies a common language to build knowledge and collegiality in learning. Reflecting on Tracy's criteria for quality, my work presented as a *worthy topic*. This research was timely and relevant to my own work. I also hope that it proves beneficial in supporting future research on policy and program adoption at the secondary level. This is done using naturalistic generalizations and identifying transferable findings for practitioners to potentially pilot. These findings are rooted in being morally, practically, and methodically relevant to the realm of implementation science research (Lincoln & Guba, 1985; Younas, 2023). As a researcher, my two key drivers for having

embarked on this work were: 1) to come to know or better understand the phenomenon; and 2) to be able to make the research palatable so that practitioners can recognize areas of transferability to their unique contexts (Merriam & Tisdell, 2016; Younas, et al., 2023).

Credibility was another criterion my research adhered to, this study was designed to be thorough in the data collection and analysis processes, the sample, and the context. Meaning is derived through showing perspectives rather than telling, allowing for multivocality, member reflections, and triangulation to express the findings. All while striving to maintain credibility by building in checkpoints to be reflexive, so I was transparent about my own potential stances, keeping a record of the methods used and any challenges along the way.

At the center of my research, I strove for *meaningful coherence* that is, interconnecting literature, research questions, and interpretations. All the while, I remained focused on my purpose for this work, not allowing other themes or ideas to distract me from this aim. This research attempted to depict a clear picture of a phenomenon that had occurred, the perspectives of those who had been engaged in this phenomenon, and how their work and firsthand experiences can lay the groundwork for future research to be done on their findings.

Ethical Considerations

One of Tracy's eight criteria not mentioned above is that the research is *ethical*. This section is devoted to elaborating on my considerations to center this work through an edict of ethics. Before I engaged in this research, I obtained an Institutional Review Board (IRB) exemption to conduct my study (Appendix I). In addition, I followed the protocols and guidelines for submitting my proposed study to the school district's research department for approval. A letter of support was obtained from the school-based administrator that allowed for research to be conducted on the school's implementation. Permission was acquired to approach

relevant staff members for interviews held during non-instructional hours (Appendix F). Staff who participated in this study were given written and verbal notification of their rights and provided consent during the process that underscored: 1) participation was voluntary 2) without penalty, participants could ask to be removed from the study at any time 3) the purpose of this study and questions that will be asked 4) the risks and benefits of participating in the study 5) materials and recordings are protected in a locked computer-based system and held in confidentiality with means taken which protected identities through the use of pseudonyms.

During the interview process, I remained aware of the individual's comfort and willingness to share, should a question appear to cause distress I paused to allow for interviewees to regroup and determine if they would like to proceed. I also periodically gave myself breaks during my data analysis to self-check that I was maintaining reflexivity and keeping my own stances and personal experiences suspended (Lichtman, 2012; Roulston, 2010). To this point, to ensure I did not misrepresent the participants, my reporting on the data collected was through the identification of themes, these themes, and supporting data were provided to the participants for review, clarification, and confirmation. All data collected were maintained in a password-protected electronic file which only I could access.

Summary

In this chapter, the process and protocol for exploring documentation, archival records, and staff perspectives were outlined. The a priori framework for data analysis was shared as well as how the data will be reviewed for additional codes and the opportunity for themes. I shared my own values and aimed for reflexivity in reviewing these data. Quality and ethical considerations were addressed. In summary, my primary aim was to explore the archival materials and data, and the perspectives of staff members with the first-hand lived experience of

implementation with the hopes that there would be findings that could be helpful for other high schools seeking to implement or improve implementation of PBIS at their respective sites.

In the subsequent chapter, a distinct approach to analysis occurs. In Chapter Four data are shared about the a priori framework and findings. Data that is not directly correlated to the a priori framework is analyzed through the review of participant stories that shed light on the meaning-making that took place during implementation to answer research question two. Chapter Five summarizes cross-cutting findings regarding relevant themes and implications for practice and further study, as well as strengths and limitations.

CHAPTER FOUR: FINDINGS: A PRIORI FRAMEWORK IN ACTION

Upon seeing the implementation success that was reported at Sunnydale, I conducted a literature review on the high school implementation of Positive Behavior Interventions and Supports (PBIS). As results were shared in Chapter Two, I learned that this case was one worthy of study as the implementation of PBIS at the high school level is still an area in which the body of research is growing. Chapter Two introduces the first research question based on the a priori framework by Feuerborn, et al., (2013). This framework for garnering staff support was selected because it is used by PBIS national technical assistance centers in Tier I training as guiding components for gaining staff support. Sunnydale received Tier I training that included this article as recommended reading and received training content that included tips related to each of the sub-questions. In wanting to explore the implementation phenomenon at Sunnydale, I wanted to know if the leadership team was influenced by this article and the strategies shared. The questions were as follows:

1.) In what ways did the school leadership team garner staff support through the proposed strategies of Feuerborn, Wallace, and Tyre (2013):

a. How did the leadership team ascertain staff perspectives of behavior and discipline as related to their school?

b. What resources were provided to aid the implementation process?

c. What professional development or materials were provided to build skills and knowledge?

d. What rationale did the leadership team provide for the adoption of PBIS?

e. How did the leadership team facilitate a shared vision and ownership?

2.) What factors contributed to the installation and implementation of PBIS?

Examples of questions that were posed to further explore this second question included:

What staff support was provided to introduce, coach, reinforce, and maintain engagement with PBIS implementation?

Were there staff who did not embrace the initiative, if so, for what reasons?

What means of differentiated support were provided to these staff, if any?

What challenges and barriers occurred along the way, and how were they addressed?

To answer my first research question, this chapter examines the data from interviews with participants and themes that have emerged during data analysis. Findings will be organized under each of the sub-questions related to research question one. Exploring resources that were used to aid implementation, themes included the *expectations matrix*, *QR code*, the in vivo code *"purple sheet"* which refers to the system of documenting and addressing classroom-managed behaviors. Additionally, the theme of *innovation* was identified which is connected to Fixsen et al.'s (2005) stages of implementation, where there was evidence of innovation to the system. In answering the question regarding what professional development was offered to build skills or knowledge, the themes of *informal and formal professional development* and *regular communication* were identified. Exploring the rationale that was provided for the adoption of PBIS themes found were that it was *top-down approach* with a connection to the already established system of *RTI-A*. The last question addressed how the shared vision and ownership was facilitated, the themes that are discussed include the ways in which the concepts of *shared leadership* and *relationships* were used to garner staff support.

There are two overarching research questions that I sought to answer, the second research question, (i.e., what factors contributed to the installation and implementation of PBIS?) was developed to answer questions regarding how this framework can be installed at a high school level once staff support is initially established. Findings that were not directly attributed to the a priori framework but elucidate how the school leadership team was able to implement PBIS are shared subsequent to all sub-questions related to research question one. Coding for this process was inductive, data from firsthand accounts (i.e., interviews) and PIRS open-ended responses are infused as a means to share the perspectives of those who lived the experience. The themes that emerged were *processes aid meaning-making* and *identifying and addressing student* needs. As well as the theme, that halted sustained implementation, *COVID-19*.

As discussed in Chapter Three, my epistemology overlaps two distinct stances. My first inclination, as someone who has been a trained behaviorist and uses a problem-solving process to approach data, is post-positivist, and centers on the aforementioned a priori framework. In my career, I engage in creating and conducting professional development for educators from a post-positivist view. As I read and reread data related to implementation (e.g., interview transcripts, archival documents, PIRS data, etc.) I sought data that would indicate answers to the five sub-questions below and then identified themes. I leaned into my interpretivist lens to account for those themes that were not directly aligned with the post-positivist approach. At the conclusion of this chapter, a summary of all findings related to both research questions are shared.

RQ1: In What Ways Did the School Leadership Team Garner Staff Support through the Proposed Strategies of Feuerborn, Wallace, and Tyre (2013)?

a. How did the leadership team ascertain staff perspectives of behavior and discipline as related to their school?

Reviewing archival documents and accounts from Clark, Taylor, Nicole, and Theodore, it was determined that the leadership team did not conduct any formal survey or discussion to determine staff beliefs regarding behavior and discipline prior to implementation. It was not until the Primary Intervention Rating Scale (PIRS) was distributed in the 2017-18 school year that any real collective opportunity to share thoughts on the Tier I proactive behavioral system occurred.

Despite lacking a baseline indication of faculty and staff perspectives regarding current discipline practices and beliefs about student behavior; a review of the first year's PIRS data collected (2017-18) indicates that 81% of the 109 survey respondents found all aspects of the system to be acceptable. The PIRS was sent via email each February with a link to the anonymous survey. The school's results of this survey were compiled by the state PBIS project into a graphic report that included all open-ended responses.

In the first year's PIRS data, participants answered with 95% agreement that "The plan was appropriate to meet the school's needs and mission." And 92% of faculty and staff agreed that "Overall, this plan was beneficial to high school students." In a review of open-ended responses from that school year, comments centered around a theme of finding the system beneficial for the following main reasons: 1) consistency across all settings and all students, some specific quotes included: "It provided a common playbook to work from," "seeing students benefit from all staff participation," and "all students were able to benefit and participate." 2) A

decrease in disciplinary issues, sample quotes that indicated this perception include: “behavior problems definitely decreased,” and “discipline problems decreased and I got to know some students more.”

Furthermore, the overarching data indicated that for three concurrent years, 80% of the staff or greater supported the implementation of PBIS. Comments on the PIRS report overwhelmingly erred on the side of “It’s working” and “I wouldn't change anything.” And remarks like, “I see some motivation that was not there before. Students participating in ways they weren't before in order to earn bucks.” These sentiments connect with the literature on PBIS implementation such as positive effects for students, including decreased time out of the classroom due to punitive disciplinary actions, increased academic engagement, and higher reports of positive school climate and culture (Evanovich, & Scott, 2016; McIntosh, Mercer, Frank, et al., 2013).

While overall the survey indicated high acceptability of the plan, I would be remiss if I did not reflect upon the comments from staff members who did not fully approve the plan. In the open responses regarding the system, three respondents provided insight into their beliefs about engaging in a proactive behavioral system at the high school level. Two spoke specifically about the system being more age-appropriate for elementary or middle school-aged students. One respondent provided insight into beliefs about the system and how discipline should be approached.

> We need to get a plan in place to be able to strictly enforce the rules of the school and have immediate consequences for the students while taking the burden of disciplining off of the plate of teachers or else teachers might as well just because babysitters who record poor behavior. It is on the students to work on their own behaviors.

This comment aligns with research on reasons why secondary staff often do not embrace PBIS implementation. Flannery and Kato (2017) share, perceptions that hinder implementation include that high school students "should" already have grasped self-management skills (p. 70). This means that high school teachers who do not support PBIS implementation have suggested that they feel their time should not have to be spent on teaching self-management skills, the students should have already mastered them before coming to high school (Meyer, et al., 2021; Steinberg, 2012).

Reviewing the PIRS open-ended responses throughout the three years of data, a theme that was constant throughout the years was the mention of feeling there was a lack of implementation consistency from other teachers. A respondent shared, "Still feel that many teachers are not following through for all students. Any inconsistency in implementation hurts all the students!" However contradictory to this theme, respondents also reported the benefit of the system was "having everyone on the same page," and overall PIRS data indicated the use of the plan by all participants.

Theodore and Taylor both told stories about a small sub-section of staff that never quite latched on to implementation. Taylor shared her experience being with the advanced placement teachers, and the teachers not seeing the value of the system because they had students who were intrinsically motivated and did not typically present with classroom management issues. "…I hate to stereotype but they were upper-level AP math teachers that I mean, students that want to be in AP Calc [Advanced Placement Calculus] are in AP Calc because they want to be an AP Calc. So, they didn't really see the point." Reviewing the PIRS data I found a response to the question regarding whether staff members thought the Tier I plan was working which elucidates some perspective on this stance.

> No, but that is because I'm familiar with the importance of culture-building in the classroom. Our respectful and productive classroom culture is enough to make behavior problems almost non-existent. Additionally, my students are not motivated by those rewards so the process was superficial and gratuitous.

Research on reasons why high school staff are reluctant to support implementation include potential bias by adults on campus who believe at this age, students "should" already have grasped social, organizational, and self-management skills and feel that the system is suited for younger-aged students (Flannery & Kato, 2017; Meyer, et al., 2021).

Some respondents felt that implementing the system meant there were little to no consequences for problem behavior, "From what I have witnessed, is that if the student buys into the program it has helped. However, if the student doesn't care to engage in the program there is no consequence to correct said behavior." Another comment to this effect was, "Only giving positive comments does not allow the teacher to address the problem."

When leadership team members were asked to talk about how outliers were addressed, Clark shared that he saw his first barrier to overcome was the perception that this was a more juvenile system, he mentioned that when speaking with staff he went ahead and addressed that concern head-on.

> I know initially upfront this sounds like it's more designed for elementary school kids. But some of you teachers are actually doing this without even knowing it's a [PBIS] practice. How many of your kids don't like candy, how many of your kids don't like to be recognized for something that they did in a positive manner? So, once we overcame that, I mean, it was it was easy peasy. It really was.

In learning about how implementation was established at Sunnydale High School, it was determined that the leadership team did not engage in any means of ascertaining the staff's beliefs about discipline and behavior supports prior to engaging in implementation. Despite this, the majority of responses from faculty and staff on the PIRS report showed approval of and support for the proactive system for supporting student behavior. Throughout the future years of implementation, the leadership team encouraged the completion of the PIRS to gain these insights. When the leadership team learned about staff who were not in support of the system there were actions taken either to connect one-on-one with those individuals, or public acknowledgment of concerns were addressed head on.

b. What resources were provided to aid the implementation process?

Expectations Matrix

The establishment of schoolwide expectations or norms that are positively stated and clearly defined is one of the first practices mentioned in the *PBIS Implementation Blueprint* (OSEP, 2015; 2023). A review of archival data indicated that an initial implementation manual was developed, and portions of the manual were shared with faculty and staff. Items shared with faculty and staff included an expectations matrix. The matrix included the three over-arching schoolwide expectations on the left (i.e., Ready, Responsible, and Respectful) and environments across the top (i.e., all settings, technology, classroom, common areas, and extracurriculars). Beneath each environment, examples of rules that demonstrate being Ready, Responsible, and Respectful were listed. For example, to be responsible in extracurriculars these three items were enumerated: 1) In the community represent Sunnydale with class; 2) exceed eligibility requirements; and 3) obey bus, driving, and parking rules. A printout of the matrix was provided to each classroom teacher to post in the classroom and larger versions of the matrix were

laminated and posted around common areas of the campus. This included the hallways, cafeteria, gym, and media center. Those posted in the hallway, gym, and cafeteria were poster-sized (i.e., 24”x 36”) to allow for ease of readability.

In interviews, Clark spoke specifically about the printing and distribution of the expectations matrix. Theodore who was also a member of the leadership team mentioned the expectations and remembered having faculty meetings where the matrix was shared and discussed regarding how you might reference it with students. Theodore said he found himself referencing the expectations matrix when he needed to address classroom behavior. He mentioned appreciating being able to point to the expectation and reminding students. This connects to the core practice of PBIS implementation where a school should develop “…clear, appropriate, and consistent expectations” for student behavior (Elrod, et al., 2021).

Reviewing PIRS open-ended responses, there were no responses that indicated a revision of or poor acceptability of the expectations. Rather some responses indicated things such as, “most beneficial was having a common element for students to achieve.” And “I think it is a good set of rules that are schoolwide.”

QR Code

Additional documents that were provided to aid implementation included a QR Code which allowed staff to input digital tickets for students exhibiting the schoolwide expectations. In unpacking data related to this theme, the use of the QR Code was indicative of the health of the overall system. The use of the QR Code not only allowed for positive reinforcement of the students for exhibiting schoolwide expectations (OSEP, 2015) but also allowed for data-based decision-making to occur regarding what expectations should be celebrated and others perhaps

re-taught or re-emphasized due to low distribution for that expectation (Weist, et al., 2014). It was also indicative of staff fidelity of use and student "buy-in" (Flannery & Kato, 2017).

The code led to a Google form that asked for the student's name, grade, homeroom teacher, number of bucks awarded, and the reason for the buck (in addition to the three schoolwide expectations there were two additional options "met a goal" and "improvement of academics, behavior, or morale"). To try and combat the creation of counterfeit ticket entries, each teacher was given a personal code to verify the entry. Having the system set up in a Google form allowed for the information to be aggregated and disaggregated for decision-making.

In a presentation delivered to other school team leaders within the district held on May 8, 2019, the co-lead who partnered with Clark, shared that this QR code system was wonderful for tracking data regarding level of use by grade level, staff member, and helped to distinguish the types of behaviors that were reinforced most often. These data allowed for easy updates in monthly emails letting the staff know where the data was trending, for example, an increase in Juniors demonstrating that they are respectful. One pitfall she shared was students trying to award themselves bucks by scanning the code and trying to guess teacher codes. She shared with great humor that, this was easy to address because the students would enter their own names, and that for her faculty this felt like an indication that the students had "bought in" to the system.

PIRS responses about resources remained at a surface level for the first year, a handful of staff mentioned disliking the QR Code system, for example,

> "There has to be a better way for students to earn tickets. I don't like multiple kids touching the devices due to germs."
>
> "What I would change about the plan is how we go about giving bucks. It is hard to verbally share with students that they earned bucks, it would be

nice if we had something to physically hand to them to let them know that they earned bucks."

Overwhelmingly the PIRS responses were positive noticing things like it, "Helped change the culture in a positive way." When organizing the data into themes the largest portion of the responses spoke to the benefits of having a positive reinforcement system,

"I believe that the most beneficial aspect of our plan was the students' reaction to accruing the 'Bucks.' Many students that I directly influenced tracked their progress toward their year-end goal."

"It gives those students a reward to work towards and encourages the students to participate more in the classroom setting."

"Purple Sheet"

In interviews with Theodore, Taylor, and Nicole they all mentioned being provided the bucks system, matrix, and what they referred to as the "purple sheet." All four interview participants referred to this representation for managing classroom behaviors as the "purple sheet" leading to an in vivo code for this theme. The *"purple sheet"* served as a means for tracking what was outlined on the paper as "classroom-managed behaviors" such as teasing/taunting, disruption, lying, property misuse, etc. This directly correlates with the recommended practices that staff apply a continuum of responses to manage specific problem behaviors categorized as either "classroom-managed" or "office-managed" (Horner et al., 2010; McIntosh & Goodman, 2016; PBIS.org; Sugai & Horner, 2006).

Looking at PIRS data, while some staff shared their dislike of using a *"purple sheet"* to track the steps taken to re-teach or support a student when misbehavior occurred, it was evident that it was understood, that you had to use it. "You don't have any idea what teachers have to do

in a day, do you? One more paper to complete, we have been just one mored to death." This sentiment is reflective of research on teacher attrition that was conducted comparatively to pre and post-COVID-19. The data in teacher satisfaction surveys indicated that teachers felt more expectations were placed upon them to support students' behavioral and mental health needs with fewer resources to do so (Kim, et al., 2022; Marshall, et al., 2023).

When Nicole joined the faculty, she mentioned that one of the first things a Professional Learning Committee (PLC) member told her she needed to know about was the *"purple sheet"* and the policy and procedures leadership had for its use. Taylor discussed the idea that everyone knew the administration's policy was "three before me," meaning there had to be three documented behavioral strategies used and parent/guardian contact before a referral was written. She shared that even though she had hallmates who did not participate as readily in the reinforcement system, they knew the "three before me" policy. She stated that it was a regular reminder Clark would send out, and provided the following as an example, "Hey, Friday, we're having a pep rally, don't forget that your sheets are due. And please make sure you're doing parent contacts so that when you give me your three, I'm not contacting the parent for the first time."

Theodore also expressed the sentiment that staff knew, that if they followed the procedure inherent in the *"purple sheet,"* Clark would have no hesitations about handling the discipline issue. As the assistant principal who took Clark's place, he does the same now with the sustained use of the *"purple sheet"* policy and procedures. He remarked that the procedures that are embedded in the form remain unchanged, as does the color of the document.

The *"purple sheet"* protocol utilized at Sunnydale was to track the frequency of a specific behavior, a strategy that was used, and after three incidents of the same behavior a phone

call or email home. In PIRS survey responses over all three years, one respondent shared frustrations with this sheet.

> The plan requires too much for teachers to be effective. It requires teachers to write up, call home/email home, three times before we can turn in any discipline issues. Because of the amount legwork to submit a referral must teachers do not fully enforce the rules of the school.

The majority of PIRS responses spoke favorably of having a more transparent system that was "clearly communicated to students." One shared, "It is a set of expectations and consequences that are fair and evenly applied so students know what will happen when they violate the rules and there aren't differences based on which teacher they are dealing with." Several mentioned the decreased need for disciplinary actions. "Many teachers and students bought into it and discipline has dropped." These responses reflect the trends in office discipline referral data that Sunnydale experienced during implementation, moving from 2,482 written in the pre-implementation year (2016-2017) to 1,516 in the first year of implementation (2017-2018) and 714 referrals in the second year of implementation (2018-2019). These responses and data correlate with the research that indicates schools that implement PBIS have seen a reduction in ODRs and in and out-of-school suspensions (Evanovich & Scott, 2016; Freeman, et al., 2016; McIntosh, Mercer, Frank, et al., 2013).

In speaking with Theodore, Nicole, and Taylor, the *"purple sheet"* helped reinforce for staff the need to be preventative and try strategies to respond to problem behavior before writing referrals. As of the 2023-24 school year, the same *"purple sheet"* template was being used at Sunnydale because they felt it was an effective means of documenting and encouraging the use of proactive behavioral strategies. For Nicole, she felt it was one of the most important things

that was explained to her as a teacher coming from out of the field. She found that it helped her to recognize and name specific behaviors as well as identify a range of strategies, she could use to address problem behaviors. Expressly outlining and defining problem behaviors and providing faculty and staff with a continuum of strategies to respond, supports the suggestion of the *PBIS Implementation Blueprint* (Horner, et al., 2010; OSEP, 2015; 2023) as a key foundation for establishing the schoolwide framework.

Innovation

In the last two years, the survey responses began to suggest some innovation to the resources provided. This theme was identified as *innovation* because while reviewing data it became a logical connection to Fixsen et al.'s (2005) stages of implementation. The PBIS framework is founded in this work, therefore, I felt a natural inclination to recognize when a stage was appearing over the years of implementation. For example, some evidence of innovation includes:

> "I would like to see more community involvement to offer incentives for students and teachers both."
>
> "I would like to see a QR code that students could scan and enter a unique ID number to check their totals and select or recommend incentives."

Another staff member shared the idea of creating a one-pager to concisely provide a visual for how the system works to share with families and when substitute teachers are on campus. These innovations and others shared were not implemented as the COVID-19 pandemic halted the 2019-20 school year and disrupted the re-engagement in the 2020-21 school year. Instead, due to COVID-19 precautions, the use of the previous QR Code system, which required the physical exchange of electronic devices between staff and students, was replaced with the

web-based platform ClassDoJo. This program allowed for the same five expected schoolwide behaviors to be reinforced with students. However, data from the PIRS survey exhibited that this platform was perceived as more juvenile in look and feel. “This year we are using ClassDojo to implement our plan and it is not as streamlined and straightforward as our previous system. I would like to see either more training or a different tracking platform.”

Reviewing PIRS responses across three years, those that erred on the more negative or critical side of the system were not directly correlated with policies, procedures, or how the system was communicated. The more critical comments were placed under the theme of *innovation* as they related specifically to this sub-question regarding resources needed to implement. In this case, resources that were described were in reference to ‘funding’ and ‘time.’ Some examples of responses related to funding include, “The idea is good but unless you provide the financial support necessary it will be meaningless.” Another response simply stated, “This needs to be state-funded.”

Funding was an issue that the PBIS co-lead mentioned at district PBIS networking sessions. Her exit ticket from meetings would often ask how this could be state-mandated so that more funding could be offered to support the provision of enticing incentives for students and staff. During the networking session, she would primarily join break-out groups on brainstorming low to no-cost incentives for students. Thus, indicating she was seeking ideas on how to innovate the system to account for funding concerns. This concern is also addressed in the revised *PBIS Implementation Blueprint* (OSEP, 2023), “securing funding” is identified as part of the second “executive key function” of leadership teams (p. 31). More explicitly the common concern of funding is described as “a barrier to implementation” and the example shared resonates with the co-lead’s plight (p. 38). “Additional funding may be necessary for

"start-up" monies to kick-off schoolwide activities, purchase technology to assist with data-based decision making, print materials (e.g., expectations posters), provide incentives for schoolwide recognition systems…" (p. 38).

The response that had the most negative or critical answers regarding "resources" was regarding the allocation of "time." However, when considering the total number of responses there were only a handful of responses (e.g., 4-5 per year) that mentioned "time." This code primarily arose from the response to the PIRS question, "What did you feel was least beneficial about this Tier I plan?" Some respondents shared things to the effect of finding the system beneficial, but, that it took up instructional time, "Was beneficial for students. Cut into valuable class time." Others saw it from a procedural standpoint, "It was time-consuming, it required more paperwork/monitoring from teachers." Another shared it was burdensome in being, "Just another thing on a teacher's plate in addition to teaching."

Concerning time, Clark mentioned an adaption he made to the logistics of how CICO mentors were identified. He saw this as a means of increasing the amount of time students had in the learning environment.

> We would try to have like a Check-In/Check-Out person in each hallway, upper halls, and lower halls. So at the end of the day, the student could just go to the teacher, maybe one or two classrooms down prior to the ringing of the dismissal bell, versus having to go across campus to another classroom teacher, when they have to run back to catch the bus. We want to minimize the classroom disruption time to check-in and check-out.

Theodore shared that he recalled the leadership team making it a point to take into consideration the number of things they asked staff to do, and that they knew they had to be consistent in sharing the importance of this work. "It goes back to that time issue, that they've

got so much on their plates that if you don't think it's important, or you don't show that it's important, then that perception gets thrown."

After the second year of implementation, to provide staff with more time, Clark evaluated the types of committees and teams that were on campus and the goals of each team. He considered the functions of each team and looked to streamline teams or committees where he could. At one point before the pandemic, high schools in the state were encouraged to create climate and culture teams to better support student success and teacher retention.

> I intentionally made PBIS merge with the climate and culture PLC, where they became one because everything we did to promote positive behavior was tied into climate and culture. So it was a perfect marriage there. And I'm a firm believer in killing multiple birds with one stone and you can do that effectively. And teachers respect that instead of a teacher being part of two teams or two PLCs, being part of one because the ultimate goal is the same.

Clark's instinct to assess efforts and merge teams aligns with the recommendation to resource map teams or review all teams or committees on campus and their functions rather than create all new teams when a new initiative is undertaken. In the field of implementation science, it has been observed that when adopting a new initiative at the school, district/region, or state level, the first step is to form a new team or committee to engage in the implementation process (Fixsen, et al., 2005; Sugai, 2010). While this may be a worthwhile endeavor, implementation efforts can often be challenging due to barriers such as limited resources, lack of clarity or lack of priority, duplication of work efforts, etc. (Sugai, 2010). Reviewing the teams or committees on campus and their purpose can allow for a more streamlined approach to saving time.

From the exploration of archival resources that were provided to the staff as well as confirmations from interview participants, I found that there was evidence of the provision of resources to build skills and knowledge of implementing PBIS. These resources include the disbursement of materials such as providing classroom copies of schoolwide *expectations matrix*, posting these expectations matrices in multiple environments across campus, as well as developing a *QR code* system for each staff member to deliver a reinforcer to individual students. They provided opportunities to read or watch a video on the compelling why behind PBIS or on strategies that could be used to respond to problem behavior. The leadership team delineated a clear procedure for documenting and managing challenging behaviors through the installation of the *"purple sheet"* (e.g., classroom-managed versus office-managed behaviors). The leadership team also allowed for *innovation* to occur, adapting how workload and physical arrangement was set up so that more time could be afforded to implementation (Fixsen, et al., 2005).

c. What professional development or materials were provided to build skills and knowledge?

Formal and Informal Professional Development

In the 2018-19 school year, archival documents concerning preparing for the school year specified that the leaders would train all faculty and staff on an in-service day held on July 30, 2018. This professional development on PBIS was blocked off as part of the mandatory learning times for all teaching staff and lasted for one and a half hours. In this training, the agenda included an introduction to the "ideals" of PBIS and the new QR Code bucks system.

Literature on establishing PBIS in schools emphasizes that schools establish, teach, and re-teach behavioral expectations (usually 3-5) across all settings and all staff consistently reinforce or acknowledge these expected behaviors (Center on Positive Behavioral Interventions and Supports, 2020; Flannery, et al., 2013; Horner, et al., 2010; McIntosh & Goodman, 2016).

Clark shared that he made it a point to talk to all faculty and staff about the system and was strategic in how he approached the use of their time.

> We would have a full staff meeting and we would introduce it to everyone…our cafeteria staff was a little bit different because their schedules kind of wacky compared to regular school schedule. So I would go in and talk to the entire cafeteria staff and in the cafeteria. And I mean, that was easy peasy. You could do that in 15 minutes while they're eating their lunch prior to the main lunch starting.

Clark revealed that he made sure all staff and coaches knew about the data on which tiers of support students were receiving because he felt this would increase the likelihood that the school community would push in to better support students needing more assistance. From this, he shared that he had more adults on campus ask to contribute, "I even had a custodian in a check-in/check-out person who just had a great relationship with this one student."

At a May 8, 2019 presentation, the co-lead shared that the leadership team was able to use the QR Code system to help distinguish those staff that may not support the overall system. Because the system relied on the use of a staff member's personal QR code, the leadership team was able to see who showed the inconsistent or low distribution of the bucks. The team reviewed these data at least every nine weeks and then made it a point for a leadership team member to reach out to those individuals with whom they might have rapport. So that all staff would be consistent in implementing the system.

In addition, Clark, and the PBIS Leadership Team co-lead provided additional means of support to new teachers on classroom management and the importance of using this proactive system of support. Research on the impact of classroom management has found that not having a grasp on proactive strategies can lead to increased teacher stress, decreased job satisfaction, and

attrition (Stevenson, et al., 2020). Furthermore, the number of states that require pre-certification classroom management coursework is limited (Freeman et al., 2014). Nicole felt like she had easy access to Clark and that the co-lead made it a point to talk to her, "I also got to have a lot of great conversations with her to kind of just break down what the idea of this program was."

The leadership team and Sunnydale provided differentiated means of support in the implementation of PBIS through ensuring that all staff veteran and new, cafeteria staff to instructional staff were included in the sharing of data and in communicating how the program was to be implemented. They also made sure all staff had access to the data regarding all three tiers of support so that all staff could contribute to supporting student success.

When speaking with Theodore, Nicole, and Taylor, all three revealed that they had little to no recollection of specific professional development activities or events. "I don't remember much about it. I know [they] did it while we were in the auditorium at the start of the school year. But I don't remember anything about it" (Taylor).

Nicole, who was a first-year teacher during the 2020-21 school year, mentioned that she did not remember any specific onboarding, professional development, or orientation to the overarching system. What she did recall was *informal professional development* through the mentoring that Clark and the co-lead provided her on classroom management. She recollects, that both leads checked in on her and established a rapport that made it feel safe to ask questions and troubleshoot any issues. In general, she felt that they didn't so much discuss the programmatic aspects or research behind PBIS but, that they impressed upon her the idea that "…if we can create relationships with our students, we can reach them and we have a better chance of reaching them at an academic level." When speaking with Clark, he made it clear that

he always felt a responsibility for supporting new teachers with classroom management and fostering student relationships.

> When a new teacher comes in, brand new into a building, they're at a crossroads immediately. When they step into that building, for the first time as a teacher, they're either going to go the direction of Negative Nelly or, they're gonna go in the direction of the great teachers that have those relationships. So that's where you want to steer them.

Clark's instincts connect to the research that indicates novice teachers "lack knowledge on classroom management" (Junker, 2021, p. 340). This often leads to attrition within the first five years of teaching citing challenging student behavior as a substantial reason for leaving the field (Gilmour, et al., 2022). In addition, having positive teacher and student relationships has been shown to motivate students to learn and teachers to elevate their teaching practices when they have these strong relationships (Li, et al., 2022).

In the 2020-21 school year, PIRS survey responses began to request more professional development. "I believe more members of the school need to be trained. The current team that was trained only has two remaining members. In order to get school-wide involvement, more people need to understand the process." Some even shared that they knew very little about RTI in any regard and why they were implementing, "Give teachers a heads up as to what this is about, what the tiers include, and how things are implemented."

Regular Communication

Interview participants did all recall, and Taylor was able to forward, some examples of monthly email updates that both PBIS leaders sent. In these emails, data were shared regarding the SRSS-IE trends, ODRs, reminders about upcoming rewards such as food truck events, raffles for prom tickets, etc. She highlighted in some of the updates the way the leads often included

links to research articles to allow staff to engage at their own pace. These links included some motivational videos to help center on why we promote positive relationships with students (e.g., Hessel, 2020; Pierson, 2013).

Nicole and Theodore expressed the importance of leadership being transparent in sharing data and a vision statement shared with all, students, staff, families, and the community. Theodore aptly stated, "… if [teachers] don't see something being measured, then they don't do it. And it goes, part of it goes back to that, that time issue, that they've got so much on their plates that if you don't think it's important, or you don't show that it's important, then that system gets thrown." The leadership team included a standing agenda item where a monthly update was provided in faculty meetings. In these updates data, new ideas, suggestions, and procedures were discussed. Sunnydale's leadership team regularly shared data via monthly email communications, from schoolwide test scores to SRSS-IE and Office Discipline Referral (ODR) trends.

To summarize findings regarding this sub-question, *formal and informal professional development,* materials, and resources that were provided to the staff included hosting a faculty orientation at the beginning of at least one school year (2018-19). As well as *regular communication*, be it at monthly faculty meetings or via emails, with links to research articles and videos. This connects to research on strategies for securing high school staff "buy-in" in particular that there should be a regular schedule of communication via multiple modalities (e.g., emails, faculty meetings; Martinez et al., 2019). There were also informal professional development opportunities offered by the PBIS co-leaders through establishing a mentor-like relationship with new teachers on classroom management strategies.

d. What rationale did the leadership team provide for the adoption of PBIS?

Top-Down Approach

PIRS data as well as interview participants indicated that there was little to no evidence of strategies being employed to explicate the rationale behind adopting PBIS. In an account from Clark who served as a founding leader in the implementation of the framework, "I'll be honest with you, it was a central office initiative. You know it started up here and filtered on down." When accounting for how it was shared with faculty and staff, all interview participants shared some aspect of it being presented at a faculty meeting as an initiative that was being "moved down the pipeline." While some policy implementation research indicates that this is not always an effective means of gaining support (Honig, 2006). It does correlate with information shared in the *PBIS Implementation Blueprint,* where it is suggested that the initiative have "leadership approval" from someone such as the superintendent indicating that there is a commitment to implement the initiative (OSEP, 2015, p. 16). This intimates that there is visible approval at the top, indicating that the initiative is not another flash in the pan. Instead, it is something that will take root for a more sustained period and will likely have funds and resources allocated to support it. This also ties to implementation policy research that signifies it is key to identify the three main "actors" at all levels that influence policy implementation: organizational authorities (i.e., director of schools, superintendent, etc.), supervisors/service providers (i.e., instructional and non-instructional staff), and potential partisans (i.e., students, family, community; Honig, 2006, p. 86). These individuals directly affect the perception of implementers regarding the significance of the policy and the expectation of commitment to the system.

RTI-A

In an interview with Taylor, she did allude to the significance of having already established an RTI framework for academics, she felt like having had that rationale made including the behavioral framework easier. She said she recalls Clark coming to the faculty and staff at a meeting in the Fall and saying something to the effect of, “Hey, guys, we've been doing a really great job with the math side, and the creative writing side, and the English side. So now we're gonna take this on, now we're going to focus on behavior and attendance.” In a follow-up communication, when asked about this idea, Clark agreed that having had some success in working through tiers for academics provided some background knowledge for implementing the behavioral framework.

Sunnydale’s administrators provided a rationale for adoption through the following two means, the first was having an administrator openly share that this is what is coming from district leadership as a best practice and we should implement it. The second was Sunnydale had an already established multi-tiered system of support for academics in place before implementing PBIS, having leadership share that they have implemented tiered interventions for academics, and we should do the same for behavior, attendance, and social, and emotional aspects of our students. This implementation rationale connects with the research that schools yield strong outcomes for students (e.g., course performance, graduation rates, attendance, etc.) when a multi-tiered approach for both academics and behavior is utilized (McIntosh & Goodman, 2016; Weist et al., 2014).

e. How did the leadership team facilitate a shared vision and ownership?

Shared Leadership

While the literature on sustained PBIS implementation at the high school level remains sparse, as shared in Chapter Two, Meyer et al., (2021) identified some initial findings. These features included: having a school-based leadership team that meets regularly and provides regular communication with staff and other key collaborators on the overall system, changes, needs, successes, and alignment of efforts. In addition, there are larger bodies of research that evidence the importance of leadership as not a singular person but how leadership is distributed and policies and systems are developed, shared, and reinforced (Honig, 2006; Northouse, 2022; McIntosh, Kelm, & Canizal-Delabra, 2016; Spillane, 2004).

When reviewing the data, aspects that stood out included, having a strong figurehead that encouraged shared leadership. Northouse (2022) devotes a chapter to this form of leadership and explains that shared leadership includes not just being a compelling leader who champions the system but knowing your colleagues well enough to know where to distribute the ownership of implementation and allowing others to share influence. Spillane distinguishes shared leadership from distributed leadership by establishing that shared leadership has a formal leader as well as additional leaders (Lindahl, 2008; Spillane, 2005, p. 4). Clark served as the administrator leading this system's approach for Sunnydale and was transparent in his unwavering belief in ensuring the plan was implemented with consistency across school settings. But Clark would be the first to tell you, he did not do this on his own.

> I can't take any of the credit for the successes we had it that comes from people like my co-lead, some of those other classroom teachers, when you have your [In School Suspension] clerk involved with [PBIS], and not just being a babysitter, it makes a

difference. So just identifying key people and empowering them to do the things that need to be done is critical. If you don't have the right people in place, it's not going to be successful. And an administrator can't do it all themselves. So, I was more of a facilitator.

In addition, Clark shared that he was strategic in those he asked to join the PBIS leadership team, "I was very intentional because I wanted the right teachers on that. And I mean, you got to have the right teachers, those that have school spirit, those that are good at relationship building." This strategy aligns with the recent publication of the *PBIS Implementation Blueprint* which indicates that in the "Getting Better" phase of implementation, the leadership team is more strategic in identifying the key staff that would be best to serve on the team to move the work forward (OSEP, 2023, p. 55).

While Clark was an administrator, he made it a point to select a teacher as his co-lead. This helped to emphasize that everyone on campus shares the act of implementation. Taylor spoke of this sentiment and felt that a version of the model Sunnydale used of having co-leads should be replicated. "I would say, somebody who's really passionate and doesn't mind doing data, and have somebody that's really fun-loving, …that does the administrative stuff or find somebody to do administrative stuff because you got to be able to support teachers, don't make them feel like they're doing one more thing." This echoes the straightforward definition of shared leadership in Long and Pisani's work, "Shared leadership occurs when two or more members engage in the leadership of the team in an effort to influence and direct fellow members to maximize team effectiveness" (2022, p. 10). This is distinct, indicating that when leadership is shared, the group feels like their voice matters and that there is an established understanding that all are working collaboratively towards a common goal and purpose (Long & Pisani, 2022).

Nicole felt an essential act of leadership was in the designation of "hallway leaders." She felt it took the social pressure off her colleagues by having gentle reminders come from a neighbor rather than the administrator. She indicated that if an administrator reminded you, it would feel authoritative and perhaps like you are perceived as being non-compliant. She also appreciated that as a new staff member, it allowed her to have a leadership opportunity which made her feel included as part of the community rather than as an outsider.

A response on the Primary Intervention Rating Scale (PIRS) exhibits this shared belief about having supportive leadership which in effect promoted a strong school climate, "[Sunnydale] High School has a positive and supportive atmosphere. We're not perfect, but compared to some other schools I've been in, the faculty feels supported, and that trickles down to the students."

In discussions with the interview participants, no one could recall any means by which a shared vision was developed. However, each individual expressed in their own way their admiration for Clark as a leader. In fact, Taylor shared, "…this specific administrator could've asked us to like run through a brick wall, and we would have tried." PIRS survey responses indicated agreement with this sentiment as one shared, "[Clark] rocks! I've experienced few administrators who work harder than him!"

When prodded to elaborate more on how the vision was established, Taylor felt that the leadership team, which varied from eight to twelve members throughout the years of study, was well cultivated. She, Taylor, and Theodore all mentioned in some way the selection of leadership team members was strong in the representation of school staff and in the strengths that they brought to the team in sharing leadership and accountability for the success of the system. For instance, in the creation of the QR Code for the reinforcement system, the team asked a teacher

who came from a strong software development background to become a part of the team to help achieve their vision for the system's operation and capabilities.

Relationships

Coinciding with the theme of leadership came the theme of "relationships." Margaret Wheatley (1992) said, "In organizations, real power and energy is generated through relationships. The patterns of relationships and the capacities to form them are more important than tasks, functions, roles, and positions" (p. 39). Regarding facilitating the ownership of the system, and reviewing email communications, it was evident that the co-leads knew their colleagues. They knew who the right person would be to enlist in helping. For instance, the school's data clerk was utilized to support the documentation of "purple sheets." The media and communications teacher was asked to help develop flyers to share the pricing for reinforcement opportunities for each semester. The staff member who facilitated the morning announcements was asked to include the schoolwide expectations in a fun way each day. Additional evidence of this strategic use of relationships and knowledge of staff to create a sense of ownership is the designation of "hallway captains."

Informally, Clark developed a strategic map of each hallway on campus and determined who would be a motivating influencer to encourage the completion of the SRSS-IE and the PIRS. This supports some of the preliminary work on exploring social network theory in PBIS implementation (Whitcomb, et al., 2017). As well as Fixsen et al.'s (2005) discussion of the contextual variable as part of the organizational culture. As Chapter One shared, this variable is defined as, "values, expectations, attitudes, and beliefs that are held by the people within the organization" (p. 5). Just as in the workplace, the organizational culture and how it is perceived by those within it can directly influence how individuals behave and treat one another. The

organizational culture drives what is perceived as primary goals, how goals are accomplished, and how business is conducted. It also determines the degree to which staff and students are given voice, vote, and ultimately decision-making authority. Educators who work within the high school setting are described as having common values or beliefs when it comes to learning. As previously mentioned, Nicole recalls being brought on board and asked to serve as a hallway captain during her first year.

> I had to follow up with people to get their data in. And I think that that helped, simply because it wasn't an administrator being like, hey, where is this? And it was a hallway leader being like, Hey, can you get that in, following up in a gentle way seemed to work and having I think that [Clark] was very smart to do that. Because I think that that buffer in between administration, and the staff worked well for him.

Nicole shared that this strategic encouragement of all staff to provide these pieces of behavioral data was also highly motivating because there was a competition between the hallways to complete their data and earn reinforcers such as getting to leave campus early or getting support with resource preparation. In addition, periodically, the leadership team provided raffle prizes for staff members who showed the most use of the QR Code for recognizing positive student behavior. Clark even recalled at one point and time potential prizes included not only supplies but gift cards from local businesses. Connecting to the literature, when training leadership or implementation teams on effective strategies for implementing PBIS, it is suggested that staff be acknowledged for their participation in the system. This is suggested as a means of securing support by having adults make a personal connection to how receiving positive reinforcement feels (Ormrod, 2019; Skinner 1974).

From my exploration of these data, I found that the leadership team facilitated shared vision ownership by engaging multiple faculty members in aspects of implementation. They strategically selected members to share in the leadership (i.e., theme of *shared leadership*) of the system and were methodical in making sure *relationships* were cultivated with all staff. They achieved this through supporting new teachers with classroom management tips and strategies. They also reinforced staff participation by holding raffles for gift cards and supplies. All that staff had to do to be entered in the raffle was use the QR code to recognize positive student behaviors. In addition, they encouraged the completion of data windows through healthy competition between hallways, with "hallway leaders" to provide the messaging rather than just the leadership team.

Summary of RQ1 Findings

Archival documents and PIRS open-ended responses from 2018-19 through the 2020-21 school years were reviewed for alignment and to identify commonalities between interview transcripts. When asked directly about recalling the use of the article or aspects of the a priori framework (Feuerborn, et al., 2013) none of the respondents remembered it. Taylor did mention and share that research articles were often shared in email updates. Clark and Theodore, who both served on the leadership team, did not recollect referring to or using this research. Nicole, who was a brand-new teacher during the final year of implementation did not remember the article or any articles being shared at that time, but she could see how Clark and the leadership team might have indirectly done some of these things.

When reviewing these data using the lens of the a priori framework the following was identified. The leadership team did not engage in any means of ascertaining the staff's beliefs about discipline and behavior supports prior to engaging in implementation. Two themes were

identified regarding how the leadership provided a rationale for adoption through the following two means: a) *Top-down*, this is what is coming from district leadership as a best practice we should implement; and b) *RTI-A*, we have implemented tiered interventions for academics, we should do the same for behavior, attendance, and social, emotional aspects of our students.

While the resources provided to the staff were brief, they were found overall to be helpful for staff to quickly engage in implementation. Themes related to the resources that were provided to the staff included the *expectations matrix* (e.g., providing classroom copies and posting expectations matrices in multiple environments across campus. Another theme identified was *QR Code*, this centered around the development of a QR code system that could track and monitor data related to each staff member's delivery of a reinforcer to individual students as they demonstrated the schoolwide expectations. Additionally, the in vivo theme, "*purple sheet"* was identified this theme was indicative of the delineation of a clear procedure for documenting and managing challenging behaviors (e.g., classroom-managed versus office-managed behaviors). As well as listing proactive strategies to utilize to address challenging behavior.

Themes regarding the professional development materials and resources that were provided to the staff included, *formal and informal professional development.* This theme encompasses the work of hosting formal training events (i.e., faculty orientation at the beginning of the 2018-19 school year; accommodating the schedules of various roles in the school such as the cafeteria staff to provide training) as well as informal professional development (i.e., connecting with new teachers to provide classroom management tips and strategies; sending email communications that provided video and article links to learn more). As well as the theme of *regular communication*, this included sharing implementation data on a monthly basis, having a standing agenda item for discussing PBIS at faculty meetings, etc.

The leadership team facilitated a shared vision and ownership, while it was not through the formal establishment of a vision statement. It was through two meaningful themes. The first of the two themes related to this finding was *shared leadership*, though not only having an administrator and school leadership team that the staff believed in and supported. The leadership team made it a point to establish a co-lead that was a respected classroom teacher. In sharing the leadership, this also meant identifying other natural and logical leaders that could support any of the multifaceted dimensions of installing, implementing, and innovating the overall system and empowering them to lead. The theme of *relationships* emerged as the righthand theme to *shared leadership* in facilitating a shared vision. The leadership team included representation from various departments (OSEP, 2023) allowing for the relationships between the leadership team and these subgroups of staff to have a natural line of connection for two-way communication (Deal, et al., 2009; Woodland & Mazur, 2019). Building relationships with staff also meant, knowing what the staff would find reinforcing to bolster staff participation (i.e., raffles for those who used the QR code to recognize positive student behaviors). As well as knowing that the staff would embrace a healthy competition between hallways in the completion of data windows (e.g., PIRS, SRSS-IE). In addition to knowing which staff to designate as "hallway leaders" to provide the messaging rather than just relying on the leadership team members to be the sole champions and cheerleaders of every facet of implementation.

RQ2: What Factors Contributed to the Installation and Implementation of PBIS?

As a form of secondary analysis, I reviewed the data to identify themes through inductive coding. This interpretivist approach allowed me to look beyond the a priori framework which provided a more limited view of how implementation was viewed. When analyzing the data through this lens, I was able to account for themes related to implementation that speak to

additional considerations for gaining staff support of PBIS at the high school level. The two additional themes identified were *processes aid meaning-making* and *identifying and addressing student needs*. As well as one theme that served as an overarching barrier that halted implementation *COVID-19*.

Processes Aid Meaning-Making

When conducting the interviews and reviewing the data for themes, one aspect of implementation that resonated with all four participants was not just the value of conducting the Student Risk Screening Scale-Internalizing/Externalizing (SRSS-IE), but when those data used in conjunction with the Early Warning System (EWS) data spoke to the needs of small groups of students with similar needs, and having an intervention available that allowed them to do something about it. This leads to the largest theme *processes aid meaning-making*. This was particularly evident when reviewing PIRS data and interview responses that centered around the Check-In/Check-Out intervention and the protocols involved with identifying students who may need additional support.

During the second day of the state PBIS project's Tier II training, the intervention Check-in/Check-out is shared as a model of the key features of an effective Tier II behavioral intervention. Sunnydale's leadership team brought this intervention back and began the process of implementing it right away during the 2018-19 school year. Taylor confirmed that they did not provide a formal Tier II training for behavior, rather they used the process of implementing the intervention to exhibit it in action. Taylor shared that the school already had a context for Response to Intervention (RTI) for academics and that she recalled the CICO process was shared at a monthly faculty meeting. "Step two was a follow-up email where we scored our students.

And then the third one was when an email was sent out with certain students saying this is who they report to. So there were three steps of communication."

Theodore shared that the implementation of CICO as a Tier II behavioral intervention is an aspect of their PBIS system that is still sustained today. From his standpoint, Theodore feels like using CICO as an intervention, and in particular, having the process or protocol of using the Daily Report Card (DPR,) which a student takes from class to class, sends a strong message not just to staff but students about the importance of the system.

> It creates a sense of community, that students know that everybody's kind of working together for them. It definitely says, 'Hey, this teacher is paying attention to me,' which sometimes is the biggest thing…we've lost some students, and that's always one of my biggest fears is that kids don't feel like they belong.

Throughout Nicole and Taylor's interviews, responses often centered back not to the overall Tier I system, but the process of implementing CICO as a meaningful experience. At the time of the interviews, both still served as CICO mentors for students. Taylor was a part of the faculty when Tier I PBIS was introduced and before the introduction of CICO, however, when asked to recall the introduction of PBIS she immediately shared about CICO mentors being established. "So they formulated a group of B [Behavior] people where certain students would report back to them as their mentor teacher. And that was shared in a in a faculty meeting, and it was followed up with on an email."

When asked to share any specific stories that she recalled about implementing PBIS, Nicole shared her experience as a CICO mentor with a student who had been deemed hard to reach by other faculty members. "I feel like one of my victory stories just because the difference between this year and last year is so dramatic, from just a solid six months of mentor check-ins."

Hearing the impact that interview participants felt the process of implementing CICO had on garnering staff support and in accepting PBIS, I went back and reviewed the PIRS survey responses again to see if any comments suggested this impression. While they did not overtly mention CICO some of the comments are indicative of the elements of CICO. For example, "Most beneficial was reaching students who do struggle and need extra support." Another simply said what was most beneficial was "having a mentor" for students. Others commented about the growth in personal responsibility students had when they had to "carry a paper to each teacher." Or saw ways to innovate the processes involved in running the CICO system by mentioning that leadership should start, "Keeping a running spreadsheet for students to see if they have moved from Tier 2 to Tier 1. If they have moved and reverted to old behaviors, it would be nice to see their progress, old mentor (check-in), etc."

My primary aim when approaching this work was on how the Tier I plan was identified as successful through scores related to social validity, discipline rates, and the Tier I Tiered Fidelity Inventory. This information regarding the potential impact the process of implementing a Tier II intervention had on staff perceptions of the overall Tier I system led me to return to looking for data but this time with a Tier II lens. The main sources being Tier II TFI (2.1) scores or observations (i.e., direct or indirect) of the fidelity of Tier II intervention delivery. While I was unable to secure the latter, the following table describes their TFI scores for Tier II implementation. The baseline year of implementation was in the 2018-19 school year. Data recorded during the 2020-21 school year is reflective of the pandemic year when it should be noted, Tier I TFI scores also dropped to 40% in the Fall and 60% in the Spring. These data reflect that the overall multi-tiered system (e.g., Tiers I and II) for behavior declined in implementation fidelity. Since the Tier II TFI (2.1) is not specific to CICO, but rather, any range

of interventions offered on campus, I spoke with Clark for more information. He shared that the only Tier II behavioral intervention they implemented during this period was CICO, thus ratings would be indicative of this specific intervention.

Table 13 Tier II Tiered Fidelity Inventory Scores

Tiered Fidelity Inventory (TFI)	Fall TFI	Spring TFI
Initial Implementation (2018-19)	N/A	31%
Year 2 (2019-20)	85%	88%
Year 3 (2020-21)	35%	65%

The significance that CICO played in gaining favorable support for the process of implementing a behavioral framework correlates with recent research in which a small, randomized control trial studied the implementation of CICO at the high school level (Flannery, et al., 2024; Kato, et al., 2022; Kittleman, et al., 2018). As one facet of this study adults and students engaged in the intervention at the high school level were surveyed on the social validity of this intervention. To gather these perspectives these key collaborators rated items adapted from the *CICO Program Acceptability Questionnaire* (Hawken & Horner, 2003). Results indicated that all parties rated the intervention as being socially acceptable (valid) for high school use (Flannery, et. al, 2024).

Additional PIRS responses indicated the perceived impact of the system,

> I think that the plan contributed to the attendance of students who used to miss a lot for no reason. I have a couple of students who missed a lot, and now being on this plan they have missed only one day or less since beginning this program. I also have better behavior in class and less problems.

Another staff member shared, “I saw almost instant (1-2 weeks) results in behavior and attendance. I think seeing instant and long-term goals are beneficial for students.” These findings support the research on CICO that it has shown positive outcomes in four areas: 1) decreased

problem behavior, 2) increased academic engagement time, 3) ease of intervention fidelity, and 4) positive response to intervention when implemented with fidelity (Filter, et al., 2007; Hawken & Horner, 2003; Hawken, et al., 2007; March & Horner, 2002; Miller, et al., 2015; Todd, et al., 2008).

Nicole indicated that she felt sharing the data from the SRSS-IE with staff would validate some shared observations about student wellbeing. Some teachers might express concern about having more students showing signs of anxiety and depression, but it might be overlooked, "I would want them to know that data can speak for itself. And if we can collect the data, then we have a better foundation in really problem-solving the crucial issues that our students are facing when it comes to behavior."

Clark mentioned the process of engaging in the universal behavior screener (SRSS-IE) was a means through which his colleagues were able to see that the implementation of the system was impacting the social and emotional needs of students. Thus, the theme *processes aid meaning-making* was established. He shared that while academics are more commonplace to look at and observe an impact, he felt that the SRSS-IE data helped to make those intangible and instinctual observations about the social and emotional needs of the students come to light.

Identifying and Addressing Student Needs

The estimated high school use of an Early Warning System (EWS) in 2014-15 was around 52% (USDOE, Institute of Education Sciences, 2016). In this practice, student data is collected around indicators of academic and behavioral performance that suggest the likelihood that a student will graduate from high school. Data are to be collected and regularly reviewed so that high schools can "catch" students and intervene before it is too late. In Tier I and Tier II PBIS training, Sunnydale's leadership team was introduced to universal behavior screeners as an

additional means of identifying students who may be showing signs of behavioral needs that are considered internalized or externalized. Personal communications with the PBIS District Coordinator indicated that the district supported the use of universal behavior screeners, providing an opt-out form for schools to send home to families with the beginning of the year paperwork for the use of the SRSS-IE.

In conversations with Theodore, Nicole, Taylor, and Clark, their responses reflected how staff support was garnered through the use of the *school-wide expectations matrix*, bucks system, *purple sheet*, and *shared leadership*. In addition, to these responses, a key finding that arose was the impact of using the SRSS-IE during the years of study and how it supported the *identification and addressing of student needs*. Theodore, as a member of the leadership team shared the significance of applying and sharing the SRSS-IE data with staff, "I think it's important to kind of see some of those trends with our students. I would venture to say that some of those negatives are definitely up with our kids right now."

Clark indicated that, as advised by the state PBIS project, they shared the school-wide trends on the SRSS-IE with faculty and staff each fall and spring. Nicole, a first-year teacher, during the last year of study, recalls being a "hallway leader" in encouraging her hallmates to complete their SRSS-IE data on time. She shared that using these data is what made her and her colleagues see value in the overall system. "I think, put in a position where I had to look at the data in a way that I was problem-solving helped me understand more about the purpose of the program and why it's important." More specifically she remembers that in addition to the "purple sheet," this was the only other memorable introduction to PBIS she had. She recalls taking time with her colleagues to review trends in SRSS-IE data from 2018 to 2020 to make decisions.

Reviewing PIRS data, some comments that suggested improvements to the system, spoke about the SRSS-IE process, one sharing that they wanted. “Easy access to the survey with names prepopulated.” Other respondents, when sharing what they felt was beneficial about the plan, shared that they felt it was helping to identify student needs and seeing an impact. “We identified students in possible need.” Another respondent shared that a benefit was, “Identifying and addressing issues with grades, absenteeism, and behavior.”

Sunnydale High encountered the barrier of identifying and appropriately addressing student needs. It was through the addition of an EWS, which included behavioral universal screening data that captured internalizing and externalizing concerns, that staff concerns were taken into account. By implementing a Tier II behavioral intervention CICO met the concern of not just capturing student need but doing something about it.

COVID-19

There was one barrier that was evident when conducting interviews with participants via Zoom– the impact of COVID-19 on learning and the Tier I PBIS system. When recalling incidents, Taylor would say, “I’m sorry COVID happened since then.” Clark shared how successful he had felt with the system’s implementation before COVID-19, “We really had it going on, I don't know that they're still carrying that out. Like we were pre-COVID. It really hurt us a lot during the COVID time.” Data indicate that after the 2020-2021 school year, Tier I PBIS was no longer considered a part of the overarching approach at Sunnydale High. While the PIRS data for 2020-21 showed that all faculty and staff completed the survey and that the number of individuals on staff remained consistent, open-ended responses declined. For instance, the number of responses that were shared for questions one and two of the PIRS dropped by twenty responses from the previous school year.

Those who did respond indicated the difficulty in implementing due to the change in the format of school, moving from all in-person learning to remote, and then hybrid. “It would be better in a normal year.” When responding to the second question, “Do you think that you and your students' participation in the Tier I plan caused your students' behavior problems to improve/decrease?” Responses reflected a sentiment similar to this one, “No because it was hard to implement with remote and was too much to keep track of along with teaching in person and online. If we were fully in-person I would say it would improve.” Some shared that it,

“remained the same. This year is rough to evaluate.”

“Unsure; this is a difficult year to implement something like this so it is hard to see true value. Survey answers are not really valid.”

Recognizing that one of the identified themes above is *processes aid meaning-making* evidence was shown that the process of supporting students remotely was not as strong. “Lack of administrator support, plans that were set in place were not followed through.” And “Hard to apply for remote learners.” Others shared that “COVID procedures hurt the plan's effectiveness.”

More drastically, some responses indicated there was no knowledge or use of the system. “I'm not sure of what is included in Tier I” and “inconsistent reward program, leading students to distrust the program.” Taylor remarked on there being less emphasis on the system because, “It seems like once we went into COVID, it was like, we lost a lot of problems because nobody was here.”

Regarding overcoming the barrier of COVID-19 disrupting implementation, as a current administrator, Theodore mentioned that in the recent school years, the pieces that remain are the “purple sheet” process and the implementation of CICO. He and Taylor expressed that they did not think the full implementation would be a priority in the upcoming 2023-24 school year.

Theodore did say that it is “a priority “to bring the SRSS-IE back because he thinks, “It's a great thing because it gets the teachers to think about who we had in our homerooms what we see every day…I think it's important to kind of see some of those trends with our students.” More recently I was able to have a conversation with Theodore on March 19, 2024, he did share that the SRSS-IE was brought back during the 2023-24 school year and is used to make data-based decisions regarding student support.

Summary of RQ2 Findings

Findings related to research question two were explored through inductive analysis. Active discussion with interview participants allowed them to share their experiences in how they came to understand the impact of the system while implementing it. PIRS data was then explored to see if open-ended responses supported these findings. In the first theme *processes aid meaning-making*, I identified that regular review of SRSS-IE screener data gave the system value as staff were able to see the impact of implementation. Utilizing SRSS-IE screener data validated the somewhat intangible observations of what was going on with students behaviorally, socially, and emotionally. The process of implementing CICO also allowed the staff to make meaning from the act of intervening to support students identified as having a need. This process in action made the work overall multi-tiered approach meaningful.

Identifying and addressing student needs emerged as a related theme indicating that there was value in regularly securing data such as a universal behavior screener to identify student needs. Then, having an established intervention that could be matched to student needs, i.e., Check-In/Check-Out, allowed staff to feel like the overall behavioral system was impactful in addressing student needs. Teachers saw the overall system as effective because the students they saw had need were supported.

An additional theme was identified as a barrier to implementation, *COVID-19*. The global pandemic halted regular in-person instruction, therefore policies and procedures had to adapt and change. It was shared that not having students in person for learning decreased the number of identified problem behaviors so the system was under-utilized. Adaptations to the system and encouragement to follow through with it did not occur and therefore the system was not sustained.

In this chapter, I explored the use of strategies used by Sunnydale High School to engage faculty and staff in the implementation of PBIS. I used the work of Feuerborn, et al., (2013) as the a priori framework to understand the tactics that were employed. From my review of data related to implementation (e.g., interview transcripts, archival documents, PIRS data, etc.) I determined that while the leadership team did not try to ascertain the staff's perspectives on behavior and discipline before implementing, but they did more informally address staff perspectives in timely manner. The leadership team did provide resources to aid implementation, as well as at least monthly communication about implementation progress with data and some research articles. In addition, the leadership team facilitated a shared vision and ownership of the system by engaging multiple staff members, supporting new teachers, and making the environment one where the system was ever-present.

In addition, I explored the findings related to my second research question regarding how staff support is installed and maintained for implementation to be pervasive. Themes that served as implementation enablers included *processes aid meaning-making* and *identifying and addressing student needs*. One theme served as a significant barrier to implementation, *COVID-19*. Heading into the final chapter, a brief review of the study is shared. In addition, a discussion

of themes is provided in relation to the two overarching research questions. Implications for practice are offered in addition to recommendations for future research.

CHAPTER FIVE: DISCUSSION AND IMPLICATIONS

The implementation of Positive Behavioral Interventions and Supports (PBIS) has been attributed to a decrease in office discipline referrals (ODRs) and suspensions and to increase academic performance, and engagement, as well as staff, family, and student perceptions of a safe and positive school climate (Cook, et al., 2015; Horner, et al., 2010; Weist et al., 2015). High schools have had more significant issues than elementary sites with installing PBIS and garnering staff support (Flannery, et al., 2018; Flannery & Kato, 2017). Research on these difficulties found that this is due to contextual factors, i.e., larger faculty, staff, and student size, multi-faceted organizational culture, and the age of the students served (Martinez, et al., 2019). In addition, factors that have also been cited as inhibiting implementation success at the high school level are lack of student involvement in the creation of the system itself, as well as the potential bias of adults on campus who believe at this age, students "should" already have grasped social, organizational and self-management skills (Flannery & Kato, 2017; Meyer, et al., 2021). Research findings of Feuerborn, et al. (2013) cite that difficulty with staff perceptions at the secondary level is identified as one of the top challenges leadership teams face, "In fact, only 30% of team members reported they obtained a majority of staff support for implementation" (p. 27). Confound that with the finding that when large systems like a school already have a steady way of operating, be it good or bad, change is perceived as a disruptor to the status quo and can be viewed as a problem. Feuerborn, et al., (2013) note, "some resistance to change is natural and to be expected" (p. 30). Ways to approach this include the surveying of staff to ascertain their

agreement or support for the initiative. Research on PBIS implementation suggests that support or a social validity score of 80% of the school staff (instructional and non-instructional) is a key indicator for long-term success (McIntosh, Predy, Upreti, et al., 2013; Sugai & Horner, 2006; Tyre & Feuerborn, 2017).

During the years 2017-18 through 2020-21, Sunnydale High School showed a marked decrease in ODRs (e.g., 2,482 referrals in 2016-17 to 80 referrals in 2020-21) and until the COVID-19 pandemic, an increase in Tiered Fidelity Inventory (TFI; 2.1) scores, while maintaining staff support as evidenced by their Primary Intervention Rating Scale (PIRS) by achieving acceptability scores of 80% or higher with all staff completing the survey. These data are indicative of PBIS implementation success. As a practitioner who provides training and technical assistance to K-12 schools, the success at Sunnydale High School was compelling and drove me to want to know how they increased student behavioral performance while also maintaining staff support of the initiative.

My means to explore this phenomenon was through a retrospective case study. I sought to answer two overarching research questions. The first, "In what ways did the school leadership team garner staff support through the proposed strategies of Feuerborn, et al., (2013)?" came to understand the experience through the a priori framework that was centered in a post-positivist analysis. I asked this question because PBIS professional development offered to teams, including Sunnydale, centered on recommendations that staff support is garnered through the use of strategies proposed by Feuerborn, et al., (i.e., develop a clear understanding of staff perspectives of behavior and discipline, secure resources, provide a strong rationale for SWPBIS, build skills and knowledge, and facilitate a shared vision and ownership).

My second question, "What factors contributed to the installation and implementation of PBIS?" aimed to account for any themes that might have been overlooked when narrowly focused on the a priori framework. Through this inductive process I hoped to further explore how the staff came to understand and see the relevance of the model to then commit to implementation. In addition to archival documents, firsthand accounts from those who have lived this implementation experience were gathered to provide insights for future research in this area. Answers to an open-ended anonymous survey (i.e., PIRS) distributed to all faculty and staff during three of the implementation years were also re-reviewed for themes that were present beyond the first research question.

In this final chapter, I discuss findings from both research questions and offer implications across these findings. Additional research areas are suggested in the hopes that we can continue to advance the field of meaningful practice and student outcomes in the secondary setting.

Discussion of Findings

When answering research question one, "In what ways did the school leadership team garner staff support through the proposed strategies of Feuerborn, et al., (2013)?" I found that the leadership team did not engage in any means of ascertaining the staff's beliefs about discipline and behavior support prior to engaging in implementation. (RQ1 sub-question "a"). However, while the leadership team did not formally assess the staff's perceptions before adopting PBIS, the team was strategic in listening to the concerns of outliers throughout implementation and addressing those concerns (e.g., age-appropriateness of the system, time needed to implement, use of personnel) and in using the PIRS data to gather input. In addition, the administrator who co-lead the system was described by his peers as compelling and effortful in being forthright

with clear and kind intentions. He was a long-standing faculty member of the Sunnydale staff who made it a point to know his colleagues. One might argue that they did not need to survey the staff on their beliefs regarding disciplinary practices because he already knew them.

The leadership team did provide a rationale for adoption (RQ1 sub-question "d") through the following two means: a) The theme of *top-down approach*, sharing that this is what is coming from district leadership as a best practice we should implement; and b) Response to Intervention-Academics (i.e., theme *RTI-A*,) communicating that they have implemented tiered interventions for academics, and should do the same for behavior, attendance, and social, emotional aspects of their students. Based on Feuerborn, et al.'s (2013) collective research on the successful implementation of PBIS they suggest that a more effective approach that garners staff support would be to reveal the need for a proactive behavioral system as the result of staff survey data that indicates this is collectively seen as an area warranting change. This often leads to more of a grassroots perception of implementation as it is seen as a "call to action" rather than the top-down approach that can often feel more authoritative (Feuerborn, et al.'s 2013; OSEP 2015; 2023). In this case, the interview participants felt that the *top-down approach* did not make staff reluctant to adopt but instead indicated it was an initiative that would likely get more resources to support it and would be long-standing.

Fixsen, et al. (2005) describe implementation as a process that is not linear, but recursive. While the leadership team may not have grounded the initial adoption of PBIS by revealing the need for it from feedback provided by staff, the leadership team was able to learn and modify their approach as they implemented it (i.e., theme of *innovation*). The leadership team developed staff rapport and were tuned in to perceptions and needs of the system throughout implementation (i.e., theme of *relationships*). While also providing *formal and informal*

professional development that was tailored to the various roles, time constraints, years of experience, and perceptions of the staff. As the "science" in implementation science insinuates, the team was able to mix multiple ingredients inherent in the stages, for example infusing elements of the stages of adoption and installation while also still moving forward with implementation.

To get the system up and running, overarching themes that were found included the resources, professional development, and materials (RQ1 sub-questions "b" and "c") that were provided to the staff such as school-wide *expectations matrices*, the *QR code* system, the "*purple sheet*," *innovation, formal and informal professional development,* and *regular communication.* They started with the distribution of classroom copies and posting expectations matrices in multiple environments across campus. Sunnydale's leadership team developed a QR code system for each staff member to deliver an acknowledgement to individual students. In addition, there was the delineation of a clear procedure for documenting and managing challenging behaviors (e.g., classroom-managed versus office-managed behaviors) using what was called the *"purple sheet."* These discrete processes aided staff to make-meaning of the overall system (i.e., theme of *processes aid meaning-making*). Throughout this time they built the skills of staff by providing *formal and informal professional development* opportunities, materials, and resources that were provided to the staff including hosting a faculty orientation at the beginning of at least one school year (2018-19), tailoring the sessions to different roles and environments staff members support (e.g., cafeteria staff having their own session; mentoring new teachers) as well as regular communication through monthly communications, be it at faculty meetings or via emails, with links to research articles and videos.

Feuerborn, et al. (2013) describe the facilitation of shared ownership also comes from regularly hearing and seeing the benefits of implementation efforts, as well as feeling recognized for one's part in these efforts. The leadership team did so by regularly sharing student outcome data (e.g., attendance data, academic scores, SRSS-IE, PIRS, and office discipline referrals). They also reviewed the distribution of bucks and acknowledged staff for their part in implementation efforts by holding monthly drawings for those staff who participated in recognizing positive student behaviors.

There are bodies of research (i.e., Feuerborn et al., 2013; McIntosh et al., 2013; 2016), that discuss the securing and establishment of resources being essential for encouraging staff commitment to a policy, initiative, or program. In reviews of PIRS responses, the concern of resources came up regarding having the time and money to support this work. The leadership team made efforts to engage in the step of *innovation*. They were responsive to time factors (i.e., having a mentor in each hallway to cut down on instructional time lost by dismissing students early) or in merging teams that had a similar function to save staff from being on one more team (i.e., merging the PBIS team with the climate and culture team). When it came to money, leaders explored ideas from other schools on how to better establish funding. However, it is recommended that staff feel more confident in supporting implementation when there are three to five years of "recurring and sufficient resources" (OSEP, 2015, p. 16).

The system at Sunnydale was pervasive. If Tier I PBIS is to be effective it must be present in all settings of the students enter during the school day (Feuerborn et al., 2013; Filter, et al., 2016; Kincaid, et al., 2007). The leadership team provided differentiated means of support in the implementation of PBIS through ensuring that all staff-veteran and new, cafeteria staff to instructional staff were included in professional development. All staff were included in the

sharing of data updates and emails. They also made sure all staff had access to the data regarding students receiving advanced tiers of support so that all staff could contribute to supporting student success. Allowing anyone on staff who had a connection with a student to serve as a mentor. This correlates with the literature that suggests that in the provision of professional development differentiated groupings are considered (Feuerborn, et al., 2013). Doing this allows flexibility in accommodating the learning needs of staff members (e.g., level of knowledge, environment served, role the staff member plays on campus, etc.)

These steps align with what Fixsen et al., (2005) call the paper and process implementation that is used to encourage performance implementation. This work also links with the *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint* (2015; 2023) which suggests that these critical practices: establishing and teaching a set of school-wide expectations that are positively stated and clearly defined, ensuring that classroom rules and expectations are aligned with the school-wide expectations, there is a continuum of responses that discourage problem behavior and encourage the expected behaviors, (OSEP, 2015). Aspects that appeared to be missing from the *PBIS Implementation Blueprint*'s recommendations were a means of consistently re-teaching the expectations throughout the year and a procedure for engaging family and community partnerships with the school (OSEP, 2015; 2023).

While the *PBIS Implementation Blueprint* (2015; 2023) and Feuerborn, et al. (2013) assert that a statement or vision that is shared regarding the establishment of a positive school culture is foundational in developing the overarching system (RQ1 sub-question "e,") the Sunnydale leadership team did not develop or share a direct statement. Rather, the leadership team facilitated shared vision ownership more covertly through 1) *shared leadership*, engaging multiple faculty members in aspects of implementation. Reinforcing participation of the staff

through raffles for those who used the QR code to recognize positive student behaviors. 2) *Relationships*, supporting new teachers with classroom management tips and strategies. Encouraging the completion of data windows through healthy competition between hallways, with "hallway leaders" to provide the messaging rather than just the leadership team. These actions evidence what Feuerborn, et al. (2013) described as a means of facilitating shared ownership.

With the theme, *shared leadership*, I learned from the participants that they recommend there is someone who is a compelling leader who champions the system. They found it beneficial to have co-leaders, one who supports regular data analysis and another who is charismatic in delivering updates and expectations for implementation. This supports the research that a leadership team should be established with an active administrator, because having an administrator who is engaged and makes visible efforts to show support and contributions throughout the process, staff are more likely to engage as well. (Lohrmann, el al., 2008; Mathews et al., 2014; McIntosh et al., 2013; 2016; OSEP, 2015).

Expounding upon the theme of *shared leadership*, respondents felt that leaders should be strategic in forming *relationships* with staff to aid the selection of leadership team members. This theme of *relationships* connects with social network theory in which leaders map the social scape of their school to know who to ask to be a mentor, a 'hallway captain,' or who to tap to create or manage products that keep the system running (Daly et al., 2010). The study of social networks in schools to impact the implementation of a system or policy change which has been growing in the education field (Barry, 2015; Daly et al., 2010; Deal, et al., 2009; Woodland & Mazur, 2019). However, the application of social network theory to the implementation of PBIS is still an emerging area of research. One seminal piece of literature tying the two together was

published by Whitcomb, et al. (2017). This was an exploratory case study on the analysis of social networks in schools and how they can be utilized to predict the successful implementation of PBIS.

Looking at research question two, "What factors contributed to the installation and implementation of PBIS?" themes that emerged were: *processes aid meaning-making* and *identifying and addressing student needs*. In addition, a key barrier to sustained implementation– *COVID-19*, was identified.

The degree to which individuals can collectively make sense of the new learning can impact the overall success of implementation (Castillo, et al., 2022; Clare, 2022). In learning about the implementation process, gauging the way meaning is made by those who serve as actors and how this meaning is applied to the new context is essential to understanding how one can influence change within an organization (Spillane, et al., 2002). Reflecting with Clark, Nicole, Theodore, and Taylor it seemed that regular review of SRSS-IE screener data gave the system value as staff were able to see the impact of implementation (i.e., theme *processes aid meaning-making*). They were able to conceptualize the impact of implementing a multi-tiered approach through the processes and protocols that illustrated this system in action. Both Nicole and Clark remarked on how utilizing the Student Risk Screening Scale-Internalizing/Externalizing (SRSS-IE) data validated the somewhat intangible observations of what was going on with students behaviorally, socially, and emotionally. Using this allowed staff to illustrate through numbers and data the observations they had about the overall well-being of students.

The theme of *processes aid meaning-making* was even evident in the way it was a known expectation that staff use the *"purple sheet"* to evidence that strategies were in place to support learners before writing a referral. To drive this policy home, staff reiterated the reminder from

the administrator to do “three before me” meaning there had to be three strategies tried before the referral would be accepted. This supports the research that when leaders consistently back up the policy or system being implemented, implementation then has greater integrity. The act of having to engage in three proactive strategies which included connecting with the families of the students, became a process that aided the understanding of what a proactive and preventative behavioral system stands for.

As the theme of *identifying and addressing student needs* suggests, the use of the universal behavior screener seemed most impactful when it was coupled with the implementation of a Tier II behavioral intervention. This added value to the overall multi-tiered behavioral approach. Weick et al., (2005) that how meaning is made is “ongoing, instrumental, subtle, swift, social, and easily taken for granted” (p.409), overlooking the role of meaning-making in organizational change would be to miss out on the convergence of human social dynamics in making policies and practices a reality.

In a review of PIRS data, there was evidence that establishing a Check-In/Check-Out intervention allowed staff to feel like the overall behavioral system was impactful for students. Meaning that the teachers saw the overall system as effective because the students they saw had need were supported. This finding also supports the foundational literature that ongoing data-based decision-making and the dissemination of data are pillars that the system relies on (OSEP, 2015; 2023). The systematic use of a universal screener for behavior also evidences that the four essential components of Response to Intervention (RTI) were in place: 1) a school-wide, multilevel behavioral and instructional system aimed at prevention of school failure; 2) screening; 3) progress monitoring; and 4) making decisions based on data for instruction, level of student need, and identification of disability (AIR, 2021; NCRI, 2010; Werner-Sedler et al.,

2017). Furthermore, this supports the fourth foundational belief of PBIS, that it has "valued outcomes" (Center on PBIS, 2020; Sugai & Horner, 2002). When it comes to looking specifically at the impact of implementing advanced tiers at the high school level, this area of research proves to be ready for exploration (i.e., only three school-level group design studies have been found; Grasley-Boy, et al., 2021). Looking at the impact of implementing advanced tiers at the high school level on the overall staff support of PBIS is an uncharted area of research.

Reviewing the findings from my exploration of research question two, I found parallels to Meyer, et al.'s, (2021) research on four small high schools implementing PBIS in Massachusetts. The investment in Tier I implementation resulted in more impactful advanced tiers. In that literature, foundations included: having a school-based leadership team that meets regularly; providing regular communication with staff and other key collaborators on the overall system, changes, needs, successes, and alignment of efforts; regularly conducting progress monitoring assessments on the fidelity of the Tier I system (e.g.,TFI). Meyer, et al.'s, (2021) found that in the layering of additional tiers of support at the high school level promotes "consistency, efficiency, communication, and access" will support high school teams (p. 7). All of which Sunnydale accomplished while implementing Tier I PBIS.

To tell the full story of how implementation was achieved would not be accurate if I did not describe how it ended. The theme *COVID-19* was identified to describe the historical worldwide pandemic that arguably changed the landscape of Sunnydale High. COVID-19 was identified by survey participants and all interviewees as an inhibitor to sustaining PBIS implementation. Clark shared how successful he had felt with the system's implementation before COVID-19, "We really had it going on, I don't know that they're still carrying that out. Like we were pre-COVID. It really hurt us a lot during the COVID time." Data indicate that after

the 2020-2021 school year, Tier I PBIS was no longer considered a part of the overarching approach at Sunnydale High. Research is still growing on the effects of COVID-19 on K-12 education (Elrod, 2022; Huck & Zhang, 2021; Middleton, 2020). Terrell and Cho (2023) studied the perceptions of staff post-pandemic on the efficacy of PBIS. They found that the implementation of PBIS decreased but shared that the research of the National Education Association (NEA) indicated that post-pandemic 76% of respondents reported behavioral issues of students as a "serious" issue. These findings support that COVID-19 was considered a barrier to PBIS implementation that was not just central to Sunnydale High.

Stepping back and considering the relationship between the two fields of Implementation Science (i.e., rooted in a scientific method and used by behavioral and school psychologists to study how a plan is enacted; Fixsen et al., 2005) and Improvement Science (i.e., grounded in educational leadership in allowing practitioners to contextualize the plan to in order apply it; LeMahieu, et al., 2017). My first research question clung to looking for a linear cause-and-effect connection between the implementation success being grounded in following the step-by-step elements described in the initial *PBIS Implementation Blueprint* (OSEP, 2015). Through reviewing the data with a more interpretivist lens I was able to see that there is a convergence between using elements of this blueprint, the implementation processs, and allowing for there to be adaptations that best fit the context of an environment (i.e., improvement science-based).

Quality Considerations

To ensure the worthiness of this research, I kept Tracy's (2010) eight-point hallmarks for quality in mind. Before embarking on this research, I determined that this was a *worthy topic* as my review of literature determined that there is a dearth of research regarding staff acceptability of PBIS at the secondary level (Flannery et al., 2013; Flannery et al., 2014; Flannery & Kato,

2017; Freeman et al., 2016). Therefore, this research is relevant, timely, and of significance to the field of PBIS and systems change as the high school level (Tracy, 2010). The implementation data that Sunnydale indicated in their years of engaging in active PBIS implementation showed implementation fidelity and a majority of staff support for the system, thus making Sunnydale worthy of a case study. Through the iterative process of thoroughly reviewing archival documents and survey data and gathering participant perspectives, it became further evident that this topic was worthy of research as it is "interesting" and somewhat unique to the field (Tracy, 2010, p. 840).

To safeguard against injecting my own values, I reviewed aspects of *credibility* and *sincerity.* The meaning was derived through showing perspectives rather than telling, thick descriptions, allowing for multivocality, member reflections, and triangulation to express the findings. Interview participants and survey responses were reviewed through a constant comparison method to identify themes and direct quotes from the PIRS and interviews were infused to allow the participants to speak for themselves. In addition, interview participants were contacted to confirm, verify, or correct any suggested findings. Emails with the PBIS leadership team members throughout my analysis process allowed me the opportunity to reexamine the data and check that my own interpretations were not overshadowing the perspectives of those who lived this experience. The multivocality represented in these data brought further richness and dimension in coming to understand this phenomenon. Thus coupling *credibility* with *sincerity*, as I sought to ensure reflexivity and transparency in my research and analysis processes (Tracy, 2010).

Ethics remained a standard by which this study was conducted. Participants were safe guarded through anonymity (e.g., selecting and using pseudonyms for participants and the

school, redacting any indication of the school district). My study's procedures were reviewed by the Institutional Review Board (IRB) and I maintained and adhered to the protocols as outlined. Data were stored in password protected databases of which only I had access. In addition, I took time and great care to culturally and situationally ethical in my research approach and in reporting of data (Tracy, 2010). Tracy describes this as "the Christian law—'to love thy neighbor as thy self'' (p.847). Meaning, that as researcher I put myself in the shoes of those I was representing and reflected on not placing those people in a situation that could compromise their reputations or careers.

To make this body of research as impactful as possible, I made *meaningful coherence* a priority. My research questions served as a touchpoint in which literature, participant voices, and interpretations were reflected. This aim allowed for a clear picture of the phenomenon to be depicted. As I explored findings effort was made to interconnect data and interpretations with literature and research strands relevant to PBIS, systems change, implementation science, and educational leadership. My work set out to achieve a clear purpose and I maintained that purpose throughout (Gubrium, 2012).

Implications of Findings

While the use of Feuerborn, et al.'s, (2013) guide for gaining staff support of PBIS was not identified by the leadership team as being used during the process of adopting, installing, and implementing PBIS at Sunnydale High, it was evident that some of the recommended steps were in action. For each of the five steps I was able to find evidence that the leadership team at Sunnydale did in some way shape or form embed that element be it overtly (e.g., providing resources, providing formal professional development, standing agenda item, etc.) or covertly (e.g., providing informal professional development, gathering staff perspectives on the system

through relationships, seeking a respected teacher to be a co-lead). This implication supports the continued use of these strategies in training and technical assistance offered to schools seeking to implement PBIS at any grade level. However, some additional considerations should be added for the high school setting.

For instance, my review of the literature suggested the conclusion that lack of implementation in high schools is often related to finding the system to not be age-appropriate (i.e., Flannery, et al., 2018; Martinez, et al., 2019), in coding PIRS responses across the three years of data, each year there were a total of two responses that indicated this concern. For example, "I don't think any rewards-based program has that much of an effect at this age." Based upon my findings in research question one this can be attributed to the central theme of *formal and informal professional development*. The stance that Clark shared as being key for high school implementation involved not just the 'why' of implementation but the outcomes of implementation. "Educating staff on the purpose and outcomes of [PBIS] practices, I feel this is important when trying to convince some staff members of the importance of this practice. This is especially true at the high school level." The leadership team's ability to make the system relevant to staff and to perpetually provide some form of learning (e.g., emails, implementation data, standing agenda item, mentorship, etc.) on the impacts of this system approach seemed to make a difference in staff support at Sunnydale.

High school leadership teams should also consider the effects of being aware of pockets of leadership within the school that could be tapped to achieve greater impact in running the overall system. This connects not only to the aforementioned early research on exploring social networks in schools implementing PBIS (Whitcomb, et al., 2017). The concept of shared leadership, (also referred to as "distributed" or "team" leadership), relies on not just having a

compelling leader but knowing your faculty and staff well enough to know where to distribute the ownership of implementation. This takes the onus of leading the system off of a singular figurehead, allowing others to share influence (Northouse, 2022). This consideration can help to combat the contextual factors (i.e., size, organizational culture) identified in the literature as barriers to high school implementation (Flannery, et al, 2018; Martinez, et al. 2019). Sunnydale's leadership made it a point to share the load of implementation by designating "hallway" captains for support building spirit and comradery in meeting data deadlines (e.g., PIRS, SRSS-IE, providing bucks). They also ensured there was a co-leadership between a respected teacher and an administrator to evidence that there was practicality being applied in anything that was asked of the staff (e.g., I wouldn't ask another staff member to take on something I myself wouldn't do).

A further consideration for high schools, is that while important, processes and protocols alone are not what make a person rate that they actively support and implement an overarching system (Aguilar, 2016; Honig, 2006). One of my favorite undergraduate professors, Dr. Lovell, regularly shared that if we wanted students to engage in learning, we had to make it "personal, meaningful, and relevant." When analyzing the data, I noticed, what should be a more apparent finding, that educators support an initiative that they see as impactful for students. In addition to having a strong leadership team with a compelling administrator, implementing a universal behavior screener and then having an impactful Tier II system in place will yield better results for students and stronger backing from the faculty and staff. The implementation of a Multi-Tiered System of Support (MTSS) in its name implies that multiple layers of support should be readily available to support student needs, it should be fluid and responsive to provide that "just in time" support (Batsche, et al., 2006; Bradley, et al., 2005; McIntosh, & Goodman, 2016;

Weist et al., 2014). Therefore, this implication of having a universal screener for behavior and Tier II interventions at the ready (as related to the themes of *processes aid meaning-making* and *identifying and addressing student need*) is not a novel concept but is novel in practice at the high school level (Meyer et al. 2021). This practice is one I see as both an implication of the findings but also an implication for practice.

Implications for Practice

As someone who often wants practical strategies that I can give to schools to use right now, key implications for practice are to build relationships, engage in shared leadership, and design a system that is dynamic in supporting the behavioral, social, and emotional needs of students at multiple tiers. My first implication for practice, building *relationships*, goes hand in hand with the theme of engaging in *shared leadership* (Northouse, 2022). Leadership teams should build relationships- meaning come to know the strengths and interests of new and veteran staff. With this knowledge and an openness to shared leadership, a team can look for avenues to allow for a partnership in the development and implementation of the system (Whitcomb et al., 2017). In discussions with Clark, Taylor, Theodore, and Nicole it was evident that they felt the staff knew who was supporting which aspect of running the multi-tiered system which led to the theme of *relationships*. This included knowing who would bring the data to meetings, who to ask to support the development of a QR code system, the best group to ask to advertise upcoming reinforcer events, etc. The co-leads made it a point to get to know new teachers such as Nicole and provided her with tips and strategies for classroom management, but also made her feel like an integral part of the system by assigning her the responsibility of a "hallway captain."

In addition, PBIS.org (2021) published research on over 860 schools that implemented PBIS over five years, that those who regularly share data with staff have stronger success in

implementation. To take it a step further, Clark made the data meaningful and relevant by ensuring all staff and coaches knew about which tiers of support students were receiving which tied to the theme of *regular communication*. This sharing of data allowed more staff on campus from various positions to ask if they could support student needs as mentors. With this, an implication for practice is to share relevant data regarding students showing a need for advanced tiers of support with those on staff who may have a relationship or encounter the students in a variety of settings.

Research suggests that PBIS often falters in secondary settings because there is the perception that this is a more juvenile system (Flannery, et al., 2018; Flannery & Kato, 2017). While the leadership team did not ascertain staff perspectives on a behavioral framework before implementing as suggested by the a priori framework (e.g., Feuerborn, et al., 2013) they were able to innovate and move fluidly between stages of implementation to meet staff needs (Fixsen, et al., 2005; OSEP, 2023). Clark shared that once he heard about staff concerns regarding age-appropriateness, he decided to address that concern head-on. He was transparent with staff about this being a potential perception but tied it to the idea that even as adults we like to be recognized or reinforced for the work we do. High schools considering implementing PBIS should consider being as open and direct in addressing this common concern head-on. As well as feel encouraged that stages of implementation are not levels to be achieved like an award status, rather, they are "dynamic and ever-changing" (OSEP, 2023, p. 52). Meaning that leadership teams should feel empowered to revisit stages of implementation as they move forward with implementation and innovation.

This study arose from the review of data regarding three years' worth of PIRS scores that consistently indicated strong social validity of Tier I practices at a high school. With this in

mind, I approached the study and interview questions to center on what I knew as indicators of Tier I implementation practices (Feuerborn, et al., 2013; McIntosh & Goodman, 2016). As I continued to explore the data and firsthand accounts, I learned that it was the layering of additional tiers that garnered additional staff support and validated the overall system. This was exhibited in the theme, *processes aid meaning-making* it was through the application of the process of using a universal behavior screener that was then coupled with additional student data to match appropriate students to the Tier II intervention CICO (i.e., theme of *identifying and addressing student needs)* that staff were able to see the impact of the overall system. In many state PBIS technical assistance models, it is a common practice to have schools engage in building a strong Tier I foundation before engaging in training and professional development on advanced tiers. To establish staff support at a high school level as suggested in this case, perhaps training models should work to build Tier I and Tier II concurrently. Kittelman, et al., (2022) exploring data from five states, shared that the latency between training and implementation of Tier I and Tier II is about 2.48 years across all grade levels. Conversely, the period between training and implementation of Tier II and Tier III is found to be shorter with about 0.80 years between the two. This is attributed to state-level leadership teams implementing decision rules and readiness criteria that enforce indicators of a strong Tier I system (i.e., Lower ODR, high fidelity scores on the TFI or School-wide Evaluation Tool [SET]) are in place before training is offered on advanced tiers.

Recommendations for Research

As discussed in Chapter Two, concerning implementing PBIS in the secondary setting many areas need further research. Providing some insight into how relatively new research on

PBIS in high schools is, for one study on advanced tiers being implemented at a high school level only three school-level group design studies had been found (Grasley-Boy, et al., 2021).

Areas that I see as adding value to the field of education include: further studies on the use of Feuerborn, et al., (2013) to frame understanding implementation efforts, learning more about factors that contribute to the social validity of PBIS at the high school level, employing universal behavioral screeners as part of an EWS, applying internalizing and externalizing interventions for advanced tiers, factors that contribute to sustainability of PBIS at a high school level, coupling improvement science with implementations science in measuring fidelity, reviewing implementation through the sensemaking framework, and studying the application of social networks to the implementation of PBIS at a high school level.

First and foremost, my recommendation for future research needs to acknowledge the work of Feuerborn, et al., (2013), using this a priori framework allowed for data to be organized in a fashion that aided securing a thicker description of this phenomenon. Nevertheless, from a review of databases, my use of this framework to study and understand securing social validity is somewhat unique despite the technical assistance centers that have used this work for developing trainings on securing staff commitment. In addition, this body of research is over ten years old, revisiting this article and addressing what still serves as a gold standard for gaining staff support and what further insights have been gained would be beneficial for technical assistance providers and school leadership teams. In studies that utilize this frame, it would be worthwhile to explore the effect of implementing a Tier II system or intervention such as CICO at the high school level on the overall acceptability of PBIS.

In addition, research is needed to further the understanding, beyond this study, of factors that contribute to the social validity of PBIS in other high schools. It would also be beneficial to

conduct studies on the integration of universal behavior screeners within an EWS. While Young et. al. 2011 and 2021 have called for further research in this area, there remains little beyond this work specific to high school implementation. Furthermore, not just the impact of employing universal behavior screeners but the application of advanced-tiered interventions specifically for internalizing and externalizing behaviors as a result of these combined data. Recent studies have been conducted on CICO adaptations at the high school level, (e.g., Flannery, et. al., 2024) but further exploration of the combined effects of using universal behavior screeners and targeted high school Tier II interventions is worthy of study. On a more personal note, I see high value in exploring this due to the rise of gun violence in schools, I cannot help but ask, if our secondary settings employed a universal behavior screener that flagged internalizing behaviors in addition to the EWS, and provided preventative interventions, could we reduce these incidents?

Data from Sunnydale's implementation indicated an upward trend in the outcomes related to student behavioral success, and staff support that began to include ideas for innovating the system (e.g., the premier level in Fixsen et al.'s stages of implementation). Research on a high school exhibiting this trend in data and the factors contributing to or inhibiting sustainability should be explored. There are studies, (e.g., Mathews, et al. 2013; McIntosh, Mercer, Hume, et al., 2013; McIntosh, Predy, Upreti, et al., 2013; Pinkelman, et. al., 2015; Sugai & Horner, 2006) but since the COVID-19 pandemic, there has been a decline in the number of schools implementing and an increase in the perceptions of school staff that behavior is a serious issue (Elrod, 2022; Huck & Zhang, 2021). From reviewing the archival data from Sunnydale, I believe they were on a trajectory towards *sustainability* (Fixsen, et al., 2005). In fact, at a conference in February of 2020, the co-leads at Sunnydale were asked to share their lessons learned with other high schools around the state in a networking session hosted by the PBIS Technical Assistance

Center. In a passing conversation, the leads shared with me that they found it humorous that the day that both of them were off campus for this event, the first physical fight on campus for the year had broken out. They remarked on what a drastic improvement this was in comparison to when they had first started implementation. When thinking about sustainability at Sunnydale, perhaps understandably (due to a quick pivot to distance learning, staff turnover, etc.) they did not sustain Tier I implementation during a worldwide pandemic. However, it is notable that they did sustain the Tier II intervention CICO, and as of the 2023-24 school year, have re-engaged the use of the universal behavior screener (i.e., SRSS-IE). This indicates that the staff saw enough value in the intervention and this universal screener process to identify strategies to overcome implementation barriers encountered during the pandemic.

Considering the convergence of Implementation Science and Improvement Science as it applies to studies on PBIS intervention fidelity. In Implementation Science fidelity is more rigid and prescriptive in what constitutes proper implementation (Fixsen, et al., 2019). Improvement Science still expects that the intervention has adherence, however, it is less stringent in how prescriptive the protocol is followed. Studying successful implementation of PBIS may entail looking not just at schools that have followed implementation to the letter, but rather, studying what contextual adaptations were made to yield positive results (Cunningham & Osworth, 2023). Studying these adaptations could allow secondary schools to feel more at liberty to make adjustments that fit their demographics, resources, and time and thus still produce impactful student outcomes.

In addition, a deeper exploration of the sensemaking process (Weick, et al., 2005) as it applies to systems change and PBIS implementation at the secondary level could yield a new perspective on how to view gaining staff commitment. Sensemaking, another concept to explain

human behavior, involves the significant process of making meaning of new policies, practices, concepts, or beliefs by accessing one's prior knowledge to apply it to their socially situated context (Honig, 2006, Rigby, et al., 2016; Weick et al., 2005). The degree to which individuals can collectively make sense of the new learning can impact the overall success of implementation (Castillo, et al., 2022; Clare, 2022). In learning about the implementation process, gauging the way meaning is made by those who serve as actors and how this meaning is applied to the new context is essential to understanding how one can influence change within an organization (Spillane, et al., 2002).

Weick et al., (2005) provide foundational knowledge about the process of sensemaking. The first step centers around schema, taking the information and clustering or organizing related concepts into categories. Second, the concepts are applied in a verbal or written manner. Finally, the application and conversations held among those within the organization begin to shape conduct. It is noted by Weick et al., (2005) that sensemaking is "ongoing, instrumental, subtle, swift, social, and easily taken for granted" (p.409). However, overlooking the role of sensemaking in organizational change would be to miss out on the convergence of human social dynamics in making policies and practices a reality. Or more aptly stated, "situations, organizations, and environments are talked into existence" (p. 409).

Another area of research that I see as beneficial to explore is the impact of social networks in schools that have shown sustained successful implementation of PBIS (Whitcomb et al., 2017). At Sunnydale, it was evident that the team instinctually knew whom to tap to complete one of the many facets involved in running the overall system (i.e., theme of *relationships*). Social network theory is the study of social linkages and relationships amongst individuals that allows for information, opinions, knowledge, and innovation to be transmitted

(Deal, et al., 2009; Adler, & Kwon, 2002; Daly, 2010). Innovation is more likely to occur in organizations that have links that span within and across the network as well as branch outside of the organization (Honig, 2006; Moolenar & Sleegers, 2010). It is the ties to others within the organization that can either barricade or enable the flow of information to others (Carolan, 2013; Barry, 2015). If one were to more formally map the social network, (Barry, 2015; Daly et al., 2010; Deal, et al., 2009; Woodland & Mazur, 2019) what could be learned and applied to other high school settings to address the research that suggests implementation is not successful in high schools due to the larger faculty size and the multi-faceted organizational culture?

Conclusion

When it comes to implementing a policy, procedure, or systemic change there may not be a perfect recipe that can be transferred to other settings and yield replicated results. However, if we take an approach that uses logic that is coupled with a desire to understand the human experience, perhaps we can make impactful decisions that produce true systemic change. In closing, I feel that Clare (2022) most fittingly shared the significance of seeking to understand implementation through not just qualitative but quantitative means, "Quantitative data reflects measurable behaviors, but the stories participants tell remain the variables that determine whether or not the intervention is practical – whether it's acceptable in that it fits with the client system sufficiently to be implemented and sustained."

REFERENCES

Adelman, H. S., & Taylor, L. (1997). Toward a scale-up and replicating of new approaches to schooling. *Journal of Educational and Psychological Consultation*, *8*, 197–230. DOI: 10.1207/s1532768xjepc0802_6

The Association for Positive Behavior Support. APBS Homepage. (n.d.). Retrieved February 26, 2022, from https://www.apbs.org/

Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *The Academy of Management Review*, *27*(1), 17-40. Retrieved from http://www.jstor.org/stable/4134367

Aguilar, E. (2016). *The art of coaching teams: building resilient communities that transform schools* (First). Jossey-Bass.

Amemiya, J., Mortenson, E., & Wang, M.T. (2020). Minor infractions are not minor: School infractions for minor misconduct may increase adolescents' defiant behavior and contribute to racial disparities in school discipline. *American Psychologist, 75*(1), 23–36. https://doi.org/10.1037/amp0000475

Barry, S.K., (2015). Using Social Network Analysis to Investigate the Relationship between School-Based Team Communication Networks and Implementation of Positive Behavior Support Systems. Doctoral Dissertations. 346. https://scholarworks.umass.edu/dissertations_2/346

Batsche, G., Elliott, J., Graden, J. L., Grimes, J., Kovaleski, J. F., Prasse, D., Schrag, J., & Tilly, W.D. (2006). *Response to intervention: Policy considerations and implementation.* Alexandria, VA: National Association of State Directors of Special Education, Inc.

Batsche, G., Kavale, K. A., Kovaleski, J. F. (2006). Competing views: A dialogue on response to intervention. *Assessment for Effective Intervention 32*(1), 6-19. DOI: 10.1177/15345084060320010301

Baule, S. M. (2020). The impact of Positive Behavior Intervention Support (PBIS) on suspensions by race and ethnicity in an urban school district. AASA Journal of Scholarship & Practice, 16(4). https://eric.ed.gov/?id=EJ1241190

Bohanon, H., Borgmeier, C., Fenning, P., Flannery, B., & Malloy, J. (2009). Finding a direction for high school positive behavior support. In Sailor W., Dunlap G., Sugai G., Horner R. (Eds.), *Handbook of positive behavior support* (pp. 581–602). New York, NY: Springer.

Bornstein, J. (2017). Entanglements of discipline, behavioral intervention, race, and disability. *Journal of Cases in Educational Leadership*, *20*(2), 131–144. DOI: 10.1177/1555458917696810

Bowen, G. A. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, *9*(2), 27-40. DOI:10.3316/QRJ0902027

Bradley, R., Danielson, L., & Doolittle, J. (2005). Response to intervention. *Journal of Learning Disabilities*, *38*(6), 485-486. DOI: 10.1177/00222194050380060201

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. DOI: 10.1037/a0012883

Bradshaw, C. P., Reinke, W. M., Brown, L. D., Bevans, K. B., & Leaf, P. J. (2008). Implementation of school-wide Positive Behavioral Interventions and Supports (PBIS) in elementary schools: Observations from a randomized trial. *Education & Treatment of Children*, *31*(1), 1–26. DOI: 10.1353/etc.0.0025

Briggs, A. R., Morrison, M., & Coleman, M. (2014). Research methods in educational leadership and management. Sage Publications.

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). Learning to improve: How America's schools get better at getting better. Cambridge, MA: Harvard Education Press.

Campbell, A., & Anderson, C. M. (2011). Check-In/Check-Out: A systematic evaluation and component analysis. *Journal of applied behavior analysis*, *44*(2), 315-326. DOI: 10.1901/jaba.2011.44-315

Carolan, B. V. (2013). *Social network analysis and education. [electronic resource]: Theory, methods & applications.* Thousand Oaks, CA: SAGE.

Carter, P. L., Skiba, R., Arrendondo, M. I., & Pollock, M. (2017). You can't fix what you don't look at: Acknowledging race in addressing racial discipline disparities. Urban Education, 52 (2) 207-235. DOI: 10.1177/0042085916660350

Castillo, J.M., Garbacz, A., Black, W.R., Davis, D., Wingate, E., & Furjanic,D. (2022) The role of sensemaking in the organizational consultation process in schools, *Journal of Educational and Psychological Consultation*, DOI: 10.1080/10474412.2022.2132254

Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. The Qualitative Report, *21*(5), 811-831. DOI: 10.46743/2160-3715/2016.2337

Center on Positive Behavioral Interventions and Supports (December 2020). Positive Behavioral Interventions and Supports (PBIS) Evaluation Blueprint. University of Oregon. www.pbis.org.

Clare, M. M. (2022). Qualitative research methods render and advance consultation practice: Here's why that matters, *Journal of Educational and Psychological Consultation, 32(1)*, 9-21. DOI: 10.1080/10474412.2020.1768859

Cooper (2008). The federal case for school-based mental health services and supports. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*(1), 4-8.

Crone, D. A., Hawken, L. S., & Horner, R. H. (2010). *The Guilford practical intervention in the schools series. Responding to problem behavior in schools: The Behavior Education Program (2nd ed.).* Guilford Press.

Cunningham, K.M.W. & Osworth, D. (2023). Improvement science and the every student succeeds act: An analysis of the consolidated state plans, *Leadership and Policy in Schools*, DOI: 10.1080/15700763.2023.2264924

Drummond, T. (1994). The Student Risk Screening Scale (SRSS). Josephine County Mental Health Program. Retrieved from: https://pbisiu12.weebly.com/uploads/1/4/2/6/14262459/srss_drummond.pdf

Daly, A. (2010). *Social network theory and educational change*. Cambridge, MA: Harvard Education Press. DOI: 10.1086/667702.

Daly, B. P., Nicholls, E., Aggarwal, R., Sander, M. (2014). In Weist, M.D., Lever, N.A., Bradshaw, C.P., Owens, J.S. (Eds.). (2014). Handbook of school mental health: Research, training, practice, and policy (2nd edition). New York, Springer. DOI: 10.1007/978-1-4614-7624-5

Dariotis, J. K., Bumbarger, B. K., Duncan, L. G., & Greenberg, M. T. (2008). How do implementation efforts relate to program adherence? examining the role of Organizational, Implementer, and program factors. *Journal of Community Psychology*, *36*(6), 744–760. https://doi.org/10.1002/jcop.20255

Deal, T. E., Purinton, T., & Waetjen, D. (2009). *Making sense of social networks in schools*. Thousand Oaks, CA: Corwin Press.

Elrod, B.G., Rice, K. G., & Meyers, J. (2022). PBIS fidelity, school climate, and student discipline: A longitudinal study of secondary schools. *Psychology in the Schools*, *59*(2), 376–397. DOI: 10.1002/pits.22614

Evanovich, L., & Scott, T. (2016). Facilitating PBIS Implementation: An administrator's guide to presenting the logic and steps to faculty and staff. *Beyond Behavior, 25*(1), 4-8. https://doi.org/10.1177/10742956160250102

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. DOI: 10.1177/001440290707300302.

Feuerborn, L. L., Wallace, C., & Tyre, A. D. (2013). Gaining staff support for schoolwide positive behavior supports: A guide for teams. *Beyond Behavior*, *22*(2), 27–34. https://doi.org/10.1177/107429561302200206

Feuerborn LL, Wallace C, & Tyre AD. (2016) A qualitative analysis of middle and high school teacher perceptions of schoolwide positive behavior supports. *Journal of Positive Behavior Interventions*.*18*(4):219-229. DOI:10.1177/1098300716632591

Filter, K. J., McKenna, M. K., Benedict, E. A., Horner, R. H., Todd, A., & Watson, J. (2007). Check in/check out: A post-hoc evaluation of an efficient, secondary-level targeted intervention for reducing problem behaviors in schools. *Education and Treatment of Children*, *30*(1), 69-84. DOI: 10.1353/etc.2007.0000.

Filter, K. J., Sytsma, M. R., & McIntosh, K. (2016). A brief measure of staff commitment to implement school-wide positive behavioral interventions and supports. *Assessment for Effective Intervention*, *42*(1), 18-31. DOI:10.1177/1534508416642212.

Fixsen, D.L., Blasé, K.A., Van Dyke, M.K. (2019). Implementation practice & science. Chapel Hill, NC: Active Implementation Research Network. ASIN: B07ZPC627X.

Fixsen, D. L., Naoom, S. F., Blasé, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231). Retrieved from: https://nirn.fpg.unc.edu/resources/implementation-research-synthesis-literature.

Flannery, K. B., Fenning, P., Kato, M. M., & McIntosh, K. (2014). Effects of school-wide positive behavioral interventions and supports and fidelity of implementation on problem behavior in high schools. *School psychology quarterly:American Psychological Association*, *29*(2), 111–124. DOI:10.1037/spq0000039.

Flannery, K. B., Frank, J. L., Kato, M. M, Doren, B., & Fenning, P. (2013). Implementing schoolwide positive behavior support in high school settings: Analysis of eight high schools. *The High School Journal, 96,* 267-282. DOI:10.1353/hsj.2013.0015.

Flannery, K.B., Hershfelt, P., & Freeman J. (2018). *Lessons learned on implementation of PBIS in high schools:Current trends and future directions.* Center for Positive Behavioral Interventions and Supports (funded by the Office of Special Education Programs, U. S. Department of Education). Eugene, Oregon: University of Oregon Press. Retrieved from: https://www.pbis.org/resource/lessons-learned-on-implementation-of-pbis-in-high-schools-current-trends-and-future-directions

Flannery, K. B., Kato, & M. M., (2017). Implementation of SWPBIS in high school: Why is it different? *Preventing School Failure, 61,* 69-79. DOI: 10.1080/1045988X.2016.1196644.

Flannery, K. B., Kato, M. M., Kittleman, A., Sampson, N. K., & McIntosh, K. (2024). Check-In/Check-Out (CICO) in High School: Results From a Small Randomized Controlled Trial. *Behavioral Disorders*. https://doi.org/10.1177/01987429231225461

Flannery, K. B., Sugai, G., & Anderson, C. M. (2009). School-wide positive behavior support in high school: Early lessons learned. *Journal of Positive Behavior Interventions, 11*(3), 177–185. https://doi.org/10.1177/109830070831s6257

Fox, N.J. (2008) Post-positivism. In: Given, L.M. (ed.) The SAGE Encyclopaedia of Qualitative Research Methods. London: Sage.

Freeman, J., Simonsen, B., Briere, D. E., & MacSuga-Gage, A. S. (2014). Pre-service teacher training in classroom management: A review of state accreditation policy and teacher preparation programs. *Teacher Education and Special Education*, *37*(2), 106–120. https://doi.org/10.1177/0888406413507002

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

Freeman, J., Wilkinson, S., & Vanlone, J. (2017). *Status of high school PBIS implementation in the U.S*. Retrieved from PBIS.org.

Fuchs, D. & Fuchs, L.S. (2017). Critque of the national evaluation of response to intervention: A case for simpler frameworks. *Exceptional Children, 83*(3), 255-268. https://doi.org/10.1177/0014402917693580

George, A. A., Hall,G. E., & Stiegelbauer, S. M. (2006). Measuring implementation in schools: The stages of concern questionnaire. Austin TX: SEDL. Retrieved from: http://www.sedl.org/pubs/catalog/items/cbam17.html

George, H. P. (personal communication, 2021, April 19). *Number of Schools Implementing PBIS in High Schools.*

George, H. P., Cox, K. E., Minch, D., & Sandomierski, T. (2018). District practices associated with successful SWPBIS implementation. *Behavioral Disorders, 43*(3), 393-406. DOI:10.1177/0198742917753612

Gershoff, E. T., & Font, S. A. (2016). Corporal Punishment in U.S. Public Schools: Prevalence, Disparities in Use, and Status in State and Federal Policy. *Social policy report*, *30*, 1. DOI: 10.1002/j.2379-3988.2016.tb00086.x

Gillies, V. (2016). *Pushed to the edge: Inclusion and behaviour support in schools*. Policy Press. DOI: 10.46692/9781447317494.001

Gilmour, A. F., Sandilos, L. E., Pilny, W. V., Schwartz, S., & Wehby, J. H. (2021). Teaching Students With Emotional/Behavioral Disorders: Teachers' Burnout Profiles and Classroom Management. *Journal of Emotional and Behavioral Disorders*, *30*(1), DOI:10634266211020258.

Grasley-Boy, N. M., Gage, N. A., Lombardo, M., & Anderson, L. (2021). The additive effects of implementing advanced tiers of SWPBIS with Fidelity on disciplinary exclusions. *Journal of Positive Behavior Interventions*, DOI:109830072110117.

Grbich, C. (2013). *Qualitative data analysis: An introduction*. London: Sage.

Gregory, A., Skiba, R. & Mediratta, K. (2017). Eliminating discrepancies in school discipline: a framework for intervention, Review of Research in Education, 41 253-278. DOI: 10.3102/0091732X17690499.

Gubrium, J. F. (2012). *The SAGE Handbook of Interview Research: The Complexity of the Craft: Vol. 2nd ed*. SAGE Publications, Inc. DOI: 10.4135/9781452218403.

Hall, G.E., & Hord, S. M. (2011). *Implementing change: Patterns, principles, and potholes* (3rd ed.), Boston: Allyn & Bacon.

Hammersley, M. (2013). What is Qualitative Research? London and New York: Bloomsburry.

Hawken, L. S. (2006). School psychologists as leaders in the implementation of a targeted intervention: The Behavior Education Program. *School Psychology Quarterly*, *21*(1), 91. DOI: 10.1521/scpq.2006.21.1.91

Hawken, L. S., & Horner, R. H. (2003). Evaluation of a targeted intervention within a schoolwide system of behavior support. *Journal of Behavioral Education*, *12*(3), 225-240. DOI: 10.1023/A:1025512411930.

Hawken, L. S., MacLeod, K. S., & Rawlings, L. (2007). Effects of the behavior education program (BEP) on office discipline referrals of elementary school students. *Journal of Positive Behavior Interventions*, *9*(2), 94-101. DOI: 10.1177/10983007070090020601.

Hesel, S. (2020, August 10). *Strong student-adult relationships lower suicide attempts in high schools*. URMC Newsroom. https://www.urmc.rochester.edu/news/story/strong-student-adult-relationships-lower-suicide-attempts-in-high-schools.

Honig, M. I. (Ed.). (2006). *New directions in education policy implementation: Confronting complexity*. Albany, NY: State University of New York Press.

Horner, R., Sugai, G., & Fixsen, D. (2017). Implementing effective educational practices at scales of social importance. *Clinical Child and Family Psychology Review*. Springer/Plenum Publishers. https://doi.org/10.1007/s10567-017-0224-7

Horner, R. H., Ward, C. S., Fixsen, D. L., Sugai, G., McIntosh, K., Putnam, R., & Little, H. D. (2019). Resource Leveraging to Achieve Large-Scale Implementation of Effective Educational Practices. Journal of Positive Behavior Interventions, 21(2), 67-76. https://doi.org/10.1177/1098300718783754

Huck, C., & Zhang, J. (2021). Effects of the COVID-19 Pandemic on K-12 Education: A Systematic Literature Review. *New Waves-Educational Research and Development Journal*, *24*(1), 53-84.

Junker, R., Gold, B., & Holodynski, M. (2021). Classroom management of pre-service and beginning teachers: From dispositions to performance. International Journal of Modern Education Studies, 5(2), 339–363. http://dx.doi.org/10.51383/ijonmes.2021.137

Kato, M. M., Kittelman, A., Flannery, K. B., & Cohen Lissman, D. (2022). Adapting and monitoring daily CICO implementation in high schools. Preventing School Failure, 67(1), 48-57. https://doi.org/10.1080/1045988X.2022.2106933

Kim, L. E., Oxley, L., & Asbury, K. (2022). "My brain feels like a browser with 100 tabs open": A longitudinal study of teachers' mental health and well-being during the COVID-19 pandemic. *British Journal of Educational Psychology*, *92*(1), 299–318. https://doi.org/10.1111/bjep.12450

Kim, R. M., & Venet, A. S. (2023). Unsnarling PBIS and Trauma-Informed Education. *Urban Education, 0*(0). https://doi.org/10.1177/00420859231175670

Kincaid, D., Childs, K., Blase, K., & Wallace, F. (2007). Identifying barriers and facilitators in implementing school-wide positive behavior support. *Journal of Positive Behavior Interventions, 9*(3), 174-184. DOI: 10.1177/10983007070090030501.

Kittelman, A., McIntosh, K., Mercer, S., Evanovich, L., Gulbrandson, K., Nantais, M., Norton, J., Way, G., Izzard, S., & Nese, R. (2022). *When do Schools Receive Tier 2 and 3 PBIS Training?* Center on PBIS, University of Oregon. www.pbis.org.

Kittelman, A., Monzalve, M., Flannery, K. B., & Hershfeldt, P. A. (2018). Adaptations of check- in/check-out to meet the needs of high school students. *The High School Journal, 102*(1), 4–17. https://www.jstor.org/stable/26757712

Koelle, M., Olsson, T., Mitchell, R., Williamson, J., & Boll, S. (2019). What is (un)acceptable? thoughts on social acceptability in HCI research. *Interactions*, (3), 36. Retrieved from http://search.ebscohost.com.ezproxy.lib.usf.edu/login.aspx?direct=true&db=edsbl &AN=RN619894363&site=eds-live

Kramarczuk Voulgarides, C., Fergus, E., & King Thorius, K. A. (2017). Pursuing Equity: Disproportionality in Special Education and the Reframing of Technical Solutions to Address Systemic Inequities. Review of Research in Education, 41(1), 61-87. DOI: 10.3102/0091732X16686947

Lane, K. L., Kalberg, J. R., Bruhn, A. L., Driscoll, S. A., Wehby, J. H., & Elliott, S. (2009). Assessing social validity of school-wide positive behavior support plans: Evidence for the reliability and structure of the Primary Intervention Rating Scale. School Psychology Review, 38, 135-144. DOI:10.1080/02796015.2009.12087854.

Lane, K. L., & Menzies, H. M. (2009). Student Risk Screening Scale for Early Internalizing and Externalizing Behavior (SRSS-IE). Retrieved from: https://www.ci3t.org/screening

Lane, K. L., Oakes, W. P., Cantwell, E. D., Menzies, H. M., Schatschneider, C., Lambert, W., & Common, E. A. (2017). Psychometric Evidence of SRSS-IE Scores in Middle and High Schools. Journal of Emotional and Behavioral Disorders, 25(4), 233–245. https://doi.org/10.1177/1063426616670862

Lane, L. K., Oakes, W. P., Cantwell, E. D., Schatschneider, C., Menzies, H., Crittenden, M., & Messenger, M. (2016). Student risk screening scale for internalizing and externalizing behaviors: Preliminary cut scores to support data-informed decision making in middle and high schools. Behavioral Disorders, 42(1), 271–284. https://doi.org/10.17988/BD-16-115.1

Lane, K. L., Oakes, W. P., Lusk, M. E., Cantwell, E. D., & Schatschneider, C. (2016). Screening for intensive intervention needs in secondary schools: Directions for the future. Journal of Emotional and Behavioral Disorders, 24(3), 159–172. https://journals.sagepub.com/doi/10.1177/1063426615618624

Lane, K. L., Oakes, W. P., & Magill, L. (2014). Primary prevention efforts: How do we implement and monitor the tier 1 component of our comprehensive, integrated, three-tiered (ci3t) model? *Preventing School Failure: Alternative Education for Children and Youth, 58*(3), 143-158. DOI:10.1080/1045988X.2014.893978

Lane, K. L., Oakes, W. P., Swogger, E. D., Schatschneider, C., Menzies, H., M., & Sanchez, J. (2015). Student risk screening scale for internalizing and externalizing behaviors: Preliminary cut scores to support data-informed decision making. *Behavioral Disorders, 40*(3)*,* 159-170. https://doi.org/10.17988/0198- 7429-40.3.159

Lane, K. L., Robertson, E. J., & Wehby, J. H. (2002). Primary Intervention Rating Scale. Unpublished rating scale. Retrieved from: https://tennesseetsc.org/wp-content/uploads/2019/03/Blank-PIRS-Survey.pdf

LeMahieu, P. G., Grunow, A., Baker, L., Nordstrum, L. E., & Gomez, L. M. (2017). Networked Improvement Communities: The Discipline of Improvement Science Meets the Power of Networks. *Quality Assurance in Education*, *25*(1), 5–25. https://doi.org/10.1108/QAE-12-2016-0084

Lewis, C. (2015). *What is improvement science? Do we need it in education?* Los Angeles, CA: Sage Publications. DOI: 10.3102/0013189X15570388

Li, X., Bergin, C., & Olsen, A. A. (2022). Positive teacher-student relationships may lead to better teaching. *Learning and Instruction*, *80*. https://doi.org/10.1016/j.learninstruc.2022.101581

Lichman, M. (2012). *Qualitative research in education: A user's guide*. Sage Publications.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

Lindahl, R.A. (2008). Shared Leadership: Can It Work in Schools? *The Educational Forum, 72*, 298 - 307. DOI: 10.1080/00131720802361894.

Lohrmann, S., Forman, S., Martin, S., & Palmieri, M. (2008). Understanding school personnel's resistance to adopting schoolwide positive behavior support at a universal level of intervention. *Journal of Positive Behavior Interventions, 10*, 256-269. DOI: 10.1177/1098300708318963

Long, J. M., & Pisani, J. A. (2022). *The value of voice in shared leadership and organizational behavior*. Anthem Press.

Lynass, Tsai, Richman, and Cheney (2012). Social expectations and behavioral indicators in school-wide positive behavior supports: A national study of behavior matrices. Journal of Positive Behavior Interventions, 14, 153-161. DOI: 10.1177/1098300711412076

March, R. E., & Horner, R. H. (2002). Feasibility and contributions of functional behavioral assessment in schools. *Journal of Emotional and Behavioral Disorders*, 10(3), 158-170. DOI: 10.1177/10634266020100030401

Martinez, S., Kern, L., Hershfeldt, P., George, H. P., White, A., Flannery, B., Freeman, J. (September, 2019). High School PBIS Implementation: Student Voice. Eugene, OR: OSEP TA Center on PBIS, University of Oregon. Retrieved from www.pbis.org.

Marshall, D. T., Smith, N. E., Love, S. M., Neugebauer, N. M., & Shannon, D. M. (2023). "At some point we're going to reach our limit": Understanding COVID-19's impact on teacher burnout and subjective mental health. Psychology in the Schools, 1–20. https://doi.org/10.1002/pits.23084

Mathews, S., McIntosh, K., Frank, J. L., & May, S. L. (2013). Critical features predicting sustained implementation of school-wide positive behavioral interventions and supports. *Journal of Positive Behavior Interventions*, *16*(3), 168–178. https://doi.org/10.1177/1098300713484065

McIntosh, K., Gion, C., & Bastable, E. (2018). *Do schools implementing SWPBIS have decreased racial and ethnic disproportionality in school discipline?* [Evaluation Brief]. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports. Retrieved from: https://www.pbis.org/resource/do-schools- implementing-swpbis-have-decreased-racial-and-ethnic-disproportionality-in-school-discipline

McIntosh, K., & Goodman, S. (2016). *Integrated multi-tiered systems of support:blending RTI and PBIS / Kent McIntosh, Steve Goodman.* The Guilford Press.

McIntosh, K., Kelm, J. L., & Canizal Delabra, A. (2016). In search of how principals change. *Journal of Positive Behavior Interventions*, *18*(2), 100–110. https://doi.org/10.1177/1098300715599960

McIntosh, K., Mercer, S. H., Hume, A. E., Frank, J. L., Turri, M. G., & Mathews, S. (2013). Factors related to sustained implementation of schoolwide positive behavior support. *Exceptional Children, 79*(3), 293.

McIntosh, K., Predy, L. K., Upreti, G., Hume, A. E., Turri, M. G., & Mathews, S. (2013). Perceptions of contextual features related to implementation and sustainability of school-wide positive behavior support. *Journal of Positive Behavior Interventions*, *16*(1), 31–43. https://doi.org/10.1177/1098300712470723

McCart, A., & Miller, D. (2020). Leading equity-based MTSS for all students. Thousand Oaks, CA: Corwin Press..

Merriam, S. B. (2010). Qualitative case studies. In Peterson p., Baker E., & McGaw B. (Eds.), International Encyclopedia of Education Third Edition (pp. 456-462). New York, NY: Elsevier, Ltd. DOI:10.1016/B978-0-08-044894-7.01532-3

Merriam, S. B. (2016). Qualitative research: Designing, implementing, and publishing a study. In V. X. Wang, (Ed.), Handbook of research on scholarly publishing and research methods (pp. 125-140). Hershey, PA: IGI Global.

Merriam, S. B. & Tisdell, E.J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Retrieved from https://ebookcentral.proquest.com

Meyer, K., Everett, S., Handler, M., Freeman, J. (2021). Advanced tiers in high school: Lessons learned from initial implementation. Eugene, OR: Center on PBIS, University of Oregon. www.pbis.org.

Michigan's Integrated Behavior and Learning Support Initiative, (2020, February). Student Risk Screening Scale – Internalizing and Externalizing, Coordinator Training [38]. Michigan Department of Education. Retrieved from: https://www.ci3t.org/wp-content/uploads/2020/09/00_SRSS IE_Coordinator_Presentation.pdf

Middleton, K. V. (2020). The longer-term impact of COVID-19 on K–12 student learning and assessment. *educational measurement: issues and practice*, *39*(3), 41-44. DOI: 10.1111/emip.12368

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.

Miles, J., & Gilbert, P. (2005). *A Handbook of Research Methods in Clinical and Health Psychology*. Oxford University Press. https://doi.org/10.1093/med:psych/9780198527565.001.0001

Miller, L. M., Dufrene, B. A., Sterling, H. E., Olmi, D. J., & Bachmayer, E. (2015). The effects of check-in/ check-out on problem behavior and academic engagement in elementary school students. *Journal of Positive Behavior Interventions*, *17*(1), 28-38. DOI: 10.1177/1098300713517141.

Miramontes, N.Y., Marchant, M., Heath, M.A., & Fischer, L. (2011). Social validity of a Positive Behavior Interventions and Support model. *Education and Treatment of Children, 34*(4), 445-468. DOI: 10.1353/etc.2011.0032.

Missouri Schoolwide Positive Behavior Support. (2018). Retrieved from: https://pbismissouri.org/wp-content/uploads/2018/05/MO-SW-PBS-Tier-1-2018.pdf

Moolenaar, N.M., & Sleegers, P.J.C (2010). Social networks, trust, innovation: The role of relationships in supporting an innovative climate in Dutch schools. In Daly, A. (Ed.). (2010). *Social network theory and educational change* (pp. 97-114). Cambridge, MA: Harvard Education Press.

Morningstar, M., Lombardi, A., Fowler, C., & Test, D. (2017). A college and career readiness framework for secondary students with disabilities. *Career Development and Transition for Exceptional Individuals, 40*, 79-91. DOI: 10.1177/2165143415589926

Moulton, S. E., Young, E. L., & Sudweeks, R. R. (2019). Examining the psychometric properties of the SRSS-IE with the nominal response model within a middle school sample. Assessment for Effective Intervention, 44(4), 227–240. https://doi.org/10.1177/1534508418777866.

National Center for Education Statistics. (2023). Racial/Ethnic Enrollment in Public Schools. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved from https://nces.ed.gov/programs/coe/indicator/cge.

Northouse, P. G. (2022). *Leadership: Theory and practice* (9th ed.). SAGE Publishing.

O'Leary, Z. (2014). The essential guide to doing your research project (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Ormrod, J. (2019). Human learning (8th ed.). Upper Saddle River, NJ: Pearson.

OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports (October 2015). *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint: Part 1 – Foundations and Supporting Information.* Eugene, OR: University of Oregon. Retrieved from www.pbis.org.

OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports (July 2023). *Positive Behavioral Interventions and Supports (PBIS) Implementation Blueprint*. University of Oregon. Retrieved from www.pbis.org.

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

PBIS.org (July, 2021). *Four Tips for Sustaining PBIS* [Video]. PBIS.org. https://www.pbis.org/video/four-tips-for-sustaining-pbis

PBIS.org (2019). A compilation of various screener tools used to assess behavior, social, and/or academic risk. Retrieved from: https://www.pbis.org/resource/systematic-screening-tools-universal-behavior-screeners.

Pierson, R.F. (May, 2013). *Every Kid Needs a Champion* [Video File]. Retrieved from: https://www.ted.com/talks/rita_pierson_every_kid_needs_a_champion?language=en

Pinkelman, S. E., Mcintosh, K., Rasplica, C. K., Berg, T., & Strickland-Cohen, M. K. (2015). Perceived enablers and barriers related to sustainability of school-wide positive behavioral interventions and supports. *Behavioral Disorders*, *40*(3), 171–183. https://doi.org/10.17988/0198-7429-40.3.171

Public School Review (n.d.) *School profile*. Retrieved September 5, 2023, from https://www.publicschoolreview.com.

Reddy, L.A., Newman, E., De Thomas, C.A., & Chun, V. (2009). Effectiveness of school-based prevention and intervention programs for children and adolescents with emotional disturbance: a meta-analysis. *Journal of School Psychology, 47*(2), 77-99. https://doi.org/10.1016/j.jsp.2008.11.00119217435

Rigby, J. G., Woulfin, S. L., & Marz, V. (2016). Understanding how structure and agency influence education policy implementation and organizational change. *American Journal of Education*, *122*(3), 295–302. https://www.jstor.org/stable/26542678

Rollenhagen, J., Buckman, M.M., Oakes, W.P., Lane, K.L.(2021). *Screening coordinator training manual*. Retrieved from https://www.ci3t.org/wp-content/uploads/2021/03/SRSS-IE-Screening-Coordinator-Training-Manual-2021-03-03-F.pdf

Romer, N., von der Embse, N., Eklund, K., Kilgus, S., Perales, K., Splett, J. W., Sudlo, S., Wheeler, D., (2020). Best Practices in Social, Emotional, and Behavioral Screening: An Implementation Guide. Version 2.0. Retrieved from: smhcollaborative.org/universalscreening

Roulston, K. (2010). Reflective interviewing: A guide to theory and practice. Thousand Oaks, CA: Sage.

Saldaña, J. (2015). The coding manual for qualitative researchers (3rd ed.). Thousand Oaks, CA: SAGE.

Shirali, S. (2014). George Pólya & problem solving ... An appreciation. *Resonance: Journal of Science Education*, *19*(4), 310–322. https://doi.org/10.1007/s12045-014-0037-7

Showkeir, J., & Showkeir, M. (2008) *Authentic Conversations*. San Francisco, CA: Berret-Koehler Publishers.

Skiba, R.J., Horner, R.H., Chung, C.G., Rausch, M.K., May, S.L., & Tobin, T. (2011). Race is not neutral: A national investigation of African American and Latino disproportionality in school discipline. *School Psychology Review*, *40*(1), 85–107. DOI: 10.1080/02796015.2011.12087730.

Skinner, B. F. (1974). About behaviorism. New York, NY: Alfred A. Knopf.

Snodgrass, M. R., Chung, M. Y., Meadan, H., & Halle, J. W. (2018). Social validity in single-case research: A systematic literature review of prevalence and application. *Research in Developmental Disabilities*, *74*, 160–173. DOI: 10.1016/j.ridd.2018.01.007.

Sondel, B., Kretchmar, K., & Hadley Dunn, A. (2022). "Who do these people want teaching their children?" White saviorism, colorblind racism, and anti-blackness in "no excuses" charter schools. Urban Education, 57(9), 1621-1650. https://doi.org/10.1177/0042085919842618

Spillane, J. P. (2004). Educational Leadership. Educational Evaluation and Policy Analysis, 26(2), 169–172. https://doi.org/10.3102/01623737026002169

Spillane , J. (2006). *Distributed leadership*, San Francisco: Jossey-Bass.

Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, *72* (3), 387–431. https://doi.org/10.3102/00346543072003387

Stake, R. E. (1998). Case studies. In Y. S. Lincoln & N. K. Denzin (Eds.), Strategies of qualitative inquiry, (pp. 86–106). Thousand Oaks, CA: Sage.

Steinberg, L. (2012). Should the sciences of adolescent brain development inform public policy? *Issues in Science and Technology, 28*. DOI:10.1037/0003-066X.64.8.739

Stevenson, N. A., VanLone, J., & Barber, B. R. (2020). A commentary on the misalignment of teacher education and the need for classroom behavior management skills. *Education & treatment of children*, *43*(4), 393–404. https://doi.org/10.1007/s43494-020-00031-1

Sugai, G. (2010). Committee/group self-assessment and action planning (working smarter matrix). Eugene, OR; Center on Positive Behavioral Interventions and Supports, University of Oregon. Retrieved from: https://nepbis.org/wp-content/uploads/2019/03/Working-Smarter-Matrix.docx

Sugai, G., & Horner, R. H. (2006). A promising approach for expanding and sustaining school-wide positive behavior supports: Integration of multi-tiered system approaches. *Exceptionality*, *17*, 223–237. https://doi.org/10.1080/027960 15.2006.12087989

Swain-Bradway, J., Freeman, J., Kittelman, A. & Nese, R. (2018). Fidelity of SW-PBIS in High Schools: Patterns of Implementation Strengths and Needs. Center on Positive Behavioral Interventions and Supports. Retrieved from: https://www.pbis.org/resource/fidelity-of-sw-pbis-in-high-schools-patterns-of- implementation-strengths-and-needs

Swain-Bradway, J., Loman, S. L., & Vincent, C. G. (2014). Systematically addressing discipline disproportionality through the application of a school-wide framework. *Multiple Voices for Ethnically Diverse Exceptional Learners, 14*, 3–17. DOI: 10.56829/muvo.14.1.jl626n21408t4846

Swain-Bradway, J., Pinkney, C., & Flannery, K. B. (2015). Implementing schoolwide positive behavior interventions and supports in high schools: Contextual factors and stages of implementation. *TEACHING Exceptional Children*, *47*(5), 245-255. https://doi.org/10.1177/0040059915580030

Tennessee Behavior Supports Project (TBSP) (2019) *Tennessee Behavior Supports Project: Annual Report*. Vanderbilt University, Nashville, TN. Retrieved from: www.tennesseebsp.org

Terrell, H.M., & Cho, S.J. (2023). Translating school faculty experiences using PBIS into recommendations for practice. *Behavioral Sciences*.*13*(5):372. https://doi.org/10.3390/bs13050372

Tobin, T., Horner, R., Vincent, C., & Swain-Bradway, J. (2012). *If discipline referral rates for the school as a whole are reduced, will rates for students with disabilities also be reduced?* [Evaluation Brief]. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports. Retrieved from: www.pbis.org.

Todd, A. W., Kaufman, A., Meyer, G., & Horner, R. H. (2008). The effects of a targeted intervention to reduce problem behaviors: Elementary school implementation of check in/check out. *Journal of Positive Behavior Interventions*, *10*, 46-55. DOI: 10.1177/1098300707311369

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. Qualitative inquiry, *16*(10), 837-851. DOI:10.1177/1077800410383121

Tyre, A. D., & Feuerborn, L. L. (2017). The minority report: The concerns of staff opposed to schoolwide positive behavior interventions and supports in their schools. *Journal of Educational and Psychological Consultation*, *27*(2), 145–172. https://doi.org/10.1080/10474412.2016.1235977

Tyre, A., Feuerborn, L., & Pierce, J. (2011). Schoolwide intervention to reduce chronic tardiness at the middle and high school levels. *Preventing school failure 55*(3) 32–139.

Tyre, A. D., Feuerborn, L. L., & Woods, L. (2018). Staff concerns in schools planning for and implementing school-wide positive behavior interventions and supports. *Contemporary School Psychology*, *22*(1), 77–89. https://doi.org/10.1007/s40688-017-0130-5

U.S. Department of Education. Institute of Education Sciences. (September, 2016) Issue Brief: Early Warning Systems. Retrieved on September 17, 2023 https://www2.ed.gov/rschstat/eval/high-school/early-warning-systems-brief.pdf.

Vanover, C., Mihas, P., & Saldaña , J. (2022). *Analyzing and interpreting qualitative research: After the interview*. SAGE Publications, Inc.

Vincent, C. G., Inglish, J., Girvan, E. J., Sprague, J. R., & McCabe, T. M. (2016). School-wide positive and restorative discipline (SWPRD): Integrating school-wide positive behavior interventions and supports and restorative discipline. *Inequality in School Discipline*, 115–134. https://doi.org/10.1057/978-1-137-51257-4_7

Vincent, C. G., & Tobin, T. J. (2010). The relationship between implementation of school-wide positive behavior support (SWPBS) and disciplinary exclusion of students from various ethnic backgrounds with and without disabilities. *Journal of Emotional and Behavioral Disorders*, *19*(4), 217–232. https://doi.org/10.1177/1063426610377329

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, *16*(4), 409. DOI: 10.1287/orsc.1050.0133.

Wentzel, K. R., & Ramani, G. (2016). Peer influence on students' motivation, academic achievement, and social behavior. In *Handbook of Social Influences in school contexts: Social-emotional, motivation, and cognitive outcomes*. essay, Routledge, Taylor & Francis Group.

Werner-Seidler et al. (2017). School-based depression and anxiety prevention programs for young people: A systematic review and meta-analysis. *Clinical Psychology Review, 51*, 30-47.

Wheatley, M. J. (1992). *Leadership and the new science: Learning about organization from an orderly universe.* San Francisco, CA: Berrett-Koehler Publishers.

Whitcomb, S., Woodland, R., & Barry, S. (2017). An exploratory case study of PBIS implementation using social network analysis. *International Journal of School & Educational Psychology*, *5*(1), 52–64. https://doi.org/10.1080/21683603.2016.1185752

Wilson, A. N. (2015). A Critique of Sociocultural Values in PBIS. *Behavior analysis in practice*, *8*(1), 92–94. https://doi.org/10.1007/s40617-015-0052-5.

Witt, J. C., & Elliott, S. N. (1985). Acceptability of classroom intervention strategies. In Kratochwill , T. R. (Ed.), Advances in school psychology (Vol. 4, pp. 251–288). Mahwah, NJ: Erlbaum. DOI: 10.1177/019874298400900211.

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11,* 203-214. DOI: 10.1901/jaba.1978.11-203

Woodland, R. H., & Mazur, R. (2019). Of Teams and Ties: Examining the Relationship Between Formal and Informal Instructional Support Networks. *Educational Administration Quarterly*, *55*(1), 42. DOI: 10.1177/0013161X18785868.

Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report, 20*(2), 134-152. Retrieved from http://nova.edu/ssss/QR/QR20/2//yazan1.pdf

Yin, R. K. (1994). Discovering the Future of the Case Study Method in Evaluation Research. Evaluation Practice, *15*(3), 283–90. DOI:10.1177/109821409401500309.

Yin, R. K. (2003). Case study research: design and methods. Thousand Oaks, CA: SAGE.

Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Paper presented at the United States: Library of Congress Cataloguing-in-Publication Data.

Younas, A., Fàbregues, S., Durante, A., Escalante, E. L., Inayat, S., & Ali, P. (2023). Proposing the "MIRACLE" Narrative Framework for Providing Thick Description in Qualitative Research. International Journal of Qualitative Methods, 22. https://doi.org/10.1177/16094069221147162

Young, E. L., Caldarella, P., Richardson, M. J., & Young, K. R. (2011). *Positive behavior support in secondary schools: A practical guide.* Guilford Publications.

Young, E.L., Moulton, S.E., & Julian, A. (2021) Integrating social emotional-behavioral screening with early warning indicators in a high school setting, *Preventing School Failure: Alternative Education for Children and Youth, 65*(3), 255-265, DOI: 10.1080/1045988X.2021.1898319

APPENDICES

Appendix A Primary Intervention Rating Scale

Primary Intervention Rating Scale:
Post-Implementation Teacher Version –Now that you have completed the past academic year of implementation, please complete this survey to obtain information that will aid in determining the effectiveness and usefulness of the primary prevention plan components for your elementary school. Please read the following statements regarding the primary prevention plan developed by your school and circle the number that best describes your agreement or disagreement with each statement.

	Strongly Disagree	*Disagree*	*Slightly Disagree*	*Slightly Agree*	*Agree*	*Strongly Agree*
1. This was an acceptable intervention for the elementary school.	1	2	3	4	5	6
2. Most teachers found this intervention to be appropriate.	1	2	3	4	5	6
3. This intervention was effective in meeting the purposes.	1	2	3	4	5	6
4. I would suggest the use of this intervention to other teachers.	1	2	3	4	5	6
5. The intervention was appropriate to meet the school's needs and mission.	1	2	3	4	5	6
6. Most teachers found this intervention suitable for the described purposes and mission.	1	2	3	4	5	6
7. I used this intervention in the school setting.	1	2	3	4	5	6
8. This intervention did *not* result in negative side-effects for the students.	1	2	3	4	5	6
9. This intervention was appropriate for a variety of students.	1	2	3	4	5	6
10. This intervention was consistent with those I have used in school settings.	1	2	3	4	5	6
11. The intervention was a fair way to fulfill the intervention purposes.	1	2	3	4	5	6
12. This intervention was a reasonable way to meet the stated purposes.	1	2	3	4	5	6
13. I liked the procedures used in this intervention.	1	2	3	4	5	6
14. This intervention plan was a good way to meet the specified purposes.	1	2	3	4	5	6
15. The monitoring procedures were manageable.	1	2	3	4	5	6
16. The monitoring procedures gave the necessary information to evaluate the plan.	1	2	3	4	5	6
17. Overall, this intervention was beneficial for elementary school students.	1	2	3	4	5	6

PIRS Open-Ended Questions:

1. What do you feel was most beneficial about this primary plan? What was least beneficial?

2. Do you think that you and your students' participation in this primary plan caused your students' behavior problems to improve/decrease?

3. What would you change about this intervention plan (components, design, implementation, etc.) to make it more student-friendly and teacher-friendly?

4. What other information would you like to contribute about this intervention plan?

From: Lane, K. L., Kalberg, J. R., & Menzies, H. M. (2009). Developing schoolwide programs to prevent and manage problem behaviors: A step-by-step approach. New York, NY: Guilford Press. Adapted from Witt, J. C. & Elliott, S. N. (1985). Acceptability of classroom intervention strategies. In T. R. Kratochwill (Ed.). Advances in school psychology, Vol. 4 (pp. 251-288). Mahwah, NJ: Erlbaum with permission from Joe Witt and Stephen Elliott. Reference: Lane, K. L., Robertson, E. J., & Wehby, J. H. (2002). Primary Intervention Rating Scale. Unpublished rating scale.

Appendix B Questions and Protocol

Interview Questions and Protocol

LEADERSHIP TEAM MEMBER

Thank you for agreeing to take part in this interview. The purpose of my research study is to explore the successful implementation of RTI^2-B (PBIS) at a high school level. During the 2017-18 through 2020-21 school year, your school indicated high levels of Tier I implementation fidelity as well as showed that 70% or greater of all staff supported the Tier I behavior plan. In this interview I would like to learn from your perspectives on how the plan was shared with staff and how staff support was garnered. These are your personal perspectives so please know that there are no right or wrong answers.

This session will be audio recorded so I can accurately recall what is said. This recording will be transcribed and de-identified so that any reference to people or places will be removed and anonymity is given to you and your school. In addition, I will be taking my own field notes as we talk, so if my gaze is not always at the camera, please know you that you do have my full attention. If for any reason you want to leave this interview, you may do so with no repercussions. As a small token of appreciation for your time you will receive a $20 Amazon gift card which is yours regardless of how much information you share.

Before we begin, do you have any questions? Let's begin.

1. As a means of getting acquainted, can you share how many years you have been in education? What brought you specifically to this high school? What do you like the most about working here?
2. What was the catalyst or culminating event that triggered the adoption of RTI^2-B at your school?
   a. How was that shared with the initial school-based leadership team?
   b. How was it shared with staff?
   c. How did you determine which staff members should be recruited for your school-based leadership team?
3. Thinking back, was there a critical incident (personally or professionally) that you recall that made you buy-in; or if you were initially against it that made you reconsider your position on RTI^2-B?
4. How did you launch RTI^2-B, what staff support was provided to introduce, coach, reinforce, and maintain engagement with PBIS implementation?
5. Describe the process for developing a shared vision for your school. How did you establish a shared vision with:
   a. your school-based leadership team?
   b. faculty and staff?
6. Prior to starting the school year or throughout the year, what was the process for determining staff's perspectives regarding behavior and discipline?
   a. Were there staff who did not embrace the initiative, if so, for what reasons?
   b. What means of differentiated support were provided to these staff, if any?
   c. If a faculty or administrator were to express feelings of lack of engagement in the initiative, what would you say to them?
7. What resources were provided to staff to aid the implementation process?
8. What professional development or materials were provided to build skills and knowledge?
9. In years following the initial implementation, what staff support was provided to introduce, coach, reinforce, and maintain engagement with PBIS implementation?
10. What did you experience as the most significant barrier to implementation? Were you able to overcome this barrier? If yes, how?
11. In Tier I training, an article was shared on the 5 common ways to engage faculty support: (1) develop a clear understanding of staff perspectives of behavior and discipline, (2) secure resources, (3) provide a strong rationale for SWPBS, (4) build skills and knowledge, and (5) facilitate a shared

vision and ownership. Do you recall utilizing any of these strategies? If so, can you provide an example of how you used it?

12. Is there anything else about the RTI²-B implementation process of that you think would be helpful to know?

Thank you for your time.

Interview Questions and Protocol

SCHOOL PERSONNEL

Thank you for agreeing to take part in this interview. The purpose of my research study is to explore the successful implementation of RTI²-B (PBIS) at a high school level. During the 2017-18 through 2020-21 school year, your school indicated high levels of Tier I implementation fidelity as well as showed that around 80% or greater of all staff supported the Tier I behavior plan. In this interview I would like to learn from your perspectives on how the plan was shared with staff and how staff support was garnered. These are your personal perspectives so please know that there are no right or wrong answers.

This session will be audio recorded so I can accurately recall what is said. This recording will be transcribed and de-identified so that any reference to people or places will be removed and anonymity is given to you and your school. In addition, I will be taking my own field notes as we talk, so if my gaze is not always at the camera, please know you that you do have my full attention. If for any reason you want to leave this interview, you may do so with no repercussions. As a small token of appreciation for your time you will receive a $20 Amazon gift card which is yours regardless of how much information you share.

Before we begin, do you have any questions? Let's begin.

1. As a means of getting acquainted, can you share how many years you have been in education? What brought you specifically to this high school? What do you like the most about working here?
2. Recall when RTI²-B was first introduced to you- how was it introduced?
   a. What rationale was given?
   b. What were your initial impressions?
   c. What are your impressions now?
   d. Positive or negative, what would you say was a catalyst that pulled your opinion that way (e.g., influence of a peer, student, an event, etc.)
3. What was the reception of the staff when this was shared?
   a. At any point, were there staff who did not embrace the initiative, if so, for what reasons?
   b. To your knowledge, how were they encouraged, and did this work?
4. Did the leadership team facilitate a shared vision and ownership? If so, can you recall how?
5. Prior to the school year starting or throughout the year, how did the leadership team gather your perspectives of behavior and discipline?
6. What professional development or materials were provided to build skills and knowledge?
7. What resources were provided to you to aid the implementation process (e.g., subs, time, establishing a leadership team, reinforcers, training in responding to student behavior, app management)?
8. In years following the initial implementation, what staff support was provided to introduce, coach, reinforce, and maintain engagement with PBIS implementation?
9. What are some strategies that the leadership team did that you found beneficial?
   a. Are there strategies that you think could be more beneficial?
10. Is there anything else about the RTI²-B implementation process of that you think would be helpful to know?

Thank you for your time.

Interview Questions and Protocol

FOLLOW-UP INTERVIEW

Thank you for agreeing to meet with me again! As a reminder, the purpose of my research study is to explore the successful implementation of RTI^2-B (PBIS) at a high school level. During the 2017-18 through 2020-21 school year, your school indicated high levels of Tier I implementation fidelity as well as showed that around 80% or greater of all staff supported the Tier I behavior plan. In this interview I would like to follow up on some initial themes I have from our first interview. I would also like to continue to hear more your perspectives on how the system was shared with staff and how staff support was garnered. These are your personal perspectives so please know that there are no right or wrong answers.

As with our previous meeting, this session will be audio recorded so I can accurately recall what is said. This recording will be transcribed and de-identified so that any reference to people or places will be removed and anonymity is given to you and your school. In addition, I will be taking my own field notes as we talk, so if my gaze is not always at the camera, please know you that you do have my full attention. If for any reason you want to leave this interview, you may do so with no repercussions. Please feel free to do so.

Before we begin, do you have any questions? Let's begin.

1. Here are some initial themes that I have pulled from the original interviews, from what you see, do you feel this is an accurate representation of your experience? What could be added or should be reconsidered?
2. Last time you shared some about how the plan was shared with faculty and staff, can you recall a specific story from this event? *(Add a specific account from the previous interview to aid participant recollection).*
3. Are there any other events or incidents that you can recall from the implementation of RTI^2-B that you would be able to share with me?
4. In the first interview you indicated some of the challenges and issues that you recall occurring? *(Add a specific account from the previous interview to aid participant recollection).* Can you elaborate perhaps with a specific story or incident?
5. Were students with disabilities engaged in the Tier I plan as well, if so, in what ways?
6. If you were to advise another high school on how to engage in implementing a schoolwide framework what would you share?
7. As the school entered into the pandemic some of the implementation measures showed a decrease in fidelity, what are some aspects of this that you recall?
8. *If relevant to participant's previously shared experience:* You had shared that initially you were not interested in implementing RTI^2-B, but your perspective changed, can you tell me a little more about what changed for you?
9. *If relevant to participant's previously shared experience:* You had mentioned that not all staff supported RTI^2-B can you tell me more about how this?

Appendix C Participant Demographics Form

PARTICIPANT DEMOGRAPHICS FORM

Thank you for sharing the following information. This information will be used for describing the overall demographics of this study's participants. Your individual information will not be shared.

What pseudonym would you like to use? _____

How many years have you worked in education? _____

How many years have you worked at this high school? _____

What is your job title/role in the school? _____

- ☐ instructional
- ☐ non-instructional

What is your age in years? _____

What is your gender? _____

What is your race/ethnicity? _____

Are you currently or have you previously served on the school's leadership team:

- ☐ no
- ☐ yes, currently for _____ years
- ☐ yes, previously for _____ years

Appendix D Participant Consent Form

INFORMED CONSENT TO PARTICIPATE IN RESEARCH INVOLVING MINIMAL RISK

Information to Consider Before Taking Part in this Research Study
Title: Count Me In: A Study of Social Validity, Positive Behavioral Interventions and Supports, and a High School
Study # _____

Overview: You are being asked to take part in a research study. The information in this document should help you to decide if you would like to participate. The sections in this Overview provide the basic information about the study. More detailed information is provided in the remainder of the document.

Study Staff: This study is being led by Dia Davis who is a Ph.D. student at The University of South Florida. This person is called the Principal Investigator.

Study Details: This study being conducted is a retrospective case study, it is reflective of the implementation of positive behavior interventions and supports (RTI^2-B) that took place between the years of 2017-18 through 2020-21. The purpose of the study is to learn about high school faculty and staff's perspectives on what factors lead to strong staff support. The study will take place via Zoom, web-based platform.

Subjects: You are invited to participate in a n interview on how you viewed the schoolwide positive behavior supports program (RTI^2-B) at your school. You are being asked to participate because you served on staff for at least one year during the period of 2017-18 through 2020-21 and you either: 1) served on the leadership team in this area; or 2) your colleagues think you have a helpful perspective on the school's program.

Voluntary Participation: Your participation is voluntary. You do not have to participate and may stop your participation at any time. There will be no penalties or loss of benefits or opportunities if you do not participate or decide to stop once you start. Your decision to participate or not to participate will not affect your job status, employment record, employee evaluations, or advancement opportunities.

Benefits, Compensation, and Risk: It is unknown if you will receive any benefit from your participation. You will be compensated with a $20 Amazon gift card for your participation. This research is considered minimal risk. Minimal risk means that study risks are the same as the risks you face in daily life.

Confidentiality: Even if the findings from this study are published, your study information will be kept private and confidential. Anyone with the authority to look at your records must keep them confidential.

Why are you being asked to take part?
Over the course of the 2017-18 to the 2020-21 school years the staff's social validity scores at your high school grew and maintained as strong indicators of staff commitment to the Tier I plan for behavior. In addition, when measuring the level of success of the installation of the Tier I

plan for behavior, your school leadership team was rated on a national measure called the Tiered Fidelity Inventory, and showed increased success throughout that time period.

In the scope of research that has been done on implementation in high schools, there is little research on high schools that sustain strong staff support or "buy-in." The aim of this research is to review schoolwide data such as office discipline referrals, graduation rates, test scores, and demographic as well as hear from those who were on staff to find some key indicators for how to gain and maintain staff support. Researching this with you I believe will prove invaluable to other high schools across the state and nation, providing insight on things they can replicate or try to have greater success for their students and staff.

STUDY PROCEDURES:

I would like the opportunity to interview (via Zoom) staff that have been a part of this process for at least one school year during the period of 2017-18 to 2020-21. These participants would be: 1) the school-based leadership team members and 2) a sample of instructional and non-instructional staff. Additional interviews will be held with individuals to provide more in-depth knowledge of the initiative and the experience of implementation.
These interview sessions will last no longer than an hour and fifteen minutes per session. All sessions be scheduled at a time that does not conflict with other school duties.
Prior to each session a questionnaire will be provided for your review to consider the types of information that is being sought.
During each session, you can expect:
To provide and use your pseudonym.
The session to be recorded and transcribed for the researcher to review at a later date.
Recordings will only be accessible to the researcher and will be stored on a password-protected and encrypted university server.
The recordings will be deleted within one-year post interview(s).
The opportunity to opt-out at any time with no repercussions.

TOTAL NUMBER OF SUBJECTS

About 3-7 individuals will take part in this study.

VOLUNTARY PARTICIPATION / WITHDRAWAL

You do not have to participate in this research study.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study.

BENEFITS

You will receive no benefit(s) by participating in this research study.

RISKS OR DISCOMFORT

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

PRIVACY AND CONFIDENTIALITY

We will do our best to keep your records private and confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Certain people may need to see your study records. These individuals include:

- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, and staff in USF Research Integrity and Compliance.

I may publish what we learn from this study. If I do, I will not include your name. I will not publish anything that would let people know who you are.

This study will be conducted virtually, confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet. However, your participation in this study involves risks similar to a person's everyday use of the Internet.

You can get the answers to your questions, concerns, or complaints.

If you have any questions, concerns or complaints about this study, call Dia Davis at [redacted]. If you have questions about your rights, complaints, or issues as a person taking part in this study, call the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

STATEMENT OF PERSON OBTAINING INFORMED CONSENT AND RESEARCH AUTHORIZATION

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research subject has provided legally effective informed consent.

_____ _____

Signature of Person Obtaining Informed Consent Date

_____

Printed Name of Person Obtaining Informed Consent

Appendix E Recruitment Email Sent to School of Study

Hello Dr. _____,
I am writing to you not as your technical assistance partner but as a doctoral candidate and a true fan of your school's work in implementing RTI^2-B. Over the course of the 2017-18 to the 2020-21 school years we have seen your social validity scores grow and maintain as strong indicators of staff commitment to the Tier I plan. Not only that, you have indicated success on your Tiered Fidelity Inventory.

In the scope of research that has been done on implementation in high schools, there is a dearth of research on high schools that sustain strong staff support. What I would like to do with your permission, and the permission of X County's Research and Accountability Department, is review your data over the 2017-18 to 2020-21 school years: ODRs, demographics, attendance rates, graduation rates, school climate surveys, as well as any archival data you have- staff presentations on RTI^2-B over the years, Tier I implementation manuals, meeting minutes or agenda that addressed RTI^2-B. Finally, I would like the opportunity to interview (via Zoom) staff that have been a part of this process for at least one school year during the period of 2017-18 to 2020-21. These participants would be representatives of: 1) the school-based leadership team members and 2) a sample of instructional and non-instructional staff. My aim is to review these data and hear from you all as a means to find some key indicators for how to gain and maintain staff support. Researching this with you I believe will prove invaluable to other high schools across the state and nation, providing insight on things they can replicate or try to have greater success for their students and staff.

Protections: You, your teammates, and your school would be protected through the use of pseudonyms to allow for you all to remain anonymous. Data would be protected on campus-based dual security servers. Data collected will not have student-specific information or identifiers.

Next steps: Should you agree, please review and sign the attached letter of support. This will allow me to submit a formal application to conduct research to X County. It will also allow for me to pursue IRB approval. I am more than happy to talk through any details with you via phone or Zoom, if you have any questions.

I fully recognize you all serve in many leadership capacities in addition to being strong and supportive educators to your students. Staff would be asked to participate during non-instructional hours. I also recognize this is another pandemic year, my hope is that this would not require too much additional time on your parts and I promise to work to minimize my requests to honor these things.

Thank you for the consistent work you do to improve the lives of your students. Please let me know if you have any questions at all.

Thank you for your time and consideration,

A. Dia Davis
Ph.D. Candidate: Educational Leadership and Policy Studies
The University of South Florida

Appendix F School Administrator Letter of Support

3/15/2022

[redacted]

Dear Ms. Davis,

I am writing to offer my support for your research study, "Count Me In: A Study of Social Validity, Positive Behavioral Interventions and Supports, and a High School" to learn about maintaining high school staff buy-in on our schoolwide behavior support system, RTI^2-B. We have benefitted from our implementation of RTI^2-B and we are well aware of the importance of considering and incorporating faculty and staff perspectives in systems. We understand this research project has potential to identify ways of supporting staff with the implementation of RTI^2-B and will review historical data as indicators of our successful implementation.

I understand that the staff who participate in this study will be part of a Zoom-based interview that will last no longer than 75 minutes. Should additional themes or topics be generated additional interviews may be conducted. I or someone on my team can assist you with the following components necessary for the completeion of the study: (1) identifying and recruiting particpants who were on staff between the years of 2017-18 through 2020-21 (2) identifying those have had some involvement with leadership and/or our school's RTI^2-B implementation plan; (3) scheduling the interview for a time that does not conflict with other school duties; (4) sending consent forms; (5) collecting signed consent forms; (6) providing historical data and documents that evidence our implementation of RTI^2-B.

I look forward to our collaboration and to learning how to engage our faculty and staff in RTI^2-B in more meaningful ways as a result of this project.

Sincerely,

[redacted]

Appendix G Questions to Consider When Identifying Staff for Interviews

The questions listed below are reviewed with the school representative to help support *their* identification of potential participants. I am available to discuss these questions with the school representative either via Zoom or on the phone. I will not be a part of the selection process, and staff names are not shared with me until after consent forms have been signed. Here is my contact information: [redacted].

The primary criteria for selection of participants are those who were on staff for at least one year during the period between 2017-18 to 2020-21

Participants Representing School-based Leadership Team
(2-3 participants)

☐ Did this staff member serve on the school-based leadership team at any point during the period of 2017-18 to 2020-21?

Participants Representing Staff

(3-4 participants)

☐ Are there any staff (instructional or non-instructional) who were on staff for at least one year during the period between 2017-18 to 2020-21, who have perspectives to share on your school's implementation of RTI^2-B? (e.g., did not support it at first, or, were instrumental in influencing other staff members to support it.)

☐ Are there any staff members who may not have been on the school-based leadership team but have helped the RTI^2-B team (e.g., planning events, celebration days, cutting tickets)?

☐ Are there any staff members who have shared an idea with the RTI^2-B team on how to improve something?

☐ Are there any staff members who have shared a criticism with the RTI^2-B team on something?

☐ Consider the demographics of your school. Participants should be diverse and representative of the staff in your building. Do the identified staff represent your school's demographic factors such as race/ethnicity, age, gender, and socioeconomic status?

☐ Do the identified staff represent your school's various programs, athletics, and clubs?

☐ Do the identified staff represent environments on campus that were crucial to implementation (e.g., cafeteria, bus, front office)?

Appendix H Letter of Support from School District

[redacted]

Dear Ms. Davis,

I am writing to offer district level support for your research study, "Count Me In: A Study of Social Validity, Positive Behavioral Interventions and Supports, and a High School" to learn about maintaining high school staff buy-in on our schoolwide behavior support system, RTI^2-B . Our district has supported the implementation of RTI^2-B in our schools, and we are aware of the importance of considering and incorporating faculty and staff perspectives in these systems. We understand this research project has potential to identify ways of supporting staff with the implementation of RTI^2-B and will review historical data as indicators of our successful implementation.

I understand that the high school staff who participate in this study will be part of a Zoom-based interviews that will last no longer than 75 minutes. A staff member on this high school's RTI^2-B team will be able to assist you with the following components of the study: (1) identifying and recruiting staff who have had some involvement with leadership and/or our school's RTI^2-B implementation plan; (2) scheduling the interview for a time that does not conflict with other school duties; (3) sending consent forms; (4) collecting signed consent forms; (5) providing historical data and documents that evidence our implementation of RTI^2-B.

Our district looks forward to our continued collaboration and to learning how to engage our faculty and staff in RTI^2-B in more meaningful ways as a result of this project.

Sincerely,

[redacted]

Appendix I IRB Exempt Determination

November 18, 2022

EXEMPT DETERMINATION

Amie Davis
13301 Bruce B. Downs Blvd., MHC2113A Tampa, FL 33612

Dear Amie Davis:
On 11/17/2022, the IRB reviewed and approved the following protocol:

Application Type: Initial Study	
IRB ID: STUDY004626	
Review Type: Exempt 2	
Title:	Count Me In: A Study of Social Validity, Positive Behavioral Interventions and Supports, and a High School
Funding: None	
Protocol:	• HRP 503 a Social Behavioral Protocol; No Consents

The IRB determined that this protocol meets the criteria for exemption from IRB review.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

Sincerely,

Myah Luna
IRB Research Compliance Administrator

Institutional Review Boards / Research Integrity & Compliance

FWA No. 00001669
University of South Florida / 3702 Spectrum Blvd., Suite 165 / Tampa, FL 33612 974-5638

/ 813-