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Vermont Special Educators' Perceptions On The Inclusion Of Students With Disabilities In Universal Positive Behavioral Interventions And Supports (pbis)

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VERMONT SPECIAL EDUCATORS' PERCEPTIONS ON THE INCLUSION OF STUDENTS WITH DISABILITIES IN UNIVERSAL POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORTS (PBIS)

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Abstract

Over the last 25 years, there has been an increased body of research on best practices to address the social, emotional, and behavioral well-being of all students in schools. Positive Behavior Interventions and Supports (PBIS) has consistently demonstrated effectiveness in attending to all students' social, emotional, and behavioral wellbeing – including students with disabilities (Simonsen et al., Feb., 2020). Despite PBIS being implemented in over 27,000 schools in the United States (Horner & Sugai, 2015) and in over 50% of schools Vermont, minimal research has been conducted on the experiences of special educators and their perceptions of PBIS practices on outcomes for students with disabilities (Stormont & Reinke, 2012; Shuster et al., 2017). In Vermont, there are currently no data on how special educators perceive the impact of universal PBIS implementation efforts on the very students with whom they work. This quantitative study explored the perceptions of special educators in four school districts in Vermont and the extent to which students with disabilities are included in universal PBIS.

Findings from this study suggest that fidelity of implementation matters, and when special educators self-report that they implement PBIS with high rates of fidelity, the involvement and participation of students with disabilities increase. While there was a strong relationship found between special educators' involvement in PBIS readiness activities and the perception that universal PBIS is beneficial for students with disabilities, these results were not significant. Furthermore, findings suggest that there is no relationship between the participation of students with disabilities in universal PBIS and 1) number of years of experience as a special educator, 2) gender, and 3) disability category, in particular, emotional disturbance. The study's results offer recommendations that may be implemented at the local, state, and national contexts.

Dedication

I dedicate this dissertation to my family members that have kept me afloat during my dissertation program. To my amazing parents, Carley, Bob, and Russ for their endless support, lifelong lessons on the importance of equity in our world, and for their unwavering confidence in my ability to take on any challenge. A special gratitude to my sister, Calista, for always believing in me and reminding me to find laughter and humor in all things big and small. I would also like to dedicate this dissertation to my little brother, Taylor, who is always watching over me from the universe and stars above and for his passion for creating a just world.

Finally, this body of work would not have been possible without the constant encouragement, remarkable patience, and senses of humor from my husband, Aaron and our children Henry and Laurel. They have been there for me throughout the entire doctorate program and have been my greatest cheerleaders.

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I would like to acknowledge the original BEST/VTPBIS State Leadership Team, and in particular the members who ignited my passion for identifying social, emotional, and behavioral practices that support *all* students, Sherry, Ken, Richard, and Anne.

Finally, I would like to acknowledge and thank my invaluable work family for their many years of encouragement, flexibility, and willingness to adopt several innovative practices that support the social, emotional, and behavioral well-being of all students, including students with disabilities.

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Chapter One: Introduction to the Study

The educational landscape in the US is in constant flux. Throughout history, economic, social, and political changes have driven significant philosophical debates about the role of education in supporting students' academic and social, emotional, and behavioral success. Many societal pressures and strains have put a spotlight on the factors that lead to students' overall academic success. Today, more than ever, children are coming to school having experienced adverse childhood experiences (ACEs) such as poverty, trauma, food insecurity, and families divided (Pew Research Center, 2015). Poor economic conditions have led to an increase in unemployment leading to financial difficulties for many families as well. According to the National Center for Educational Statistics (NCES), between 2000-2014, poverty rates increased an average of three to four percentile points each year across all racial/ethnics groups. Reports and statistics such as these have increased the awareness that many students are indeed coming to school having experienced various forms of adverse childhood experiences such as poverty, verbal or physical abuse, living with an adult who is experiencing drug addiction, divorce, and food insecurity, to name a few. Research is also clear that adverse childhood experiences can significantly impact the learning outcomes and educational experiences of students (Eber et al., 2020).

The increase in our society's collective awareness of the challenges facing many students today has led to an increased body of research on how schools can support students who are at risk of or who experience adverse childhood experiences, and the degree to which social, emotional, and behavioral challenges impede access to and

success in the general education curriculum. Thus, educational research has shifted from solely focusing on best practices to support students' academic success to a more comprehensive focus on identifying best practices to support *all* students' social, emotional, and behavioral well-being (Durlak et al., 2011).

Problem Statement

According to the National Technical Assistance Center on Positive Behavioral Interventions and Supports (PBIS), PBIS is a comprehensive, evidence-based framework designed to mitigate the impact of adverse childhood experiences and build the capacity of schools to support the social, emotional, and behavioral skills of all students (Eber et al., 2020). PBIS is an "implementation framework for maximizing the selection and use of evidence-based prevention and intervention practices along a multi-tiered continuum that supports the academic, social, emotional, and behavioral competence of all students" ("PBIS FAQ," 2019). The PBIS framework consists of three different tiers of support. The first level of support, frequently referred to in the literature as Tier 1 or School-Wide Universal PBIS, consists of applying selected interventions to *all* students, including students with disabilities (100% of the student population). The second level, Tier II/Targeted Level, includes small group interventions applied to some students (10-15% of the student population), and the third level, Tier III/Intensive Level, includes highly individualized interventions that are applied to few students (1-5% of the student population) (Sugai & Horner, 2002; Walker & Shinn, 2002; Walker et al., 1996). While the primary prevention level of PBIS is often referred to in the literature as Tier 1,

School-Wide or Universal, for this study, the PBIS level of interventions applied to all students will be referred to as universal PBIS.

The literature reports a number of benefits associated with the implementation of PBIS and positive student outcomes. Although several programs exist that have been found to counteract the impact of adverse childhood experiences (e.g., Cognitive Behavioral Intervention for Trauma in Schools, Attachment, PBIS, Regulation and Competency, Support for Students Exposed to Trauma – http://www.aceresponse.org/give_your_support/ACEs-in-Education_25_68_sb.htm), PBIS alone has consistently demonstrated effectiveness in attending the social, emotional, and behavioral well-being of *all* students – including students with disabilities – and the establishment of a positive school climate (Simonsen et al., 2020). Research also shows several other positive outcomes related to the implementation of PBIS. For example, schools that implement PBIS with fidelity see reductions in exclusionary discipline practices (Bradshaw et al., 2010), increases in positive school culture among staff (Bradshaw et al., 2008), and increases in student academic achievement for all students, including students with disabilities (Pas & Bradshaw, 2012).

For the past 25 years, the Office of Special Education Programs (OSEP) has promoted, through policy, legislation, and research briefs, the use of the PBIS framework in supporting students' overall success. This is a critical shift in identifying, acknowledging, and valuing the link between the importance of attending to all students' social, emotional, and behavioral well-being and positive academic outcomes. Although there is a significant body of research identifying key outcomes of PBIS implementation

and impact on student outcomes (Simonsen, et al., 2020; Bradshaw et al., 2010; Horner et al., 2009; Pas et al., 2015), minimal research exists that specifically looks at the extent to which students with disabilities benefit from and have access to universal levels of support within the PBIS framework (Hawken & O'Neill, 2006). Furthermore, despite PBIS being implemented in over 27,000 schools in the US (Horner & Sugai, 2015), minimal research has been conducted on the experiences of special educators and their perceptions of PBIS practices and their impact on creating positive social, emotional, and behavioral outcomes for students with disabilities within schools implementing PBIS (Shuster et al., 2017; Stormont & Reinke, 2012). In Vermont, there are currently no data on how special educators, who work directly with students with disabilities, perceive the impact of universal PBIS implementation efforts on the very students with whom they work.

A notable exception to the lack of research on the perceptions of special educators implementing PBIS is a study from Vanderbilt University (Shuster et al., 2017) that looked specifically at whether or not students with disabilities were included in universal PBIS. Shuster and colleagues conducted a state-wide study on the perspectives of special education teachers in Tennessee to ascertain the following: 1) special educators' understanding of PBIS; 2) participation of students with disabilities in PBIS; 3) participation of special educators in PBIS; and 4) benefits of PBIS for students with disabilities. Interestingly, Shuster et al. found:

> Disparate patterns of involvement [in PBIS] for special educators at the school versus classroom levels, as well as for special educators who primarily support

> students with low-incidence versus high-incidence disabilities. At the school level, special educators reported limited involvement in PBIS, with more than 20% reporting that they did not know whether their school used a PBIS framework. (p. 153)

Furthermore, the authors suggest, based on their findings, "That many special educators may be uninformed or isolated from school-wide PBIS initiatives" (Shuster et al., p. 153).

Despite an increased understanding in the importance of social, emotional, and behavioral supports for all students, including students with disabilities, students with disabilities continue to experience higher rates of exclusion from universal curricula and practices compared with their non-disabled peers.

Purpose of the Study

Expanding on the 2017 study by Shuster and colleagues as well as existing research on PBIS, the purpose of this research study was to explore the inclusion of students with disabilities in universal PBIS through the perspectives of special educators working in five different school districts implementing PBIS in Vermont. Additionally, this study was designed to explore the relationship between special educators' perceptions of their fidelity of implementation and the extent to which special educators perceive students with disabilities are included in universal PBIS. This study also explored what factors contribute to the participation of students with disabilities in PBIS. As will be described in more detail in the methods section, key criteria in selecting school districts were that: 1) schools were pre-identified as schools that were implementing PBIS; and 2) schools in each school district demonstrated varying levels of

implementation fidelity. Additionally, the school districts selected for this study varied with respect to their years of PBIS implementation and the size and socioeconomic status of the communities in which they are located. All school districts selected for this study are located in Northwestern Vermont in both rural and urban settings. Special educators were selected as the target population as they are licensed educators who work directly with students with disabilities in Vermont schools, and were, therefore, best positioned to speak to the degree to which students with disabilities were included in the Universal PBIS Framework (Handler et al., 2007; Simonsen et al., 2008). The following research questions were used to guide this study.

Research Questions

- **Research Question 1:** To what extent do students with disabilities participate in the Universal PBIS Framework?
- **Research Question 2:** To what extent do special educators participate in the Universal PBIS Framework?
- **Research Question 3:** How do special educators view the benefit of Universal PBIS for the students with disabilities on their caseloads?
- **Research Question 4:** How does the fidelity of implementation, the perception of the benefits of PBIS, special educator involvement in PBIS readiness activities, and Emotional Disturbance influence the participation of students with disabilities in PBIS?

Rationale and Significance

Rationale

Although approximately 53% of schools in Vermont are implementing PBIS, little is known about the extent to which students with disabilities are included in the universal PBIS framework. The PBIS framework is premised on the idea that all students, despite ability, should have access to universal PBIS practices; however, there are currently no data to suggest that this is or is not true in Vermont schools implementing PBIS. When looking at data on the national level, there are also significant gaps in research as to whether or not the implementation of PBIS with fidelity leads to higher rates of inclusion for students with disabilities in universal PBIS. While many students in Vermont are recipients of PBIS universal practices, gaining a deeper understanding of this impact on students with disabilities is important and will add knowledge to the field of research on PBIS. This study is also significant for several reasons and both conceptual and empirical contributions are addressed below.

Significance

Conceptual Contribution. PBIS is an integral framework in the majority of Vermont's schools, and the results of this study could inform funding and professional development opportunities and yield insights for statewide efforts to strengthen PBIS implementation in Vermont; in particular, in addressing the social, emotional, and behavioral learning needs of students with disabilities. This study is also unique in that it provides the critical voice of special educators who implement PBIS and who work with students with disabilities every day. PBIS is also a system-wide framework and when

implemented with fidelity, all students should have access and all staff should participate in universal PBIS efforts. This study could offer insights into how special educators perceive their implementation of PBIS with fidelity and recommendations on how to examine the fidelity of implementation of large systems-wide frameworks. This study could also shed light on the influences that contribute to the participation of students with disabilities in PBIS. Currently, in Vermont, PBIS implementation is measured by the triangulation of several PBIS endorsed self-perception fidelity tools (e.g., PBIS Tiered Fidelity Inventory (TFI), School-wide Assessment Tool (SAS), and self-reported academic data) and this study could lead to a deeper understanding of using self-perception data in measuring the fidelity of implementation of PBIS in Vermont schools. Finally, this study could provide a launching point for other related research studies to further explore PBIS and students with disabilities.

Empirical Contribution. As very little is known about special educators' perception of the impact of PBIS on students on their caseloads, this study provides a set of new data through which to explore special educators' perceived fidelity of implementation. This study explores the degree to which there is or is not a relationship between special educators' perceived fidelity of implementation and perceived benefits of PBIS for students on their caseload and the extent to which their students are involved in PBIS. Additionally, the study explores the influences that may contribute to the participation of students with disabilities in universal PBIS.

The state of Vermont has a rich history of creating policies and practices that are inclusive of students with disabilities. The inclusion of students with disabilities in PBIS

efforts is critical for several reasons and will be further explored in the literature review. In short, according to the National Technical Assistance Center on PBIS:

> Students receiving special education and related services under the Individuals with Disabilities Education Act (IDEA) have civil right protections, including a free and appropriate public education. To ensure a high-quality education prepares them for further education, employment, and independent living, students with disabilities need to be part of an inclusive school-wide system of positive behavior support. (https://www.pbis.org/topics/disability)

It is not only best practice to include students with disabilities in universal PBIS efforts, it is the law and researchers Grasley-Boy et al. (2019) and Tobin et al. (2012) discovered that students with disabilities benefit from support across all three tiers of PBIS implementation. According to Simonsen et al. (2020), all students, including students with disabilities, benefit from several key practices involved in implementing universal PBIS. These include: an environment that is accessible for all students, explicitly teaching school-wide expectations, providing all students the opportunity to respond and participate, and giving students reminders to set them up for success, to name a few (Simonsen et al.). The study was also designed to explore the degree to which findings might validate and affirm Vermont's rich history of creating policies and programs that are inclusive of all students, including students with disabilities, by finding that students with disabilities are in fact included in universal PBIS efforts in Vermont schools.

Statement of Researcher's Role

As a researcher, it is important for me to identify my role and interest in this topic in relation to this study. I am passionate about equity in education and believe strongly that all students, despite disability or ability, should have equitable access to systems that are designed to support all students. For seven of the last 11 years, I was employed as a member of the Vermont Positive Behavior Interventions and Supports State Implementation Team (VTPBIS) housed at the University of Vermont's Center on Disability and Community Inclusion. Since leaving the team four years ago, I have remained an auxiliary member of the state team and, on occasion, have provided training to schools in Vermont on the implementation of PBIS. I currently hold the position of Director of Special Education and the Director of Behavior Systems for a school district in Vermont. As an advocate for PBIS and students with disabilities, it is important for me to acknowledge how close my employment and passion are to this study. Holding a level of expertise in the implementation of PBIS and PBIS features, I have seen (anecdotally) school personnel misunderstand the intent behind the three-tiered PBIS framework. In particular, school personnel often do not understand the importance of ensuring that all students, despite their ability, have access to all universal PBIS supports in addition to other higher levels of support. This study is personally important to me as it allowed me to gather information to determine whether or not what I am hearing and experiencing, anecdotally, is really happening. Using special educators as the study population gave me a deeper understanding of this phenomenon, as they are staff members in schools working directly with students with disabilities. Prior to embarking on this study, I was

aware that a key implication of this personal perspective was the potential to unintentionally bias either the framing of the survey and/or the analysis of respondents' responses to these questions in the data analysis phase. To minimize bias, I used an existing data collection tool and I did not distribute the survey to special educators in the school that I currently work in. As Vermont is a small state, and to ensure a high response rate, I did not ask study participants to identify the school in which they work but rather they were asked to identify their school district instead.

The following chapter addresses a thorough review of the literature related to PBIS implementation and students with disabilities at both the national level and within the context of Vermont.

Chapter Two: Literature Review

Introduction

This chapter explores the educational landscape and social context in which PBIS was developed, literature related to students with disabilities both nationally and within the context of Vermont, and educational policies that promote the use of PBIS as a framework in schools to support the social, emotional, and behavioral well-being of *all* students. Finally, literature related to PBIS implementation and practices is thoroughly analyzed, including the definition and features of PBIS, the benefits of PBIS for students with and without disabilities, as well as the literature related to universal levels of PBIS. Although there is an increasing body of research on Tier II/Targeted and Tier III/Intensive Levels of PBIS, this literature review focused on universal PBIS as related to its research questions.

As discussed in Chapter One, the uptick in research regarding the social, emotional, and behavioral well-being of students corresponds with the often-cited landmark study, Adverse Childhood Experiences (ACEs) (Felitti et al.,1998). While this particular study does not address ACEs in relation to PBIS and the inclusion of students with disabilities, the literature reviewed in the chapter regarding the ACEs study provides context setting and serves to validate the importance of schools attending to the social, emotional, and behavioral well-being of all students.

Educational Landscape and Social Context

Adverse Childhood Experiences (ACEs)

The landmark ACEs study, published in the *Journal of Preventative Medicine* in 1998, discovered an important link between various childhood adverse experiences, including childhood abuse, and many of the leading causes of death in adults (Felitti et al., 1998). Based on 9,508 survey respondents, Felitti and colleagues discovered that over half of the study participants had experienced one adverse childhood experience and about a quarter of the participants had reported experiencing two or more ACEs.

The ACEs study is important for several reasons and had several key findings. First, the researchers found that the more exposures children had to adverse experiences (e.g., loss of a parent, divorce, physical or sexual abuse, drug abuse, and/or neglect), the more likely they were to experience one of the following conditions as adults: increase in smoking, obesity, alcoholism, depression, and suicide. Second, the study identified that the accumulation of childhood adverse experiences leads to what is referred to as toxic stress. Toxic stress, according to the Harvard University's Center for the Developing Child (2019), is an increased stress response due to prolonged exposure to adverse childhood experiences. This prolonged exposure to toxic stress as a result of experiencing ACEs can lead to poor development of the body and brain. In another study conducted by Bynum and colleagues (2010), 59% of adults responding to the Behavioral Risk Factor Surveillance System reported experiencing one or more ACEs, and about 9% of adults had experienced five or more ACEs. Bynum et al. (2010) also discovered that toxic stress

caused by exposure to ACEs can be passed onto future generations – meaning essentially that one's biological make-up and responses to stress can be passed down to children.

Impact of ACEs on Children. The discovery and notion that adverse childhood experiences impact future health outcomes for adults have also led to an increased body of research on the current status of children in the US who have experienced ACEs. A 2011-2012 study conducted by the National Survey of Children's Health (NSCH) reported that 48% of children from ages 0 to 17 years had experienced at least one ACE. The NSCH report also discovered that approximately 23% of children experienced two or more ACEs (Bethell et al., 2014).

When looking at the educational outcomes for children who have experienced ACEs, Cole et al. (2009) revealed that children exposed to adverse childhood experiences or trauma may have difficulty processing information, distinguishing between threatening and non-threatening interactions, forming trusting relationships, and regulating emotions. Furthermore, exposure to traumatic experiences can limit the development and acquisition of 1) language and communication skills, 2) ability to attend to tasks and instructions, 3) ability to organize and remember new information, and 4) ability to solve problems and process academic information (Cole et al.). Several studies (Burke et al., 2011; Cole et al., 2009; Trentacosta & Izard, 2007) of children who experience adverse childhood experiences have found that early exposure to ACEs can lead to poor academic outcomes as well. While the literature shows that a large population of children in the US are exposed to ACEs, within the context of the school setting, another study (Burke et al.) looked specifically at the impact of ACEs on children living in poverty. The authors

found that an increased ACE score was highly correlated with an increased risk of learning and behavioral challenges.

Impact of ACEs on Children in Vermont. Unfortunately, Vermont, the 49th smallest state in the US, is not immune to the impacts of ACEs and/or childhood trauma. A recent study from Kasehagen et al. (2018), which expanded on the notion of ACEs by investigating Adverse Family Experiences (AFEs), sampled 1,130 children in Vermont and found that children who had experienced three or more AFEs had more challenges at school than those with fewer AFEs. Specifically, Kasehagen and colleagues found that children with more ACEs were less likely to complete their homework and demonstrated lower levels of resilience. According to Bethell et al. (2017), in a brief from Johns Hopkins Bloomberg School of Public Health, 19% of children in Vermont have experienced two or more of the following ACEs: family violence, mental illness, alcoholism or drug problems, divorce, or death of a parent/guardian. According to research conducted by a workgroup charged by the Vermont State Legislature in 2017, An Act Relating to Building Resilience for Individuals Experiencing Adverse Childhood Experiences, "One in eight Vermont children has experienced three or more ACEs" (Act 43, p. 1).

While the ACEs study, conducted in 1998, shed light on the importance of understanding the impact that adverse childhood experiences have on students' social, emotional, and behavioral well-being and quality of life for students, that same year, the Office of Special Education Programs (OSEP) initially funded the first-ever National Technical Assistance Center on Positive Behavioral Interventions and Supports (PBIS).

In an interview with Rob Horner, one of the founding directors of the Technical Assistance Center on PBIS, when asked about the origin of PBIS, he stated that PBIS "emerg[ed] from people who were doing behavior support, really committed to ensuring that behavior support efforts not just reduced problem behaviors, but continually maintained a focus on ensuring that when you do behavior support it enhances the quality of life of the students and the family and the community in which you are engaged." (TASH Podcast, 2016ret). Both the results of the ACEs Study and the development of the Technical Assistance Center on PBIS correspond with an increased body of research on the social, emotional, and behavioral well-being of all students, including students with disabilities, and changes to policies that govern education in the US.

The following section outlines pivotal national policies that have guided schools in strategies to support all students, including students with disabilities so that they can be successful in school.

Educational Policies

One significant policy that has guided schools to create inclusive learning environments for all students, including students with disabilities, is the 1975 Education for All Handicapped Children Act, re-authorized in 1990 as the Individuals with Disabilities Education Act (IDEA). The 1997 amendments to the IDEA promoted the idea that schools and all students should engage in "positive behavioral interventions, strategies, and supports," and "positive academic and social learning opportunities" to address student behavior when it "impedes his or her learning or that of others" (IDEA, 1997). As noted previously, this new language coincided with the development of the

National Technical Assistance Center for PBIS in 1998. Since the inception of PBIS as a framework for supporting all students to be successful in schools, several other significant policies have recommended schools adopt PBIS approaches as well.

The 2004 reauthorization of IDEA states:

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

The reauthorization also emphasized the need to conduct Functional Behavior Assessments (FBAs) in order to better support behavioral programming for students.

In 2015, the Every Students Succeeds Act (ESSA) – the reauthorization of the Elementary and Secondary Education Act of 1965 – further emphasized the importance of all schools focusing on preventative practices such as positive behavioral interventions and supports to improve school climate and positive student outcomes (Marx, 2016).

Most recently, the U.S. Department of Education's Office of Special Education and Rehabilitation Services created a guidance letter entitled "Dear Colleague" (2016) that encouraged "schools to consider how the implementation of behavioral supports within the IEP could be facilitated through a school-wide, multi-tiered behavioral framework" (p. 6).

As cited in several of the education policies above, a Multi-Tiered System of Support (MTSS) framework (e.g., PBIS) provides an organizational structure for educational initiatives to meet the needs of all students by looking at data, systems, and practices at both the school and school district level. Implementing an MTSS Framework that prioritizes both academic and social, emotional, and behavioral supports involves implementing the best evidence-based practices to *all* students (Tier I/universal Interventions); students in need of targeted group support (Tier II/Targeted Interventions); and students in need of highly individualized supports (Tier III/Intensive Interventions) (Simonsen et al., 2008). Adoption of an MTSS framework benefits students by bringing greater organization and structure to a school system. According to Elmore (2007), schools that are less organized tend to demonstrate poorer academic outcomes than those that are well-organized. Similarly, Sailor and McCart (2014) report that "students with disabilities are at greater risk of experiencing academic failure in schools that are low performing and this likelihood is even greater in schools with poor organizational structures" (p. 59). Therefore, creating educational environments that are organized within an MTSS framework is essential for bringing about "comprehensive, *unified* school reform" (Sailor & McCart, p. 60).

Students with Disabilities

While not all students have exposure to adverse childhood experiences, some students come to school with previously identified disabilities or are identified through the special education process. Currently, 14% of all students in the US are served under the IDEA (National Center for Education Statistics). IDEA gives children with

disabilities the same access to academic and behavioral support in the least restrictive learning environment as their non-disabled peers. Under IDEA, children become eligible for specialized services and instruction under different categories of disability. The disability category of Emotional Disturbance (ED) is often used to address the needs of students who have experienced some level of ACEs or trauma. Lightfoot and colleagues (2011) confirmed that ED is the most frequently occurring disability among children who experienced maltreatment and/or trauma. Furthermore, they discovered that students who experienced maltreatment and had a disability were twice as likely to experience out-of-home placement (Lightfoot et al.). While not every child with a disability has experienced ACEs or trauma, researchers (e.g., Cavanaugh, 2016; Jaudes & Mackey-Bilaver, 2008; Milot et al., 2010) found that students with disabilities and students identified with ED have experienced higher rates of trauma, including abuse or neglect.

A 2018-2019 report from the U.S. Department of Education identified that approximately 5% of the student population, nationally, is served under the category of ED. In a law review article titled "Childhood Trauma and Special Education: Why the IDEA is Failing Today's Impacted Youth" (Winder, 2015), the author argues that identifying a student who has experienced trauma or ACEs as ED is one of the most significant challenges schools face because the category is so broad and it can be challenging to identify effective interventions for students. Due to the nature of behavioral challenges often associated with students identified as ED, the following section reviews the literature pertaining to students identified with disabilities, including ED, and exclusionary discipline practices.

Students with Disabilities and Exclusionary Practices. Not only does research show that students who have experienced adverse childhood experiences or trauma are more likely to be identified under the disability category of emotional disturbance, but the research also shows students with disabilities and, in particular, students identified with ED, experience inequities in disciplinary practices in schools nation-wide, further compounding the outcomes of such students. According to a report by Losen and Gillespie (2012), approximately 7% of all students – including those with and without disabilities – are suspended nationally; however, approximately 15% of students with disabilities are suspended at some point in time during their school career. Furthermore, Achilles et al. (2007) report that of the students who received suspensions, approximately 45% were students identified with the disability category of emotional disturbance. Additionally, the U.S. Department of Education's Office for Civil Rights (2014) reports that "students with disabilities served by IDEA are more than twice as likely to receive one or more out-of-school suspensions as students without disabilities" (p. 3). In a 2004 longitudinal study, Wagner et al. (2004) looked at the experiences of high school students with disabilities over time and found that the suspension rate of high school students with ED has increased by 50% since the early 1980s.

Students with Disabilities in Vermont

As one of the smallest states in the nation, Vermont has approximately 76,808 students total and 12,189 students served under IDEA (Vermont Agency of Education [VT AOE], 2016). Vermont's total percentage of students with disabilities is approximately 16%, two points higher than the national rate of 14%. One statistic that

makes Vermont particularly unique compared to other states is the high percentage of students with ED. According to the same report (VT AOE, 2016), while approximately 16% of all students in Vermont are served under IDEA, about 18% of students with disabilities are identified with the disability category of ED. This is approximately three times more than the national average of 5%. A report from the Brattleboro Reformer (2015) goes further, providing evidence to support the assertion that Vermont has the highest percentage of students with disabilities identified in the category of ED in the country.

Students with Disabilities and Exclusionary Practices in Vermont. While Vermont has a relatively high percentage of students identified with ED (18%), Vermont's suspension rate does not differ greatly compared to national data. In Vermont schools, approximately 1,193 students, or 8%, have received one or more out-of-school suspensions. Of the approximately 68,785 students without disabilities in Vermont, 2,064 students, or 3%, have received one or more out-of-school suspensions. But Vermont students with disabilities are twice as likely to have received one or more out-of-school suspensions compared to students without disabilities. This trend in Vermont mirrors the national disparity in disciplinary practices for students with disabilities.

One strategy that the state of Vermont has used in an effort to organize evidence-based practices that support the social, emotional, and behavioral well-being of students in schools is the use of an MTSS Framework. In 2014, the Vermont Agency of Education (VT AOE) created the first MTSS Field Guide for educators, administrators, and school teams. According to the VT AOE website, the field guide provides a "systematic

approach to decision-making for excellence and equity within a culture of continuous improvement that focuses on successful outcomes for all students." In the spring of 2019, the VT AOE updated the MTSS field guide to "strengthen their commitment to promoting rigorous outcomes for everyone, especially for students who have been historically marginalized and/or under-performing" (p.1). While similar to the previous version of the field guide, the new version provides a shift in language and instead of using the term "tiers" to describe levels of support, the preferred term in Vermont is now "layers" of support. PBIS, in Vermont, is identified as an MTSS Framework that provides layers of intervention to students based on need.

Positive Behavioral Interventions and Supports (PBIS) Framework

PBIS is defined as an "implementation framework for maximizing the selection and use of evidence-based prevention and intervention practices along a multi-tiered continuum that supports the academic, social, emotional, and behavioral competence of all students" (PBIS FAQ, 2019). PBIS is heavily grounded in applied behavior analysis and requires schools to engage in a series of practices for all students, such as developing clearly stated school-wide behavioral expectations, lesson plans for explicitly teaching school-wide expectations, and procedures for giving students positive feedback when they are demonstrating school-wide expectations by using specific behavior praise (Simonsen et al., 2008). Prior to embarking on PBIS, schools are advised to engage in several readiness steps. It is critical that all school staff learn about the PBIS framework and that, at minimum, 80% of all staff must be willing to commit to implementing PBIS practices (Sugai & Horner, 2002). Additionally, schools implementing PBIS are expected

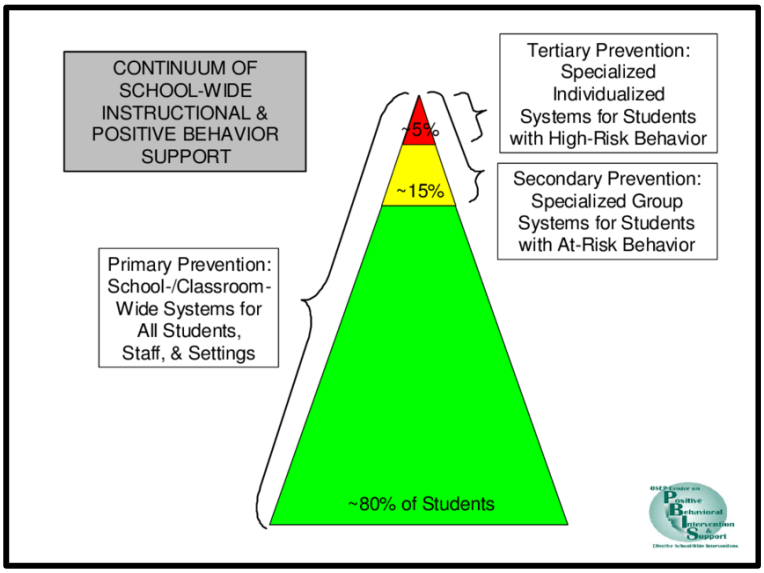
to develop systems for responding to students who violate school-wide expectations and use data systems to both analyze and make data-based decisions. PBIS readiness activities and PBIS practices are critical features to implementing PBIS with fidelity (Simonsen et al., 2008). Readiness to implement PBIS is also contingent on creating a diverse leadership consisting of a variety of school and community stakeholders, consistent communication between administrators and staff, and school district support (Handler et al., 2007). Therefore, engaging is in PBIS readiness activities prior to implementing PBIS is critical for successful implementation.

PBIS, an MTSS framework, relies on tiered levels of support (referred to in Vermont as layered levels of support) for all students, small groups of students, and individual student needs (Sugai & Horner, 2002). As discussed in Chapter One, the tiered levels of support within the PBIS framework include the universal level which includes interventions applied to ALL students (100% of the student population), Tier II/Targeted Level which includes small group interventions applied to SOME students (10-15% of the student population), and Tier III/Intensive Level which includes highly individualized interventions that are applied to FEW students (1-5% of the student population) (Sugai & Horner; Walker & Shinn, 2002; Walker et al., 1996). Implementing the universal level of PBIS for all students is when, for example, a school decides to implement a social-emotional learning curriculum (e.g., Second Step) for all students. After applying the universal intervention to all students, data may suggest that some students would benefit from additional Tier II/Targeted interventions (e.g., small group Second Step lessons). After the application of small group lessons for some students, data may further suggest

that a few students would benefit from additional Tier III/Intensive interventions (e.g., individualized Second Step lessons). A fundamental key to implementing an MTSS framework is the understanding that the tiers of support are not mutually exclusive and that the use of one level of intervention does not necessarily supplant other levels of intervention or support. The figure below is a common representation of the PBIS Tiered Framework produced by the National Technical Assistance Center for PBIS.

Figure 1

Continuum of School-wide Instructional and Positive Behavior Support



A major tenet of PBIS is that ALL students, despite ability, should have access to universal levels of interventions and support. A significant question that arises in the literature on PBIS is how to define "ALL" students. The assumption is that "all students" is inclusive of all students in a school. However, as Snell (2006) discusses, "Students with severe disabilities are less likely to be a part of the universal approaches found to

effectively prevent problem behavior in most students without disabilities, primarily because of their separate location in school" (p. 65). Snell suggests that when schools have separate locations and programs for students with significant disabilities, access to school-wide universal levels of support is by definition limited for students with disabilities, and especially students with more significant disabilities. Hawken and O'Neill (2006) discovered that often students in self-contained settings only receive Tier III/Intensive Levels of support and lack access to universal support. Similarly, Simonsen et al. (2020) in a recent research brief wrote, "We hear common misrules or "myths" in the field, including (a) special education is Tier 3 or (b) students in special education require only Tier 3 supports to be successful" (p. 3). However, Benner et al. (2010), in a study on the impact of PBIS on students with ED in a self-contained program, report that "teachers of students with the most challenging behaviors need to carry out the process of PBIS with fidelity comprehensively, or at all three levels of prevention" (p. 86).

The idea that some students may not have access to universal levels of PBIS is directly counter to what Freeman et al. (2006) report in an article looking at the impact of PBIS on students with severe disabilities. These authors confirm that the concept of universal levels of support is the foundation of PBIS and should be accessed by all students as a precursor for students receiving higher levels of intervention (e.g., Targeted and Intensive Levels). Students with disabilities often access Tier III/Intensive levels of support, but the research is clear that these students should not be denied access to universal levels of intervention or support.

To illustrate the idea that all students with or without disabilities should have access to all tiered levels of support, Figure 2 shows the ideal relationship between different students' access to levels of support. As illustrated, all students in Figure 2 have access to universal levels of support despite some students needing additional layers of support. Figure 3 shows that not all students have access to universal levels of support. While Student 2 and Student 3 are accessing higher levels of support, they are not accessing universal levels of support. While not all students may need access to all levels of support, all students should, at least, have access to universal levels of support and targeted levels of support, if needed. Essentially, access to interventions at all levels should not be viewed as supplanting instructional support but rather, supplementing existing support. Understanding the relationship between the ideal PBIS tiered/layered logic model and the actual implementation of PBIS for students with disabilities in five school districts in Vermont is at the foundation of this study.

Figure 2

Theory of Change: PBIS Layers of Support for Three Different Students - IDEAL

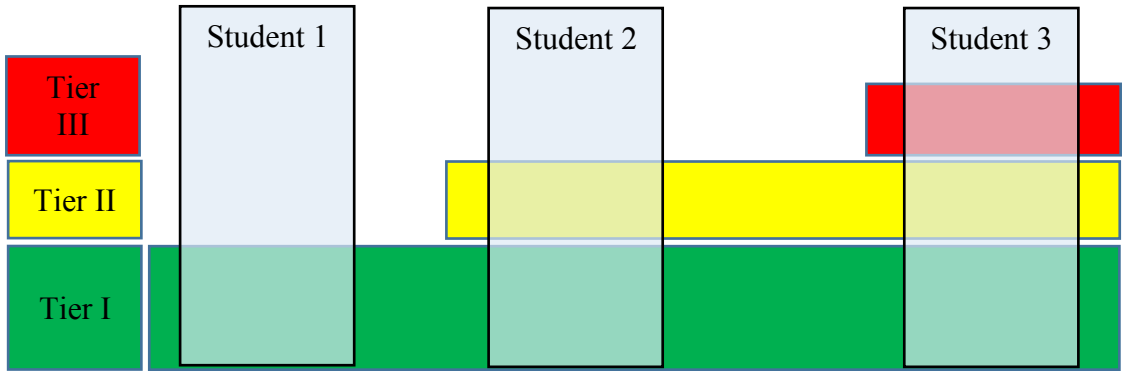
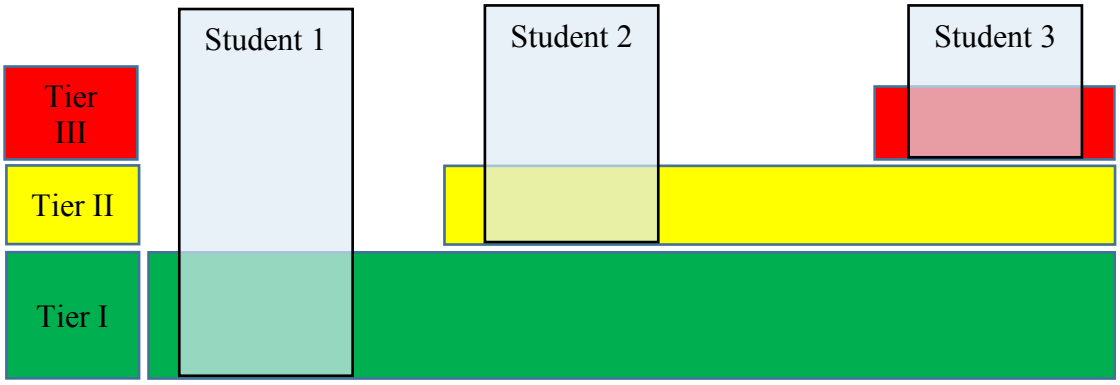


Figure 3

Theory of Change: PBIS Layers of Support for Three Different Students - ACTUAL



Benefits of Universal PBIS for ALL

Over the past 25 years, research on PBIS has been well documented, with much of it focusing on the impact of universal PBIS on reducing problem behaviors and exclusionary discipline practices, increasing positive school climate and staff retention, promoting social, emotional learning opportunities, and increasing academic outcomes for all students (Bradshaw et al., 2010; Horner et al., 2009; Pas et al., 2015). The following highlights key findings in relation to the benefits of universal PBIS for all students.

Reduction in Problem Behaviors and Exclusionary Discipline. The majority of the research on PBIS has highlighted the reduction of problem behaviors and the reduction in the use of exclusionary discipline practices as key outcomes of PBIS implementation (Bradshaw et al., 2010; Horner et al., 2009; Pas et al., 2015). Furthermore, when PBIS is implemented with fidelity, many schools have been able to

reduce rates of school-wide discipline referrals (Bradshaw et al., 2009; Simonsen et al., 2012). In a recent longitudinal study of PBIS outcomes, Kim et al. (2018) found that schools that had implemented PBIS with fidelity over a period of three consecutive years reported lower rates of problem behaviors compared to schools that had implemented PBIS for one or two years. Simonsen et al. also found that schools who implemented School-wide Universal PBIS with fidelity not only had fewer problem behaviors resulting in office discipline referrals but also had lower rates of out-of-school suspensions. These outcomes are significant as noted earlier; students identified with the disability category of ED are often susceptible to exclusionary discipline practices. When students are removed from the classroom learning environment, they often miss out on instruction, and in turn, they may be at risk of falling behind peers in academic achievement. Another study by Childs et al. (2016) that examined PBIS outcomes in Florida schools over a four-year period of time confirmed that schools with high levels of implementation fidelity had fewer exclusionary discipline practices when compared to Florida schools with low implementation fidelity. Freeman et al. (2016) discovered that even schools implementing PBIS with "medium" levels of fidelity still had lower rates of problem behaviors and office discipline referrals than schools with low fidelity of implementation. Flannery et al. (2014), in a multi-level longitudinal study of 12 high schools, found a significant reduction in office discipline referrals for schools implementing PBIS with fidelity.

Positive School Climate and Staff Retention. In addition to the research on the reduction of problem behaviors and exclusionary discipline practice, several studies have

explored the relationship between implementation of PBIS and the creation of a positive school climate and impact on staff retention. Bradshaw et al. (2014) report that a positive school climate, defined by the National Center on School Climate as "the quality and character of school life," has a positive impact on a variety of educational outcomes for students. In addition, a growing body of research indicates that schools implementing universal PBIS with fidelity see an increase in school climate outcomes such as increased administrator retention and a decrease in school staff attrition (Koth et al., 2008). Confirming previous research, Cohen and colleagues (2009) found that a positive school climate is linked to positive outcomes such as an increase in teacher retention, an increase in academic outcomes for students, and a decrease in overall problem behaviors.

Not only is the retention of school administrators key, but equally critical is the retention of teachers. Yasin (1999) reported that about one in five teachers leaves their teaching jobs during the first three years. According to the National Center for Education Statistics, in 2007-2008, 7.6% of teachers in the US moved to a different school and 8% left the profession altogether. Researchers Grayson and Alvarez (2008) concluded that school climate is a powerful predictor of teacher retention because a positive school climate often reduces emotional exhaustion and increases feelings of accomplishment. Similarly, Singh and Billingsley (1998) found that when teachers feel supported by their administrators, they tend to be more committed to their profession. Both administrator and teacher retention are critical for successful PBIS implementation because the implementation of PBIS with fidelity is contingent on having the support and buy-in of all teachers and school staff (Fullan, 2001; Ryndak et al., 2007; Sarason, 1982).

Interestingly, teacher retention rates vary by type of teacher role; a fact that holds significance for the implementation of PBIS and the experiences of special educators and students with disabilities. According to an analysis of IDEA and Common Core of Data (the U.S. Department of Education's primary database) from 2005 to 2015 conducted by the Education Week Research Center (2018), while the number of teachers in the country has remained relatively steady, the number of special educators decreased by 17%. At the same time, the research center also discovered that there was only a 1% reduction in the number of students served by IDEA.

While the number of students served by IDEA is relatively stable, the decreasing number of special educators is alarming because special educators are specifically trained to teach and work with students with disabilities. In a recent study looking at the school climate perspective of middle school students with ED, Salle et al. (2018) concluded that "building efficient school-wide systems like PBIS that involve implementing appropriate academic, social, and emotional support to all students, and students with ED, has the potential to improve school climate (p. 389).

Not only is it important for students with disabilities to be included in universal PBIS efforts, as mentioned in Chapter One, but it is also equally vital for special educators who work with students with disabilities to be included in all tiers of the framework as well. Special educators who work with students with disabilities are often successful in implementing Tier III/Intensive interventions, but as PBIS is implemented school-wide, it is equally important for special educators to also apply the same universal PBIS practices with students on their caseloads (Schelling & Harris 2015). According to

Schelling & Harris, special educators should be involved in universal PBIS interventions as it provides the foundation for the other tiers of support. Therefore, the retention of special educators in addition to other staff is necessary for positive outcomes for students with disabilities.

Unfortunately, Vermont is not unaffected by these trends: a fact that is particularly evident when looking at administrative leadership roles. At the end of the 2014 school year, about one-third of Vermont superintendents decided to leave their current positions (Freeser, 2014). Not only is the turnover in superintendent positions staggering, but also troubling is the attrition rate of school-building administrators in Vermont. According to Freeser, approximately 16-23% of principals and assistant principals in Vermont leave their jobs each year. High-quality teacher retention is also a significant challenge for Vermont. According to the U.S. Department of Education's 2011-2012 Educator Equity Report for Vermont, there are huge discrepancies between quality teacher retention and absenteeism in lower socioeconomic schools versus wealthier schools (Education Equity Profile, 2011-2012). Not maintaining and sustaining teachers at both the national and state level is problematic for several reasons. Research (Béteille et al., 2011) shows that high rates of turnover can lead to the following negative outcomes: 1) a decrease in the sustainability of school-wide change efforts or initiatives (McIntosh et al., 2015); and 2) poor academic outcomes (Cohen et al., 2009).

As startling as the attrition rates are among Vermont's educational leaders and special educators, Vermont is in a unique position to address some of these concerns through statewide implementation efforts that focus on aligning both academic and

social, emotional, and behavioral supports within a comprehensive MTSS framework. As previously mentioned and important to reiterate, creating educational environments that are organized within an MTSS framework is essential for bringing about "comprehensive, *unified* school reform" (Sailor & McCart, 2014, p. 60). Without prioritizing administrator and teacher retention, and organized structures in our educational systems, we are likely to find results similar to those identified by Sailor and McCart. The implementation of PBIS within the MTSS framework is a perfect example of school reform efforts currently being promoted and supported in Vermont. In addition to the importance of attending to an educational system's organizational structure and administrator and teacher retention, the literature on universal PBIS also highlights the need for schools to attend to and identify best practices that ensure the social, emotional, and behavioral well-being of all students as well as staff.

Social-Emotional Learning (SEL). Much of the literature on PBIS, in addition to the key features of PBIS, cites the importance of social-emotional learning (SEL) of all students in order for students to be successful. One of the key features of PBIS is the explicit teaching and instruction of school-wide behavioral expectations. This focus is often the catalyst for schools to consider SEL practices in conjunction with the PBIS framework. In 2011, Durlak and colleagues conducted a meta-analysis of approximately 265 different research articles on SEL and found that intentionally attending to students' social, emotional, and behavioral well-being will lead to an increase in both academic success and pro-social behaviors. Specifically, they found that students exposed to SEL in school do better than their peers on a number of pro-social indicators such as

displaying and engaging in positive behaviors, demonstrating empathy, engaging in teamwork, and being academically successful. Furthermore, Durlak et al. discovered that students who participated in evidence-based SEL programs showed an 11 percentile-point increase in academic achievement compared to students who did not participate in SEL programming. Finally, the meta-analysis concluded that early SEL skills taught and learned in Kindergarten led to positive outcomes for young adults in the areas of employment, criminal activity, substance abuse, and mental health, countering the negative impact of ACEs or early childhood trauma (Durlak et al.). To further understand the impact that explicit instruction on SEL has on student outcomes, Cohen et al. (2009) found that if students are not explicitly taught social, emotional, and behavioral skills, academic outcomes decline. Ultimately, the research shows that if students are not socially, emotionally, and behaviorally ready to learn, they will experience an increase in problem behaviors, often leading to school suspension or other exclusionary disciplinary practice, and poor academic outcomes (Durlak et al.). As Losen and Gillespie (2012) remind us, higher rates of exclusionary discipline practices are particularly evident for students identified with the disability category of ED. While research shows the positive impact of social, emotional, and behavioral learning on all students in general, we see an especially noteworthy benefit of SEL for students entering school with significant social, emotional, and behavioral deficits or challenges (Brauner & Stephens, 2006).

Benefits of Universal PBIS for Students with Disabilities

PBIS and Students with Disabilities. While several studies (Bradshaw et al., 2010; Brauner & Stephens, 2006; Cohen et al., 2009; Durlak et al., 2011; Elmore, 2007;

Fullan, 2001; Horner et al., 2009; Pas et al., 2015; Ryndak et al., 2007; Sarason, 1982) have shown the benefits of PBIS on factors such as the reduction of problem behavior, exclusionary practices, positive school climate, staff retention, social-emotional learning, and positive academic outcomes, fewer studies have focused on the extent to which the benefits of universal PBIS are afforded to students with disabilities. One of the earliest reports on PBIS, conducted by Carr et al. (1999), looked at whether or not students with disabilities were included in universal PBIS. Carr et al. analyzed 107 studies between 1985-1996 and discovered that PBIS has been effectively used for students with significant disabilities. In contrast, Landers et al. (2012) explored the extent to which students with disabilities were included in universal PBIS by surveying PBIS State Coordinators. The authors found that although 93% of state coordinators believed that students with disabilities should participate or partially participate in school-wide PBIS, only 41% believed that this message was being conveyed to school staff during initial PBIS training. Landers and colleagues also discovered that 31% of state PBIS coordinators believed that students with disabilities could only partially participate in universal PBIS. In a similar study, Shuster et al. (2017) looked at the perspectives of special educators in Tennessee and found that although 80% of special educators believed that students with disabilities should be included in universal PBIS, more than 20% of special educators did not know about PBIS and did not participate in any initial training. While these three studies (Carr et al.; Landers et al.; Shuster et al.) have shed some light on whether or not students with disabilities are included in universal PBIS efforts, more research is needed to determine the extent to which this is true in other contexts.

PBIS in Vermont

PBIS was first introduced in Vermont during the 2006-2007 school year (VTPBIS Annual Report, 2019). Vermont is in its 15th year of PBIS implementation and universal PBIS is currently practiced in approximately 53% of Vermont schools and approximately 92% of Vermont Supervisory Unions/School Districts. The implementation of PBIS in Vermont has been established through a 20-year partnership between the Vermont Agency of Education (VT AOE) and the Vermont BEST Project, housed at the University of Vermont's Center on Disability and Community Inclusion. As a result of this partnership, the state was able to establish the Vermont PBIS Implementation Team (VTPBIS Team) to support schools and school districts in creating learning environments where all students are socially and academically successful. This partnership also included the prioritization of BEST/Act 230 funds to support educational initiatives across Vermont in an effort to increase the "training and professional learning to support teachers, administrators, and other personnel in creating equitable, rigorous learning environments for students with emotional and behavioral needs" and to provide "training of teachers, administrators, and other personnel in the provision of education services to students who require educational supports for academics and/or social/emotional/behavioral." (VT AOE Website, 2020). Specifically, Vermont School Districts are eligible to apply for these funds each year and the funds have enabled school districts and schools to sustain and maintain educational initiatives, including PBIS.

Vermont continues to be a national leader in the implementation of PBIS. Over the past 15 years, the VTPBIS Team has worked to build the capacity of schools

implementing PBIS by creating opportunities for technical assistance, collaboration with other Vermont schools implementing PBIS, and a variety of professional learning opportunities. According to the VTPBIS Annual Report, schools implementing PBIS with fidelity show enhanced academic achievement, the sustainability of implementation, and fewer office discipline referrals for problem behavior. While PBIS has been well established in Vermont over the past 15 years, very little is known about the impact PBIS has had on students with disabilities.

Summary

The preceding review of the literature establishes the critical need to implement comprehensive evidence-based practices that address the social, emotional, and behavioral needs of all students, including students with disabilities. While the literature shows the benefits of PBIS for all students, there is a gap in research regarding the benefits of PBIS as they relate to outcomes for students with disabilities. Furthermore, there is a lack of practitioners' voices in much of the research on PBIS. This study seeks to add to the literature on PBIS and bridge the gap between what is known about PBIS outcomes in relation to students with disabilities. Additionally, this study will add an empirical contribution to the impact of PBIS on students with disabilities by gathering data on special educator perspectives in five different school districts in Vermont. The next chapter introduces this study's research design and methodology for addressing the research questions above.

Chapter Three: Methodology

Purpose of the Study

As mentioned in Chapter One, the purpose and two main objectives of this study were to 1) examine the inclusion of students with disabilities in universal PBIS efforts through the perspectives of special educators in five school districts implementing PBIS in Vermont, and 2) explore whether there is a relationship between special educators' perception of their fidelity of implementation and the extent to which special educators perceive students with disabilities are included in universal PBIS. Expanding on the work of Shuster et al. (2017), this study explored the special educators' perceptions across the following domains: 1) participation of students with disabilities in PBIS; 2) participation of special educators in PBIS; and 3) benefits of PBIS for students with disabilities. This study also explored what influences the participation of students with disabilities in PBIS. This chapter describes the study's research design and methodology.

Research Design

A quantitative survey design methodology was used both to understand the perceptions of special educators working in PBIS schools regarding the inclusion of students with disabilities in universal PBIS and to explore whether or not there is a relationship between special educators' perceptions and their perceived fidelity of implementation. The decision to utilize a survey design methodology was confirmed by the work of Dillman et al. (2014), who report that a survey is an ideal methodology when the researcher wants to capture knowledge from a group of individuals in an effort to identify trends and/or relationships. As this study expands upon an existing survey

developed by Shuster et al. (2017), I obtained written permission from Shuster and colleagues to utilize the survey instrument they developed and to adapt the survey to fit the context of Vermont. The decision to use an existing survey was thoughtfully considered as this approach yields several benefits.

According to Hyman et al. (2006), the use of pre-existing survey questions provides accurate measures as they were pre-tested prior to use; therefore, the quality of the data and the degree of validity is quite high. In this particular case, Shuster et al. (2017) developed their survey instrument based on several validated PBIS evaluation tools (e.g., Freeman et al., 2006; Landers et al., 2012), research on tiered systems of support (e.g., Bambara et al., 2012; Bambara et al., 2009; Lane et al., 2015), and validated PBIS implementation checklists (e.g., Sugai et al., 2012). This study also collected quantitative data from a single source web-based survey. As shared earlier, the following research questions were used to guide this study:

Research Questions

- **Research Question 1:** To what extent do students with disabilities participate in the Universal PBIS Framework?
- **Research Question 2:** To what extent do special educators participate in the Universal PBIS Framework?
- **Research Question 3:** How do special educators view the benefit of Universal PBIS for the students with disabilities on their caseloads?
- **Research Question 4:** How does the fidelity of implementation, the perception of the benefits of PBIS, special educator involvement in PBIS readiness activities,

and Emotional Disturbance influence the participation of students with disabilities in PBIS?

Study Variables

The construct of *implementation fidelity* is one of the predictor variables in this study in relation to research question four. Although there are different frameworks for defining fidelity (e.g., individual vs. school-wide), for this study, fidelity is defined as special educators' participation in critical features of PBIS. This definition is similar to that of Noell and colleagues (2002), who describe implementation fidelity as the extent to which core or critical features of intervention are implemented as intended. There exists a strong body of research that shows when schools implement an intervention with high rates of fidelity, this leads to better outcomes (Flannery et al., 2014; Noell et al., 2017; Sanetti & Kratochwill, 2008). Furthermore, a meta-analysis that looked at 542 studies associated with children's physical health, academic performance, mental health, and drug use issues discovered that when programs were implemented with fidelity and implementation fidelity was carefully monitored, children experienced two to three times higher positive outcomes than when programs were not implemented with fidelity (Durlak & DuPre, 2008). For this study, special educators' perception of their *participation* in PBIS activities was used as a proxy for the variable *fidelity of implementation.* The decision to use special educators' perception of their participation in PBIS as a proxy for fidelity was based on fact that the seven survey questions about participation in PBIS came from existing self-reporting PBIS fidelity measures. It was also logical to use participation in PBIS as a proxy for implementation fidelity as it aligns

with this study's definition of fidelity as cited above. While the VTPBIS State Team has school level fidelity data, in order to obtain a high response rate for sample the size, participants in this study were not asked to identify the school in which they worked; rather they were asked to identify the school district in which they work. Therefore, existing school-level data were not used as a measure of fidelity. As discussed in the section regarding the survey instrument, the decision not to ask participants to identify the school in which they worked was to ensure a high survey response rate and honest answers (Dillman et al., 2014). Also, based on the literature review and current research, other study variables included: the perception of the benefits of PBIS, special educator involvement in PBIS readiness activities, numbers of years as a special educator, gender, and the disability category of ED. These study variables were used to investigate special educators' perspectives on the following dependent variable: Students with disabilities' participation in Universal PBIS.

Target Population and Participant Selection

Target Population

As the aim of this study was to ascertain the extent to which students with disabilities are included in universal PBIS efforts in five Vermont school districts implementing PBIS, it was critical to survey special educators to obtain their perspectives. Selecting special educators as the sample for this study was intentional as special educators in Vermont are licensed teachers who work directly with students with disabilities and, in particular, students who need a higher level of support, above and beyond universal support for students generally. Within the PBIS tiered framework,

special educators support students in accessing Tier II/Targeted and Tier III/intensive levels of support to ensure academic and social, emotional, and behavioral success. Additionally, special educators have first-hand knowledge of the interventions a student has had or may need in order to be successful in school (Handler et al., 2007; Simonsen, et al., 2008). Having intimate knowledge of their students' needs, special educators should also be able to speak to whether or not their students are included in universal PBIS practices. Therefore, the target population for this study was special educators working in five school districts where permission to conduct the study was obtained by each district's Director of Special Education. The school districts included in the study are Lakeside School District, Hillside School District, Mountainside School District, Suburban School District, and the City School District. Although five school districts were included and participated in this study, it is important to note that only data from four of the five school districts were used in data analysis. This will be explained further in Chapter Four. Please also note that the names of the actual school districts have been changed to pseudonyms to protect their anonymity.

Participant Selection

Purposive, Convenience, and Proportional Sampling. Purposive, convenience, and proportional sampling methods were used to recruit participants for this study. The decision to seek permission to conduct this study in the five school districts in Vermont was predicated on several factors. First, it was essential to conduct the study in school districts with a solid history of implementation of PBIS. The expectation was that as long-time implementers of PBIS, these schools would be sites where a higher level of

special educator knowledge of and involvement with PBIS might be present. Conversely, patterns of special educator involvement might be lower in school districts newer to implementation because of the novelty of PBIS implementation, with the result that it would be difficult to obtain a deeper interpretation of the framework. Two of the school districts were early implementers of PBIS and have a history of PBIS implementation that suggested their models would be among the best in the state; as such, the degree of involvement of special educators and children with disabilities in universal PBIS might be expected to be the best it will be in Vermont, even if it falls short of full alignment with the framework. Second, each of the school districts in this study had schools that were implementing PBIS with high, medium, and low rates of implementation fidelity. Proportional sampling was used so that the percentage of schools in this study mirrored the percent of implementation fidelity across all schools implementing PBIS in Vermont. Table 1 shows this relationship, labeling high, medium, and low rates of implementation fidelity as Exemplar, Merit, and No Star schools, respectively.

Table 1

Purposive and Proportional Sampling

Population:	**Sample:**
VT PBIS Schools = 156 Total Schools	**5 VT School Districts = 20 Total Schools**
Exemplar Schools (***) = 28 (18%)	Exemplar Schools (***) = 3 (15%)
Merit Schools (**) = 71 (46%)	Merit Schools (**) = 9 (45%)
*No Star Schools = 57 (37%)	*No Star Schools = 8 (40%)

*Schools not identified as implementing with fidelity according to the 2019 VTPBIS Annual Report

Third, it was instructive to conduct the study in five districts that varied with respect to demographic characteristics. Four of the school districts selected for this study were located in Champlain County where the county's median household income was $66,906. One school district was located in Appleton County where the county's median household income was $61,875. While the median household income of each county varied slightly, the percent of students eligible for free and reduced-priced meals (FRM) across school districts differed greatly. Table 2 shows the percent of students eligible for free and reduced-price school meals by the school district (VT AOE, 2019).

Table 2

Percent of Students Eligible for Free and Reduced-Priced Meals across the Five School Districts (School Year 2018-2019)

School District	Free and Reduced Students	Enrollment	% Low Income	Number of Schools Implementing PBIS	Number of Schools Implementing PBIS with fidelity
Lakeside SD	1,092	1,723	63%	7	2
Hillside SD	344	2,648	13%	4	3
Mountainside SD	441	1,353	33%	6	5
Suburban SD	270	994	27%	2	1
City SD	868	885	98%	1	1

Finally, the selection of these five school districts involved a level of convenience sampling and was based on several factors. First, I was able to garner the support of district administration based on my role as Director of Special Education in a school in Vermont. As implementers of PBIS, all school districts in this study had expressed a desire to learn more about the impact PBIS has had on students with disabilities in their schools. Second, one of the goals of the study was to identify an approach that could be used over time to distribute the survey to special educators across the entire state of Vermont. Therefore, the five school districts selected for this study may be thought of as pilot sites, with associated findings allowing for additional hypothesis generation for future studies.

Sample Size

As the sampling frame for this study was narrow, consisting of a total of 101 special educators across the five school districts in Vermont, a census approach to data collection was used, with the goal of distributing the survey and collecting data from all special educators working in the five identified school districts. A listserv of e-mail addresses was obtained by contacting the Special Education Directors in each school district. The list of schools within each school district that were implementing PBIS and their level of implementation fidelity was obtained by contacting the VTPBIS Team.

Survey Instrument

The quantitative data collected for this study were obtained through the use of an adapted version of a pre-existing validated survey instrument developed by Shuster et al. (2017). Shuster and colleagues surveyed special educators in the state of Tennessee and

the survey questions were broken down into five domains: 1) Understanding of PBIS; 2) Participation of students with disabilities in PBIS; 3) Participation of special educators in PBIS; 4) Benefits of PBIS for students with disabilities; and 5) Barriers to student participation. Within each domain, a varying number of questions were asked, for a total of 35 survey questions. The answer selections were consistent across each of the five domains and responses to each question were broken down into the following 5-point Likert scale: Not at all (1), (2), Somewhat (3), (4), and Fully (5). All questions had the same lead phrase, "to what extent…". Shuster et al. developed two versions of the survey for two different populations. One population consisted of special educators in PBIS schools and the other survey was for special educators not in PBIS schools. Shuster et al. developed their survey based on existing validated and reliable surveys from the National Technical Assistance Center on PBIS, PBIS Technical Assistance Center.

For the purpose of this study, the original survey developed by Shuster et al. (2017) was adapted and modified slightly to fit the context of Vermont and to address this study's research questions. While the original survey was broken down into the five domains designed by Shuster and colleagues, the modified survey for this research study was shortened and participants were asked to complete three of the five domains: 1) Participation of students with disabilities in PBIS; 2) Participation of special educators in PBIS; and 3) Benefits of PBIS for students with disabilities. The modified survey for this study consisted of 27 questions. The decision to modify this survey was based on the study's research questions and the desire to obtain a high response rate. First, the research questions were thoughtfully considered as all schools in this study were implementing

PBIS as opposed to the Shuster et al. (2017) study, in which the survey was distributed to participants in schools implementing PBIS and schools not implementing PBIS. It made logical sense to modify the questions for this study's particular population. Second, as Dillman et al. (2014) suggest, in order to obtain a high response rate, the fewer number of survey questions and increased anonymity could lead to the likelihood that participants will complete the survey and with increased honesty. As the total sample of this study was quite small, it was imperative to create a survey that elicited a high rate of response.

In summary, the survey for this study was distributed to special educators from five school districts in Vermont implementing PBIS. Despite modifications to the original survey, the integrity of the survey questions remained intact plus or minus a few word changes to adjust for the vocabulary used in Vermont regarding PBIS compared to the vocabulary used in Tennessee regarding PBIS. Table 3 describes the changes made to this study's survey instrument.

Table 3

Description of Survey Adaptations

Survey Table 3 Description of Survey Adaptations **Feature**	**Shuster et al. (2017) Survey**	**Townshend, (2020) Survey**
Research Questions:	**Research Question 1:** To what extent are special educators involved in school-wide PBIS teams and implementing this	● **Research Question 1:** To what extent do students with disabilities participate in the Universal PBIS Framework? ● **Research Question 2:** To what extent do special

	framework into their classrooms? **Research Question 2:** To what extent are students with disabilities participating in various aspects of the PBIS framework at their school? **Research Question 3:** How do special educators view the actual and anticipated benefits of involving their students with disabilities in various aspects of PBIS? **Research Question 4:** What areas and avenues do special educators prioritize for professional development?	educators participate in the Universal PBIS Framework? ● **Research Question 3:** How do special educators view the benefit of Universal PBIS for the students with disabilities on their caseloads? ● **Research Question 4:** How does the fidelity of implementation, the perception of the benefits of PBIS, special educator involvement in PBIS readiness activities, and Emotional Disturbance influence the participation of students with disabilities in PBIS?
Sample	Special Educators in PBIS and Non-PBIS Schools	Special Educator in PBIS Schools in five School Districts
Sample Strategy	Random	Census
Survey Questions	Original including five Domains	Slight word changes to fit the context of PBIS in Vermont (e.g. reward to acknowledge, rules to expectations, etc.) and will include three of the five Domains.

Validity and Reliability

To ensure the validity and reliability of the augmented survey questions, cognitive interviews were conducted in November 2017 with members of the study population to ensure that the questions were worded correctly and were not confusing. Cognitive interviewing is the process of "determining whether respondents comprehend questions

as intended by the survey sponsor" (Dillman et al., 2014, p. 234). Dillman et al. (2014) also identified that cognitive interviewing is the preferred method for testing survey questions.

Summary of Cognitive Testing

Following the recommendation from Dillman et al. (2014), I completed cognitive testing of the interview questions with four special educators at the school in which I currently work. It is important to note that the school in which the four participants came from did not participate in this study. These volunteers reviewed the questions and took the survey in a paper version. As this was a pilot of the initial survey questions, it was not feasible to give the participants the actual link to the survey in the final online REDCap version. Prior to engaging the volunteers in this process, I met with the volunteers individually to ensure that their answers were confidential and that the goal of this process was to fine-tune survey questions to ensure clarity and coherence. Each cognitive interview took about 30 minutes and provided an opportunity for participants to ask questions, seek clarification, and share if any of the questions were confusing. This process also gave me insight into how the participants interpreted each question and provided an opportunity to share information about the survey process and this study. The cognitive interviewing process led to minor changes to some of the survey questions.

Despite these changes, the integrity of the original survey was kept intact and as previously mentioned, the domains or categories of questions were reduced from five to three and included: 1) Participation of students with disabilities in PBIS; 2) Participation of special educators in PBIS; 3) Benefits of PBIS for students with disabilities. The

revised survey, found in Appendix F, shows the final changes made to the survey post the cognitive interviewing process. In general, the use of the cognitive interviewing process revealed that the questions adapted from the original Shuster et al. (2017) survey were clear; as such, only minor tweaks to the survey questions were needed. The primary changes to the questions were to ensure the participants in this study had a clear understanding of the language used in Vermont in relation to PBIS implementation. Table 4 highlights the changes that were made to the survey to fit the context of Vermont.

Table 4

Description of Survey Question Adaptations (For more see Appendix G)

Shuster et al. (2017) Survey	Townshend, (2020) Survey
Do you (would you be likely to) reference the school-wide expectations when discussing behavioral expectations with students?	Do you reference the school-wide expectations when discussing behavioral expectations with students on your caseload?
Do your students participate in school-wide rewards (e.g., school store or school-wide PBIS raffles)?	Do the students on your caseload receive or have been given a school-wide acknowledgement (e.g., school store or school-wide PBIS raffles)?
Do you feel your students benefit (or would benefit) from participating in explicit lessons about expected behavior in school settings?	Do you feel students on your caseload benefit from participating in explicit lessons about expected behavior in school settings?

Survey Implementation Plan. The survey was administered online to special educators who worked in the five school districts. The decision to use an online survey platform to obtain data from study participants was made because online surveys are efficient and once distributed, participants can often complete surveys relatively quickly. According to Dillman et al. (2014), online surveys are one of the fastest-growing modes

of data collection due to an online survey's relatively low cost and quick turn-around. The online survey platform used in this research study is called REDCap. REDCap is an online survey toolkit that is approved by the University of Vermont and the Institutional Review Board (IRB). REDCap was selected as it allows for different question formats, anonymous or identified participants, multiple output formats, and graphical displays for data collected (http://www.uvm.edu/~dhoward/redcap.html). It is important to note that the original survey was distributed via REDCap as well and was vetted by Shuster et al. (2017) as a suitable web-based platform.

The survey distribution plan consisted of four distinct phases (see Table 5). The first phase was to finalize the survey and add the final version of the survey to REDCap, the online platform. This required training and included a review of the REDCap User Guide and technical assistance from the University of Vermont's Technology Team. This was a critical phase as the accuracy of the survey format and content is essential for obtaining valid responses.

The second phase was to secure the school email addresses of special educators working in the five school districts. Identifying accurate emails was critical to obtaining a high response rate and ensured that the survey was distributed to the correct population. The listserve of participant emails was obtained by contacting the Special Education Directors at each of the five school districts. Additionally, a list of schools implementing PBIS in each of the five school districts was obtained by reaching out to the VTPBIS State Implementation Team. Once both lists became available, a distribution list

consisting of only special educators working in PBIS schools was generated. This list served as the final email distribution list for the survey.

The third phase consisted of composing an introductory letter that was embedded within the survey link sent to each participant. Included in the introductory letter were the rationale behind the survey, information about the study and the researcher, and assurance to participants that their responses would be kept anonymous. To ensure that the survey link and the content of the email were clear, a test email was sent to colleagues, and feedback was obtained. The process of obtaining feedback was iterative and important to ensure that the survey was perceived positively and was not confusing for the participants taking the survey (Dillman et al., 2014).

The fourth phase of the distribution plan consisted of strategies to ensure a high response rate. Dillman et al. (2014) suggest that in addition to adding an incentive within the body of the email, resending emails and varying the email messaging is critical to obtain higher rates of participant response. While an incentive was not used in this study, follow-up emails took place in order to yield a higher response rate. Dillman et al. also advocate for personalizing emails as much as possible to incentivize participants to take the survey. The following table describes the survey distribution phases of this study.

Table 5

Survey Distribution Phases

Phase:	**Activity:**
Phase 1	Finalized survey and uploaded to REDCap
Phase 2	Created listserv of sample emails
Phase 3	Created an introductory letter to introduce the research study and the researcher
Phase 4	Ensured high response rate by sending follow-up emails

Methods

Quantitative data from this study were thoroughly analyzed in an effort to establish a deeper understanding of the impact PBIS has on students with disabilities based on the perceptions of special educators in five school districts in Vermont. As this study used an already validated survey instrument, quantitative data analysis strategies were similar to the original study conducted by Shuster et al. (2017). Specifically, for research questions 1, 2, and 3, descriptive statistics were used to summarize survey findings across individual research questions. Descriptive statistics included frequency data, measures of central tendency (mean, median, mode), and standard deviation. Specifically, for research question 4, correlational analyses and multiple regression were used to determine if there was a relationship between special educators' perceived fidelity of implementation the benefits of PBIS, special educator involvement in PBIS readiness activities, numbers of years as a special educator, gender, and the disability category of Emotional Disturbance on the participation of students with disabilities in PBIS. Following demographic information and questions related to PBIS features, the remainder of the survey consisted of questions that pertained to special educators' perceptions of their students' involvement in PBIS, their participation in PBIS (proxy for fidelity), and their perception of the benefit of PBIS on students within their caseloads. While analysis of each question was considered, to get a better understanding of the collective thinking of these participants, the analysis was conducted by combining the questions into cohort categories. For example, there were seven questions pertaining to student participation in PBIS, seven questions pertaining to participation (fidelity), and

nine questions pertaining to the benefit of PBIS for students with disabilities. Analyses of these questions were done by creating three different scale variables (Student Participation in PBIS, PBIS Fidelity (based on the 7 questions about participation), and Benefit of PBIS on Students with disabilities) based on the three categories of survey questions. To ensure reliability across the questions and participants, Cronbach's Alpha was used. The dependent scale variable, student participation in PBIS (comprising 7 survey questions), had a strong Cronbach's Alpha at .858. The scale variable, PBIS fidelity (comprising 7 survey questions about participation), had a Cronbach's Alpha of .89. The final scale variable, the benefit of PBIS on students (comprising 9 survey questions), received a Cronbach's Alpha of .909. This data analysis resulted in confidence that the questions asked were internally consistent. This was not surprising as this survey was adapted from an existing validated survey instrument.

In addition to the cohort of survey questions that comprised the following scale variables 1) Student Participation, 2) PBIS Fidelity, and 3) Benefit of PBIS, there were four survey questions that addressed important PBIS readiness activities. As identified earlier in the literature review, a readiness process must be implemented with all staff prior to the implementation of PBIS. The readiness process increases the likelihood of implementation fidelity. PBIS readiness activities include full staff awareness training on PBIS features, buy-in from 80% of all staff meaning 80% of your staff must agree to implement PBIS, allotted time for district-wide and school-wide professional development, and allocated time during the school day for school PBIS to meet and plan. The following survey questions were used to address these readiness components.

- Were you asked for input during the development of your PBIS framework?
- Have you had any training in your school's PBIS framework?
- Is there time allocated during district-wide professional development or planning to develop your school's PBIS framework?
- Is there time allocated during the school day or year for your school's PBIS team planning to occur?

To get an understanding of participants' responses to these four questions, a new variable (Sped_Readiness) was created. To ensure reliability across these four questions, Cronbach's Alpha was again used and resulted in a Cronbach's Alpha of .853. Multiple response frequencies were also calculated to understand the cumulative responses based on the Likert scale selections and will be discussed further in Chapter 4.

Finally, research question 4 analyzed the relationships between the dependent variable, student participation in PBIS and the five independent/predictor variables, PBIS Fidelity (special educators' perceptions of their participation in universal PBIS), special educator involvement in PBIS readiness activities, numbers of years as a special educator, gender, and the disability category of Emotional Disturbance. The analysis of these relationships utilized the Pearson Correlation Coefficient. Table 6 below shows research questions 1, 2, and 3 displayed next to the set of survey questions that will help answer the question. Figure 4 shows the phases for data collection and analysis.

Table 6

Research Questions 1-3 Mapped to Survey Questions

Research Question:	**Survey Questions:**
RQ1: To what extent do students with disabilities participate in the Universal PBIS Framework?	1. Do the students on your caseload know the school-wide/expectations (e.g., Be Respectful, Be Responsible, Be Safe)?
	2. Do the students on your caseload actively participate in school-wide PBIS celebrations (e.g., award assemblies)?
	3. Do the students on your caseload receive or have been given a school-wide acknowledgement (e.g., tickets, tokens, activities that all students can earn)?.
	4. Do the students on your caseload receive consequences similar to other students as outlined in the school discipline plan?
	5. Are the students on your caseload included in school-wide lessons to teach appropriate behavior in each of your school settings?
	6. Are the students on your caseload identified for interventions based on behavioral data (e.g., attendance, office discipline referrals)?
	7. Are the students on your caseload screened in the same way as other students to see if they are in need of more intensive behavioral interventions and supports?
RQ 2: To what extent do special educators participate in the Universal PBIS Framework?	1. Do you reference the school-wide expectations when discussing behavioral expectations with students on your caseload?
	2. Do you participate in reinforcing students using the PBIS framework (e.g., handing out school-wide tickets)?
	3. Do you participate in the school-wide PBIS celebrations (e.g., award assemblies)?
	4. Do you reference the school-wide consequences for inappropriate student behaviors for your students?
	5. Do you teach school-wide expectations to your students?
	6. Do you model the school-wide expectations for your students?

	7. Do you use school-wide behavioral data (e.g., attendance, office discipline referrals) to make decisions about students on your caseload?
RQ 3: How do special educators view the benefit of PBIS for the students with disabilities on their caseloads?	1. Do you feel students on your caseload benefit from PBIS?
	2. Do you feel students on your caseload benefit from having school-wide expectations/rules (e.g., Be Respectful, Be Responsible, Take Pride)?
	3. Do you feel students on your caseload benefit from receiving the same rewards for appropriate behavior as do other students in the school (i.e., school-wide reinforcement)?
	4. Do you feel students on your caseload benefit from participating in school-wide PBIS celebrations (e.g., award assemblies)?
	5. Do you feel students on your caseload benefit from receiving the same consequences for inappropriate behavior as do other students in the school (i.e., school-wide consequences)?
	6. Do you feel students on your caseload benefit from participating in explicit lessons about expected behavior in school settings?
	7. Do you feel students on your caseload benefit from school teams looking at behavioral data to determine which students need additional support?
	8. Do you believe students on your caseload should be included in the PBIS framework at your school?
	9. Do you feel students on your caseload are included in the PBIS framework at your school?

Figure 4

Methods for Data Collection and Data Analysis

Phase	**Procedures**	**Product**
Quantitative Data Collection	• Create listserv of Special Educators working in five school districts in VT • n = 101 Special Educators • Distribute Survey Instrument adapted from Shuster et al., 2017	• n = 70 Participants • n = 5 School Districts • Database with survey data • n = 63 Special Educators
Quantitative Data Analysis	• SPSS • Missing data • Outliers • Descriptive statistics • Pearson correlation analysis • Linear regression	• n = 63 Participants (62%) • n = 4 School Districts • Means, SDs • Significance values • Frequency tables • Table of correlation coefficients with significance • ANOVA • Collinearity Diagnostics

Chapter Four: Analysis and Findings

Introduction

As described in Chapter Three, a survey was distributed to special educators working in five different school districts implementing PBIS in Vermont. Specifically, this survey was designed to understand the extent to which students with disabilities are included in universal PBIS efforts. The survey consisted of 27 questions in addition to general demographic information and questions about special educators' perceptions across the following domains: 1) Participation of students with disabilities in PBIS, 2) Participation of special educators in PBIS (PBIS Fidelity), and 3) Benefits of PBIS for students with disabilities. Participants were invited to share their perceptions using a 5-point Likert scale (i.e., ranging from "Not at all," to "Somewhat," to "fully").

The survey was distributed to 101 special educators in five different school districts (and 20 schools) in Vermont and a total of 70 surveys were completed by study participants. The 70 completed surveys represented 69.3% of the targeted study population. The survey data were collected using REDCap (Research Electronic Data Capture), an electronic data capture tool hosted at the University of Vermont. REDCap is a secure, web-based software platform designed to support data capture for research studies. The data were analyzed by using Statistical Package for the Social Sciences (SPSS). This chapter will focus on the findings of this study including an analysis of results.

Demographic Data

Among the five school districts who participated in the study, 51% of participants were from Hillside SD, 21% were from Mountainside SD, 16% were from Lakeside SD, 13% were from Suburban SD, and only one participant completed the survey from City SD. Although 70 participants completed the survey, three participants were removed from this study as they indicated they were not special educators. One more participant was removed from this study because that participant was the only respondent from the City SD. Removing this participant was logical as much of the data in this study was analyzed at the district level and removing this participant helped to prevent skewing the data. Another three participants were removed as their data presented significant outliers. Therefore, data from 63 participants out of 101 and 19 schools were used for data analysis and analyzed based on four school districts, instead of five. The final survey response rate was 62%. Additionally, the data were thoroughly reviewed to ensure there were no other outliers or duplicates. Table 7 summarizes the adjusted sample.

Table 7

School District and Study Sample

School District	*n*	%
Hillside SD	32	50.8
Mountainside SD	13	20.6
Lakeside SD	10	15.9
Suburban SD	8	12.7
Total	63	100

Of the 63 survey participants, 81% identified as female and 19% identified as male. Approximately, 96% of the participants identified as White (Not Hispanic), 1.6% of participants identified as Multi-Racial, and 1.6% identified as Other. The majority of participants held a Master's Degree (89%), with 11% holding Bachelor's Degree. All study participants identified as having a special education teaching license, although the type of license varied slightly. Fifty-seven percent (57%) indicated they had a Special Educator teaching license for grades K-21, 35% indicated they had a Special Educator teaching license for grades K-8, and 6% indicated they had a Special Educator teaching license for grades 7 through age 21. Finally, 8% of participants indicated they also had an Intensive Special Educator teaching license.

The number of years participants worked as a special educator ranged from one to 42 years with a mean of 14 years. However, when looking at the number of years participants worked at their current school, the mean was nine years. The community size in which these participants worked was not surprising and was to be expected as this study was conducted in a rural state. Thirty-five percent (35%) of participants work in communities with less than 2,500 people, 33% of participants work in communities with 2,500 - 9,000 people, 18% work in communities with 10,000 - 24,999 people, and 14% work in communities larger than 100,000 people. Approximately 81% of study participants indicated they worked in an elementary school, 56% indicated they worked in a middle school, and 11% indicated they worked in a high school. Table 8 summarizes the demographic data of study participants.

Table 8

Demographic Data of Participants

Demographic Variable	School District					
	Hillside (n = 32)	Mountainside (n = 13)	Lakeside (n = 10)	Suburban (n = 8)	Total (n = 63)	Total %
Gender						
Female	27	10	7	7	51	81
Male	5	3	3	1	12	19
Years of Experience						
1-5 Years	7	5	1	3	16	25
6-10 Years	6	3	1	2	12	19
11 - 15 Years	3	1	1	0	5	8
16 - 20 Years	6	1	3	2	12	19
21 Years or Greater	10	3	4	1	18	29
Highest Level of Education						
Masters	31	11	7	7	56	89
Bachelors	1	2	3	1	7	11
Community Size						
Less than 2,500	10	8	3	1	22	35
2, 500 - 9,999	13	4	1	3	21	33
10, 000 - 24,999	6	1	1	3	11	17
25, 000 - 99,999	2	0	4	0	6	10
100, 000 or more	1	0	1	1	3	5

As mentioned in Chapter Three, one characteristic that was explored in this study was a school district's level of poverty, as defined by the number of students receiving free and reduced-priced meals (FRM). Lakeside SD had the highest percentage of students eligible for FRM with 63%, and Hillside SD district had the lowest percentage of students eligible for FRM with 13%. Mountainside SD had 33% of their students receiving FRM and Suburban SD had 27% of students eligible for FRM.

Table 9 below shows the FRM rates for each school district, including the mean score for each of the study's variables: PBIS Fidelity, Benefit of PBIS and Special Educator involvement in PBIS readiness activities.

Table 9

Free and Reduced-Priced Meals (FRM) Across School Districts and Mean Scores Across Three Study Variables.

School District	Students eligible for FRM	Total SD Enrollment	% Low Income	Student Participation in PBIS *M (SD)*	Special Educator Participation in PBIS (PBIS Fidelity) *M (SD)*	Benefit of PBIS for Students with Disabilities *M (SD)*	Special Educator Involvement in PBIS Readiness Activities *M (SD)*
Lakeside SD (n=10)	1,092	1,723	63%	3.3 (1.3)	3.1 (1.3)	3.2 (1.0)	2.18 (1.0)
Hillside SD (n=32)	344	2,648	13%	4.1 (.62)	4.0 (.67)	3.9 (.69)	3.3 (1.1)
Mountainside SD (n=13)	441	1,353	33%	4.0 (.69)	4.0 (.66)	3.8 (.85)	3.13 (1.1)
Suburban SD (n=8)	270	994	27%	4.3 (.46)	4.4 (.39)	4.1 (.61)	4.0 (.463

When participants were asked if their school had a PBIS leadership team, approximately 91% of participants responded "yes." When participants were asked if they were on their school's PBIS leadership team, 81% of participants said they were not. A small percentage of participants indicated they did not know if their school had a PBIS Team or if they were on that team. Tables10 and 11 summarize this data below.

Table 10

Does your School have a PBIS Leadership Team?

Response	*N*	%
Yes	57	90.5
No	5	7.9
I don't know	1	1.6
Total	63	100

Table 11

If yes, are you on that Team?

Response	*N*	%
Yes	10	15.9
No	51	81
I don't know	2	3.2
Total	63	100

When looking at data related to IDEA disability categories and, in particular, ED, participants noted that the students they work with are most frequently identified in the disability category of Specific Learning Disability (41%), followed by the disability categories of Other Health Impairment (25%), Emotional Disturbance (14%) and

Developmental Delay (13%). Only four or 6% of participants indicated they work with students identified with Autism Spectrum Disorder. The most frequently occurring disability categories of students in which these participants serve is found in Table 12.

Table 12

Which of the Following Special Education Categories Best Describe the Largest Category of Students you Currently Serve on your Caseload?

Disability Category	School District					
	Hillside (*n* = 32)	Mountainside (*n* = 13)	Lakeside (*n* = 10)	Suburban (*n* = 8)	*Total (n = 63)*	*Total %*
Autism Spectrum Disorder	3	0	0	1	*4*	*6*
Developmental Delay	3	1	2	2	*8*	*13*
Emotional Disturbance	5	1	2	1	*9*	*14*
Other Health Impairment	11	2	2	1	*16*	*25*
Specific Learning Disability	10	9	4	3	*26*	*41*

Summary of Findings

Research Question 1

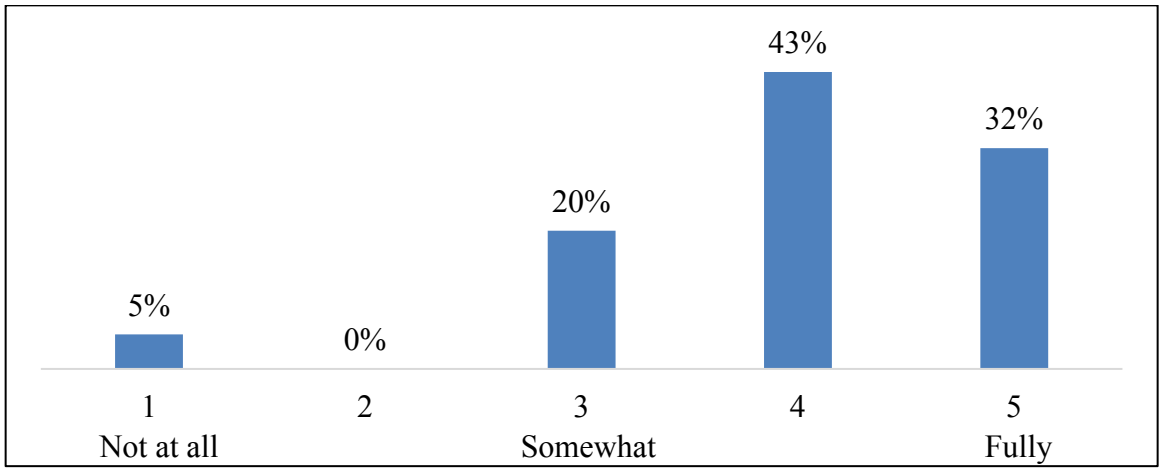
To what extent do students with disabilities participate in the Universal PBIS Framework? (Student Participation)

Findings. The cohort of questions that comprised the variable, Student Participation, included 60 participant responses. The Likert scale for answer selection ranged from 1 = "not at all" to 5 = "fully." The mean score across all questions in this category was relatively high with an overall mean score of 4. The Standard Deviation was .89. While the mean score based on the cumulation of all seven questions was 4, approximately 95% of participants selected that, at a minimum, students on their caseload participate "somewhat" to "fully" in universal PBIS. However, when looking at each question individually, higher rates of variability was found.

Figure 5 shows how participants responded on the Likert scale to the scale variable (comprised of seven survey questions) Student Participation.

Figure 5

Special Educators' Perspectives on the Extent to Which Students on their Caseload Participate in Universal PBIS (n=60)



When looking at participant responses to specific questions within the category of ***Student Participation in PBIS***, the majority of the responses yielded relatively high marks across all questions. For example, when participants were asked "to what extent do

the students on your caseload receive or have been given a school-wide acknowledgement (e.g., tickets, tokens, activities that all students can earn)," 56.5% of participants indicated "fully." A similar pattern was observed across the following questions:

- Do the students on your caseload actively participate in school-wide PBIS celebrations (e.g., award assemblies)? (47.6% = fully)
- Are the students on your caseload included in school-wide lessons to teach appropriate behavior in each of your school settings? (50.8% = fully)

In addition to the questions that yielded the highest percent of responses in the category of "fully," there were a couple of questions in which the category "somewhat" was the most commonly selected answer within this category. For example, when participants were asked, "To what extent do the students on your caseload receive consequences similar to other students as outlined in the school discipline plan," approximately 41% of participants indicated "somewhat." Similar responses were obtained for the following questions:

- Are the students on your caseload identified for interventions based on behavioral data (e.g., attendance, office discipline referrals)? (23.8% = somewhat)
- Do the students on your caseload know the school-wide/expectations (e.g., Be Respectful, Be Responsible, Be Safe)? (22% = somewhat)

There were a couple of questions in which the category "not at all" was the most commonly selected answer within this category and across questions. For example, when participants were asked, "To what extent are the students on your caseload screened in

the same way as other students to see if they are in need of more intensive behavioral interventions and support," 9.4% of participants indicated "not at all." Although the "not at all" category yielded the fewest responses collectively across all questions, the following question yielded a similar response:

- Are the students on your caseload identified for interventions based on behavioral data (e.g., attendance, office discipline referrals)? (6.3% = not at all)

The following tables show the percent of participants responding to each question within the category of Student participation in PBIS.

Table 13

Student Participation in PBIS (Frequency Data)

RQ1: Student Participation in PBIS (Comprised of the following 7 questions found in the table below)	**N**	**Min.**	**Max.**	**Median**	**Mean**	**SD**
	60	1.0	5.0	4.1	**4**	.89

Table 14

Special Educators' Perspectives on the Extent to Which Students on their Caseload Participate in Universal PBIS.

RQ1: To what extent do students with disabilities participate in the Universal PBIS Framework?	**Percent Responding**					***M (SD)***
	Not at all		**Somewhat**		**Fully**	
	1	**2**	**3**	**4**	**5**	
1. Do the students on your caseload know the school-wide/expectations (e.g., Be Respectful, Be Responsible, Be Safe)?	3.2	1.6	**22.2**	36.5	36.5	*4.2 (.97)*

2.	Do the students on your caseload actively participate in school-wide PBIS celebrations (e.g., award assemblies)?	3.2	3.2	19.0	22.2	**47.6**	*4.1 (1.0)*
3.	Do the students on your caseload receive or have been given a school-wide acknowledgement (e.g., tickets, tokens, activities that all students can earn)?.	1.6	3.2	14.5	24.2	**56.5**	*4.3 (.95)*
4.	Do the students on your caseload receive consequences similar to other students as outlined in the school discipline plan?	4.7	3.1	**40.6**	29.7	21.9	*3.6 (1.0)*
5.	Are the students on your caseload included in school-wide lessons to teach appropriate behavior in each of your school settings?	4.8	4.8	11.1	28.6	**50.8**	*4.1 (1.1)*
6.	Are the students on your caseload identified for interventions based on behavioral data (e.g., attendance, office discipline referrals)?	**6.3**	6.3	**23.8**	34.9	28.6	*3.7 (1.1)*
7.	Are the students on your caseload screened in the same way as other students to see if they are in need of more intensive behavioral interventions and support?	**9.4**	6.3	20.3	21.9	42.2	*3.8 (1.3)*

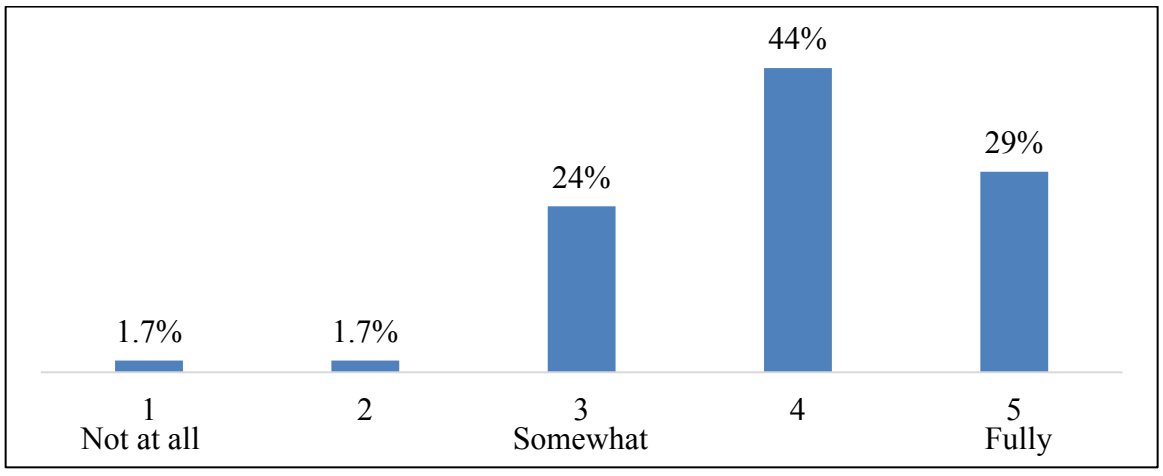
Research Question 2

To what extent do special educators participate with fidelity in the Universal PBIS Framework? (PBIS Fidelity)

Findings. The cohort of questions that comprised the variable, PBIS Fidelity, included 59 participant responses. The mean rating across all questions in this category was relatively high as well with an overall mean score of 3.9. The Standard Deviation was .79. While the mean score based on the cumulation of all seven questions was 3.9, approximately 97% of participants selected that, at a minimum, that they participate "somewhat" to "fully" in universal PBIS. However, when looking at each question individually, higher rates of variability was found. Figure 6 shows how participants responded on the Likert scale to the scale variable (comprised of seven survey questions) Special Educator Participation (PBIS Fidelity).

Figure 6

Special Educators' Perspectives on the Extent to which They Participate in Universal PBIS (PBIS Fidelity) (n=59)



When looking at participant responses to specific questions within the category of ***Special Educator Participation in PBIS***, the majority of the responses yielded relatively high marks across all questions. For example, when participants were asked, "To what extent do you model the school-wide expectations for your students," 72.6% of participants indicated "fully." As can be seen in Table 15 below, this high response rate to the category of "fully" was similar when looking to the following questions as well:

- Do you teach school-wide expectations to your students? (54.8% = fully)
- Do you participate in the school-wide PBIS celebrations (e.g., award assemblies)? (51.6% = fully)

The question that yielded the smallest percentage of respondents selecting "fully" (30.6%) was when participants were asked, "To what extent do you use school-wide behavioral data (e.g., attendance, office discipline referrals) to make decisions about students on your caseload?" This question also happened to yield one of the highest participant responses (24.2%) in the category of "somewhat" compared with other questions. The response rate of "somewhat" was similar when looking to the following questions as well:

- Do you reference the school-wide consequences for inappropriate student behaviors for your students? (24.2% = somewhat)
- Do you participate in reinforcing students using the PBIS framework (e.g., handing out school-wide tickets)? (17.7% = somewhat)
- Do you reference the school-wide expectations when discussing behavioral expectations with students on your caseload? (17.7% = somewhat)

When looking at other questions related to PBIS Fidelity, the percentage of participants who responded by selecting "not at all" to these questions was very similar and ranged from a minimum of 3.2% participants to a maximum of 6.5% participants. However, when looking at the "2" selection option on the Likert scale, 8.1% of participants responded to the following question:

- Do you participate in reinforcing students using the PBIS framework (e.g., handing out school-wide tickets)? (8.1% = 2)

This was at least double the percentage of responses compared with other questions in the category. The following tables show the percentage of participants responding to each question within the category of PBIS Fidelity.

Table 15

Special Educator Participation PBIS (PBIS Fidelity) (Frequency Data)

RQ2: Special Educator Participation in PBIS (Comprised of the following 9 questions found in the table below)	**N**	**Min.**	**Max.**	**Median**	**Mean**	**SD**
	59	1.0	5.0	4.1	3.9	.79

Table 16

Special Educators' Perspectives on the Extent to which They Participate in Universal PBIS.

RQ 2: To what extent do special educators participate in the Universal PBIS Framework (PBIS Fidelity)?	**Percent Responding**					***M (SD)***
	Not at all		**Somewhat**		**Fully**	
	1	**2**	**3**	**4**	**5**	
1. Do you reference the school-wide	4.8	3.2	**17.7**	30.6	43.5	*4.0 (1.1)*

	expectations when discussing behavioral expectations with students on your caseload?						
2.	Do you participate in reinforcing students using the PBIS framework (e.g., handing out school-wide tickets)?	6.5	**8.1**	**17.7**	27.4	40.3	*3.8 (1.2)*
3.	Do you participate in the school-wide PBIS celebrations (e.g., award assemblies)?	6.5	4.8	11.3	25.8	**51.6**	*4.11 (1.1)*
4.	Do you reference the school-wide consequences for inappropriate student behaviors for your students?	4.8	1.6	**24.2**	32.3	37.1	*3.95 (1.0)*
5.	Do you teach school-wide expectations to your students?	6.5	0.0	14.5	24.2	**54.8**	*4.2 (1.1)*
6.	Do you model the school-wide expectations for your students?	3.2	0.0	6.5	17.7	**72.6**	*4.5 (.88)*
7.	Do you use school-wide behavioral data (e.g., attendance, office discipline referrals) to make decisions about students on your caseload?	6.5	3.2	**24.2**	35.5	30.6	*3.8 (1.1)*

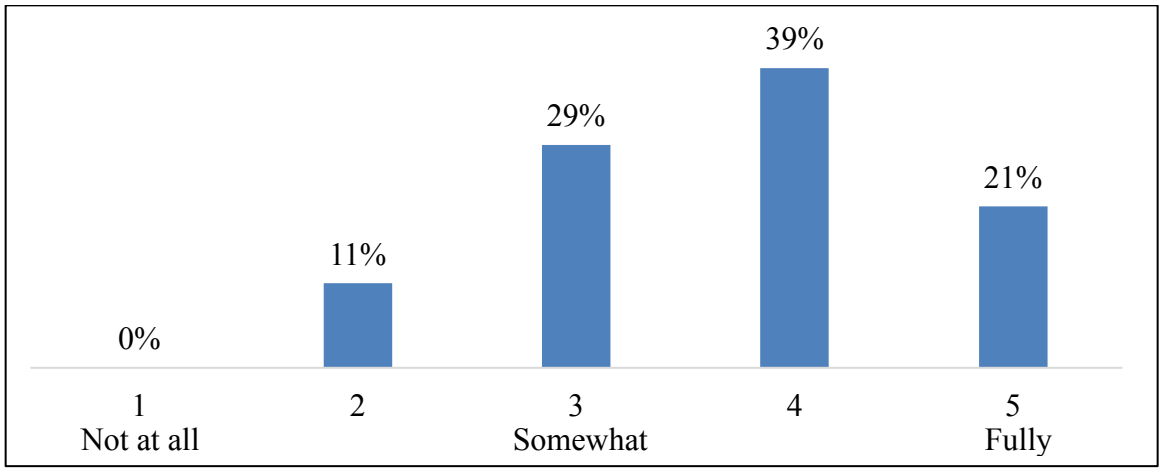
Research Question 3

How do special educators view the benefit of PBIS for the students with disabilities on their caseloads? (Benefit of PBIS)

Findings. The cohort of questions that comprised the variable, Benefit of PBIS, included 57 participant responses. The Likert scale for answer selection for this category remained the same as the previous variable discussed and ranged from 1 = "not at all" to 5 = "fully." The mean rating across all questions in this category was slightly lower than the previous categories with an overall mean score of 3.9. The Standard Deviation was .69. While the mean score based on the cumulation of all nine questions was 3.9, approximately 89% of participants selected that, at a minimum, that their students benefit "somewhat" to "fully" in universal PBIS. When looking at each question individually, higher rates of variability was found. Figure 7 shows how participants responded on the Likert scale to the scale variable (comprised of nine survey questions) Benefit of PBIS.

Figure 7

Special Educators' Perspectives on the Extent to which the Students on their Caseload Benefit From Universal PBIS (n=57)



When looking at participant responses to specific questions within the category of ***Benefit of PBIS for Students with Disabilities,*** a similar trend was in that the majority of

the responses to this category yielded relatively high marks across all questions. This was the same when looking at the variables, Student Participation and PBIS Fidelity. For example, when participants were asked, "To what extent do you believe students on your caseload should be included in the PBIS framework at your school?," 76.7% of responses selected, "fully." Similar high responses of "fully" were reported in the following questions:

- Do you feel students on your caseload are included in the PBIS framework at your school? (43.3% = fully)
- Do you feel students on your caseload benefit from having school-wide expectations/rules (e.g., Be Respectful, Be Responsible, Take Pride)? (56.7% = fully)
- Do you feel students on your caseload benefit from participating in explicit lessons about expected behavior in school settings? (56.7% = fully)

In addition to the questions that yielded the highest percent of responses in the category of "fully," there were a couple of questions in which the category "somewhat" was the most commonly selected answer. For example, when participants were asked, "To what extent do you feel students on your caseload benefit from receiving the same consequences for inappropriate behavior as do other students in the school (i.e., school-wide consequences)," 35% of participants indicated "somewhat." The response "somewhat" was similar for the following questions as well:

- Do you feel students on your caseload benefit from PBIS? (27.6% = somewhat)

- Do you feel students on your caseload are included in the PBIS framework at your school? (21.7% = somewhat)

While the majority of participants selected 4 and 5 on the Likert scale related to the Benefit of Students across all questions, there were a couple of questions that yielded higher responses in the percentage of participants who responded by selecting "not at all." These questions include:

- Do you feel your students benefit from school teams looking at behavioral data to determine which students need additional support? (8.2% = not at all)
- Do you feel students on your caseload are included in the PBIS framework at your school? (8.3% = not at all)

The following tables show the percentage of participants responding to each question within the category of Benefit of PBIS.

Table 17

Benefit of PBIS for Students with Disabilities (Frequency Data)

RQ3: Benefit of PBIS for students with disabilities (Comprised of the following 9 questions found in the table below)	**N**	**Min.**	**Max.**	**Median**	**Mean**	**SD**
	57	1.0	5.0	4.0	3.9	.69

Table 18

Special Educators' Perspectives on the Extent to which the Students on their Caseload Benefit From Universal PBIS

RQ 3: How do special educators view the benefit of PBIS for the students with disabilities on their caseloads?	**Percent Responding**					***M (SD)***
	Not at all		**Somewhat**		**Fully**	
	1	**2**	**3**	**4**	**5**	
1. Do you feel students on your caseload **benefit** from PBIS?	3.3	8.3	**26.7**	36.7	25.0	*3.7 (1.0)*
2. Do you feel students on your caseload benefit from having school-wide expectations/rules (e.g., Be Respectful, Be Responsible, Take Pride)?	**1.7**	5.0	6.7	30.0	**56.7**	*4.3 (.93)*
3. Do you feel students on your caseload benefit from receiving the same rewards for appropriate behavior as do other students in the school (i.e., school-wide	3.3	11.7	16.7	21.7	46.7	*3.9 (1.1)*

	reinforcement)?						
4.	Do you feel students on your caseload benefit from participating in school-wide PBIS celebrations (e.g., award assemblies)?	5.0	10.0	10.0	31.7	43.3	*3.9 (1.2)*
5.	Do you feel students on your caseload benefit from receiving the same consequences for inappropriate behavior as do other students in the school (i.e., school-wide consequences)?	6.7	11.7	**35.0**	23.3	23.3	*3.4 (1.1)*
6.	Do you feel students on your caseload benefit from participating in explicit lessons about expected behavior in school settings?	3.3	1.7	16.7	21.7	**56.7**	*4.3 (1.0)*
7.	Do you feel your students benefit from school teams	**8.3**	3.3	15.0	40.0	33.3	*3.8 (1.2)*

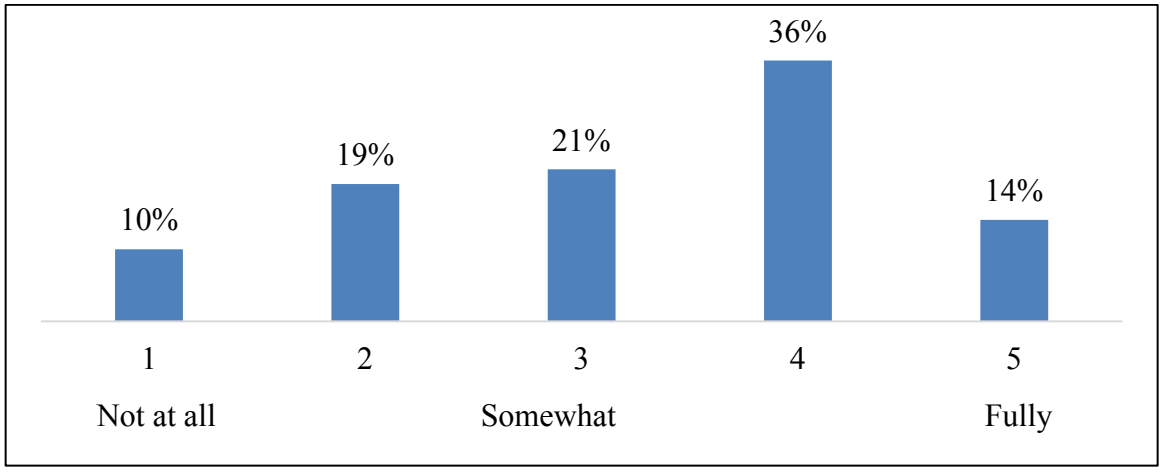
	looking at behavioral data to determine which students need additional support?						
8.	Do you believe students on your caseload ***should*** be included in the PBIS framework at your school?	1.7	1.7	10.0	10.0	**76.6**	*4.5 (.87)*
9.	Do you feel students on your caseload ***are*** included in the PBIS framework at your school?	**8.3**	3.3	**21.7**	23.4	**43.3**	*3.9 (1.2)*

PBIS Readiness

Findings. When looking at the descriptive statistics across all questions that created the scale variable, ***special ed involvement in PBIS readiness***, the mean score of 3.1 was the lowest when compared to the mean scores of the other scale variables in this study (e.g., Student Participation, PBIS Fidelity, and Benefits of PBIS). Approximately 50% of participants selected that, at a minimum, that they are "somewhat" to "not at all" involved in PBIS readiness activities. Figure 8 shows how participants responded on the Likert scale to the scale variable (comprised of four survey questions) Special Educator Involvement in PBIS Readiness.

Figure 8

Special Educator Involvement in PBIS Readiness Activities (n=61)



While the mean score based on the cumulation of all four questions was 3.1, there were higher rates of variability when looking at each question independently. For example, when participants were asked, "To what extent have you participated in any training in your school's PBIS framework?" 32.2% of participants indicated, "fully." This was similar to the following question:

- Were you asked for input during the development of your PBIS framework? (25.4% = fully)

When looking at which questions had the highest percent of participant responses within the category of "somewhat," the following question rose to the top with 29.8%:

- Do you feel there is enough time allocated during district-wide professional development or planning to develop your school's PBIS framework? (29.8% = somewhat)

While collectively PBIS Readiness yielded the lowest percentage of participants selecting "fully," the variable PBIS Readiness yielded the highest response rate in the Likert scale category of "not at all." These questions include:

- Were you asked for input during the development of your PBIS framework? (23.7 = not at all)
- Do you feel there is enough time allocated during the school day or year for your school's PBIS team planning to occur? (14% = not at all)

The following tables show the percentage of participants responding to each question within the category of PBIS Readiness.

Table 19

Special Educator Involvement in PBIS Readiness (Frequency Data)

Special Educator involvement in PBIS Readiness	N	Min.	Max.	Median	Mean	SD
	61	1.0	5.0	3.5	3.14	1.1

Table 20

Special Educator Involvement in PBIS Readiness (Scale Variable)

Special Educator involvement in PBIS Readiness (Comprised of the following 4 questions found in the table below)	**Percent Responding**					***M (SD)***
	Not at all		**Somewhat**		**Fully**	
	1	**2**	**3**	**4**	**5**	
1. Were you asked for input during the	**23.7**	10.2	15.3	25.4	**25.4**	*3.1 (1.5)*

	development of your PBIS framework?						
2.	Have you participated in any training in your school's PBIS framework?	13.6	8.5	16.9	28.8	**32.2**	*3.5 (1.2)*
3.	Do you feel there is enough time allocated during district-wide professional development or planning to develop your school's PBIS framework?	8.8	17.5	**29.8**	26.3	17.5	*3.2 (1.2)*
4.	Do you feel there is enough time allocated during the school day or year for your school's PBIS team planning to occur?	**14**	22.8	22.8	29.8	10.5	*3 (1.3)*

Other survey questions related to special educator involvement and engagement in PBIS were analyzed as well.

When participants were asked if their school had a PBIS leadership team, approximately 91% of participants responded "yes." When participants were asked if they were on their school's PBIS leadership team, 81% of participants said they were not. A small percentage of participants indicated they did not know if their school had a PBIS

Team or if they were on that team. Tables 21 and 22 summarize this data below.

Table 21

Does your school have a PBIS Leadership team?

Response	*n*	%
Yes	57	90.5
No	5	7.9
I don't know	1	1.6
Total	63	100

Table 22

If yes, are you on that team?

Response	*n*	%
Yes	10	15.9
No	51	81
I don't know	2	3.2
Total	63	100

Research Question 4

How does the fidelity of implementation, the perception of the benefits of PBIS, special educator involvement in PBIS readiness activities, and Emotional Disturbance influence the participation of students with disabilities in PBIS?

Findings. Based on the literature and original correlations across various potential predictors of the participation of students with disabilities in universal PBIS, the following variables were explored in the correlation analysis: 1) perceived fidelity of PBIS implementation (PBIS Fidelity); 2) special educator involvement in readiness activities (PBIS Readiness); 3) perceived benefit of PBIS (Benefit of PBIS); 4) number of

years as a special educator (Number of Years), Gender, and disability category Emotional Disturbance (ED). Table 23 summarizes the bivariate correlation results. As can be seen on the table, PBIS Fidelity, PBIS Readiness, and Benefit of PBIS are positively and significantly correlated with the dependent variable, student with disabilities' participation in PBIS. This indicates there is a positive relationship between the variables (special educators' implementation of PBIS with fidelity, perception of the benefit of PBIS, and involvement in PBIS readiness activities) but does not indicate that one of these variables causes the other. Gender, number of years as a special educator, and disability category of ED did not yield significant correlations with the participation of students with disabilities in PBIS, indicating there is little to no relationship between these variables and the participation of students with disabilities in PBIS. Table 23 summarizes these data.

Table 23

Descriptive Statistics and Correlations for Study Variables

Variable	*n*	*M*	*SD*	1	2	3	4	5	6
1. Student Participation	60	3.9	0.9						
2. PBIS Fidelity	59	3.9	0.8	.771**					
3. PBIS Readiness	61	3.1	1.2	.568**	.775**				
4. Benefit of PBIS	57	3.9	0.7	.597**	.705**	.694**			
5. Number of years	63	13.9	9.3	.078	.029	.227	.220		
6. Gender	63	.8	0.4	.243	.199	.122	.006	.115	
7. ED	63	.14	0.3	.077	.019	.017	-.175	-.044	-.033

** $p < 0.01$ (2-tailed). ED = Emotional Disturbance

Prior to carrying out the multiple regression analysis with these variables to estimate the relationship between the predictor and dependent variables, I thoroughly checked for assumptions that could potentially impact the data model (Pallant, 2016). The assumption of multicollinearity was assessed by checking the correlations across the dependent variable and the independent variables to ensure that at least some relationship existed. As previously mentioned, this was true for the following variables: PBIS Fidelity, Benefit of PBIS, and PBIS Readiness. Second, I looked at the Tolerance and VIF values to ensure that they did not suggest the possibility of multicollinearity. According to Hair et al. (2010) and Pallant (2016), if the VIF value exceeds 10, or tolerance less than 0.4 is observed, then there is usually a problem with multicollinearity. In this case, no violation of the assumption of multicollinearity was observed for any of the variables except for the perceived benefit of PBIS. Although there was a high correlation between student participation in PBIS and special educators' perceived benefit of PBIS, this variable was removed due to problems with multicollinearity. Therefore, five predictor variables were used in the final regression model (PBIS Fidelity, PBIS Readiness, Number of Years, Gender, and ED).

I also preliminarily checked for other violations of assumptions including outliers, normality, linearity, homoscedasticity, and independence of residuals by inspecting the Probability Plot (P-P) of the Regression Standardized Residuals and the Scatter-plot. Based on the Normal P-P Plot, there were no major deviations from normality. When examining the Scatterplot of the standardized residuals, the data appears to be roughly rectangularly distributed, meaning there are no violations of these assumptions. However,

after inspecting the Mahalanobis distances and based on the critical value of five predictor variables (critical value = 20.52), three outliers were discovered. The Mahalanobis distances of three cases were well outside of the critical value of 20.52. Therefore, the three outliers were then removed prior to running the multiple regression. This was to ensure that the outliers did not affect the regression model.

Regression Model. The multiple regression with all five predictor variables produced a strong regression equation $R^2 = .615$, ($F(5, 53) = 16.916$, $p < .001$). The results of the regression indicated that the model explained 62% or ($R^2 = .615$) of the variance in the participation of students with disabilities in PBIS. When looking specifically at each variable in the model, PBIS fidelity made the largest unique contribution ($\beta = .828$, $t = 6.330$, $p = .001$) in the participation of students with disabilities in PBIS. Specifically, as PBIS fidelity increased by 1 unit, students with disabilities' participation also increased by approximately .828 of a unit when controlling for readiness, number of years, gender, and ED. The other four variables, special educator involvement in readiness ($\beta = -.103$, $t = -.793$, $p = .432$), number of years as a special educator ($\beta = .053$, $t = .610$, $p = .544$), gender ($\beta = .088$, $t = 1.002$, $p = .321$), , and ED ($\beta = .067$, $t = .783$, $p = .437$) did not make a significant contribution to the model and were not significant in predicting the participation of students with disabilities in universal PBIS. Table 24 below summarizes the regression analysis for study variables.

Table 24

Regression Analysis Summary for Study Variables Predicting Students with Disabilities Participation in PBIS

Variable	*B*	β	*t*	*P*
1. Student Participation (Constant)	.260		.608	.546
2. PBIS Fidelity	.936	.828	6.330	.001
3. PBIS Readiness	-.078	-.103	-.793	.432
4. Number of years	.005	.053	.610	.544
5. Gender	.199	.088	1.002	.321
6. ED	.170	.067	.783	.437

** $p < 0.01$ (2-tailed). ED = Emotional Disturbance

Chapter Five: Discussion

Since PBIS has been acknowledged, nationally, as one of the best evidenced based practices that support the social, emotional, and behavioral well-being of all students, including students with disabilities, the need to understand how universal PBIS practices include students with disabilities from the perspectives of special educators is relevant. This chapter summarizes study findings in relation to the study's four research questions, and implications of the results related to the literature review will be discussed. Finally, study limitations and recommendations for future research are offered.

Findings and Implications

Implementation Fidelity Matters (RQ 1 & RQ 2)

Study findings reveal that implementing PBIS with fidelity matters, when fidelity is defined as special educators' participation in the implementation of PBIS. When special educators perceive they are participating in and implementing PBIS with high rates of fidelity, the involvement and participation of students with disabilities in universal PBIS also increases. As mentioned in the literature review, there are several benefits to implementing PBIS with fidelity for all students, including students with disabilities. As Bradshaw et al. (2010) note, access to universal PBIS activities for students with disabilities is critical because implementing PBIS with fidelity leads to reductions in exclusionary discipline practices. Knowing that students with disabilities in Vermont are twice as likely to receive one or more out-of-school suspension compared to students without disabilities (VT AOE, 2016), involving students with disabilities in PBIS is vital. Snell (2006) also reminds us that students with disabilities are often

excluded from school-wide universal practices, such as PBIS. Fidelity of implementation is not only important at the individual level; implementation fidelity matters at the systems level as well. Childs et al. (2016) confirmed that when schools implement high levels of fidelity, often these schools have fewer exclusionary practices. This is also supported by Freeman et al. (2016) that suggest even when schools implement PBIS with "medium" levels of fidelity, exclusionary discipline practices for all students and students with disabilities decreases.

The implication of these results indicates the value of ensuring that all educators, including special educators, engage in implementing universal PBIS practices with fidelity. As the literature confirms, when schools implement PBIS, an MTSS Framework, not only do students benefit, but staff benefit too; school climate improves, administrator and staff retention increase, academic outcomes for students increase, and exclusionary discipline practices decrease (Bradshaw et al., 2014; Koth et al., 2008; Cohen et al., 2009; Yasin, 1999). While this study's scale variable, *staff participation in PBIS*, was used as a proxy for the variable, *implementation fidelity*, understanding how to measure and define fidelity both at the individual and systems level is important. That said, it is important to note that this study looked solely at special educators' perceptions of their own involvement in universal PBIS practices and it would be pertinent to explore other fidelity tools beyond self-reporting measures. As mentioned in Chapter One, much of the fidelity data on PBIS implementation in Vermont is measured by the triangulation of several PBIS endorsed self-perception fidelity tools (e.g., PBIS Tiered Fidelity Inventory (TFI), School-wide Assessment Tool (SAS), and self-reported academic data), including

this study. Therefore, the need to explore other measures of system-wide implementation of fidelity on student outcomes should open the door for further conversations and research on how to measure fidelity at the individual practitioner level and at the systems level beyond using self-reporting measures.

Implementing practices with fidelity takes time, buy-in, professional development, coaching, and funding. While participants in this study indicated favorably that special educators implement PBIS practices with fidelity, it is still concerning that a majority (81%) of special educators indicated that they are not on their schools' PBIS leadership teams. Fortunately, only a small percentage of participants indicated that they did not know their school had a PBIS Leadership team and/or did not know if they were on this team. Therefore, it is important to include special educators in the system structures (e.g., teaming) where implementation and practices are discussed that support all students. Special educators bring a unique voice and perspective regarding our schools most vulnerable populations and it is critical for them to be at the table when school-wide decisions are being made.

Belief in the Benefit (Buy-in) of PBIS is Important (RQ 3)

Although the findings were not statistically significant, the study found that there is a strong relationship ($R^2 = .597$) between special educators' perception of the benefits of PBIS and the participation of students with disabilities in PBIS (See Table 23 in Chapter Four – Correlation). In particular, when looking at the scale variable, Benefit of PBIS, 60% of study participants responded that they feel the students on their caseload "fully" (including both 4 and 5 Likert scale selections) benefit from universal PBIS, 29%

percent indicated that their students "somewhat" benefit from universal PBIS, and only 11% (including 1 and 2 Likert scale selections) responded that their students did not likely benefit from universal PBIS. Similarly, when participants were asked the specific question "Do you feel students on your caseload **benefit** from PBIS?", approximately 62% responded "fully." When participants were asked, "Do you believe students on your caseload ***should*** be included in the PBIS framework at your school?", 77% of participants responded, "fully". Interestingly, when participants were asked if they believe that students on their caseload ***are*** included in PBIS, the response was less with 43% of the participants selecting "fully." These findings suggest there is a gap in the perception of special educators' belief that students on their caseloads ***should*** be included in PBIS versus special educators' perceptions that students on their caseloads ***are*** included in universal PBIS. Although this study did not provide an opportunity to explore this further, it would be important to investigate this in future research.

While overall 60% of the special educators who participated in this study believe that students with disabilities benefit from PBIS, this percentage is less than what Shuster et al. (2017) discovered when asking the same question. Shuster and colleagues found that 80% of special educators (study participants) in Tennessee believed that students with disabilities benefit from PBIS. Landers et al. (2012), in a survey of PBIS State Coordinators, found that 93% of participants believed that students with disabilities should participate in PBIS. However, as noted earlier, despite the smaller percentage of Vermont special educators in the study (60%) indicating they feel that students with

disabilities benefit from PBIS, the study did show a strong relationship between perceived benefit of PBIS with students with disabilities participation in PBIS.

These results indicate that special educators' belief in the benefit of PBIS and the level of buy-in of PBIS correlates with students' participation in PBIS. While this study did not conclude that the belief in PBIS impacts the participation of student with disabilities in PBIS, multiple research studies, (e.g., Fullan, 2001; Ryndak et al., 2007; Sarason, 1982), have shown that the belief and buy-in of practices can impact fidelity of implementation. On the whole, these researchers found that the implementation of PBIS with fidelity is contingent on having the support and buy-in of all teachers and school staff. One of the critical features of implementing practices or frameworks with fidelity is ensuring that all stakeholders learn and are knowledgeable about the practice or framework. Of note is the fact that in this study, only 32% of special educators indicated that they "fully" received training on PBIS and only 25% of special educators indicated they were asked for input during the development of their PBIS framework. As indicated earlier, if belief and buy-in are critical to implementation, then how do we engage our special educators in this process? What structures, practices, or service delivery models get in the way of special educator participation in learning about initiatives?

Engaging in Readiness Activities is Critical (RQ 4)

Study findings indicate that when special educators are involved and included in PBIS readiness activities, there is also a strong correlation with students' participation in PBIS. Although not significantly significant, when special educators are involved in readiness activities, a positive relationship ($R^2 = .568$) occurs with the participation of

students with disabilities in PBIS (Table 23 in Chapter Four – Correlation). Readiness activities include special educators' involvement with development of their schools' PBIS framework, structured time during the school day for PBIS planning, and targeted professional development. Interestingly, when looking at the descriptive statistics across all questions that created the scale variable, *special ed involvement in PBIS readiness*, the mean score of 3.14 (on the Likert scale from 1-5) was the lowest when compared to the mean scores of the other scale variables in this study (e.g., Students with disabilities' participation in Universal PBIS, Special Educator Participation in PBIS (PBIS Fidelity), and Special Educators' perception on the Benefits of PBIS). Additionally, when looking at the participants' responses to each of the four questions that created the scale variable, *special ed involvement in PBIS readiness,* all four questions yielded relatively lower means compared to other questions asked in this study (Table 20 in Chapter 4).

These results confirm what has been reported in the literature; namely, that readiness is a critical feature to implementing PBIS with fidelity and one of the most challenging to accomplish. According to Simonsen et al. (2008), engaging in PBIS readiness activities is one of the most critical steps to implementing PBIS with fidelity. Furthermore, all school staff must learn about PBIS features and commit to the implementation of PBIS practices (Sugai & Horner, 2002). As mentioned in the literature review, readiness activities must also include the development of a PBIS leadership team at the school level, consistent and frequent communication between administrators and staff, and school district support (Handler et al., 2007). The findings in this study indicate that special educators are less likely, or are less likely to perceive, that they are involved

in PBIS readiness activities. Additionally, they indicate that they do not have enough time during the school day to dedicate to PBIS efforts or enough time for professional development. While special educators indicate that students on their caseloads participate in universal PBIS and indicate that they are less involved in PBIS readiness activities, this was an interesting finding considering the positive relationship identified between special educators' involvement in readiness activities and students' participation in PBIS. Therefore, if the literature suggests that engaging all staff in PBIS readiness activities is critical for the implementation of PBIS with fidelity, and this study shows a positive relationship between special educators' involvement in readiness activities and the participation of students with disabilities in PBIS, it is critical that we continue to engage Vermont special educators in the readiness process as well. It would also be worth exploring how to define "readiness" as a construct variable.

No Relationship with Disability Category (RQ 4)

Regarding whether or not a student's disability category has a relationship with the participation of students with disabilities in PBIS, the study revealed that the type of disability category a student is identified with has no significance on the participation of students with disabilities in universal PBIS. This was true when looking at all 13 IDEA disability categories, including those with ED.

The implications of these results offer a unique perspective on students identified with ED in Vermont and their participation in universal PBIS. The literature on ED and PBIS suggests that often students with ED are less likely to participate in universal interventions and support because 1) often there is a misunderstanding that students

receiving special education services should only receive intensive interventions, and 2) students with emotional disturbance are often in self-contained programs (Benner et al., 2010; Simonsen et al., 2020). Going into this study, I was very curious about the extent to which students with ED in Vermont participate in universal PBIS. These findings are good news for Vermont schools: as mentioned earlier in the literature review, Vermont has the highest percentage of students identified with ED in the nation (VT AOE, 2016). I speculate that the results regarding ED and students with disabilities' participation in PBIS, in a broader sense, affirm Vermont's rich history of creating policies and programs that are inclusive of all students, including students with disabilities. Furthermore, the implementation of PBIS has been long-standing and the VTPBIS State team has been well supported by both the Vermont Agency of Education as well as the National Technical Assistance Center for PBIS. I believe that this consistent and collaborative relationship over the past 15 years has paved the way for the VTPBIS State Leadership team to provide high quality professional development, coaching support, and funding opportunities to ensure that Vermont schools interested in implementing PBIS are able to do so and ensure that they are implementing PBIS critical features with fidelity.

Limitations

While this study provided both conceptual and empirical contributions to the field of research in relation to students with disabilities participation in PBIS, as mentioned above, there were several limitations. Study limitations pertain to sampling methods and sample size, lack of data, survey instrument, and the timing in which data collection took place.

Sampling Methods and Sample Size

As mentioned in Chapter Three, purposive, convenience and proportional sampling were used to identify participants for this study. This strategy was useful for this study's research questions but using probability sampling with a larger sample size could have yielded different and interesting survey results. The sample size of 101 special educators working in PBIS schools was also limiting in that it only provided the voice of special educators working PBIS schools. It may be pertinent to include other school staff voices in future research and to include schools that are not implementing PBIS in future studies.

Lack of Data

As the purpose of this study was to explore the inclusion of students with disabilities in universal PBIS through the perspectives of special educators working in different school districts implementing PBIS in Vermont and to see what other factors may contribute to the participation of students with disabilities in universal PBIS, it was challenging to find PBIS fidelity data at the district level. While fidelity data at the school level does exist, in order to obtain a high response, participants were not asked to identify the school they worked in. Obtaining a high response rate was more critical as census sampling was used and this study's sample size was small to begin with. As the survey did not prompt participants to identify the school in which they work, school level fidelity data was not used as a research variable. Instead, as mentioned in Chapter Three, special educator participation in PBIS was used as the proxy for fidelity of implementation.

To get a deeper understanding of the impact that fidelity of PBIS implementation has on students' participation in PBIS, it would behoove future research to consider collecting fidelity data at both the school and district levels. Perhaps, even conducting a study comparing self-perception fidelity data with outside externally assessed fidelity data within the same sample.

Survey Instrument

The quantitative survey instrument used in this study was adapted from a pre-existing validated survey. The survey instrument itself was not necessarily a limitation, however the use of only one survey instrument to collect perception data may have limited the breadth and depth of research findings. Had the study employed a mixed methods design that included participant interviews or a focus group, additional special educator perspectives could have been included. The data collected from this survey could be used to inform future studies. Additionally, the survey instrument could be adapted for future studies to gain a deeper and more comprehensive understanding of school-wide initiatives, like PBIS, and how they impact students with disabilities. Perhaps a mixed-methods approach could add to this study's empirical data and go deeper in understanding the lived experiences of special educators in Vermont and their impact on supporting students with disabilities within the PBIS framework.

Global Pandemic

The act of engaging in research is predicated on the understanding that "research" does not exist in a vacuum. The variables and constructs do not freeze in time, nor do the influences of a contested presidential election, or in this case, a global pandemic. The

very nature of distributing and collecting survey data from participants during the initial months of the global COVID-19 pandemic posed some challenges. An original iteration of the study's methodological design included face to face opportunities for me to meet with each school district's special educators at their local department meetings. The plan was to introduce this study and field any questions eligible participants had, with the hope of yielding a high survey response rate. Instead, due to state level mandates to curb COVID-19 outbreaks, it was not possible to conduct these meetings in person nor was there time to conduct meetings virtually. In fact, during these initial months, schools in Vermont closed and educators were asked to work from home. Therefore, as discussed in Chapter Three, I emailed the survey to participants and did follow-up emails to encourage participation. It is really hard to know the full ramifications a global pandemic can have on the impact of this study's participation rates and/or findings, but it does beg the question, "How would the study have changed under different circumstances?"

Recommendations for Policy, Practice, Research

Given the study's scope and limitations, implications and recommendations must be carefully considered and contextualized. It is in this spirit that I offer the following recommendations for policy, educational practices, and areas in need of further study.

Policy Recommendations

While the implementation of PBIS is well established in Vermont and there exists a strong relationship with the VTPBIS State Leadership Team and the VT AOE, the current funding mechanism to support PBIS and other educational initiatives through BEST/Act 230 funds should remain a viable resource to support and sustain these efforts.

Although BEST/Act 230 funding guidelines were not addressed fully in this study, it is clear that school districts' access to BEST/Act 230 funds are critical for success (VTPBIS Annual Report, 2020). However, I would strongly recommend that the VT AOE consider increasing the flexibility in how these funds can be used. Currently, allowable funds are only to be used for professional development (training) and external coaching support. Unfortunately, these funds cannot be used to purchase materials, books, or other activities that may serve to support PBIS implementation efforts. This lack of flexibility in use of these funds could potentially limit school districts' access to valuable resources as school budgets are becoming increasingly tight. It could also jeopardize the amount of funds the legislature earmarks each year for BEST/Act 230 funds, especially if funds are unused and returned to the State.

This study also prompted several questions about implementation fidelity, in particular how to measure the fidelity of system-wide frameworks like PBIS. As noted in the literature review, existing tools designed to measure the fidelity of social, emotional, and behavioral interventions and frameworks, such as PBIS, are often limited to self-reporting assessments at the local level. Indeed, the proxy for fidelity used in this study was special educators' self-reported participation in universal PBIS. This definition of fidelity aligns with self-reporting measures used in the past and is one important component of assessing implementation fidelity; that said, it misses the opportunity to evaluate fidelity of implementation in relation to more objective and outcomes-oriented factors. I would recommend that the VT AOE, in conjunction with the VTPBIS State Leadership team, explore externally assessed fidelity measures to further assist and

provide guidance to Vermont school districts and schools on how to measure the social, emotional, and behavioral well-being of students.

Furthermore, as the literature review suggests, attending to and prioritizing all students' social, emotional, and behavioral well-being increases overall academic success and better life outcomes and can counteract the impact of adverse childhood experiences (Adverse Childhood Experiences [ACE], 2021). Therefore, I would recommend that the VT AOE consider options that would serve to expand its ability to influence and increase the use of evidence-based practices designed to enhance the social, emotional, and behavioral well-being of Vermont's students. These might include: 1) Restructure the organizational chart (VT AOE (2021) to include a Division Director of Social, Emotional, and Behavioral Learning, and/or 2) collaborate with the University of Vermont and the VTPBIS Leadership Team to create Vermont's first Center for Social-Emotional Learning and Behavioral Support.

Finally, based on this studies literature review regarding the inequities in exclusionary disciplinary practices for students with disabilities, and based on other relevant research showing the overwhelming inequities in disciplinary practices for black, indigenous and people of color (BIPOC), I would implore the VT AOE to create a policy requiring that schools immediately eliminate exclusionary discipline practices and provide guidance, funding, and support to school districts and schools to embed Restorative Approaches to discipline within the PBIS framework.

Practice Recommendations

Study findings highlight the importance of having special educators engaged in universal PBIS readiness activities, including membership on their school's PBIS leadership team. As mentioned in the literature review, prior to implementing PBIS, one of the readiness activities is to develop a building-based leadership team with a broad representation of school staff. Currently, the VTPBIS Readiness Checklist (2021) asks schools to include special educators on this team; however, the current study findings indicate that the application of this recommendation is not translating into practice. To ensure the unique perspectives that special educators bring to the table, I would strongly recommend that the VTPBIS State Team moves beyond suggesting this practice to requiring that at least one special educator be included as a member on their school's PBIS Leadership Team. This would ensure that special educators are involved in not only the systems development, but in the critical features of maintaining and sustaining PBIS with fidelity to improve the social, emotional, and behavioral well-being of all students, including students with disabilities.

Another important aspect of PBIS readiness is the identification of a School District Leadership Team and the identification of a PBIS District Coordinator. According to the VTPBIS Intent to Implement PBIS application (VTPBIS Website 2021), school districts must "identify a .1 to .2 FTE SU/SD Coordinator for 1-7 schools to establish a district leadership team, facilitate to use of data-based tools for decision-making, communicate with local and state partners, and participate in PBIS District Coordinator meetings." Although this study did not investigate who is currently in the

role of PBIS District coordinator in each of these school districts, the need to ensure that the perspectives and voices of special educators are present in PBIS implementation suggests that it would be logical to recommend that persons serving in the role of District Special Education Director or the equivalent position take on the role of PBIS District Coordinator.

Future Research Recommendations

In order to further evaluate the impact PBIS has on the inclusion of students with disabilities, several recommendations for future research are listed below:

- Future studies should include a mixed methods approach to study design, using both quantitative and qualitative approaches. This would provide a more comprehensive understanding of the role special educators play in the implementation of PBIS and the inclusion of students with disabilities in universal PBIS efforts.
- While this study did not incorporate student outcome data, such as academic, discipline data, and disproportionality in behavioral referrals, I would strongly recommend that future studies include these student outcome variables to further evaluate the impact PBIS has on students with disabilities, especially for students identified with Emotional Disturbance.
- To increase the scope of data on the implementation of PBIS on students' outcomes, I recommend that future studies include a longitudinal component to assess the effectiveness of PBIS on students with disabilities over time and across

cohort groups. Perhaps a comparative analysis of schools implementing PBIS and schools not implementing PBIS.

- This study's literature review unveiled many benefits of PBIS on supporting the social, emotional, and behavioral well-being of all students, including students with disabilities. I would recommend that future studies investigate why Vermont has such a high rate of students with disabilities identified with Emotional Disturbance. Although this study did not explore this, further research is warranted on what factors, policies, and practices exist in Vermont that may contribute to such high rates.
- The results of this study confirm the significance that implementation fidelity has on the participation of students with disabilities in PBIS. However, as found in the literature review, much of the available data to assess PBIS implementation fidelity is largely self-reporting or self-perception data, including the data collected in this study. While there has been an attempt to triangulate data from various sources, at both the national and state levels, much of this data is again, self-perception data. In future studies, I would strongly recommend that externally assessed outside fidelity data be incorporated in addition to self-reporting fidelity measures. The following research questions related to PBIS Fidelity were prompted as a result of this study and would be areas of interest for future research.
    - Is there a relationship between special educators' perceptions of PBIS and the actual implementation of PBIS based on observations?

- How do we measure large systemic fidelity?

Conclusion

The goal of this study was to explore the perspectives of Vermont special educators working in PBIS school districts regarding the inclusion of students on their caseload in universal PBIS efforts. This study also explored factors that may contribute to the inclusion of students with disabilities in universal PBIS. Study results indicate that when special educators implement, or perceive that they implement universal PBIS with fidelity, the participation and inclusion of students with disabilities in universal PBIS increases. Findings also suggest there are strong positive relationships between the participation of students with disabilities in universal PBIS and 1) special educators' involvement in PBIS Readiness activities, and 2) special educators' belief that PBIS positively impacts the students they work with. Finally, this study's findings suggest that there is no relationship between the participation of students with disabilities in universal PBIS and 1) number of years of experience as a special educator, 2) gender, and 3) disability category, in particular, emotional disturbance.

While the literature review indicates that often students with disabilities, including students identified with ED (Freeman et al., 2006; Hawken & O'Neill, 2006; Snell, 2006), may not be included in universal PBIS activities, this study did not support this claim. In fact, study findings indicate that special educators working in four different school districts in Vermont believe that the students with whom they work with benefit from participating in universal PBIS and should be included in PBIS efforts. However,

there are still more questions about the extent to which students with disabilities are fully included in universal PBIS and what this actually looks like.

Prior to this study, there were no data in Vermont on the perceptions of special educators on the inclusion of students with disabilities in PBIS. This study bridged a gap in research by offering the unique voices and perspectives of special educators working in Vermont schools. The findings of this study are not surprising as Vermont has a rich history of creating policies and practices that are inclusive of students with disabilities. Vermont is poised to remain a national leader in inclusive educational practices and this study could serve as a launching pad for future research in an effort to further understand the effectiveness of PBIS and other interventions in supporting the social, emotional, and behavioral well-being of all students, including students with disabilities.

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Appendix A. Survey Instrument

Vermont Special Educators' perceptions on the Inclusion of Students with Disabilities in Universal Positive Behavioral Interventions and Supports (PBIS)

(Adapted with permission from Shuster et al., 2017)

Section 1: About You and Your School

Please note, you will be able to skip questions that you do not want to answer.

Are you a special education teacher
- ❑ Yes
- ❑ No

Total number of years as a special educator anywhere ____

Total number of years as a special education teacher at your school ____

Highest level of education
- ❑ Bachelor's Degree
- ❑ Master's Degree
- ❑ Doctoral/Specialist Degree
- ❑ Other:_____

Teacher Certification Areas Check all that apply.

- ❑ Early Childhood Special Educator - Birth through age 6
- ❑ Special Educator - Grades K-8
- ❑ Special Educator - Grades 7 through age 21
- ❑ Special Educator - Grades K through age 21
- ❑ Intensive Special Education Teacher - Age 3 through age 21
- ❑ Non-certified
- ❑ Other:_____

Race/Ethnicity
- ❑ American Indian/Alaskan Native Race/Ethnicity
- ❑ Asian
- ❑ Black

❑ Hawaiian/Other Pacific Islander
❑ Hispanic/Latino
❑ Multi-Racial
❑ White (Not Hispanic)
❑ Other:_____
❑ Prefer not to answer

Gender
❑ Female
❑ Male
❑ Prefer not to answer

Which of the following school levels does your school serve? Check all that apply

❑ Elementary
❑ Middle/Junior
❑ High school
❑ Other: _____

How would you describe the population of the community your school serves? Check one

❑ Less than 2,500
❑ 2,500-9,999
❑ 10,000-24,999
❑ 25,000-99,999
❑ 100,000 or more

Please select the school system in which you work.
❑ Hillside SD
❑ Lakeside SD
❑ Mountainside SD
❑ Suburban SD
❑ City SD

Select all of the special education categories that describe the students you currently serve on your caseload.

Autism Spectrum Disorder
Deaf-Blindness
Developmental Delay
Emotional Disturbance
Hearing Loss
Intellectual Disability
Multiple Disabilities

Orthopedic Impairment
Other Health Impairment
Specific Learning Disability
Speech or Language Impairment
Traumatic Brain Injury
Visual Impairment
Other (please explain): _____

Which of the following special education categories best describe the largest category of students you currently serve? Select only one.

Autism Spectrum Disorder
Deaf-Blindness
Developmental Delay
Emotional Disturbance
Hearing Loss
Intellectual Disability
Multiple Disabilities
Orthopedic Impairment
Other Health Impairment
Specific Learning Disability
Speech or Language Impairment
Traumatic Brain Injury
Visual Impairment

Read the following description of PBIS and then answer the next questions.

PBIS is a multi-tiered framework in which:
School-wide behavioral expectations/rules are communicated clearly to students and staff, lessons are taught about school-wide behavioral expectations in different locations, student and staff reinforcement are provided for meeting those expectations, and some type of behavior or social data is collected and reviewed to make decisions about students' needs for additional support.

Does your school use a PBIS framework to address students' social and behavioral concerns?

- ❑ Yes
- ❑ No
- ❑ I don't know

Does your school have a PBIS Leadership team?

- ❑ Yes
- ❑ No
- ❑ I don't know

If yes, are you on that team?

- ❑ Yes
- ❑ No
- ❑ I don't know

Section 2: To What Extent do Students with Disabilities Participate in the School-Wide PBIS Framework?

Rate the extent to which students with disabilities on your caseload are included and participate in the PBIS framework at your school. Circle the number that best reflects students on your caseload participation this school year. If your school does not offer one or more of these things, also select "Our school does not have this for any students."

To what extent…		
1. Do the students on your caseload know the school-wide/expectations (e.g., Be Respectful, Be Responsible, Be Safe)?	1 2 3 4 5 not at all somewhat fully	Our school does not have this for any students
2. Do the students on your caseload actively participate in school-wide PBIS celebrations (e.g., award assemblies)?	1 2 3 4 5 not at all somewhat fully	Our school does not have this for any students
3. Do the students on your caseload receive or have been given a school-wide acknowledgement (e.g., tickets, tokens, activities that all students can earn)?	1 2 3 4 5 not at all somewhat fully	Our school does not have this for any students
4. Do the students on your caseload receive consequences similar to other students as outlined in the school discipline plan?	1 2 3 4 5 not at all somewhat fully	Our school does not have this for any students
5. Are the students on your caseload included in school-wide lessons to teach appropriate behavior in each of your school settings?	1 2 3 4 5 not at all somewhat fully	Our school does not have this for any students

6. Are the students on your caseload identified for interventions based on behavioral data (e.g., attendance, office discipline referrals)?	1 2 3 4 5 not at all somewhat fully	Our school does not have this for any students
7. Are the students on your caseload screened in the same way as other students to see if they need more intensive behavioral interventions and supports?	1 2 3 4 5 not at all somewhat fully	Our school does not have this for any students

Section 3: How Do You Participate in the PBIS Framework?

Tell us about your participation in your school-wide PBIS framework and your involvement in decisions about the PBIS framework. Circle the number that best reflects your involvement this school year.

To what extent...	
1. Do you reference the school-wide expectations when discussing behavioral expectations with students on your caseload?	1 2 3 4 5 not at all somewhat fully
2. Do you participate in reinforcing students on your caseload using the PBIS framework (e.g., handing out school-wide tickets)?	1 2 3 4 5 not at all somewhat fully
3. Do you participate in the school-wide PBIS celebrations (e.g., award assemblies)?	1 2 3 4 5 not at all somewhat fully
4. Do you reference the school-wide consequences for inappropriate student behaviors for students on your caseload?	1 2 3 4 5 not at all somewhat fully
5. Do you teach school-wide expectations to students on your caseload?	1 2 3 4 5 not at all somewhat fully
6. Do you model the school-wide expectations for students on your caseload?	1 2 3 4 5 not at all somewhat fully

7. Do you use school-wide behavioral data (e.g., attendance, office discipline referrals) to make decisions about students on your caseload?	1 2 3 4 5 not at all somewhat fully
8. Were you asked for input during the development of your PBIS framework?	1 2 3 4 5 not at all somewhat fully
9. Have you had any training in your school's PBIS framework?	1 2 3 4 5 not at all somewhat fully

Section 4: How Do You View the Impact of PBIS on Your Students?

Rate the extent to which you agree with each question about different components of your school's PBIS framework.

To what extent…	
1. Do you feel students on your caseload benefit from PBIS?	1 2 3 4 5 not at all somewhat fully
2. Do you feel students on your caseload benefit from having school-wide expectations/rules (e.g., Be Respectful, Be Responsible, Take Pride)?	1 2 3 4 5 not at all somewhat fully
3. Do you feel students on your caseload benefit from receiving the same rewards for appropriate behavior as do other students in the school (i.e., school-wide reinforcement)?	1 2 3 4 5 not at all somewhat fully
4. Do you feel students on your caseload benefit from participating in school-wide PBIS celebrations (e.g., award assemblies)?	1 2 3 4 5 not at all somewhat fully
5. Do you feel students on your caseload benefit from receiving the same consequences for inappropriate behavior as do other students in the school (i.e., school-wide consequences)?	1 2 3 4 5 not at all somewhat fully
6. Do you feel students on your caseload benefit from participating in explicit lessons about expected behavior in school settings?	1 2 3 4 5 not at all somewhat fully

7. Do you feel students on your caseload benefit from school teams looking at behavioral data to determine which students need additional support?	1 2 3 4 5 not at all somewhat fully
8. Do you believe students on your caseload should be included in the PBIS framework at your school?	1 2 3 4 5 not at all somewhat fully
9. Do you feel students on your caseload are included in the PBIS framework at your school?	1 2 3 4 5 not at all somewhat fully
10. Is there time allocated during district-wide professional development or planning to develop your school's PBIS framework?	1 2 3 4 5 not at all somewhat fully
11. Is there time allocated during the school day or year for your school's PBIS team planning to occur?	1 2 3 4 5 not at all somewhat fully

Thank you for investing your time in this survey!

Appendix B. Research Information Sheet

Research Information Sheet

Title of Research Project: Vermont Special Educators' Perceptions on the Inclusion of Students with Disabilities in Universal Positive Behavioral Interventions and Supports (PBIS)

Principal Investigator: Cassandra Townshend
Sponsor: University of Vermont

You are being invited to take part in this research study because you are a special educator working in a school implementing PBIS.

Why is This Research Study Being Conducted?
This study seeks to understand the perspectives of special educators working in school districts implementing PBIS in Vermont. Specifically, this study seeks to understand the extent to which students with disabilities are included in school-wide/universal PBIS efforts.

How Many People Will Take Part In The Study?
Special educators in five different school districts in Vermont

What Is Involved In The Study?
Special Educators in five School Districts implementing PBIS will volunteer to complete a survey.

What Are The Benefits of Participating In The Study?
There may be no direct benefit to you for your participation. However, you may gain some insight about your reflective practice as a Special Educator working in a PBIS school.

Are There Any Costs?
There are no costs associated with this study other than your time.

What Is the Compensation?
There is no monetary compensation for participation in this study.

Can You Withdraw or Be Withdrawn From This Study?
You may discontinue your participation in this study at any time. There are no consequences for discontinuing this study and will in no way impact your relationship with anyone at UVM.

If you choose to discontinue your participation in this study, please send an email asking that you be removed from the study. All collected information including digital files will be deleted.

What About Confidentiality?
All identifiable information will be removed and pseudonyms will be used when needed.

Appendix C. Statement of Verbal Consent

Statement of Verbal Consent

You have been given and have read or have had read a summary of this research study. Should you have any further questions about the research, you may contact the person conducting the study at the address and telephone number given below. Your participation is voluntary and you may refuse to participate or withdraw at any time without penalty or prejudice.

Agreeing to complete this survey, will be considered your verbal consent to take part in this research study and that you will receive a signed copy of this form.

Name of Principal Investigator: Cassandra L. Townshend
Email Address: Cassandra.Townshend@uvm.edu
Telephone Number: (802) XXX-XXXX

_____ _____

Principal Investigator Date