

ABSTRACT

JONES, MARY H. How the Tiered Fidelity Inventory Instrument (TFI) Impacted Positive Behavior Interventions and Supports (PBIS) Team Implementation in Two Rural Middle Schools: A Comparative Case Study. (Under the direction of Dr. Timothy Drake and Dr. Lance D. Fusarelli).

This comparative case study included perspectives of two rural middle school Positive Behavior Interventions and Supports (PBIS) teams' experiences with the Tiered Fidelity Inventory (TFI). TFI data from two consecutive school years was compared for both schools from the 2015-2016 and 2016-2017 school years. Data from annual Office Discipline Referral (ODR) reports from two consecutive years were analyzed for patterns. The main finding indicated that both middle schools self-reported full PBIS implementation on the TFI for the 2016-2017 school year, although one school was recognized by the state educational agency as exemplar and one school was recognized as non-exemplar. Additional findings suggested that both PBIS teams completed the TFI tool out of compliance rather than developmental purposes and both teams perceived PBIS as more effective for sixth-grade middle school students. PBIS teams did, however, vary in terms of their views of the TFI and their ODR data.

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How the Tiered Fidelity Inventory Instrument (TFI) Impacted Positive Behavior Interventions
and Supports (PBIS) Team Implementation in Two Rural Middle Schools:
A Comparative Case Study

by
Mary H. Jones

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APPROVED BY:

Dr. Timothy Drake
Committee Co-Chair

Dr. Lance Fusarelli
Committee Co-Chair

Dr. Anna Jacob

Dr. Gregory Hicks

DEDICATION

I dedicate this dissertation to the children of North Carolina who have benefited from having PBIS in their schools. Thank you to our Lord, Jesus Christ. My faith has instilled my longing to serve in public education and make a difference for our students.

A special thank you to my husband, Steve, for your encouragement every step of the way, and to my children, Mackenzie and Michael, for your sacrifices. Your support provided encouragement to complete this work. My gratitude goes to Dr. Drake for your unwavering guidance and to Dr. Fusarelli for your insights during the journey. Dr. Sugai, thank you for your dedication to PBIS.

Thank you to my Mother (Kathleen) and Grandmother (Eula). I wish you could be here to celebrate this accomplishment, as your perseverance and determination lives on in your children and grandchildren. Mom, although the dream to become a teacher was never realized, your unwavering passion for education lives on. The opportunity to serve students as a school administrator has allowed me to serve as you so eloquently did. Thank you both for being strong women and instilling a passion to pay it forward.

BIOGRAPHY

Mary H. Jones began her educational career as a lateral entry science teacher at Red Oak Middle School located in Red Oak, North Carolina. After completing the NC Teach program at East Carolina University, she enrolled at East Carolina to pursue a Master of Arts in Teaching, completing the degree in 2004. In 2005, she began work on National Board Certification in early adolescent science, which she earned in 2007. In 2008, she enrolled in an administration add-on cohort at East Carolina University to meet requirements for administrative licensure. In 2010, she completed the administrative internship at the middle school and became an assistant principal at her high school Alma Mata, Northern Nash High School, located in Rocky Mount, North Carolina. After serving four years at the high school level, she became the principal of Bailey Elementary School, where she currently serves. In 2013, she was accepted in the Educational Administration and Supervision doctoral program at North Carolina State University. In 2018, she renewed her National Board Teacher certification in early adolescence science.

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CHAPTER 1: INTRODUCTION

Chapter Introduction

Negative student behavior disrupts the school environment, results in loss of instructional time, and presents school administrators, teachers, and other school-level support staff with real challenges. Developing workable strategies to aptly address negative student behavior has been a focus for school districts across the nation, particularly with the reported accounts of school incidents in the media (Gallup, 2000; Wolf, Kalinich, & DeJarnett, 2016). Student learning and engagement are affected by negative behaviors and disruptions to the academic environment (Martinez, McMahon, Coker, & Keys, 2016).

To address this, several behavioral programs have been used in an effort to minimize interruptions. One behavioral support system called Positive Behavior Interventions and Supports (PBIS) has been viewed as effective in reducing discipline referrals when implemented according to its guidelines; for this reason, it is recommended by the North Carolina Department of Public Instruction (NCDPI). To measure their PBIS implementation fidelity and change practices within the school setting, PBIS teams use a self-rated, three-tiered tool called the Tiered Fidelity Inventory (TFI). The goal of this multi-case study was to capture PBIS team experiences with the TFI to determine if the TFI results differed between an exemplar and non-exemplar school, and to gain insights into team members' perceptions of PBIS as an effective behavioral system for middle schools.

Background on the Problem

Student behavior issues have been a major problem facing educators and the public at large (Mayer, 2001; Walker et al., 1996). In 1986, matters related to student discipline were perceived as a major problem facing school leaders (Killion, 1998). Currently, school administrators and teachers continue to dedicate much of their time and effort to deal with

student problem behaviors (Rose & Gallup, 2000; Wolf et al., 2016). Disciplinary actions such as in-school and out-of-school suspensions result in students falling behind their peers academically (DeRidder, 1991; Raffaele Mendez, 2003; Wolf et al., 2016). For instance, one national longitudinal study found that students with behavioral issues are more likely to be suspended from school, resulting in absenteeism and negative impacts on achievement outcomes (Weebyl & Kern, 2014). Similarly, students with behavioral problems impact not only themselves but also the overall school climate, sometimes resulting in student absences (Martinez et al., 2016). A study by Steinberg and Lacoë (2017) indicated discipline reform policies have yielded unintended results. Steinberg and Lacoë found out-of-school suspensions (OSS) in several Philadelphia schools did not decrease after discipline reform was implemented; however, attendance improved with no associated increase in academic achievement. The study concluded that peer effects negatively impact students with no discipline issues prior to implementation.

Importantly, as schools respond to disruptive student behaviors, administrators and teachers work to implement systems to counteract discipline issues. School leaders have considered many plans of action to effectively address student behaviors, such as increased “wait time,” uniform dress codes, counseling, verbal praise, and even punitive strategies.

For instance, Rowe (1986) described an instructional strategy popular among educators in the late 1980s which integrated strategic wait time. This strategy increased the amount of time students were given to respond to teacher-initiated questions, resulting in more student-teacher dialogue and greater overall student engagement. Rowe (1986) concluded that increased discourse had a positive impact on comprehension and student attitudes. Another use of wait time included students receiving more wait time before teachers asked further questions, encouraging student’ responses in classroom settings (Rowe, 1986). Overall, Rowe (1986) found

wait time minimized competition, especially for students with disabilities, and lessened discipline issues within classroom settings. Additionally, uniform dress codes have been used as a method to reduce discipline issues and improve school safety (Black, 1998; Bowsher, 2001; Wilson, 1999). A recent comparative case study, however, did not find uniform dress codes reduce student discipline incidents (Dulin, 2016). Other work described indirect preventative strategies such as school-level counseling and teaching acceptable strategies used by educators to counter negative behaviors (Walker & Horner, 1996). Some research indicates punitive measures, such as verbal reprimands, school setting detentions, in-school-suspensions, out-of-school suspensions, and expulsions are included in the vast approaches used to limit or counteract inappropriate student behaviors (Mayer & Sulzer-Azaroff, 1990).

Despite the focus on addressing negative student behaviors, the consistent use of verbal praise as a preventative measure utilized by classroom teachers has shown results that minimize disruptive student behaviors (Lewis, Hudson, Richter, & Johnson, 2004). Researchers reported decreases in undesirable target behaviors after implementing the use of a simple behavior management system comprised of teaching desired student behaviors to students, training staff to recognize disruptive behaviors, and employing verbal praise as reinforcement (Wheatley et al., 2009).

One system of positive interventions and supports is the Positive Behavior Interventions and Supports (PBIS) system. Researchers regard PBIS as a proactive system founded on defining, teaching, and monitoring school-level behavioral expectations to promote a positive school climate and improve academic outcomes (Sugai & Horner, 2002, 2010; Sugai & Simonsen, 2012). Teaching positive social competencies, often referred to as positive student behaviors, is a major component of the PBIS system utilized in school settings (Sugai & Horner,

2002). For example, one of the student behaviors utilized by school-level PBIS teams includes “be respectful, be responsible, be ready” (McCurdy, Mannella, & Eldridge, 2003, p. 161). The school-wide behavior system includes behavior supports at the school, classroom, and individual level, proactively enacting a positive learning environment (Sugai & Horner, 2009a, 2010). PBIS matrices, collaboratively designed by on-site teams, designate behavior expectations for areas, based on needs inventories to support social outcomes throughout the school setting (Sugai & Horner, 2007; Sugai & Simonsen, 2012). Irwin and Algozzine (2008) reported North Carolina PBIS implementation originated in 2000 in response to increased student discipline issues and because of No Child Left Behind (NCLB) federal legislation requirements.

The North Carolina Department of Public Instruction (NCDPI) received direction to identify “persistently dangerous schools” based on NCLB (Irwin & Algozzine, 2008, p. 1). Further, Irwin and Algozzine (2008) explained NCDPI followed the State Board of Education (SBE) expectations to identify schools based on discipline data and develop “safe school” plans in 1997 (p. 2). In 2000, Bob Algozzine, Co-director of the Behavior and Reading Improvement Center at UNC Charlotte, was regarded as “North Carolina’s center-affiliated partner and collaborator” to work with the NCDPI Behavior Support Services Division, implementing “Whole School Positive Behavioral Support Programs” in North Carolina (Irwin & Algozzine, 2008, p. 5). Positive Behavior Support originated as a part of the North Carolina State Improvement Program, funded by IDEA. One Durham elementary school was chosen as the first North Carolina positive behavior center in 2001 (Irwin & Algozzine, 2008).

The research on PBIS has found a significant effect on staff organizational health (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008), efficacious classroom management (Reinke, Herman, & Stormont, 2013), and a reduction in student suspensions, while improving overall

school climate (Pas & Bradshaw, 2012). Overall, researchers agree that teaching social competencies such as behavioral expectations in school settings have positive impacts on student outcomes compared with more punitive approaches (Sugai & Horner, 2002). PBIS is also used to counter gang violence, with outcomes including less anger and positive attitudes toward police (Howell, 2013). Despite current scholarly PBIS research that focuses on its relationship to student outcomes, PBIS implementation can vary dramatically from school to school, creating a need for more robust implementation studies (Reinke et al., 2013). Prior to 2014, several tools that measured PBIS implementation were available, such as the School-Wide Evaluation Tool (SET) (Sugai, Lewis-Palmer, Todd, & Horner, 2001) and the School-Wide Benchmarks of Quality (BoQ) (Kincaid, Childs, & George, 2005); however, none of these tools were robust enough to capture full PBIS implementation.

Algozzine et al. (2014) introduced the Tiered Fidelity Inventory (TFI) as a comprehensive tool for school teams to measure beginning implementation progress, serve as a planning guide, and assess support needs across universal (Tier I), targeted (Tier II), and intensive (Tier III) support. More specifically, the Universal Tier I criteria addresses PBIS team composition, team operating procedures, behavioral expectations for students, classroom expectations, and staff professional development (Algozzine et al., 2014). Targeted Tier II components include screenings, requests for assistance, and support interventions. Intensive Tier III interventions require extensive consideration such as staffing, student support teams, and family/staff/community involvement. The TFI, applied by school-level teams or system planning teams, provides measures of implementation fidelity and serves as an action planning needs assessment. Algozzine et al. (2014) recommend the PBIS system planning team complete the inventory with a trained PBIS coach.

The TFI, utilized by school-level PBIS team members to determine the implementation fidelity level, provides insights for adjusting strategies and practices to improve student outcomes, and can identify deficits in the school-based framework. Algozzine et al. (2014) introduced the TFI as a PBIS fidelity measure and in 2015, the NCDPI adopted the inventory platform. Prior to adopting the TFI, a preventative tool to assess operative behavior strategies, the SET, was utilized. Horner, Todd, Lewis-Palmer, Irvin, Sugai, and Boland (2004) described the SET tool, an instrument comprised of seven key features for determining school-wide positive behavior support and preventative measures, was used by PBIS school teams. To increase fidelity measures, the TFI addresses more complex levels including preventative strategies, team dynamics, and determinants of staff, parent, and community involvement (Algozzine et al., 2014).

The purpose of this dissertation is to compare PBIS implementation in two rural North Carolina middle schools by gathering information from team member focus-groups, two school years Office Discipline Referral (ODR) data, and TFI results from the 2015 and 2016 academic school years. North Carolina is an ideal state to study rural PBIS implementation using the TFI because the NCDPI adopted the TFI in 2015 across North Carolina public schools (Horner, Sugai, & Fixsen, 2017). In addition, PBIS implementation studies almost exclusively focus on urban schools; however, Fusarelli and Militello (2012) argue many rural schools have high-poverty, low academic outcomes, and have trouble recruiting effective leaders. McIntosh, Mercer, Neese, and Ghemraoui (2016) found schools implementing PBIS over a five-year period describe “distinct patterns” surrounding PBIS implementation and the likelihood of sustainability (p. 992). The findings indicate the first years of implementation are “fragile,” requiring more support to avoid abandonment (McIntosh, Mercer, et al., 2016, p. 999). Importantly, Bradshaw,

Koth, Thornton, and Leaf (2009) suggest there are limited qualitative PBIS studies on middle school implementation.

Middle school climates are unique considering early adolescent behavior issues. Pas, Cash, O'Brennan, Debnam, and Bradshaw (2015) report that school-level administrators and teachers face daily disruptions in middle school settings. Teachers often spend classroom time addressing disruptive behaviors, resulting in loss of instructional time, and administrators spend considerable efforts focusing on discipline issues (Public Agenda, 2004). Brackenreed and Barnett (2006) found teacher candidates in one study were minimally confident in addressing secondary school-level disruptive behaviors and classroom management in comparison to elementary candidates. “Attention seeking behaviors” and “hyperactivity” were among some of the classroom disruptions observed in secondary settings (Brackenreed & Barnett, 2008, p. 166). However, PBIS has shown to be an effective approach for middle school settings. Lassen, Steele, and Sailor (2006) conducted a three-year longitudinal middle school data analysis and found a reduction in office discipline referrals and a decrease in student suspensions after implementation of PBIS.

Research Questions

In this study, I used a comparative case qualitative approach to compare two rural middle schools that have been designated as exemplar and non-exemplar by NCDPI to examine how these schools may differ with respect to TFI results and use. My research questions are:

1. How do PBIS teams in two rural North Carolina schools designated as exemplar and non-exemplar schools vary in their use of the Tiered Fidelity Inventory tool?
2. How do exemplar and non-exemplar schools differ in terms of their Tiered Fidelity Inventory results?

3. Do team members perceive PBIS as an effective middle school behavioral support system?

This comparative case study adds to the limited extant research on PBIS implementation.

Given that North Carolina is a state with a strong focus on PBIS as a behavior support system, this study used the TFI rubric elements as an implementation guide. The NCDPI provides regional PBIS coaches throughout the state and recommends the framework for all schools. Studying PBIS implementation in a rural context is important because rural schools face many obstacles not experienced in urban school settings, including poverty often associated with limited resources and teacher recruitment barriers (Fusarelli & Militello, 2012). The staffing difficulties faced by high-poverty rural schools are just one facet of the complex issues challenging today's school leaders. Meeting student needs in these settings can present challenges and opportunities for effective leaders. Klar and Brewer (2013) describe the positive impact of effective leaders, especially in rural school settings. The current study provides school and district leaders with insights and increase understanding about factors impacting PBIS implementation and sustainability in two rural middle school settings.

Focus of the Study

The focus of the current study was to examine how PBIS team members working in two rural, eastern North Carolina middle schools utilize the revised TFI to implement PBIS in their respective schools. This study also examined the differences in PBIS implementation in an NCDPI-rated exemplar middle school and a non-exemplar middle school. Given the limited studies addressing PBIS in middle schools, PBIS team member perspectives and the impact of PBIS as a behavior system in the middle schools may provide interesting insights. To gain understanding of team member's perceptions while meeting the demands of the TFI, the remainder of this chapter describes the social science origin of PBIS in detail, as well as

addresses the expansion from PBIS to SWPBIS and the creation and integration of the TFI tool for measuring implementation and sustainability within two rural school settings.

Significance of the Study

This study adds to the current literature and helps to build our understanding of how PBIS team implementation is carried out with fidelity by considering TFI criteria to meet exemplar or non-exemplar status while impacting student behaviors and ultimately influencing student achievement in two rural middle school settings. The deeper understanding of team perceptions gained adds to depth to this qualitative study. The goal of this comparative case study was to gain understanding of how PBIS teams support, influence, and work with other team members to meet TFI expectations, as well as to monitor the middle school-level behavior system. Another aspect of the study examined how the school teams collaborate and perceive PBIS impact in a middle school setting, especially considering the overarching difficulties of working in rural school settings that have limited resources and support low socioeconomic student populations. Since there is limited literature on rural middle school PBIS team perspectives or team experiences with TFI implementation, this study provides school-level PBIS teams and administrators with real insights and deeper understanding. Notably, the current study's findings may not be applicable to all PBIS teams given that every school setting is different.

Overview of the Study

The data in this comparative case study were gathered from focus groups within each school-level team, ODR data, TFI data results from the prior two consecutive school years, researcher notes taken during the focus group sessions. Prior approval from school-based PBIS team members was obtained in writing before the focus group sessions. ODR and TFI data were acquired from the district-level coach with prior written confirmation, and confidentiality was

maintained by assigning pseudonyms to any identifying data. Each team member was asked background information including demographics, PBIS experiences, TFI usage, team member perspective, and changes over time with the TFI during the focus group sessions.

Data transcription from the focus group data was completed using an online voice translator and stored on a secure drive. TFI results were kept on a secure password-protected computer, and an analysis was conducted using NVivo. Memo notes were maintained on a secure drive. No data were sent over unsecured email or stored on any public platform. Following the data collection, participants from each focus group, including administrators were provided with a copy of the field notes for review, a method suggested by Creswell (2007) as a form of member checking.

After the transcriptions of the focus group sessions, collected data, and memo notes were thoroughly reviewed, the data were analyzed using NVivo for initial coding, followed by a second coding cycle of clustering for patterns and themes. Additionally, data analysis included a replication strategy of seeking patterns pertinent to both cases. Throughout the study, expertise and guidance from the doctoral advisory committee was sought for the purpose of validity and professional insights, and the study results were also provided to the committee for their input.

Chapter Summary

Chapter 1 introduces the study, including its purpose and significance. Chapter 2 follows with a review of literature related to PBIS, student behavior, and TFI, among other topics pertinent to the current investigation. Chapter 3 details the methodology used to conduct the current study, and Chapter 4 discusses the results. Finally, Chapter 5 offers a discussion of the study findings and their implications for future study and practice.

CHAPTER 2: LITERATURE REVIEW

Addressing Student Behavior in U.S. Schools

In the 1980s, student behavior was among the most time-consuming issues facing school leaders (Rowe, 1986). Rowe (1986) reports that school leaders used several measures to address disruptive student behaviors, including suspensions and other punitive approaches. However, in 1998, school settings changed drastically as school violence took center stage nationally. School leaders, community representatives, and concerned parents faced a new challenge as a series of school shootings occurred. In response, Richard Riley, then U. S. Secretary of Education, sent the document entitled *Early Warning, Timely Response: A Guide to Safe Schools* to school leaders nationwide with the recommendation that they focus their efforts on disruptive student behaviors and school violence (Dwyer, Osher, & Warger, 1998). During this tumultuous time, Sugai and colleagues responded by compiling a detailed document with recommendations to address school violence, including a multi-tiered approach for addressing school-wide discipline reform (Sugai, Sprague, Horner, & Walker, 2000). The occurrence of school violence incidents also leads to an abundance of recommendations providing school leaders with numerous suggestions for how to confront student behavior (Murray & Myers, 1998; Sprague, Sugai, & Walker, 1998; Walker, Colvin, & Ramsey, 1995; Walker, Irvin, & Sprague, 1997). More recently, researchers concluded that policy reforms alone can have unexpected outcomes. Steinberg and Lacoé (2017) contended that changing policy had an adverse impact on students without discipline issues because of “peer effects” in certain Philadelphia schools following reform (p. 27). Overall, the study did not find academic improvement, but suggested recommendations include utilizing Positive Behavior Interventions and Supports (PBIS) as an “alternative strategy” (Steinberg & Lacoé, 2017, p. 32).

Historically, school administrators have exhausted various strategies to thwart or divert disruptive student behaviors in school settings. One instructional strategy used in the late 1980s was strategic wait time (Rowe, 1986). Rowe found student engagement increased as teacher wait time increased, thus impacting student disciplinary actions. During the investigation, increased wait time provided students with more time to respond to teacher-initiated questions before follow-up questions were presented. This approach was integrated to minimize student competition and allow more time to respond for students who had anxiety. However, Rowe (1986) concluded that the approach decreased competition for students with disabilities and resulted in positive behavior outcomes. Other measures such as verbal reprimands and punitive approaches were implemented in the late 1980s to counteract negative student behaviors (Mayer & Sulzer-Azaroff, 1990). In-school detentions, out-of-school suspensions, and expulsions were some of the many approaches used by school leaders to reduce less than desirable behaviors (Mayer & Sulzer-Azaroff, 1990).

Additional approaches used by school leaders and teams include the implementation of uniform dress codes, enacted as a deterrent to minimize discipline issues and improve school safety (Black, 1998; Bowsher, 2001; Wilson, 1999). Uniform dress codes were utilized to reduce peer competition and teasing, among the many reason for implementation, according to Holloman, LaPoint, Alleyne, Palmer, and Sanders-Phillips (1996); however, Dulin (2016) concluded that uniform dress codes did not have a significant impact on student discipline incidents. Indirect preventative strategies, including school-level counseling, have been viewed as acceptable approaches to counter disruptive student behaviors.

Students with extreme behaviors often present school leaders with the greatest challenge. Sugai et al. (2000) described intensive interventions for students who did not respond to whole

school approaches. Small group interventions provided by related service personnel include those from special educators, school counselors, and psychologists (Sugai et al., 2000). However, in 2012, only 128,940 school counselors were employed in elementary and secondary schools nationwide, according to the United States Bureau of Labor Statistics. The National Center for Education Statistics (NCES) reported approximately 129,000 elementary and secondary schools, both private and public in 2012. Considering many high schools have more than one guidance counselor on site, elementary or middle schools may not have support personnel on site. Similarly, in 2009, there were only 32,000 school psychologists employed across the United States (NCES, 2010). According to the American Psychological Association (2012), one psychologist should be assigned to every 500-700 students. Given the need for small group behavioral interventions, related services may not be available for all students across school settings. Sugai et al. (2000) suggest that the most at-risk students require additional support, such as adult supervision, altered schedules, or increased rewards, to create environments conducive to student success.

Behavioral reinforcement, such as verbal praise, is among the many interventions school personnel use in school settings to promote positive student behaviors. Research suggests various strategies and approaches comprised of behavioral reinforcement have yielded positive results on student behavior (Espin & Yell, 1994; Haydon & Musti-Rao, 2011; Lewis et al., 2004; Oswald, Safran, & Johanson, 2005). Consistent use of verbal reinforcement by teachers minimized negative behaviors in classroom settings (Lewis & Newcomer, 2005). Similarly, Espin and Yell (1994) found that verbal praise lowered off-task behaviors. Teacher affirmation can be behavior specific (BSP) or non-behavior specific (NBSP) (Haydon & Musti-Rao, 2011). The use of verbal

praise for BSP reduced time-off-task behaviors and increased student engagement (Fullerton, Conroy, & Correa, 2009; Sutherland & Wehby, 2001).

Tokens or token reward systems have been utilized in many school settings as a behavior motivator. Researchers have concluded that token systems are impactful when preceded by taught rules in non-classroom settings (Lewis & Garrison-Harrell, 1999; Lewis, Sugai, & Colvin, 1998). Similarly, Haydon and Musti-Rao (2011) describe how teacher praise coupled with tokens or personal notes to students can increase desirable student behaviors in classroom settings.

Other positive student motivation strategies include rewards such as electronic device time, free time, and teacher affirmation. The use of computer-assisted instruction (CAI) to increase time on task behaviors has shown positive outcomes (Flower, 2014). Flower (2014) noted that in-class iPad usage was reported as positive by teachers and students in a study, but the researcher did acknowledge the small sample size. Wheatley et al. (2009) suggest that simple behavior management systems have shown desirable results. Behavior reinforcement in class settings can be a simple reward such as free time where students choose to work on assignments or on another task. Research found simple rewards like free-time coupled with teaching desired behaviors, and staff training on the importance of verbal praise, as a reinforcement, reduced target behaviors (Hawkins, Haydon, Denune, Larkin, & Fite, 2015). However, Bradshaw, Reinke, Brown, Bevins, and Leaf (2008) maintained that teacher praise has the greatest impact when verbal affirmation is BSP.

Teacher influence has a major impact on student behavioral and academic outcomes. Froiland, Oros, Smith, and Hirschert (2012) describe the importance of teacher support as an intrinsic motivating factor for students. They conclude that teacher support in classroom settings is greater when educators are passionate about the subject matter (Froiland et al., 2012). As

students gain intrinsic motivation, their influence extends to peer students and can lead to autonomy (Froiland et al., 2012; Radei, Sarrazin, Legrain, & Wild, 2010). Teacher influence is maximized when students understand the importance of the subject to the educator (Froiland et al., 2012). Significantly, behavior reinforcement is necessary for creating a positive classroom climate and a major component of PBIS, especially for vulnerable student populations like early adolescents.

Middle School Challenges

Educators in middle school settings face challenges unique to early adolescent school situations. Hecker et al. studied teacher perceptions of middle school student behavior and found students with behavior problems have difficulty with peer and teacher relationships (Hecker, Young, & Calderella, 2014). Further, the study found teacher experiences include middle school students display difficulty following teacher directions (Hecker et al., 2014). Ruiz, Ruiz, and Sherman (2012) conducted a three-year longitudinal study on a rural district of middle school students and found student behavioral challenges including “classroom offenses, hallway offenses, and communication offenses” occurred frequently (p. 2). Further, Brackenreed and Barnett (2006) surveyed school teacher candidates and found they reported limited confidence levels after spending time in secondary school settings in comparison to pre-service elementary counterparts. Teacher candidates identified disruptive behaviors in the secondary setting resulted in preconceived lack of developing effective classroom management strategies (Brackenreed & Barnett, 2006). However, PBIS has been utilized in middle school settings as a proactive approach to counter early adolescent behaviors.

Positive Behavioral Interventions and Supports, a Proactive Approach

PBIS originated as a behavior plan to address students’ emotional and behavioral disorders and later expanded to a system addressing school-wide behaviors (Colvin, Sugai, &

Kameenui, 1994; Lewis & Sugai, 1999). Lewis and Sugai (1999) presented a plan for teachers to address students with emotional and behavioral disorders (EBD). The plan, created to address EBD students with low academic achievement, was intended to target exceptional children (EC) (Lewis & Sugai, 1999). In the developmental stages, the plan focused on students with extreme emotional behavioral issues, especially those exhibited by students identified as EC. However, Lewis and Sugai (1999) found teaching social competencies within school settings resulted in fewer discipline referrals, thus improving overall academic outcomes. Eventually, the EBD plan advanced into a whole school approach, referred to as Effective Behavior Support (EBS) (Lewis & Sugai, 1999). Ultimately, a comprehensive system for school-wide use emerged at the University of Oregon, designed by George Sugai, Rob Horner, and other associates (Colvin, Sugai, & Kameenui, 1994).

PBIS, originally referred to as Positive Behavior Support (PBS), with origins in the behavioral sciences expanded to an integrated system for addressing student social and emotional needs within education settings (Warren et al., 2006). PBS merged educational approaches and environmental design, ultimately promoting “personal competence and environment integrity” (Carr et. al, 2002, p. 4). Netzel and Eber (2003) note how PBS expanded as schools added interventions in school settings, integrating the multi-tiered system to the school-wide level, called PBIS. Eventually, PBIS gained popularity as schools piloted the framework and encountered student success with the newly introduced system founded on teaching social competencies within school settings. The framework included teaching behavioral expectations, monitoring student discipline, and rewarding positive student behavior. Lewis and Newcomer (2005) proposed school-wide systems of positive behavior support (SWPBS) in school settings designed to counteract growing student behavior problems.

Among the several behavioral approaches utilized in school settings, PBIS has shown positive outcomes. Regarded as a proactive approach, PBIS includes a multi-tiered approach encompassing teaching expected behaviors, reinforcing positive behaviors, and monitoring behaviors utilizing data (Lewis & Sugai, 1999). The tiers are comprised of three levels of support. Sugai and Horner (2006) describe the foundational level as Tier I with behavior interventions for all students and staff. Tier II is designed for small group interventions (Crone, Horner, & Hawken, 2004) and Tier III is developed in response to individual intense student needs (Freeman et al., 2016).

PBIS Framework

The framework (Table 1) entails tiers including primary, secondary, and tertiary preventions to support positive student behaviors. Table 1 delineates criteria to address behavioral support at each level. The tiers include support for all students, minimally at-risk students, and high-risk students needing individualized support. Tier I (green) is designed to provide support for the student population majority. Tier II addresses limited at-risk student support while Tier III provides individualized support for high-risk students. School-level teams decide collectively what behaviors should be taught and addressed and create visuals to support school-wide expectations. The PBIS framework has been utilized across elementary, middle, and high school settings. Horner and Sugai (2015) reported that more than 21,000 schools across America were in the “implementation stages.”

Freeman et al. found the PBIS framework had a positive impact on attendance and decreased office referrals in high school settings (Freeman et al., 2016). Some research indicates PBIS has a positive impact on staff and organizational health and overall school climate (Bradshaw et al., 2008). Ross, Romer, and Horner (2012) find as teachers nationwide experience increased accountability coupled with changing school climates, many report higher stress levels

and some have chosen to leave the field of education altogether. In a 54-item teacher survey completed in elementary schools in Oregon, teacher responses indicated a strong relationship between Schoolwide Positive Behavior Interventions and Supports (SWPBIS) and teacher efficacy, described as the teacher's ability to impact student outcomes (Ross et al., 2012). In this study, the authors found that teachers in lower socioeconomic schools reported higher benefits from having PBIS in their school (Ross et al., 2012). Overall, this study suggests that teacher well-being is associated with higher levels of PBIS implementation.

School-Wide Positive Behavioral Interventions and Supports

Expansion to SWPBIS

The three Tier framework of SWPBIS (Sugai & Horner, 2009b) expanded across American school systems to address student behavior issues. Horner (2014) reported over 21,000 systems had implemented SWPBIS. One important feature of SWPBIS implementation with fidelity is positive student academic outcomes, impacted by fewer reported ODRs, according to research (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2004; Ross et al., 2012). Moreover, Flannery, Fenning, Kato, and McIntosh (2014) assert that SWPBIS schools with higher implementation fidelity experienced fewer behavior issues in high school settings. Fidelity of implementation is defined as the extent to which a program, intervention, framework, or practice, "as conceptualized in a theoretical model or manual, is implemented as intended" (Schulte, Easton, & Parker, 2009, p. 460).

One longitudinal study found implementation fidelity of SWPBIS at the Tier 1 level, as measured by the Benchmarks of Quality (BoQ) validated measure, has positive impacts on out-of-school suspensions (OSS), in-school-suspensions (ISS), and office-discipline-referrals (ODRs) (Childs, Kincaid, George, & Gage, 2016). The study included BoQ total scores, 10 subscale scores, and behavioral outcome and were examined for association (Childs et al., 2016).

The results indicated higher SWPBIS implementation scores were associated with decreases in student discipline outcomes (Childs et al., 2016). An additional study utilized a large PBIS database and concluded “real world” systems implementation is often adjusted given time constraints and the lack of resources in school settings (Malloy, Moore, Trail, Van Epps, & Hopfer, 2013).

Variation in SWPBIS Implementation

Schools seem to vary in their implementation of PBIS. Part of this variation is attributable to school-level differences. Originally, PBIS implementation was found mostly in elementary and middle schools, though it has expanded to high school settings (Freeman et al., 2013). High schools make up only 13% of schools with SWPBIS implementation, at least partially due to difficulty in implementation (Flannery, Frank, Doren, Kato, & Fenning, 2013). Several reasons contribute to this difficulty. For instance, high school students may respond to peer influence rather than adult suggestions (Murphy, Beck, Crawford, Hodges, & McGaughy, 2001). Additionally, Freeman et al. (2016) explain larger high schools find implementation more difficult based on larger student populations, time required to monitor data collection, and peer influence at the high school level.

In comparison, many elementary schools utilize the PBIS behavior system at higher rates. One study of 33 elementary classrooms where the schools implemented PBIS with fidelity found when teachers explicitly taught behavior expectations to students in the classroom setting, they experienced fewer negative discipline issues and class disruptions (Reinke et al., 2013). Horner, Sugai, and Anderson (2010) suggest that most research has been conducted on elementary schools, which have stronger implementation of Tier I interventions. PBIS teams currently utilize the Tiered Fidelity Instrument (TFI) tool to determine Tier I fidelity, such as taught expectations

and classroom procedures. The instrument can be utilized to target specific preventative areas needing attention, limiting the amount of time spent on target identification.

Implementation Challenges

Currently, PBIS school-level teams face demanding challenges with implementing positive behavior student systems. SWPBIS implementation is more complex than merely a system with methods to integrate behavioral expectations. One extensive study focused on psychometric criteria spanned the state of Minnesota and drew random samples from over 180 schools (Filter, Sytsma, & McIntosh, 2016). The findings suggest staff buy-in as a critical component of schools with higher-fidelity implementation, although Filter et al. (2016) acknowledge more research is needed to understand buy-in in lower fidelity settings.

Adelman and Taylor (2003) describe implementation challenges, noting school-based initiatives can vary across school settings, sometimes resulting in abandonment. Abandonment of newly-implemented behavior expectations can have negative impacts on student outcomes, diminish staff commitment, and cause financial implications (McIntosh, Mercer, et al., 2016). However, research indicates PBIS fidelity measurements followed by using data to inform decision making can positively influence sustainability, thus reducing the likelihood of abandonment (McIntosh, Kim, Mercer, Strickland-Cohen, & Horner, 2015).

Other research indicates a lack of attention paid to implementation quality in current studies may limit sustainability at the onset. Malloy et al. (2013) conducted a study focused on implementation quality spanning seven states and including data from over three years and 27,000 students ,which used a longitudinal dataset including surveys and school-wide information system (SWIS) data; their findings indicated that “real world” constraints impact PBIS implementation (Malloy et al., 2013). The results suggest three areas of importance for effective PBIS systems. Taught expectations accompanied by reward systems and aligned

sanctions surfaced as essential elements; however, the study concluded management was a problem associated with negative student behaviors, an unexpected finding (Malloy et al., 2013).

Tiered Fidelity Inventory Instrument

Currently, the SWPBIS system implemented in most schools includes the Tiered Fidelity Inventory (TFI), which entails scoring criteria for school-level teams as measures to determine implementation fidelity. Data influences SWPBIS decisions to provide student support, serve as a basis for action planning, and measure implementation fidelity by school-level teams (Algozzine et al., 2014). All stakeholders have a voice as decisions are made, and action planning should be ongoing (Leverson, Smith, McIntosh, Rose, & Pinkelman, 2016). Although there are numerous fidelity measures, the SWPBIS TFI was created as a “comprehensive fidelity of implementation tool” with three scales: Tier I, Tier II, and Tier III. (McIntosh et al., 2017, p. 4). Tier I (universal), Tier II (targeted), and Tier III (intensive) are intended as components used to assess implementation, determine focus areas, and provide insights for planning (Leverson et al., 2016; McIntosh et al., 2017). The tiers are outlined in Table 1 below.

Table 1: The Three Tiers of the PBIS TFI

Tier I Universal SWPBIS Features
1.1 Team Composition
1.2 Team Operating System
1.3 Behavioral Expectations
1.4 Teaching Expectations
1.5 Problem Behavior Definitions
1.6 Discipline Policies
1.7 Professional Development
1.8 Classroom Procedures
1.9 Feedback and Acknowledgment
1.10 Faculty Involvement
1.11 Student/Family/Community Involvement
1.12 Discipline Data
1.13 Data-based Decision Making
1.14 Fidelity Data
1.15 Annual Evaluation
Tier II Targeted SWPBIS Features
2.1 Team Composition
2.2 Team Operating Procedures
2.3 Screening
2.4 Request for Assistance
2.5 Options for Tier II Interventions
2.6 Tier II Critical Features
2.7 Practices Matched to Student Need
2.8 Access to Tier I Supports
2.9 Professional Development
2.10 Level of Use
2.11 Student Performance Data
2.12 Fidelity Data
2.13 Annual Evaluation
Tier III Intensive SWPBIS Features
3.1 Team Composition
3.2 Team Operating Procedures
3.3 Screening
3.4 Student Support Team
3.5 Staffing
3.6 Student/Family/Community Involvement
3.7 Professional Development
3.8 Quality of Life Indicators
3.9 Academic, Social, Physical Indicators
3.10 Hypothesis Statement
3.11 Comprehensive Support
3.12 Formal and Natural Supports
3.13 Access to Tier I and Tier II Supports
3.14 Data System

Table 1 (Continued)

Tier III Intensive SWPBIS Features
3.15 Data-based Decision Making
3.16 Level of Use
3.17 Annual Evaluation
3.13 Access to Tier I and Tier II Supports
3.14 Data System
3.15 Data-based Decision Making
3.16 Level of Use
3.17 Annual Evaluation
3.13 Access to Tier I and Tier II Supports

SWPBIS Tiered Inventory version 2.1 (September 2014)

Scoring criteria is based on a Likert-type scale and teams utilize the TFI rubric to assess level of impact. 0=not implemented, 1=partially implemented, and 2=fully implemented as regarded by McIntosh et al. (2017) as they describe the TFI criteria choice responses as *not implemented, partially implemented, or fully implemented*. Moreover, PBIS teams rank their implementation progress within each component based on data. Tier I contains criteria to determine school-wide support; whereas Tier II focuses on targeted interventions (McIntosh et al., 2017). McIntosh et al. (2017) present Tier III as individual focused which entails more intensive features for teams, resources, plans, and evaluations.

Fidelity Measure Concerns

The TFI rubric requires teams to initially determine SWPBS implementation via self-assessment. Noell et al. (2005) maintain that the use of self-assessment measures can result in over-inflated results. To minimize flawed results, McIntosh et al. (2017) strongly recommend the external coach assist school-level teams through the self-assessment process, guide teams with scoring, and provide support as the results are analyzed. External coaches provide school-level PBIS teams guidance utilizing the TFI, make suggestions strategically for improvement, and are often located at the district level (McIntosh et al., 2017).

Further analysis conducted by Horner et al. (2017) suggests that the PBIS “blueprint” encompasses evaluation by the school-level team as a necessary component to guide the implementation process. The analysis considers “evidence-based” implementations across different industries, including education, as an “implementation science.” Horner et al. (2017) emphasize that necessary components such as detailed descriptions require in-depth consideration prior to enactment to sustain the system. Further, the “breadth of systems variables” need precise consideration prior to implementation (Horner et al., 2017, p. 26). Horner et al. (2017) present many practices that are used in educational settings; yet, determining which are effective is more difficult. Herein lies the importance of the TFI as a fidelity measure within school settings. Fidelity measures are more complex than a single assessment in time. Horner et al. (2017) argue these measures serve as “influencers” of implementation.

North Carolina, PBIS, and the Tiered Fidelity Inventory

McIntosh et al. (2017) present the TFI as a compilation, originated from components and measures used across states including North Carolina. The TFI is intended as an assessment framework, either utilized alone or in combination with other measures. TFI sub measures assist school-level teams to determine the level of SWPBIS usage or implementation (McIntosh et al., 2017). McIntosh et al. (2017) find Tier I, Tier II, and Tier III practices are assessed within the TFI-embedded criteria. Ultimately, the TFI tool assessment provides an implementation fidelity measure based on data which can be utilized as progress monitoring (McIntosh et al., 2017).

PBIS Implementation in North Carolina

PBIS implementation began in North Carolina in 2000 from a grant provided to seven reading centers, one math center, and one behavioral support center (Irwin & Algozzine, 2007). The grant was provided after growing student discipline issues were reported in school settings across North Carolina. By 2006, the initiative had expanded to over sixty-six school district-wide

adoptions of the framework. In 2008, 691 North Carolina schools were implementing PBIS (Provasnik et al., 2007). The 691 schools were comprised of 426 elementary, 175 middle, 59 high, and 29 alternative schools out of the 2,513 regular and charter schools in 2008 (NCPBIS, 2013). In the 2013-2014 school year, 536 North Carolina schools were recognized by NCDPI, which reflected an increase from 476 in the 2012-2013 school year, as reported by NCDPI evaluation report (McCamish, 2015). The NCES evaluation report found 1,210 schools participated in PBIS in the 2013-2014 school year, which represented 45% of the 2,685 total North Carolina schools (NCES, 2014). In 2015, NCDPI implemented TFI usage for PBIS teams and external coaches to measure implementation fidelity within school settings (Horner, Sugai, & Fixsen, 2017). External coaches, sometimes referred to as PBIS behavior support coaches, are trained individuals who provide district, school, and teacher support, serving as “a linkage between the districts and schools” (Barrett, Bradshaw, & Lewis-Palmer, 2008, p. 107). Typically, the external coaches are district employees and provide training, recommendations, and strategies for school-based teams. According to the NCDPI PBIS Overview (2017), 95 of the 100 counties in North Carolina had at least one PBIS school implementing the behavioral system.

PBIS Implementation in Rural School Settings

Rural schools are an especially interesting and provide an under-studied setting to study PBIS implementation. Often, rural schools face many problems, including high-poverty and limited resources with fewer preventative behavior systems in place compared to urban and suburban school settings (Gottfredson & Gottfredson, 2001). Gottfredson and Gottfredson (2001) conducted a large survey study of principals in public, private, and Catholic schools, finding preventative activities were limited in rural settings compared to others. Principals of 848 schools participated and reported rural schools have fewer mentoring programs and limited

intervention activities to provide student support (Gottfredson & Gottfredson, 2001). However, PBIS has been an effective system of support in high-poverty schools, especially rural school settings. One study conducted by Fitzgerald, Geraci, and Swanson (2014) found that PBIS was an effective system when implemented in rural school settings. Considering changes in family dynamics and increased poverty, rural schools often have higher student populations with mental health needs (Fitzgerald et al., 2014). Student support services needed to address mental health in school settings can be limited due to a lack of funding and resources. A large study across urban, suburban, and rural districts found that “real-world” PBIS implementation in rural settings may vary from the original implementation plans because of limited resources (Malloy et al., 2013). For example, school-level professionals (such as counselors, psychologists, and consultants) face dual roles in rural settings, limiting time devoted to initiatives like PBIS (Feinberg, Nuijens, & Canter, 2005). Steed, Pomerleau, and Muscott (2013) contend that student support professionals are often limited in rural settings; thus, the availability of personnel needed for school-level behavior initiatives may be minimized.

Chapter Summary

PBIS has been found to be an effective system of addressing student and school-wide emotional and behavioral issues. The literature suggests that there may be some limitations to the implementation of PBIS in rural school settings, due to challenges including increased poverty, reduced resources, and limited funding. Yet there has been evidence of the successful implementation of PBIS in some rural schools. Moreover, the TFI provides school-level teams with scoring criteria to use for measuring PBIS implementation fidelity. To gain deeper understanding of the factors affecting how the success of PBIS implemented in rural school settings, the current qualitative comparative case study investigated the perspectives of two rural

middle school PBIS teams and their experiences with the TFI to determine the impact of their views on implementation.

CHAPTER 3: METHODOLOGY

Chapter Introduction

This study explored the similarities and differences between Positive Behavior Interventions and Supports (PBIS) implementation in an exemplar and non-exemplar school, capturing experiences with the Tiered Fidelity Inventory (TFI) tool and its impact on implementation. Perceptions from middle school educators were sought to determine whether PBIS is a favorable behavioral system for early adolescent students. To answer the research questions, background information on the qualitative research design was gathered before conducting the study, integrating information on case study design. The following chapter details the data collection and analysis strategies used in the current study, including the use of a contextual framework to inform the case study and organize the data, and outlines this study's limitations and ethical considerations.

Research Questions

The current study was guided by the following research questions used to investigate the topic:

1. How do PBIS teams in two rural North Carolina schools designated as exemplar and non-exemplar schools vary in their use of the Tiered Fidelity Inventory tool?
2. How do exemplar and non-exemplar schools differ in terms of their Tiered Fidelity Inventory results?
3. Do team members perceive PBIS as an effective middle school behavioral support system?

Ethical Issues

Hamilton and Corbett-Whittier (2012) assert ethical issues, for both the participants and quality of the study, are crucial considerations. They contend the researcher has two main

obligations: “do no harm” and “respect” person(s) involved in the study (Hamilton & Corbett-Whittier, 2012, p. 65). To mitigate any ethical concerns, permission from all participants was gained prior to the group focus interviews, and the researcher also sought guidance from the North Carolina State University Internal Review Board (IRB). In the interest of maintaining transparency in the study, I shared my previous position as a PBIS school-level administrator with participants in the study. Additionally, I sought input from the university dissertation committee to help ensure “no harm” to the participants or the integrity of the study itself.

Qualitative Research Design

The current study employed a qualitative approach, which sought to explore and understand "the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2014, p. 4). The focus of this comparative case study was to examine how PBIS teams in two rural middle schools utilize the TFI by capturing their perceptions of the tool. The study included comparing data from each educator focus group from two schools that had implemented PBIS: one exemplar school and one non-exemplar school. The 2016-2018 North Carolina Department of Instruction (NCDPI) recognizes schools implementing PBIS as either green ribbon, model, or exemplar schools based on scores from academic and/or discipline data, including three consecutive years, TFI results, and submission criteria (See Appendix H and Appendix G).

The interview data were transcribed, member-checked, and analyzed for similarities and differences based on questions regarding the usage of the TFI as a measure for implementation or sustainability and PBIS member experiences. Next, the data were analyzed for insights on member experiences with the TFI instrument, looking for commonalities and contrasts. Further analysis was conducted to determine limitations. Finally, the data were analyzed for TFI impact on implementation and sustainability.

Social Construction

A constructivist approach was used in this qualitative study to explore in depth PBIS team member experiences with PBIS and the TFI in separate rural school settings. Creswell (2014) asserts that the constructivist approach guides the research process as participants construct meaning through interactions with others. The approach was chosen based on how the TFI instrument was utilized by participants and the way these PBIS team members assigned meaning or interpreted the criteria. The constructivist view stresses that meaning is derived as participants engage in conversations; therefore, using open-ended questions allowed participants the opportunity to share their experiences while listening to others in the setting (Creswell, 2014). The focus groups were guided by open-ended questions that allowed free discussions to reveal various team member perspectives. This qualitative method encouraged participants to recount their experiences with TFI implementation over the previous two school years. By interviewing members of PBIS teams in their own school, the researcher was able to apply an inductive approach, capture collective perspectives, and compare accounts within each setting (Creswell, 2014).

Researchers argue the use of qualitative research case studies provide deep insights of the studied phenomenon (Miles & Huberman, 1984; Stake, 1995; Yin, 2009). Yin (1994) presents a case study as research exploring issues in a real-life context within the natural setting. Hence, examining two rural PBIS school teams and their real-life experiences with using the TFI enabled the researcher to gain insights related to the limited studies on PBIS implementation in rural school settings. Swanborn (2010) maintains that case studies may be carried out in “natural context” and can include capturing information after the phenomenon of interest has taken place. Conducting the focus group in the natural setting furthermore provided an element of familiarity

for the participants. Patterns of meaning were gleaned from the data collected in the natural setting.

The TFI implemented in North Carolina since 2015 may have member' perspectives and experiences with the tool which vary across school settings. Qualitative research provides a framework to capture experiences and the varying perspectives of individuals. For example, school-level teams may have unique experiences with additional responsibilities or varied time commitment associated with TFI usage. High school PBIS team members and district leaders could benefit from different insights in comparison to school-level teams, given the limited studies currently available. The demands accompanying TFI tool implementation may have created varying work levels for NCDPI regional coaches. In this study, I included only those perspectives and experiences of school-level team members.

The researcher utilized a case study design based on two PBIS team accounts. According to Creswell (2014), the researcher is instrumental to develop an in-depth analysis of the "case." Cases are furthermore developed through participant experiences and captured by various data collection approaches (Stake, 1995; Yin, 2009, 2014). Multiple data sources including focus groups, document analysis, and a literature review were used for the study. This comparative case analysis included participants from two PBIS schools, one recognized as exemplar and the other recognized as non-exemplar by the NCDPI.

Miles, Huberman, and Saldana (2014) note that multiple-case studies provide deeper insights about a case or phenomenon and add confidence to the findings. To understand team experiences with the TFI, the researcher chose two cases for analysis, one exemplar PBIS team and one non-exemplar PBIS school team. Yin (2014) writes that multiple-case design is subject to the same methodological framework as single case studies and suggests the use of a

replication strategy, which strengthens the findings or makes the case more robust (Miles et al., 2014). Using small samples of people in their setting and choosing participants based on criteria to gain a purposive sample follows the qualitative sampling guide (Miles et al., 2014). The samples in this study, two PBIS teams in rural school settings, were chosen based on time constraints and accessibility, as well as for their experiences with the TFI and similar grade-level spans.

The two school teams in the current study were chosen with assistance from the PBIS district-level coach to provide input and suggestions for two comparable schools (elementary, middle, or high) based on the PBIS determination of the schools' exemplar, model, or green ribbon status. The selection of the schools for this study was determined by the most recent state-level PBIS recognition based on the state scoring guides and team submissions. District coach confidentiality was considered during the selection process.

The school settings were selected with consideration to reduce researcher bias, including choosing those from middle school settings in a school district not associated with the researcher's current position to reduce bias. PBIS TFI results were accessed after confidentiality statements were provided to team members currently operating in one of two rural schools. These TFI results encompassed the current and previous school year data, and two consecutive school year results were chosen to follow recommendations that case study design should be bound in time (Creswell, 2014; Stake, 1995; Yin, 2009). Analysis of PBIS implementation, as measured by the TFI PBIS sustainability data, included the TFI results and Office Discipline Referral (ODR) data over two years.

Role of the Researcher

Yin (2009) describes that a case study may include an exploratory approach through which data are collected followed by discovery. In this study, the researcher was the key

instrument, conducting focus groups, transcribing the data, and analyzing the data within two weeks following participant interviews. Prior to conducting the focus groups, TFI results and ODR data were reviewed from each respective school, utilizing scholarly literature for reference. Additionally, I sought guidance from the dissertation committee Chair throughout the study. Tufford and Newman (2010) point out the importance of “bracketing” to enable the investigator to acknowledge preconceptions during the research process, and they suggest that the researcher confer with colleagues throughout the study. Therefore, the researcher remained self-aware by writing memos during the data collection and analysis phases of the study, and preserved objectivity by seeking guidance from the dissertation committee.

Data Collection

This study involved collecting data from focus groups (two school PBIS teams) as well as TFI and ODR data from two school-years. The focus groups, TFI data, and ODR data from two school years, and researcher observation memos provided various data points for the overall approach (Creswell, 2014). Permission was granted from District Superintendent, Dr. Cooper, of Napoli County Schools in the eastern region of the state. Two schools were chosen based on PBIS recognition from NCDPI for the 2016-2017 school year as either exemplar or non-exemplar middle schools. To maintain confidentiality, the two schools were identified with the pseudonyms of Pleasant Middle School and Sunny Middle School. Face-to-face interviews were conducted with six PBIS team member participants at the exemplar school site and four participants at the non-exemplar school site. The varied number of participants was because Sunny Middle School had only four members in attendance on the focus group date due to an unexpected situation.

From the district-level PBIS coach, the researcher obtained TFI results from 2015-2016 and 2016-2017 along with ODR data from the same school years, maintaining confidentiality

throughout the process. Focus groups allowed participants to share their experiences with PBIS in their respective school, while also listening to other team members. The intent of this approach was to gain rich insights on the experiences of TFI usage in rural middle school settings. Both focus groups lasted about an hour and all members willingly participated, sharing their backgrounds in education, thoughts on PBIS, and experiences with the TFI. Although generalizations cannot be made from the findings, capturing member experiences could provide other school leaders with a deeper understanding of PBIS implementation. During the focus group, researcher notes about each participant as they responded to the semi-structured interview questions noted if they had any reluctance to respond or requested input from another participant. For future reference, memo notes were documented to record where each participant was seated during the focus groups.

The focus group was comprised of the school-level team members at each respective rural middle school. Prior to the session, PBIS team members from each school were invited to participate voluntarily in the focus group. The invitation included a written introduction to the researcher and a minimal description of the study (Appendix I). The focus group was limited to a small group (Yin, 2009) and the setting where PBIS team members were interviewed was their school site (Creswell, 2014). Interviews were conducted in the participant's natural settings, a major component for qualitative research (Creswell, 2014). Since PBIS leadership teams are typically comprised of five to six members, the researcher chose five to six participants for this study. Although only four members from Sunnyside Middle School attended, these participants shared in-depth accounts of their experiences. The focus groups were led by the researcher to capture views from each participant, while maintaining awareness of the conversational nature of discussions to limit researcher influence (Yin, 2009).

Prior to the focus groups, the researcher examined and compared TFI results from the 2015-2016 and 2016-2017 school years, noting similarities and differences between the data. The TFI analysis provided some comparable results while also revealing unique differences related to the schools' recognition as either exemplar or non-exemplar by the NCDPI. The Tier I analysis included team composition; team operating procedures; behavioral, teaching, and problem behavior expectations; discipline policies; professional development; classroom procedures, feedback, and acknowledgement; faculty involvement and student/family/community involvement; discipline data; data-based decision making, fidelity data, and annual evaluation; and schoolwide PBIS features relevant to this study. Tier II analysis involved team composition; team operating procedures; screening; request for assistance; options for Tier II; Tier II critical features; practices matched to student needs; access to Tier I support; professional development; level of use; student performance data, fidelity data, and annual evaluation; and targeted schoolwide PBIS features. Lastly, Tier III analysis included team composition; team operating procedures; screening; student support team; staffing; student/family/community involvement; professional development; quality of life indicators and academic/social/physical indicators; hypothesis statement; comprehensive support and formal and natural supports; access to Tier I and Tier II support; data-system aggregated; data-based decision making, level of use, and annual evaluation; and intensive schoolwide PBIS features. All three tiers were analyzed to add depth for the multi-case study focus. Features for analysis were chosen in hopes of building understanding from the team and based on how participants constructively assessed each category within each tier. The PBIS team collectively assigns ratings based on the Likert scale typically, as a group decision.

To determine similarities and differences between the two schools, the researcher reviewed each school's discipline ODR data from the two consecutive school years prior to the focus group. The data provided insights on levels of discipline aligned with the TFI levels I, II, and III. Reviewing the ODR data presented information on the referral types and incident locations, which was useful data in allowing for comparisons of an exemplar and non-exemplar PBIS middle school.

Researcher observation memos were utilized to capture any nuances not obtained on the auditory recording. Memos such as reluctance to respond or seeking approval from other participants provide rich descriptions to increase validity of the findings (Creswell, 2014). The memos in the current study noted any subtleties observed during the focus group and captured details and descriptions and provided an in-depth account of member interactions.

The face-to-face focus interview took place during the traditional school year, beginning in 2017 (following IRB approval) and ended in the spring of 2018. I recorded the sessions using an audio recording device. After acquiring written approval by the participants, I maintained confidentiality by assigning numbers to members at the beginning of each session. Participants were asked to share their background information during the focus group after being assigned a participant number to ensure confidentiality. This approach provided pertinent information for the final analysis. During the interview, I asked members to identify themselves by their assigned number and I wrote the number on the participation agreement document to maintain confidentiality. I used the following questions to guide discussions:

- How do PBIS team members' perceptions of PBIS implementation vary based on exemplar and non-exemplar status?
- Do you think PBIS works for middle school students? Why or why not?

- How is the TFI utilized by your team?
- Has the team focus changed since using the TFI criteria? How? What is different?
Are there any limitations your team has experienced?
- Are there any factors that hinder your team's ability to implement PBIS with fidelity?

During the focus group, I made notes, capturing team member interactions by notating emotions expressed as members responded for future reference. The session was audio taped and then transcribed before analyzing the responses. The data was transcribed within a two-week period following the focus groups to maintain familiarity.

Table 2: Conceptual Framework/Structure

Participant background	Internal Considerations	Team Decisions Navigation	Changes over time: implementation	Results
Background information- Collected for each participant provided during focus group with an assigned number (for confidentiality).	Team member demographics Team member experiences	Initial TFI usage TFI impact on implementation Results	Initial During Conclusion	Outcomes Data Adjustments

Source: Miles, Huberman, & Saldana, 2014, pp. 21-24

Validity

During data collection, I triangulated data sources as I reviewed TFI data results, ODR data, focus-group interview responses, and memo participant interactions. I purposefully sought insight from the dissertation committee to ensure validity and to gain different perspectives that needed consideration during data analysis. To ensure the accuracy of the data, I provided a copy of the transcribed responses to the participants as a way of “member checking” (Creswell, 2007). Participants were asked to review the notes and provide responses to ensure accuracy of the data. After team members submitted their feedback, necessary adjustments were made to the data. This process was used to increase data accuracy and served as a method to address researcher bias. During coding, committee member reviews served to address researcher bias.

Finally, I took a respite from the data in order to gain a new perspective. Data outliers were included in the findings for transparency. Miles, Huberman, and Saldana (2014) describe how outliers should be considered to strengthen the findings. I considered any outliers to limit self-selecting bias.

Data Analysis

Initially, the researcher sorted and arranged the raw data from field notes, transcriptions, and TFI results. Next, all data sources were reviewed to gain a general understanding of the results, using Creswell’s (2014) suggestion to seek the tone and depth of information. Subsequently, the researcher made notes (memos) as the data were reviewed. The next step involved initial coding of all data using a qualitative software program, NVivo. The first search was for words that occurred at a high frequency, and the second search was for common phrases. Next, the data were reviewed and organized into categories (Creswell, 2014). Outliers in the data were included to build interest and transparency.

Data were transcribed data following each interview by listening to the audio recordings and reviewing the hand-written memo notes. The transcriptions were coded using NVivo for initial coding (first cycle) while looking for similar descriptors. Descriptive coding followed the first cycle (Saldana, 2013). Next, a second coding cycle that included clustering was conducted to look for patterns and themes. After the first round of second coding, the researcher created categories (clusters) as the data were analyzed (Saldana, 2013). The final clustering enabled the identification of themes aligned with this study's research questions. After the first and second cycle coding process, data analysis in the current study included using a replication strategy, which gives the researcher patterns that are pertinent to both cases (Yin, 2009).

By limiting the focus group to one school year, the researcher had an opportunity to capture the nuances of both exemplar and non-exemplar PBIS teams and gain deeper understandings for the complex demands and experiences of team members in rural school settings.

Limitations of the Study

There are limitations to this study including human perspectives, researcher bias, and generalizability. First, participants likely had preconceived notions about the importance of PBIS. Their response to questions may bias the findings. Participant perceptions from two PBIS teams may not reflect opinions like those on other PBIS teams. Further, researcher influence could have had an impact on participant responses. To minimize researcher impact, oral responses to answers were limited.

The purpose of this study was not for generalizability to other PBIS teams; however, it could provide meaningful insights about participant experiences with the TFI. Importantly, there are limits to focus groups. Although focus groups provide opportunities for participants to listen to other members, the intricate setting could thwart some member' input. Team members may

have felt pressured to agree with other participants or simply to refrain from sharing, or not responding at all. It is important for the researcher to consider focus group limitations. These limitations are addressed in the results.

CHAPTER 4: FINDINGS

Chapter Introduction

This dissertation was a comparative case study of two rural middle school Positive Behavioral Interventions and Supports (PBIS) teams from eastern North Carolina. The purpose of the study was to capture team members' experiences with the PBIS system in middle school settings, obtain collective views of the Tiered Fidelity Inventory (TFI) tool usage, and gain an understanding of the perceived implementation impact. Focus groups were held at each school with PBIS team members. Six team members were present at Pleasant Middle School, including both Co-Chairs, three regular education teachers, and one special education teacher. Pleasant Middle School was an exemplar PBIS Middle School, recognized by the North Carolina Department of Public Instruction (NCDPI) for the 2016-1017 school year. Four team members (one administrator and three teachers) were present at the Sunny Middle School focus group, but notably, the administrator had not served on the team during the prior school year. One member was not able to attend because of a personal emergency. A follow-up interview was conducted with two prior administrators from each school, both serving on the PBIS team in 2015-2016. Sunny Middle School was recognized by the NCDPI as a non-exemplar school for the 2016-2017 school year. The Chair had served two consecutive years in the role.

I also collected two consecutive years of Office Discipline Referral (ODR) data (see Appendix B) for each school, and two consecutive years of TFI results (see Appendix C). School demographics were compiled from the NCDPI state website. I audio-recorded each focus group session and personally transcribed all responses after the sessions. Memo notes were taken throughout the focus groups as participants responded to questions. As a form of member checking, each participant received their individual responses in a password-protected document for review. Two Pleasant Middle School participants responded in agreement to the transcribed

responses. Sunny Middle School administrator, Mr. Teal, responded and agreed with the response in addition to the Chair (Co-Chair) and one other teacher.

Chapter 4 is arranged by: (1) a description of each school including demographic information from NCDPI, district principal monthly report data, and school website information; (2) a description of team member backgrounds; and (3) themes that emerged from the focus group interviews and data analyses. Pseudonyms were utilized to maintain participant confidentiality. The overarching questions that guided this dissertation were:

1. How do PBIS teams in two rural North Carolina schools designated as exemplar and non-exemplar schools vary in their use of the Tiered Fidelity Inventory tool?
2. How do exemplar and non-exemplar schools differ in terms of their Tiered Fidelity Inventory results?
3. Do team members perceive PBIS is an effective middle school behavioral support system?

School Descriptions

Pleasant Middle School is a rural school located about 30 minutes from a major city in eastern North Carolina. In the 2016-2017 school year, it had a population of 763 students and 45 teachers, with one national board-certified educator and one holding an advanced degree. Pleasant Middle was considered a safe school indicated by the “no criminal reports per 100 students.” The student population in 2016-2017 included White (50%), Black (30%), and Hispanic (17%) students. More than 50% of students at Pleasant Middle receive free or reduced-price lunch, similar to many rural North Carolina schools in the area.

Sunny Middle school is a rural school located in a small township in eastern North Carolina, which had a population of 889 students and 46 teachers in the 2016-2017 school year. The student racial/ethnic distribution is White (43%), Black (44.9%), Hispanic (6%), and those

of two or more races (3.6%). Fifty-nine percent of the students at Sunny Middle participate in the free or reduced-price lunch program, comparable to the state average, as reported by the National Center for Education Statistics (NCES, 2010). Overall, the school was regarded as a “safe school” with no school related arrests during the 2016-2017 school year (NCES, 2010).

Pleasant Middle School and Sunny Middle School are both rural schools with similar student population sizes; however, their ethnic distributions have unique diversity makeups. Pleasant Middle (17%) had more Hispanic students than Sunny Middle (6%), but Pleasant Middle also had more White students (50%) than Sunny Middle (43%). In comparison, Sunny Middle (44.9%) had a higher percentage of Black students than Pleasant Middle (30%).

School Team Member Backgrounds

Pleasant Middle School

In March 2018, I visited Pleasant Middle School to hold a focus group with six PBIS team members. We met in the conference room located down the hallway from the administrative offices in the school, and each team member shared their background information (see Appendix F). When we met, the team had two Co-Chair PBIS leaders, Mr. Pope and Miss White. Mr. Pope had served as Co-Chair for two consecutive years prior to the group meeting and four years on the PBIS team. Miss White was a relatively new first-year PBIS Co-Chair, having only been on the team for two years . Mr. Pope, a lateral entry teacher with a Biology background, described how he longed to work with students prior to becoming an educator. Similarly, Miss White entered the field as a lateral entry teacher; however, she had a business background and had worked in the banking industry prior to entering the education field. Both leaders shared they had a “calling” to teach, but Miss White recounted her desire to teach originated from a “not so great middle school experience” as a middle school student. Other team

members shared their pathway to education after being asked, “How did you arrive in the education field?”

Team member Ms. Poe said she “knew at an early age” that she wanted to be a teacher after the local librarian suggested a career path in library science. Ms. Poe pursued an undergraduate and graduate degree in elementary education, only to realize during her student teaching experience that she was “not cut out” for elementary school. At the time of the focus group, Ms. Poe had served for two years on the PBIS team. Similarly, Ms. Joy, who had two years of PBIS team experience, recalled how she had wanted to teach since childhood and took the traditional pathway into education, entering college in pursuit of an elementary education degree. However, Ms. Joy quickly discovered that middle school was a better fit and received a Bachelor’s degree in middle school math.

Comparable to Mr. Pope and Miss White, Ms. Berman took an untraditional pathway into education. Ms. Berman had a previous career as a school administrator prior to her mother’s death. She realized the desire to teach and pursued a Bachelor’s degree in elementary education, beginning middle school as a sixth-grade teacher. Similar to Ms. Poe, she followed a friend’s lead into middle school teaching and had served on the PBIS team for two years. Ms. Pink joined the focus group about 15 minutes into the discussion. Although she did not share her background information, she had served on the PBIS team for about two years. The team members appeared to be a close, congenial group eager to share their experiences in working on the PBIS team.

Sunny Middle School

In March 2018, I traveled to Sunny Middle School and conducted a focus group at 3:30pm. Four team members attended the session, with one member not in attendance due to a personal occurrence. Each team member shared their background information (See Appendix F). Mr. Teal, the administrator assigned to the PBIS team, was in attendance. When asked the

question “Tell me how you arrived in the education field?,” he recalled entering the profession through the non-traditional pathway of a lateral-entry teacher, and he had an educational background in history and business. He desired to present content “in a way that was less boring than it was for me and other kids.” Mr. Teal recounted his school experiences in a negative light and spoke about his current drive to “spin” instruction in a way to make it interesting. Overall, he identified the journey into education differently than most educators.

In contrast, Ms. Chase said the influence of her former teachers was her driving force into the education field. She described how former educators influenced and made her want to “take after them.” Other team members, Ms. Martin and Ms. Phelps, recounted their desire to help students as their reason for entering the field. Ms. Phelps took a different pathway, as she had originally pursued an occupational therapy profession only to change direction and choose teaching special education. Ms. Martin recalled experiences tutoring her younger cousins as influential in her decision to enter the teaching profession.

Emergent Themes

The next section outlines a number of themes that emerged from the TFI data and conversations with team members at both Pleasant Middle School and Sunny Middle School. These themes include: (1) both schools self-reported a fully implemented PBIS system across all three tiers of the TFI instrument; (2) ODRs varied by schools; (3) both PBIS teams completed the TFI for compliance rather than developmental purposes; (4) PBIS team leaders’ views of the TFI varied; and (5) both teams perceive PBIS as more effective for sixth-grade students.

Major Themes

Theme 1: Self-Reported PBIS System Across Three TFI Tiers

The first theme to emerge from this study was that both schools self-reported a fully implemented PBIS system across all three tiers of the TFI instrument. Table 3 includes the TFI

results for Pleasant Middle School and Sunny Middle School for the 2015-2016 and 2016-2017 school years. The scores are an overall percentage based on each PBIS team's self-rated rating. TFI scoring criteria are “not implemented” (0), “partially implemented” (1), and “fully implemented” (2). Tier I has 15 features centered on universal school-wide PBIS elements. Tier II features include student performance data, student progress data, intervention tracking tool, progress report sheets, and family communication. Tier III focuses on intensive school-wide features. The last row of Table 3 contains the NC PBIS state recognition ratings for non-exemplar and exemplar status.

Table 3: TFI Results by School and School Year

		Pleasant Middle School	Sunny Middle School		
		2015-2016	2016-2017	2015-2016	2016-2017
Tier 1	100	100		90	100
Tier II	96	100		92	100
Tier III	80	100		74	100
NCDPI Assigned Rating (based on additional criteria)	Model	Exemplar		Model	Model

Table 4 summarizes the criteria for earning a NC PBIS rating, which include “green ribbon,” “model,” and “exemplar” designations. In this dissertation, I categorize anything lower than an “exemplar” designation as “non-exemplar.” Those schools who submit documentation for recognition must include evidence and artifacts for consideration to the state PBIS review team. This table summarizes these artifacts and evidence related to school “systems,” “data,” and

“practices.” Under “systems,” schools must meet a common set of criteria, including administration, an active PBIS Team, PBIS monthly team meetings, and a school coach. Schools distinguish themselves based on the number of training modules they complete. The first module informs participants of the history of PBIS and focuses on behavioral expectations and data-based decision making. The second module focuses on interventions and data tracking, providing guidance on addressing repetitive negative behaviors. The third and final module covers intensive specific individualized tracking (NCDPI, 2015a, 2015b, 2015c).

Additionally, all ODRs must be submitted to NCDPI. The ODR data spreadsheets include school identification information, referrals by day and month per 100 students, annual ODR rates (calculated by students/per school day), race/ethnicity percentages per school enrollment, and incident types. Persistently dangerous behavior is captured in the spreadsheets as directed by state guidelines. ODR data are broken down into bar graph representations of each aforementioned category. Moreover, schools must include their TFI results for the school year. To be considered for “exemplar” status, schools must submit a PowerPoint presentation that includes:

- Improvement trend in behavioral indicators;
- Improvement trend in achievement indicators; and
- Improvement trend in *one* of the following data elements:
 - Self-Assessment Survey.
 - Staff retention data.
 - Climate Surveys.
 - Special Education Referral Information.
 - Attendance.

In 2016-2017, scores on the TFI had to be at least 75% on Tier I and 80% on Tier II to receive model school recognition. Exemplar recognition required 80% or more for all three tiers on the TFI. Additionally, exemplar schools had to submit a presentation with three years of consecutive data supporting improvements in student behavior and achievement.

Table 4: 2016-2017 NC PBIS State Recognition Criteria

		Non-Exemplar	Exemplar	
		PBIS Green Ribbon School	PBIS Model School	PBIS Exemplar School
Systems		Active Administration PBIS Team in place PBIS Team meets monthly (9X yearly min.) Identified In-School Coach Completed Module 1	Active Administration PBIS Team in place PBIS Team meets monthly (9X yearly min.) Identified In-School Coach Completed Modules 1 & 2	Active Administration PBIS Team in place PBIS Team meets monthly (9X yearly min.) Identified In-School Coach Completed Modules 1-3
Data		All office referral data submitted in the Discipline Data Summary Spreadsheet	All office referral data submitted in the Discipline Data Summary Spreadsheet	All office referral data submitted in the Discipline Data Summary Spreadsheet

Table 4 (Continued)

	PBIS Green Ribbon School	PBIS Model School	PBIS Exemplar School
Practices	TFI submitted by PBIS In-School Coach or PBIS Data Base Manager SET or BSET (<i>see criteria for BSET use</i>) entered by Regional Behavior Consultant or LEA PBIS Coordinator/Coach	TFI submitted by PBIS In-School Coach or PBIS Data Base Manager SET or BSET (<i>see criteria for BSET use</i>) entered by Regional Behavior Consultant or LEA PBIS Coordinator/Coach	TFI submitted by PBIS In-School Coach or PBIS Data Base Manager SET or BSET (<i>see criteria for BSET use</i>) entered by Regional Behavior Consultant or LEA PBIS Coordinator/Coach

Source: Public Schools of North Carolina, n.d.

The TFI results for both 2015-2016 and 2016-2017 indicated self-rated results increased in the 2016-2017 school year. The Tier I results indicated that team composition, family/student involvement, and annual evaluation were partially implemented categories at Sunny Middle (Table 5). In contrast, Pleasant Middle reported full implementation on all Tier I elements for the 2015-2016 school year (Table 5). Tier II results indicated request for assistance and critical features were partially implemented elements for Sunny Middle, whereas Pleasant Middle

reported student performance data as partially implemented and all other elements rated as fully implemented (Table 6). Next, Tier III results varied in 2015-2016 for both schools; whereas, self-ratings indicated all elements were fully implemented in 2016-2017 (Table 7).

In 2015-2016, Pleasant Middle School Tier I was rated at 100%, indicating all components received a score of fully implemented (Table 3). Tier II was rated at an overall score of 96%, with one feature ranked at “partially implemented” (Level 1). Student performance data was also ranked at “partially implemented” (Level 1). Tier III received an overall rating of 88%, indicating additional features were ranked at “partially implemented” (Level 1). The intensive features ranked “partially implemented” (Level 1) were:

1. Quality of life indicators – An assessment of student/family goals based on needs.
2. Academic/social, and physical indicators – A culmination of individual student data based on academics, behaviors, medical, and mental health needs.
3. Hypothesis statement – A statement with problem behavior, location of problem behavior, and reinforcers (part of a behavioral plan).
4. Formal and natural supports – Part of a behavior plan with extensive, coordinated support both at a formal and natural level.

In 2015-2016 scores, the Sunny Middle School PBIS team rated themselves as 90% on Tier I, 92% on Tier II, and 74% on Tier III (Table 3). Under Tier I, the team rated team composition feature rated at “partially implemented” (Level 1), signifying the team existed; however, a Level 1 score could indicate member roles may not have been in place or team member attendance was less than 80% as recorded by meeting minutes. Additionally, “student, family, and community involvement” and “annual evaluation elements” were assigned Level 1 ratings. Sunny scored Tier II with an overall self-rating of 92% for targeted SWPBIS features

(Table 3). Both “request for assistance” and “critical features” received Level 1 ratings on Tier II, indicating limited opportunities for family members to request help for students or limited processes for seeking behavioral support/skill support for at-risk students. Sunny Middle results on Tier III were 74%, indicating “intensive student support” was only “partially implemented (Level 1).” Tier III features ranked “partially implemented” (Level 1) included:

1. Team composition – Includes a Tier II system planning team, coordinator, multi-agency support, and knowledge of students, and knowledge of students across grade levels and programs.
2. Professional development – A written process to teach staff about behavioral theory, function of behavior, and function-based intervention.
3. Academic/social/physical indicators – A culmination of individual student data based on academics, behaviors, medical, and mental health.
4. Hypothesis statement – Behavior support plans include a description of problem behavior, context where problem behavior is most likely, and maintaining reinforcers.
5. Comprehensive support – Behavior support plans include all necessary elements.
6. Formal and natural supports – Include extensive and coordinated support.
7. Data system, aggregated – Tier III data are aggregated and provided to staff monthly.
8. Data-based decision-making – Each student behavior support team meets monthly.
9. Level of use – Teams follow written processes to track students participating in Tier III. (Table 7)

Importantly, in the 2016-2017 school year, Pleasant Middle and Sunny Middle self-rated all three tiers at fully implemented on the TFI, indicating that both schools were fully implementing PBIS on all three tiers. However, the state-recognized ratings for these two

schools differed as Pleasant Middle School received exemplar status and Sunny Middle School received non-exemplar status.

Table 5: TFI Tier I Universal SWPBIS Features

Features	2015-2016	2016-2017	2015-2016	2016-2017
	Sunny Middle	Sunny Middle	Pleasant Middle	Pleasant Middle
1.1 Team Composition	1	2	2	2
1.2 Team Operating Procedures	2	2	2	2
1.3 Behavioral Expectations	2	2	2	2
1.4 Teaching Expectations	2	2	2	2
1.5 Problem Behavior Expectations	2	2	2	2
1.6 Discipline Policies	2	2	2	2
1.7 Professional Development	2	2	2	2
1.8 Classroom Procedures	2	2	2	2
1.9 Feedback and Acknowledgement	2	2	2	2
1.10 Faculty Involvement	2	2	2	2
1.11 Student/Family/Community Involvement	1	2	2	2
1.12 Discipline Data	2	2	2	2
1.13 Data-based Decision-Making	2	2	2	2
1.14 Fidelity Data	2	2	2	2
1.15 Annual Evaluation	1	2	2	2

Scoring Criteria: 0=Not implemented; 1=Partially implemented; 2=Fully implemented

Table 6: TFI Tier II Targeted SWPBIS Features

Features	2015-2016	2016-2017	2015-2016	2016-2017
	Sunny Middle	Sunny Middle	Pleasant Middle	Pleasant Middle
2.1 Team Composition	2	2	2	2
2.2 Team Operating Procedures	2	2	2	2
2.3 Screening	2	2	2	2
2.4 Request for Assistance	1	2	2	2
2.5 Options for Tier II	2	2	2	2
2.6 Tier II Critical Features	1	2	2	2
2.7 Practices Matched to Student Need	2	2	2	2
2.8 Access to Tier I Supports	2	2	2	2
2.9 Professional Development	2	2	2	2
2.10 Level of Use	2	2	2	2
2.11 Student Performance Data	2	2	1	2
2.12 Fidelity Data	2	2	2	2
2.13 Annual Evaluation	2	2	2	2

Scoring Criteria: 0=Not implemented; 1=Partially implemented; 2=Fully implemented

Table 7: TFI TIER III Intensive SWPBIS Features

Features	2015-2016	2016-2017	2015-2016	2016-2017
	Sunny Middle	Sunny Middle	Pleasant Middle	Pleasant Middle
3.1 Team Composition	1	2	2	2
3.2 Team Operating Procedures	2	2	2	2
3.3 Screening	2	2	2	2
3.4 Student Support Team	2	2	2	2
3.5 Staffing	2	2	2	2
3.6 Student/Family/Community Involvement	2	2	2	2
3.7 Professional Development	1	2	2	2
3.8 Quality of Life Indicators	2	2	1	2
3.9 Academic, Social, and Physical Indicators	1	2	1	2
3.10 Hypothesis Statement	1	2	1	2
3.11 Comprehensive Support	1	2	2	2
3.12 Formal and Natural Supports	1	2	1	2
3.13 Access to Tier I and Tier II Supports	2	2	2	2
3.14 Data System: Aggregated	1	2	2	2
3.15 Data-based Decision-Making	1	2	2	2
3.16 Level of Use	1	2	2	2
3.17 Annual Evaluation	2	2	2	2

Scoring Criteria: 0=Not implemented; 1=Partially implemented; 2=Fully implemented

Theme 2: Office Discipline Referrals Varied by School

Table 6 summarized the ODRs for both Pleasant and Sunny Middle Schools. Results indicate there were fewer ODRs for Pleasant Middle from 2015-2016 to 2016-2017, an overall *decrease* in 87 reported offenses. The grade-level 2015-2016 ODRs for Pleasant Middle showed a decrease of 69 referrals for sixth-grade students, an increase of 36 referrals for seventh-grade students, and a decrease of 56 referrals for eighth-grade students. Although there was an increase for seventh grade, the overall decrease in reported offenses seems to support a fully implemented PBIS system that is working to reduce student misbehavior, as demonstrated by Pleasant Middle School's TFI results and state rating.

In comparison, Sunny Middle School reported an *increase* of 687 reported offenses from the 2015-2016 to 2016-2017 school year. The grade-level ODRs indicated an increase of 283 sixth-grade referrals, 183 seventh-grade referrals, and 220 eighth-grade referrals for the 2016-2017 school year. This widespread increase across all three grade levels seems to run contrary to the fully implemented TFI results. That is, if the PBIS system was in place and functioning, it should work to reduce student misbehaviors. In describing these data, however Mr. Teal did not mention PBIS at all, but instead described how the new administration emphasized the importance of holding students more accountable for inappropriate offenses. Other focus group members agreed that there was more emphasis placed on student behavior issues with the new administrative team, which appeared to focus more on punishing negative behaviors rather than rewarding positive behaviors. This occurrence appears contradictory to the premise of PBIS as an effective behavioral system.

Therefore, while Pleasant Middle School reported a decrease over the study period, Sunny Middle School reported a large increase in reported offenses. Interestingly, this difference is not reflected in both schools' TFI results.

Table 8: ODR Totals, Pleasant Middle and Sunny Middle (2015-2016 and 2016-2017)

Name of School	2015-2016 Number of ODRs (number of school days)	2016-2017 Number of ODRs (number of school days)	Difference	15/16 ODRs per grade level	16/17 ODRs per grade level	Difference
Pleasant Middle School	453 (180)	366 (174)	-87	6th-155	6th-86	-69
				7th-127	7th-163	+36
				8th-171	8th-115	-56
Sunny Middle School	1073 (180)	1760 (174)	+687	6th-356	6th-639	+283
				7th-387	7th-570	+183
				8th-330	8th-550	+220

Theme 3: PBIS Teams Completed TFI for Compliance not Development

The third theme was: Both PBIS Teams Completed the TFI for Compliance Rather Than Developmental Purposes

Across both PBIS school-level teams, teachers understood that the intended usage of the TFI was to adjust strategies and/or practices; however, both schools' PBIS teams regarded the TFI as a type of "checklist" to be completed out of compliance for state reporting purposes. They communicated it was an ineffective tool that was not utilized to change practices as intended.

More specifically, in 2015-2016, Pleasant Middle administrator Mrs. Velane was instrumental in guiding the PBIS team to complete the TFI. Prior to completing the tool, Mrs. Velane recounted how she "sent the TFI out to our PBIS members early" as an opportunity for members to review the tool prior to group completion. Team administrators recalled the TFI tool was new in 2015-2016, as teams were instructed to complete the instrument with all team members. After providing the tool for preview, a follow-up meeting was scheduled for PBIS team members to come together, as reported by Mrs. Velane. While describing the process, Mrs.

Velane also remembered that members were instructed to rate the elements individually prior to meeting together as a group, and further noted that scores were then collectively determined as a PBIS team.

In contrast to this collective process, for the 2016-2017 school year, Mr. Pope Co-Chaired the PBIS team and led the work to complete the TFI. Though he felt like the TFI was a “good idea,” he said that the Chairs completed it alone, stating “we found it was better to do it together, as Chairs, and then, take the information that we get from the tool, and we would present it at the next [PBIS team] meeting.” Importantly, Mr. Pope indicated the tool was something to complete out of conformity and not viewed as something that would help them developmentally. When asked about experience with the TFI, he shared:

The purpose of the tool is to measure how well your PBIS team has things in place, you know, it’s kind of a self-assessment, that’s what it is. And I don’t feel like it is a benefiting self-assessment, if that makes sense.

Perhaps as a result of this view, Pleasant Middle School team members indicated completing the TFI tool was more of a task needed for compliance instead of an instrument used by the team to guide reflection on current practices.

Sunny Middle School’s 2015-2016 PBIS administrator, Mrs. Teson, described the TFI as an instrument that could help PBIS team members direct their efforts for the following school year. Mrs. Teson explained that the TFI required more effort than the previous tool they had used when it was first introduced in 2015-2016; for example, the PBIS team had to complete the TFI together. Still, though the team worked collectively to complete the instrument, team members often sought Mrs. Teson’s guidance to assign scores across all three tiers. Nonetheless, despite the additional effort required to complete the TFI, she noted that the TFI was a tool used to fulfill

a requirement rather than as a way to inform future PBIS work in the following school year. That is, she suggested that the team went through the process without an emphasis on using the tool for change or needed action, but rather merely “for reporting information.”

Sunny Middle Co-Chair Ms. Chase shared that there was a lack of interest in completing the tool as a PBIS team the following school year, and results were not used to change practice. Ms. Chase shared how they “did it once with the team last year” and said that “the interest of doing it together” was not evident. She indicated the tool was something used for reasons of conformity or compliance. Ms. Chase shared:

I tried to do it with our team last year, and it kind of fell through. We did it once with the team last year. The interest of doing it together waned at the end. Other conversations started taking over. When we talk about our team last year, the interest was just not there. And so, when trying to complete the TFI with them last year, it just was difficult to do with them, and so I just went over it on my own. It was team issues not the TFI itself. It was the team not paying attention, not wanting to do what was necessary to finish the TFI.

Another team member from Sunny Middle School, Ms. Phelps, shared that there was a lack of team member training. Without the training, Ms. Phelps suggested that “it makes a difference in how to handle the tool itself.” Overall, none of Sunny Middle members referred to using the tool as intended to change practice. Therefore, it is not too surprising that Sunny Middle showed a large increase in ODR rates while also reporting a “fully implemented” PBIS system—the tool itself was completed by a single administrator who believed the process needed to be completed out of compliance purposes.

Theme 4: PBIS Team Leader’s Views of the TFI Varied

While both PBIS team leaders suggested that the TFI self-assessment was completed out of compliance rather than developmental purposes, their views of the TFI varied. More

specifically, Mr. Pope from Pleasant Middle School regarded the tiers within the instrument as redundant:

You know, when you go from Tier 1, you go from the basic of the basic, Tier 2, you are making sure you have the baseline, but you have a little bit more, this is just from my observation, our experience with it. I feel like as you move up, yes, yes, we've got that, Tier 2 and 3, it gets a little more confusing, you know, the wording, the redundancy, all the information over and over. It's like, didn't we just answer that you know, the wording, the redundancy, all the information over and over.

Mr. Pope went on to suggest the instrument would serve PBIS teams more effectively if repeating elements across tiers were eliminated:

I think the idea of the tool is a good idea. I think it is too complex. It needs to be simplified. You are supposed to do it with a team, but as we have found, it kind of gets you know, like I said redundant, to say the same thing over again. The team starts to get you know, how long does this last?

In contrast, Ms. Chase, Co-Chair of Sunny Middle School, regarded the tool as “easy to use.” Yet, she described difficulty with completing the TFI with team members, stating that “the interest was just not there.” In clarifying her comments, she said “it was not the tool itself” that was the issue but rather “it was the team not paying attention” to completing the instrument. She explained, “It just was difficult to do with them, and so I just went over it on my own.”

In summary, though both Sunny and Pleasant Middle Schools rated themselves as fully implemented on all three tiers, and both team leads completed the TFI instrument alone, their views of the tool varied. Pleasant Middle described the tool as “redundant” and “complex.” In

contrast, Ms. Chase, Sunny Middle Chair, referred to a lack of team member interest when attempting to complete the instrument.

Theme 5: Both Teams Perceive PBIS as More Effective for Sixth-Grade Students

Members of both PBIS teams shared they believe PBIS works for younger middle school students, specifically sixth-grade students. Focus group participants were asked, “Do team members believe PBIS works for middle school students?” Both teams described similar perceptions that sixth-grade students responded more favorably to the PBIS system in comparison to older middle school students (eighth-grade students).

Pleasant Middle School Co-Chair, Mr. Pope, described personal experiences teaching sixth-grade and eighth-grade students, adding that “middle school age (students) are the type of students you can influence heavily.” However, he identified a lack of response from eighth-grade students to the PBIS behavioral system, describing it as “not cool” for older students to receive motivational rewards. Overall, Pleasant Middle participants agreed with Mr. Pope’s response that it works for younger middle school students because the older students are less motivated to respond to the PBIS reward system.

Further, Mr. Teal indicated the PBIS system at Sunny Middle impacted sixth-grade students as they were immersed in more foundational PBIS experiences than with the previous administration. In contrast, he commented that eighth-grade students lacked the primary focus on PBIS behavioral expectations, given the previous administration’s emphasis. In the same way, Ms. Chase argued that PBIS “works well for the younger middle school students” as she described how sixth-grade students seemed more interested in receiving a token reward called “tiger paws” than do the older students. The seventh-grade and eighth-grade students appeared less interested in redeeming the tokens at the PBIS school-based store, according to Ms. Chase. She supported her prior statement by recounting “as they go up in grades, it seems to kind of fall

off and that's been shown through the data.” Likewise, Miss Martin agreed with Ms. Chase and Mr. Teal as she discussed how the sixth-grade students she taught responded to the rewards and to PBIS behavioral expectations.

At Sunny Middle School, all team members agreed PBIS motivation waned as students matured in middle school. Mr. Teal shared that PBIS influenced younger middle school students. Ms. Chase added “we are still in the process of figuring out how it works for seventh and eighth graders.” Without hesitation, she shared the school store was not a motivation for older middle school students and regarded the reason as “what we see as cool may not be as entertaining to them.” Mr. Teal added that, if the sixth-grade and seventh-grade students regarded something as “cool,” the eighth-grade students appeared to oppose the event or lack interest, mentioning school dances as an example. The lack of eighth-grade interest in response to PBIS rewards seemed puzzling to the team members, especially considering their perception of sixth-grade accounts.

Therefore, across both middle schools, school-level teams agreed that the PBIS system did not appear as effective for eighth-grade students.

Summary of Major Findings

After analyzing the data from two consecutive years of TFI results, two years of ODR results, and focus group transcriptions, the findings of the current study were unique to each school setting, despite the fact that both schools were rural middle schools with similar student populations.

The first question, “How do PBIS teams in two rural North Carolina schools designated as exemplar and non-exemplar schools vary in their use of the Tiered Fidelity Inventory tool?” was answered through participant responses and TFI analysis. Three important themes emerged from the results. First, though their PBIS state rating varied, both schools self-reported a fully

implemented PBIS system across all three tiers of the TFI instrument. TFI usage did not appear to vary for both Pleasant Middle and Sunny Middle considering both teams ranked themselves as fully implemented on all elements in the 2016-2017 school year.

The next theme that emerged was that both teams completed the TFI for compliance rather than developmental purposes and indicated the Co-Chair and Chair of each team completed the tool independently without team input. Sunny Middle School's Co-Chair described the instrument being completed independently, without team input, due to a loss of team interest. Similarly, Pleasant Middle Co-Chair Mr. Pope shared that his team did not complete the TFI collectively. Finally, PBIS team leaders' views of the TFI varied, which impacted TFI usage. Sunny Middle School's Ms. Chase said her team lost interest in completing the tool collectively, whereas Pleasant Middle Co-Chair Mr. Pope described the tool as "redundant" and complex. The attitudes toward the TFI appeared to limit usage of the TFI as intended to change practice.

The second question, "How do exemplar and non-exemplar schools differ in terms of their TFI results?," was addressed by analyzing the TFI data results for two consecutive school years, 2015-2016 and 2016-2017. An important emergent theme was that, despite the fact that their PBIS state rating varied, both schools self-reported a fully implemented PBIS system across all three tiers of the TFI instrument. The TFI results indicated that Tier I, Tier II, and Tier III were not part of implementation for the 2015-2016 school year. Both schools differed in Tier I results in the 2015-2016 school year. Tier I results for Sunny Middle reported three elements were partially implemented, whereas Pleasant Middle reported full implementation for all elements. The 2015-2016 overall results for Tier II were 92% for Sunny Middle and 96% for Pleasant Middle. In 2016-2017, Tier II was reported at 100% for both schools. Tier III results for

2015-2016 were reported as 74% for Sunny Middle and 80% for Pleasant Middle. Importantly, Tier III was reported at 100 for both schools in 2016-2017, but ODR data at Sunny Middle indicated an increase in student referral that did not align with the self-ratings. Pleasant Middle was recognized as exemplar by NCDPI and Sunny Middle received non-exemplar status. Overall, the TFI results for the 2016-2017 school year did not vary, although state recognition was different for each school.

While the teams did not vary in TFI results for the 2016-2017 school year, the tool was not utilized as intended; that is, it was not used to change practices in either school. Interestingly, attitudes toward the tool did vary. Mr. Pope described the tool as “redundant” and “complex,” indicating it was not useful. In contrast, Ms. Chase regarded the TFI as “useful,” though the team still lacked interest in tool completion. Team member attitudes were unique to each school, although Pleasant Middle was recognized as exemplar and Sunny Middle received non-exemplar state recognition.

The final research question, “Do team members perceive PBIS is an effective middle school behavioral support system?,” was determined during the focus group discussions and reviewing the ODR data. The theme that both teams perceived PBIS as more effective for sixth-grade students indicated that team perceptions for both Pleasant Middle and Sunny Middle were similar. Pleasant Middle Co-Chair Mr. Pope shared the system was more effective for younger middle school students, based on his accounts with PBIS rewards as an incentive. Sunny Middle Co-Chair Ms. Chase similarly indicated the system was more effective for sixth-grade students than it was for older middle school students. Another theme, ODRs varied by school, indicated team perceptions did not align with the ODR data. The ODR data did not indicate a distinct reduction in referrals between the grade levels, but team members similarly viewed the school’s

behavioral system as effective. Both schools shared the system was more effective for younger students although the ODR data did not align with this perception. Specifically, seventh-grade ODRs increased between the two school years at Pleasant Middle, while Sunny Middle reported increases for sixth-grade, seventh-grade, and eighth-grade referrals.

CHAPTER 5: DISCUSSION, IMPLICATIONS, AND CONCLUSION

Chapter Introduction

School administrators, teachers, and other school-level support staff face challenges when negative student behavior disrupts the school environment, resulting in loss of instructional time. Strategies to address negative student behavior have been a focus for school districts across the nation, given accounts of reported school incidents in the media (Gallup, 2000; Wolf et al., 2016).

Considering student engagement and learning decreases when negative behaviors cause disruptions impacting the school climate (Martinez et al., 2016), several behavioral programs have been used in an effort to minimize interruptions. One behavioral support system, Positive Behavioral Interventions and Supports (PBIS), regarded as effective in reducing discipline referrals when implemented with fidelity, is recommended by the North Carolina Department of Public Instruction (NCDPI). PBIS teams use the Tiered Fidelity Inventory (TFI), a self-rated tool with three tiers of support, to measure implementation fidelity and change practices within the school setting. The current multi-case study worked to capture the experiences of PBIS team members with the TFI. The goal was to determine if the TFI results differed between an exemplar and non-exemplar school, and to gain insights of team member perceptions of PBIS as an effective behavioral system for middle schools.

Studies regard PBIS as a practical system that establishes school-level behavioral expectations, teaches rules in the school setting, provides incentives for desirable behaviors, and monitors outcomes to encourage an overall positive learning environment (Sugai & Horner, 2002, 2010; Sugai & Simonsen, 2012). Lassen et al. (2006) found that, when implemented in middle schools, PBIS resulted in reduced reported discipline referrals and fewer student suspensions. Interestingly, rural schools face difficulty with high poverty, resulting in a lack of

resources, according to Fusarelli and Militello (2012). Bradshaw et al. (2009) report there are limited PBIS studies on middle school implementation; therefore, this qualitative multi-case study provided practical insights into PBIS initiatives in two rural middle schools.

This study set out to answer three research questions:

1. How do PBIS teams in two rural North Carolina schools designated as exemplar and non-exemplar schools vary in their use of the Tiered Fidelity Inventory tool?
2. How do exemplar and non-exemplar schools differ in terms of their Tiered Fidelity Inventory results?
3. Do team members perceive PBIS as an effective middle school behavioral support system?

In this qualitative multi-case study, two rural middle school PBIS teams participated in a focus group, at each school site, in early 2018. While interviewing PBIS team members from two rural middle schools with the pseudonyms Pleasant Middle School and Sunny Middle School, several themes emerged.

Discussion of Emergent Themes

TFI Results Did Not Vary

One theme emerged after the TFI results were analyzed, which was that TFI results did not vary between the schools. The TFI tool, consisting of three tiers, includes a type of Likert scale self-rating for teams to determine fidelity of implementation, was introduced by Algozzine et al. (2014). The instrument was intended to measure implementation progress, serve as a planning tool, and assist in determining levels of support within each Tier (Algozzine et al., 2014). In the current study, the TFI results were the same across both schools for the 2016-2017 school year. Each school reported 100 for Tier I, Tier II, and Tier III, indicating the maximum potential score, or self-ratings indicated all tiers were at full implementation. The results did not

vary across the two schools, although Pleasant Middle School was designated as exemplar and Sunny Middle School received non-exemplar recognition by NCDPI.

The intended use of the TFI is to determine implementation within each tier, change practice, and determine any deficits in the school-level system, based on the self-ratings (Algozzine et al., 2014). However, the TFI results did not vary across the schools although one school, Pleasant Middle, was awarded exemplar status based on submitted criteria and the other school, Sunny Middle, received non-exemplar recognition. Considering the TFI has complex levels intended to determine preventative strategies and guide team planning (Algozzine et al., 2014), the lack of variance between the school results did not indicate ratings were given consideration as intended.

Prior to the TFI tool being introduced to North Carolina in 2015, an instrument called the SET review, with seven key features to determine school-wide PBIS support, was used; Horner et al. (2004) argued the SET tool was not robust enough. Likewise, Algozzine et al. (2014) regarded the prior tool as ineffective in determining fidelity. Therefore, TFI was introduced in 2015 as a complex measure to assist school-level PBIS teams across the state (NCDPI, 2015). The tool has three tiers: Tier 1 (universal), Tier II (targeted), and Tier III (intensive) (Leverson et al., 2016; McIntosh et al., 2017). The TFI is a complex instrument designed to serve as a measure of implementation fidelity and a guide for planning actionable strategies (McIntosh et al., 2017). Self-ratings of 100 indicate all areas are fully operable with limited need for adjustment. However, Sunny Middle School reported that they did not receive exemplar recognition. During the focus group, Sunny Middle participants noted that their recognition status was influenced by a change in administration which increased monitoring student behaviors more closely. Mr. Teal, Sunny Middle School administrator, recounted the increase in

student discipline referrals as a product of creating “new disciplinary programs that we’ve implemented that were not documented programs in the past.” During the focus group, Mr. Teal shared he had not been formally trained on the PBIS system. Thus, while it is unclear whether Mr. Teal understood the purpose of implementing a PBIS system, he did view student accountability for misbehavior as an important leadership strategy for addressing student behavior in the school. Moreover, research indicates that when PBIS is implemented in middle school settings, the system is an effective approach to addressing student behaviors (Lassen et al., 20016). The school’s increase in office discipline referrals (ODR) suggests that the leadership team prioritized this approach rather than PBIS.

Research indicates that implementation variation is a concern across school settings, and has been a focus in studies partially because school settings tend to differ greatly. Freeman et al. (2013) investigated the issue of PBIS variance and found that PBIS originated in mostly elementary and middle schools because larger school settings like high schools found it difficult to implement PBIS. Other researchers have determined that full Tier I implementation is primarily found in elementary schools (Horner et al., 2010). In the current study, each middle school was similar in size and considered a rural school, but findings did not indicate a variance in their TFI results.

Interestingly, Pleasant Middle School was awarded exemplar status by NCDPI based on criteria outlined for recognition. The school reported a decrease in ODR data, in addition to scoring 100 on Tier I, Tier II, and Tier III of the TFI self-rated instrument for the 2016-2017 school year. Similarly, Sunny Middle School reported 100 on all three tiers of the TFI for the 2016-2017 school year, though they received non-exemplar PBIS recognition for the same period due to a reported increase in ODR data. Exemplar status is the highest PBIS recognition,

followed by model and then green ribbon, which is typically awarded to schools beginning PBIS implementation. In the current study, both schools were middle rural schools, similar in size, and had established PBIS teams; however, team attitudes toward the TFI differed.

Team Attitudes Varied

Another theme that the current study found varied between the exemplar and non-exemplar middle schools was PBIS team attitudes toward the TFI. Pleasant Middle School Co-Chair Mr. Pope described the instrument as “redundant” and indicated the team did not complete it collectively, noting it was completed by the Co-Chairs. Interestingly, Sunny Middle School Co-Chair Ms. Chase regarded the tool as “useful,” but later admitted the tool was completed without team input. In the constructivist view, meaning is derived as participants engage in conversations, so open-ended, semi-structured questions allow participants to share their experiences while listening to others do the same (Creswell, 2014). The current study’s focus group discussions, then, were guided by open-ended questions that encouraged participants to recount their experiences with TFI implementation over the past two school years. Participant responses revealed that team member perspectives varied across the different middle school settings. It should be noted that sharing within the focus group setting may have influenced other team members’ responses as they listened to the Co-Chairs voice their opinions.

In the current study, both Co-Chairs indicated they completed the instrument with limited or no input from other team members, adding that the other members of the PBIS team lost focus and/or interest in completing the tool collectively. It has been suggested, however, that the use of the self-assessment measures can result in over-inflated results (Noelle et al, 2005). Could the attitudes toward the TFI expressed by the Co-Chairs of each team have had an impact on whether the tool was used as intended? Another consideration to minimize flawed results was put forth by McIntosh et al. (2017), who strongly recommend that the external coach assists school-level

teams throughout the self-assessment process, guiding them in scoring and providing support as the results are analyzed. Though directions and assistance from the PBIS coach has been strongly recommended as an effective practice (McIntosh et al., 2017), neither the participants nor either Co-Chair in the current study referenced receiving input or guidance from the district PBIS coach while completing the TFI.

Teams Viewed PBIS as Effective in Middle Schools

Another theme emerged when participants in the current study were asked if they viewed PBIS as an effective system for middle schools and encouraged to share their insights on the topic. Research studies indicate middle school settings are inundated with disruptive student behaviors such as bullying or harassment, which frequently leave students victimized by their peers. In a study of 20 middle schools, Perkins, Perkins, and Craig (2014) found that more than two-thirds of students reported being victims of bullying and/or harassment or having witnessed the victimization of others. In addition, the location of incidents occurred in both supervised and unsupervised areas (Perkins et al., 2014). School personnel face difficulties in middle school settings when negative behaviors impede positive interactions with students. Spaulding et al. (2010) note more frequent displays of defiance and disruptions in middle schools than in elementary or high school settings. This means that middle school administrators are often faced with student behavior issues that can result in suspensions (Spaulding et al., 2010). The National Center for Education Statistics (NCES, 2010) regard middle school as a time where students need additional support. Given middle school climates vary depending on demographics, Lassen and colleagues (2006) report PBIS has shown to be an effective deterrent system deterring unwanted negative behaviors. In this qualitative study, participants were asked, “Is PBIS was an effective behavioral system for middle school students?”

Team perceptions of PBIS as an effective system were similar for both groups. However, the team at both Pleasant Middle and Sunny Middle regarded the PBIS system as more effective for younger than older middle school students. The Co-Chair of Pleasant Middle, Mr. Pope, stated, “For the majority of students, I think it does work.,” but added, “I think it is especially important, when you start out in the sixth grade.” Mr. Pope cited the amount of work for team members as a contributing factor for an effective PBIS system. However, the ODR data used in this study did not align with his perception. Sunny Middle Co-Chair Ms. Chase remarked, “It works for younger middle school students,” but the school ODR results indicated an increase for all three grade levels, sixth, seventh, and eighth grades. Interestingly, the number of eighth-grade ODRs did not reflect as much of an increase as did sixth and seventh grades. The younger middle school students had more ODRs, suggesting PBIS did not work as well for them, contrary to Ms. Chase’s statement. Pleasant Middle reported a decrease in ODRs across all three grade levels.

In this study, ODRs for the exemplar school, Pleasant Middle, decreased across all grade levels during the 2016-2017 school year. Although Sunny Middle reported an increase across all grade levels for the 2016-2017 school year, the number of referrals for eighth-grade students did not significantly increase in comparison to sixth-grade and seventh-grade ODRs. Nonetheless, although the ODR data did not support their perceptions, PBIS team participants at both Pleasant Middle and Sunny Middle said they believed the PBIS system was more effective for younger students. Given the volatile school climate in middle school settings, this finding is important, as teams should consider how team member’s perceptions differ from actual data outcomes, and further investigate the discrepancy.

Implications of the Study

Implications for Future Research

McIntosh, Kern, and Delabra (2016) describe the importance of administrator influence on effective PBIS implementation. In a qualitative study comprised of 10 principal interviews, principal PBIS support was found to be a major determinant for schoolwide implementation success, and hence regarded as critical for PBIS sustainability (McIntosh, Kern, et al., 2016). The current study focused solely on two rural middle schools in eastern North Carolina. Future researchers should consider rural school settings based on the limited PBIS studies in these settings. Gottfredson and Gottfredson (2001) reported preventative programs are limited in rural school settings, associated with a lack of resources. Another large study found “real-world” PBIS implementation in rural setting varied in implementation because of limited resources (Malloy et al., 2013). Another consideration for research to extend the current knowledge should include studies on schools with new administrators on PBIS teams and their level of support.

Another implication of the current study relates to this researcher’s potential influence on the participants. After several attempts to schedule a time and date for the Sunny Middle School focus group, the school’s principal asked the team to comply with my request for participation in a focus group. The constructivist view suggests meaning is constructed through conversations (Creswell, 2014), and the researcher may influence participant’ responses (Yin, 2009). While the researcher kept possible influences in mind during both focus groups, participant’ responses could have been impacted by their principal’s mandate to participate. For future case study research, attention to researcher influence should be considered.

Researchers should consider the time allocated for focus groups. In the current study, the focus group was held after the school day and many participants had assigned afternoon duties, including student supervision, car duty, and bus lot responsibilities. Thus, despite the cooperation

of the participants from Pleasant Middle School, I felt rushed to complete the focus group session considering the time of day. Researchers should be mindful of the time of day when scheduling focus groups to eliminate any concerns of having to rush to complete a session.

The findings indicated that both exemplar and non-exemplar school team members completed the TFI out of a sense of compliance, rather than for the intended purpose of changing practices. Moreover, it was the Co-Chairs at each school who completed the instrument, with no assistance from the PBIS team members. Participants' opinions toward the TFI were similar at both schools, but the teams had different attitudes. The non-exemplar school team felt the instrument was a good idea, while the exemplar school Co-Chair described the TFI tool as "redundant" and recalled negative experiences with the instrument. Neither team referenced the TFI as changing practices. Future research should extend the limited current studies on the TFI and methods used to ensure intended and proper tool usage.

Implications for Practice

The implications of this study are important to ensure PBIS school-level teams utilize the TFI instrument as intended, as a developmental tool to change practice and as a measure of implementation fidelity. Other implications for practice include considering ODR data while completing the TFI, improving team member perceptions on PBIS as an effective behavioral system for middle school students, and providing more time for TFI completion. The results also suggest that new administrators should be trained on the PBIS system to build understanding. Other types of incentives could be more effective and warrant consideration for middle school students. Furthermore, as an integral support for each PBIS school-level team, district PBIS coaches could ensure team training for all PBIS team members in the district, monitor TFI completion closely, collaborate with Chairs and Co-Chairs when ratings are assigned, and make suggestions to NCDPI about ways to refine and improve the tool and its usage.

Use of TFI to change practice. The TFI tool is intended to measure implementation fidelity while serving as an instrument to guide changes in practice. PBIS teams and district leaders could consider the findings of the current study to help make sure the TFI is being utilized as recommended by NCDPI when it was created in 2015. Using the TFI tool to affect changes in practice should influence positive student behaviors and enhanced student academic outcomes. Although North Carolina schools implementing PBIS are not required to use the TFI, it is highly recommended to change practice and as a measure for implementation (Algozzine et al., 2014). McIntosh et al. (2015) suggest using the tool with fidelity to ensure sustainability and limit abandonment of the PBIS behavioral system.

Inclusion of ODR data. Considering ODR data are reviewed monthly by team members, this data should be included when self-ratings are assigned to the TFI. One component of the TFI includes monthly reports provided to PBIS team members throughout the school year. The data in these reports are discussed and reviewed during monthly meetings as a part of PBIS team requirements. Therefore, making sure that ODR data is considered while teams complete the TFI could provide deeper insights. Using the referral data should impact using the tool as a measure of implementation fidelity.

Limitations of team member influence. Interestingly, individual team member's perceptions could limit the scope of PBIS implementation, thereby impacting PBIS implementation within the school setting. As constructivist view suggests participants derive meaning from interactions with others (Creswell, 2014); therefore, when PBIS teams meet to complete the TFI, each participant could provide individual ratings in writing, privately. Leverson et al. (2016) suggest all team members should participate in completing the TFI, which would limit individual members' influence, increase member participation, and ensure a

collective approach while completing the tool. This could limit the influence from other participants and make sure that all members have input while completing the TFI. Algozzine et al. (2014) insist team members are an integral part of the self-ratings for the effectiveness of the tool.

Time to complete the tool. Given that team members have additional responsibilities, another important consideration is providing additional time for tool completion. Perhaps more time should also be devoted to enabling the completion of the tool as a team, ensuring collective ratings are assigned within each tier. Serving on the PBIS team is typically an additional responsibility for team members, so PBIS Chairs and administrators could schedule time for staff members to meet within the school day to allow them to complete it together. Two recommendations to assist team members with other school responsibilities are to provide substitutes or comp time for them, much like what the Pleasant Middle School team members in this study had.

New administrators and PBIS training. In this study, the PBIS administrator from Sunny Middle School, Mr. Teal, described having a new administration team which focused more on punitive approaches to counter negative behaviors rather than the PBIS systems approach. Leithwood and Sun (2012) describe the importance of “strengthening the school culture” as one of many necessary practices for new school leaders (p. 400). Further, the focus on building common beliefs is crucial when new administrators are assigned to previously established schools (Leithwood & Sun, 2012). New school leaders may not prioritize a behavioral system, like PBIS, during the first year; rather, they may establish a more rigid approach to discipline to set the tone. Thompson, Henry, and Preston (2016) find that discipline problems and low student expectations impact student achievement. Student behaviors connected

to the overall school climate are especially important considerations for schools with low academic achievement (Thompson et al., 2016). Sunny Middle School was rated as a “D” school, based on North Carolina school report card criteria, for the 16-17 SY; however, early indications suggest the school increased by one letter grade to a “C” and “exceeded growth” in the 17-18 SY, indicating student proficiency increased after two school years with the new administration. Another interesting result is Pleasant Middle School’s improved student proficiency in the same period, from the 2016-2017 school year to the 2017-2018 school year, exceeding growth and moving from a “D” rated school to a “C” state report card grade. Research indicates administrator support is a major determinant of PBIS implementation (McIntosh et al., 2016). Future research could examine the extent to which new administrative teams embrace PBIS or focus on a similar strategy employed by Sunny Middle School in focusing on holding students accountable for misbehavior. Importantly, research suggests training is an important component for all PBIS team members to support implementation and sustainability (McIntosh et al., 2016).

District coach support. Finally, district PBIS coaches provide school-level team support and guidance that is important for implementation fidelity. In North Carolina, NCDPI typically provides one district PBIS coach. McIntosh (2017) describes their role as crucial for implementation and sustainability of the PBIS behavioral system. One suggestion for practice is for district-level coaches to closely monitor self-ratings for all three tiers – Tier I, Tier II, and Tier III – at each school implementing PBIS, prior to state recognition submission. Importantly, the district coach and PBIS team Chairs/Co-Chairs could use the insights gained from this study to consider additional safeguards, possibly an accountability checklist at the school and district levels to capture evidences of collective TFI completion. Algozzine et al. (2014) recommend the team complete the TFI collectively with support from the coach, rather than in isolation. The

PBIS Chairs/Co-Chairs should furthermore ensure team members receive adequate training on the TFI instrument and collaborate with district coaches on the scheduled date and time allocated for team completion—a core expectation from NCDPI. Lastly, considering current findings from this study, district coaches could provide recommendations to NCDPI, suggesting the state revisit TFI completion practices for all North Carolina PBIS teams.

Middle School Incentives. In this study, team members shared their beliefs that PBIS is more effective for younger middle school students (sixth grade) and not as beneficial for seventh-grade and eighth-grade students. Studies indicate several rewards have been utilized for students, with positive results. For example, free time, electronic device usage, and teacher affirmation are among some incentives which have been used to motivate students (Flowers, 2014; Wheatley et al., 2009; Reinke et al., 2008). Considering early adolescent social influences in middle school settings, one possibility is to poll students in each grade level to determine possible reward preferences. Given the social nature of middle school students, PBIS teams could consider free time with peers as a motivational incentive. In this comparative case study, several participants shared they found it difficult to determine effective incentives for older middle school students; therefore, providing students a choice could provide more insights for PBIS teams, especially to meet the social needs of typical middle school students. Further research could examine how reward type may vary based on grade level.

District incentives for PBIS implementation. Future consideration should include identifying and extending effective incentives for implementing PBIS in schools and school districts. Prior incentives included funding for PBIS start-up in Local Education Agencies (LEAs). The 2017-18 NCDPI memorandum states grants are available through the Exceptional Children Division, funding from IDEA, to support LEAs wanting to implement PBIS. NCDPI

funding requirements include a detailed application process with specific requirements, including training module delivery, budget, and sustainability expectations (NCDPI, 2017). At this time, NCDPI incentives to implement PBIS include training for staff on the PBIS modules. The ultimate goal of establishing a caring, positive school climate is the expected outcome for implementing PBIS, with an emphasis on positive reinforcement of desirable student behavior. The NCDPI document describes an intentional focus on “proactive, instructional, and outcome-based” discipline strategies, countering punitive approaches to discipline (2017). Other incentives for schools could extend beyond training to assist school-level teams and district coaches. Given the extensive research on PBIS as an effective behavioral system when implemented with fidelity, NCDPI and LEAs should consider additional incentives beyond state recognition. Additional parental involvement in Tier I PBIS features, adding school recognition for PBIS implementation on the school report card, and providing monetary rewards for exemplar schools could provide additional incentives for schools and LEAs, resulting in increased implementation with fidelity.

Conclusion

In the current study, three questions were asked to capture PBIS team members' experiences with the TFI, as well as to determine usage and understand team member perceptions of PBIS as an effective behavioral system for middle school settings. Though the results are not generalizable because of the limited number of school settings and only two PBIS teams having been interviewed, the findings are nonetheless still important. Surprisingly, one PBIS chair regarded the TFI tool as redundant, describing it as a checklist and not a tool that could be used to adjust practices. Training all team members on the TFI could impact future TFI self-ratings. Given the opportunity to extend the current study, one recommendation is to utilize specific questions about using the ODR data during the focus group. The ODR data usage during

self-ratings could have changed the TFI results, especially for the non-exemplar school in this study. Another consideration for future comparative PBIS case studies is to consider the constructivist view and how team members construct meaning from others. Minimizing participant influence could be carried out with pre-surveys before the focus group is held. Nonetheless, PBIS teams and district personnel should consider the findings of the current study for middle school PBIS teams, especially in rural settings, if they wish to enhance its effectiveness. Moreover, district-level and state-level behavioral consultants could use the findings to promote the usage of the TFI tool as intended, which could work to change practice and improve the precision of team self-ratings.

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APPENDICES

Appendix A: Focus Group Interview Questions

1. How did you arrive in the education field?
2. How many years have you worked at this school? How long have you served on the PBIS team?
3. Please describe your experiences with PBIS. Can you elaborate more?
4. Do you think PBIS works for middle school students? Positives? Limitations? (If more details are needed, I will ask: Can you explain further?)
5. Describe your experiences with the TFI tool. Positive experiences? Are there any limitations experienced with the TFI? Please tell me more.
6. Have all members received training on the TFI?
7. How often does your team meet? Please describe your meetings.
8. Have you experienced any difficulty serving on the PBIS team? Please explain.

Thank you for sharing your information. Is there anything you would like to add?

Below are the follow-up questions asked to administrators not attending the focus group:

1. What was the difference between the 2015-2016 and 2016-2017 TFI results?
2. Was the TFI completed alone or with the team?
3. Can you recall the difference in scoring?

Appendix B: Study Schools' ODR Totals, 2015-2016 & 2016-2017

Name of School	Years	Number of ODRs/Number of School Days		ODRs per Grade Level
Pleasant Middle School	2015-2016	453/180	2015-2016	6-155 7-127 8-171
	2016-2017	366/174	2016-2017	6-86 7-163 8-115
	2015-2016	1073/180	2015-2016	6-356 7-387 8-330
	2016-2017	1760/174	2016-2017	6-639 7-570 8-550

Appendix C: TFI—Tier I Universal SWPBIS Features

Features	2015/16	2016/17	2015/16	2016/17
	Sunny Middle	Sunny Middle	Pleasant Middle	Pleasant Middle
1.1 Team Composition	1	2	2	2
1.2 Team Operating Procedures	2	2	2	2
1.3 Behavioral Expectations	2	2	2	2
1.4 Teaching Expectations	2	2	2	2
1.5 Problem Behavior Expectations	2	2	2	2
1.6 Discipline Policies	2	2	2	2
1.7 Professional Development	2	2	2	2
1.8 Classroom Procedures	2	2	2	2
1.9 Feedback and Acknowledgement	2	2	2	2
1.10 Faculty Involvement	2	2	2	2
1.11 Student/Family/Community Involvement	1	2	2	2
1.12 Discipline Data	2	2	2	2
1.13 Data-based Decision Making	2	2	2	2
1.14 Fidelity Data	2	2	2	2
1.15 Annual Evaluation	1	2	2	2

Scoring Criteria: 0=Not implemented; 1=Partially implemented; 2=Fully implemented

Appendix D: TFI—Tier II Targeted SWPBIS Features

Features	2015/16	2016/17	2015/16	2016/17
	Sunny Middle	Sunny Middle	Pleasant Middle	Pleasant Middle
2.1 Team Composition	2	2	2	2
2.2 Team Operating Procedures	2	2	2	2
2.3 Screening	2	2	2	2
2.4 Request for Assistance	1	2	2	2
2.5 Options for Tier II	2	2	2	2
2.6 Tier II Critical Features	1	2	2	2
2.7 Practices Matched to Student Need	2	2	2	2
2.8 Access to Tier I Supports	2	2	2	2
2.9 Professional Development	2	2	2	2
2.10 Level of Use	2	2	2	2
2.11 Student Performance Data	2	2	1	2
2.12 Fidelity Data	2	2	2	2
2.13 Annual Evaluation	2	2	2	2

Appendix E: TFI—Tier III Targeted SWPBIS Features

Features	2015/16	2016/17	2015/16	2016/17
	Sunny Middle	Sunny Middle	Pleasant Middle	Pleasant Middle
3.1 Team Composition	1	2	2	2
3.2 Team Operating Procedures	2	2	2	2
3.3 Screening	2	2	2	2
3.4 Student Support Team	2	2	2	2
3.5 Staffing	2	2	2	2
3.6 Student/Family/Community Involvement	2	2	2	2
3.7 Professional Development	1	2	2	2
3.8 Quality of Life Indicators	2	2	1	2
3.9 Academic, Social, and Physical Indicators	1	2	1	2
3.10 Hypothesis Statement	1	2	1	2
3.11 Comprehensive Support	1	2	2	2
3.12 Formal and Natural Supports	1	2	1	2
3.13 Access to Tier I and Tier II Supports	2	2	2	2
3.14 Data System: Aggregated	1	2	2	2
3.15 Data-based Decision Making	1	2	2	2
3.16 Level of Use	1	2	2	2
3.17 Annual Evaluation	2	2	2	2

Appendix F: PBIS Team Member Backgrounds

Team Member Name/School	Education Entry	Years at School & Serving on Team	PBIS Experience
Pleasant Middle School			
Mr. Pope	Lateral Entry, Biology Major	Four years at Pleasant Middle and four years serving on the team	Fourth year as PBIS Co-Chair
Miss White	Lateral Entry, Business Major	Four years at Pleasant Middle and four years serving on the team	Second year as PBIS Co-Chair
Ms. Poe	Traditional pathway into education, Library Science Major	One year at Pleasant Middle and one year serving on the team	Team member
Ms. Joy	Traditional pathway into education, Math Major	17 years at Pleasant Middle and two years serving on the team	Team member
Ms. Berman	Traditional pathway into education, Master in Business Administration Major	Four years at Pleasant Middle and two years serving on the team	Team member
Ms. Pink	Traditional pathway into education,	Did not disclose how long at school and over two years serving on the team	Team member
Sunny Middle School			
Mr. Teal	Lateral Entry Teacher, History/Business Major	10 years at Sunny Middle and one and one-half years on the team	New to the Middle School, PBIS team administrator
Ms. Chase	Traditional pathway into education,	Four years at Sunny Middle and two years on the team	Second year as the PBIS Co-Chair
Ms. Phelps	Began education in occupational therapy, switched to special education,	Nine years at Sunny Middle and four years on the team	Team member
Miss Martin	Traditional pathway into education, Literature major	One year at Sunny Middle and one year on the team	Team member
Mrs. Velane	Not shared	2015-2016 new Assistant Principal at Pleasant Middle/PBIS	2015-2016 Admin/PBIS
Mrs. Teson	Not shared	2015-2016 new Assistant Principal at Sunny Middle/PBIS	2015-2016 Admin/PBIS

Appendix G: North Carolina PBIS State Recognition Criteria, 2016-2017

	North Carolina PBIS Green Ribbon School	North Carolina PBIS Model School	North Carolina PBIS Exemplar School
Systems	<p>Active Administration PBIS Team in place PBIS Team meets monthly (9X yearly min.) Identified In-School Coach Completed Module 1 All office referral data submitted in the Discipline Data Summary Spreadsheet. http://behaviorsupport.ncdpi.wikispaces.net/Discipline+Data+Summary+Spreadsheet</p> <p>Items listed below are completed and submitted electronically at https://schools.nc.gov/pbis</p> <ul style="list-style-type: none"> • TFI submitted by PBIS In-School Coach or PBIS Data Base Manager • SET or BSET (<i>see criteria for BSET use</i>) entered by Regional Behavior Consultant or LEA PBIS Coordinator/Coach 	<p>Active Administration PBIS Team in place PBIS Team meets monthly (9X yearly min.) Identified In-School Coach Completed Modules 1 & 2 All office referral data submitted in the Discipline Data Summary Spreadsheet. http://behaviorsupport.ncdpi.wikispaces.net/Discipline+Data+Summary+Spreadsheet</p> <p>Items listed below are completed and submitted electronically at https://schools.nc.gov/pbis</p> <ul style="list-style-type: none"> • TFI submitted by PBIS In-School Coach or PBIS Data Base Manager • SET or BSET (<i>see criteria for BSET use</i>) entered by Regional Behavior Consultant or LEA PBIS Coordinator/Coach 	<p>Active Administration PBIS Team in place PBIS Team meets monthly (9X yearly min.) Identified In-School Coach Completed Modules 1-3 All office referral data submitted in the Discipline Data Summary Spreadsheet. http://behaviorsupport.ncdpi.wikispaces.net/Discipline+Data+Summary+Spreadsheet</p> <p>Items listed below are completed and submitted electronically at https://schools.nc.gov/pbis</p> <ul style="list-style-type: none"> • TFI submitted by PBIS In-School Coach or PBIS Data Base Manager • SET or BSET (<i>see criteria for BSET use</i>) entered by Regional Behavior Consultant or LEA PBIS Coordinator/Coach <p>In order to be recognized for Exemplar status, the <u>Exemplar PowerPoint</u> must show:</p> <p>*Improvement trend in behavioral indicators *Improvement trend in achievement indicators AND *Improvement trend in <u>one</u> of the following data elements:</p> <ul style="list-style-type: none"> ○ Self-Assessment Survey ○ Staff retention data ○ Climate Surveys ○ Special Education Referral Information ○ Attendance <p><i>*Improvement should be reported using three consecutive years of current data. Additional data showing a pattern of improvement over a period of several years in specific data elements may also be included. If there has been a decline in growth over past three years, include past data to indicate trend. Provide a written explanation of the decline.</i></p>
Data	North Carolina PBIS	North Carolina PBIS	North Carolina PBIS

	Green Ribbon School	Model School	Exemplar School
Practices	<ul style="list-style-type: none"> • SET 80%/BSET 70% TFI: 70% or better on Tier 1 	<ul style="list-style-type: none"> • SET 90%/BSET 80% TFI: 75% or better on Tier I and 80% or better on Tier II 	<ul style="list-style-type: none"> • SET 95%/BSET 85% TFI: 80% or better on Tiers 1, 2, and 3

Source: NCDPI, n.d.

Appendix H: North Carolina PBIS State Recognition Criteria, 2017-2018

Award	Green Ribbon	Model	Exemplar
Systems	<p>Active Administration Team in Place Leading Implementation Team Meets Regularly (9x yearly minimum) Identified In-School Coach/Coordinator Completed Module 1</p> <p>1. List data sources utilized for problem solving (via the online application)</p> <p>2. Tiered Fidelity Inventory (TFI) should be completed and submitted electronically at https://schools.nc.gov/pbis</p> <ul style="list-style-type: none"> - Submitted by PBIS In-School Coach or PBIS Data Base Manager - District Coordinator should review, verify and approve scoring for accuracy, with the use of artifacts and data sources. - TFI Walkthrough must be administered by external facilitator 	<p>Active Administration Team in place leading implementation Team meets regularly (9x yearly minimum) Identified In-School Coach/Coordinator Completed Modules 1 & 2</p> <p>1. List data sources utilized for problem solving (via the online application)</p> <p>2. Tiered Fidelity Inventory (TFI) should be completed and submitted electronically at https://schools.nc.gov/pbis</p> <ul style="list-style-type: none"> - Submitted by PBIS In-School Coach or PBIS Data Base Manager - District Coordinator should review, verify and approve scoring for accuracy, with the use of artifacts and data sources. - TFI Walkthrough must be administered by external facilitator 	<p>Active Administration Team in Place Leading Implementation Team Meets Regularly (9x yearly minimum) Identified In-School Coach/Coordinator Completed Modules 1 – 3</p> <p>1. List data sources utilized for problem solving (via the online application)</p> <p>2. Tiered Fidelity Inventory (TFI) should be completed and submitted electronically at https://schools.nc.gov/pbis</p> <ul style="list-style-type: none"> - Submitted by PBIS In-School Coach or PBIS Data Base Manager - District Coordinator should review, verify and approve scoring for accuracy, with the use of artifacts and data sources. - TFI Walkthrough must be administered by external facilitator <p>Submit data sources (via online application) to show an improvement trend in behavior indicators, achievement indicators, and one of the following elements:</p> <ul style="list-style-type: none"> - self-assessment survey - staff retention data - climate surveys - special educational referral information - attendance <p>*Improvement should be reported using 3 consecutive years of current data.</p>
Data			

Award	Green Ribbon	Model	Exemplar
Practices	Tiered Fidelity Inventory (TFI): 70% or better on Tier 1	Tiered Fidelity Inventory (TFI): Tier 1 75% or better and Tier 2 80% or better	Tiered Fidelity Inventory (TFI): 80% or better on Tiers 1, 2, and 3

Source: Public Schools of North Carolina, 2018

Appendix I: Participant Letter

January 30, 2018

Dear Participant,

My name is Mary Hull Jones and I am pursuing my doctorate in Educational Administration and Supervision from North Carolina State University. I am also an employee of Nash Rocky Mount Public Schools as an Elementary School Principal. In partial fulfillment of the requirements for this degree, I am writing a dissertation. I am asking if you would take part in a research study to gain a better understanding of a certain topic or issue.

You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. In essence, your participation in this study is completely voluntary and will remain anonymous through the use of pseudonyms. No reference will be made in oral or written reports which could link you to the study. You will NOT be asked to write your name on any study materials; therefore no one can match your identity to the responses that you provide.

If you agree to participate in the research study, you will be interviewed by the researcher. You will be asked questions about your experience with the Tiered Fidelity Inventory tool. The face-to-face focus group interview is expected to last 60 minutes and will be audio-recorded. If you have an interest in participating, the next step is that I will provide a form to you where you will find additional details about the research in which you are being asked to participate and where you can sign consent. Please reply to this email (m****@ncsu.edu) to express interest in participating in this study and/or for additional information.

Thank you for your time.

Mary Hull Jones
Doctoral Candidate
Educational Administration and Supervision
m****@ncsu.edu

Appendix J: Informed Consent Form

INFORMED CONSENT FORM for RESEARCH

Title of Study: How the Tiered Fidelity Inventory Instrument (TFI) Impacted Positive Behavior Interventions and Supports (PBIS) Team Implementation in Two Rural Middle Schools: A Comparative Case Study

Principal Investigator: Mary H. Jones **Faculty Sponsor:** Dr. Timothy Drake

What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research study is to gain a better understanding of how the Tiered Fidelity Inventory Tool impacts Positive Behavior Interventions and Supports implementation in your school.

You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?

The purpose of the study is to examine team member experiences with the Tiered Fidelity Inventory since recent implementation by the North Carolina Department of Public Instruction in 2015. This study will provide school leaders, rural school Positive Behavior Interventions and Supports team members, and district-level leaders' perspectives on Tiered Fidelity Inventory usage and implementation, given the limited qualitative research studies on Positive Behavior Interventions and Supports implementation fidelity.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to participate in a one-hour semi-structured focus group interview with approximately five other Positive Behavior Interventions and Supports team members. The focus group interview will be held in the Positive Behavior Interventions and Supports team regular meeting room. You will be asked questions about experiences with the Tiered Fidelity Inventory and Positive Behavior Interventions and Supports implementation. The focus group will be audio recorded. You will be provided a copy of your audio-recorded responses to review for accuracy.

Risks and Benefits

There are minimal risks associated with participation in this research. During the focus group, you will be provided a number to maintain participant confidentiality. Also, you will be asked to not share information discussed in the focus group sessions for confidentiality of other participants. There are no direct benefits to your participation in the research. The indirect benefits are this study will add to the current research on Positive Behavior Interventions and Supports and the Tiered Fidelity Inventory. The findings could help other Positive Behavior Interventions and Supports team members in rural school settings.

Confidentiality

The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in a password protected file on a password protected computer. No reference will be made in oral or written reports which could link you to the study.

Compensation

For participating in this study, you will not receive compensation.

What if you are a Napoli County Schools employee?

Participation in this study is not a requirement of your employment at Napoli County School System, and your participation or lack thereof, will not affect your job.

What if you have questions about this study?

If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the researcher, Mary H. Jones at XXXX or email at m***@ncsu.edu. You may reach me by phone at ***-***-***.

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator at d****@ncsu.edu or by phone at 1-XXX-XXX-XXXX.

Consent to Participate

“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

Participant's signature _____ **Date** _____

Investigator's signature _____ **Date** _____

Appendix K: Positive Behavioral Interventions and Supports Pyramid

