MIDDLE SCHOOL TEACHER AND SUPPORT STAFF PERCEPTIONS OF MULTI-TIERED SYSTEMS OF SUPPORT (MTSS): A CASE STUDY IN A SUBURBAN WESTERN PENNSYLVANIA MIDDLE SCHOOL

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Emily Mazzant

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COMMITTEE MEMBERS

Committee Chair: Richael Barger-Anderson, Ph.D. Associate Professor of Special Education Slippery Rock University Committee Member: Jason T. Hilton, Ph.D. Director, The Honors College Associate Professor of Education Slippery Rock University Committee Member: Robert Isherwood, Ed.D. Associate Professor of Special Education Slippery Rock University

ABSTRACT

This dissertation focuses on teacher and staff perceptions of Multi-Tiered Systems of Support (MTSS) implementation at the middle school level. MTSS implementation at the secondary level proves to be a daunting task which includes many complex facets. Ensuring that teacher and staff insights are sought out and taken into account when implementing school-wide programming such as MTSS can increase program success and fidelity. Specifically, this study examines three research questions: (1) How do middle school teachers and school support staff perceive implementation of a multi-tiered system of support? (2) How do these perceptions impact the buy-in and level of understanding of MTSS implementation? (3) In what ways do middle school teachers understand the MTSS framework? Utilizing a qualitative, single subject case study design methodology, this study sought to explore how teacher and staff perceptions and understanding of MTSS can impact implementation. The study took place in a suburban, western Pennsylvania middle school, in which the researcher is employed. The constant comparative method of coding was utilized in order to uncover themes related to the collected data. The following themes were uncovered through data analysis: support for all students and addressing individual student needs is a part of the MTSS process, the need for all staff to be involved in MTSS, insufficient communication with off-team teachers, discussion of forms as a part of the MTSS process, parental involvement was not discussed as a priority in responses, and procedures and logistics are discussed in relation to MTSS rather than the day to day implementation through working with students. Results of this study indicate that seeking opinions from teachers and staff regarding program implementation can provide valuable information for schools and districts to consider and highlights the importance of professional development focused on MTSS.

DEDICATION

I dedicate this dissertation to my husband, Jared, and children, Rosalie and Jared Jr., for encouraging me, believing in me, and never doubting my ability to pursue and finish this journey.

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CHAPTER 1 INTRODUCTION

Research indicates that as many as half of secondary students are unable to read basic text (King, Lemons & Hill, 2012). Labeled as a public health crisis, this lack of ability to read has astounding implications on students. A Multi-Tiered System of Support (MTSS) is a comprehensive method to ensure all students receive the academic, behavioral, and socialemotional learning services that they need in order to be successful, prevent failure for students at risk, and combat this crisis (Bohanon, Gilman, Parker, Amell & Sortino, 2016).

This dissertation explores middle school teacher and support staff perceptions of MTSS implementation. Taking place within a suburban, western Pennsylvania middle school, a qualitative, single descriptive case study approach was utilized to conduct this study. Implementing MTSS at the secondary level proposes a number of issues such as scheduling, school personnel, identifying age-appropriate research-based interventions and ensuring a teambased approach. Including teachers and staff in decision making regarding implementation can increase its success (Castro-Villarreal, Rodriguez & Moore, 2014). Within the middle school in which this study takes place, MTSS has been implemented for one full school year. Within the first year of implementation, teacher knowledge of MTSS was the main focus in order to ensure that the framework was being implemented as planned. Moving forward, ensuring teacher and staff buy-in through gaining teacher and staff perspective on the initiative became a focus, as well ensuring communication with off-team teachers regarding MTSS. This dissertation collects and analyzes data received by teachers and staff in order to present the importance of teacher and staff perspective in relation to MTSS implementation. This introduction will discuss the existing research, purpose of the study, research questions, study significance, delimitations, assumptions, and definition of terms associated with this dissertation.

Existing Research

Those who work in the field of education would likely agree that improvement in the area of student academic achievement, behavior and social-emotional learning is needed. Response to Intervention (RTI), later transitioned to MTSS, is a widely adopted initiative put into place to ensure improvement for students in various areas and to address the overrepresentation of students who receive special education services (Shapiro, Zigmond, Wallace, & Marston, 2011). RTI consists of providing a three-tiered approach to increase academic success designed based upon student need (McIntosh & Goodman, 2016). Positive Behavioral Interventions and Supports (PBIS) is another school-wide initiative focused mainly on behavior and social development of students (Harn, Basaraba, Chard, & Fritz, 2015, McIntosh & Goodman, 2016). MTSS works to combine these initiatives into a more comprehensive system in an effort to streamline practices for students to ensure a preventative approach to the areas of behavior, academics, and social-emotional learning for all students.

MTSS, an integrated approach, is defined as "... a school-wide approach that addresses the needs of all students, including struggling learners and students with disabilities, and integrates assessment and intervention within a multi-level instructional and behavioral system to maximize student achievement and reduce problem behaviors" (IDEA, 2004, p. 1). Combining approaches within school systems is widely supported by research (Nelson, Benner, Lane, & Smith, 2004 & Bohanon et al., 2016). McIntosh & Goodman (2016) support combining educational initiatives based upon three assumptions. First, focusing on academics, behavior, and social-emotional learning is supported by research relating to the historic connection between problem behavior and academics (McIntosh & Goodman, 2016, Nelson, Benner, Lane, & Smith, 2004 & Bohanon et al., 2016). By looking at student information consisting of more than just test scores or other academic data, educators can ensure that a wide range of information is being taken into account when determining the needs of individual students. Second, the commonalities between PBIS and RTI allow for teachers and staff to become proficient and familiar with one initiative and apply that knowledge to the other. These commonalities teach the basics of effective service and intervention delivery, no matter the focus of the intervention or need. Third, instead of having teachers and staff become familiar with multiple, similar systems, combining these similar systems into MTSS allows educators to build capacity within one common system (Batsche, 2019, McIntosh & Goodman, 2016).

MTSS can be implemented as a three-tiered system across all grade spans; however, differences exist when implementing in an elementary setting as compared to a secondary setting (King, Lemons & Hill, 2012). Often in the elementary school setting the focus of MTSS consists of identifying struggling readers based upon student scores on benchmark assessments with the goal being to identify struggling learners early in order to provide appropriate interventions before the learning gap widens and intervening becomes more difficult (Batsche, Kavale & Kovaleski, 2006). Additionally, MTSS at the elementary level typically focuses on level of intervention with level and area of need determined by universal screeners. Research relating to MTSS implementation at the secondary level is limited as compared to the elementary level (Sansosti, Noltemeyer, & Goss, 2010). Fuchs, Fuchs & Compton (2010) note that researchers may tend to avoid secondary schools altogether due to complicated schedules and compliance issues. Assumptions that work to form the MTSS model at the elementary level do not necessary apply at the secondary level, such as the need for screening to identify deficits as these areas of need are typically already known by the time students make it to the secondary level. Additionally, determining student responsiveness to less intensive interventions prior to

implementing more intensive methods is no longer relevant at the secondary level as most students with intensive needs would have already been identified and be receiving more intensive interventions (Fuchs, Fuchs & Compton, 2010). Johnson, Smith and Harris (2009) discuss the primary purposes of MTSS at the secondary level as:

...to build the capacity of the school to meet the increasing demands for a diverse student population to meet rigorous standards for graduation; to ensure appropriate instruction and intervention is provided to all students; to provide a system that will support continuous school improvement to improve outcomes for all students (Johnson, Smith & Harris, 2009, p. 3).

The proper implementation of MTSS is equally as important as the methods and practices used within the model. Successful implementation of MTSS involves ensuring a comprehensive approach to district initiatives through strategic planning, including all relevant stakeholders in the implementation, and utilizing a science-based implementation process (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005, Bohanon et al., 2016, Van der Embse, 2018). School districts can increase MTSS implementation success by ensuring school teams represent diverse areas of expertise, having a comprehensive plan regarding data usage, ensuring connections to evidence-based practices (EBPs), and an overall district-level commitment (Bohanon et al., 2016).

Organizational leadership, professional development and establishing systems to ensure sustainability are also key drivers related to successful implementation (Fixsen et al., 2005). Soliciting stakeholder perspectives, especially from teachers, must be encouraged in order to increase success for implementation and sustainability. "...General education teachers are fundamental in the RTI process. Given teachers' integral role, it is important to examine teachers' attitudes, beliefs, perceptions, and challenges with respect to RTI to identify the

appropriate actions, interventions, and sustainability of RTI" (Castro-Villarreal et al., 2014). Utilizing a collaborative approach for implementation, including gaining stakeholder perspectives, feelings and ideas can increase the overall success of implementation (Bean & Lillenstein, 2012, Dulaney, et al., 2013). In addition to soliciting teacher and staff feedback, ensuring these school employees are given the opportunity to become experts within the area of MTSS and comfortable with the changes within their day also helps to ensure fidelity and sustainability of programming. "Educators embrace change when two conditions exist: they understand the need for change and they perceive that they have the skills or the support to implement change" (Batsche, 2019).

Study Purpose

MTSS has shown success within the elementary school setting, particularly in enhancing reading abilities of students, but limited research and success is documented at the secondary level (King et al., 2012, Sansosti et al., 2010). Additional research in the area of MTSS effectiveness and implementation at the secondary level is needed. The purpose of this study is to explore middle school teacher and support staff perceptions of MTSS implementation in order to enhance effectiveness and sustainability of MTSS. Data was gathered from three separate sources as a part of this qualitative study; a teacher benchmark on MTSS knowledge completed during the 2019-2020 school year by teachers in the school in which this study took place, completion of the MTSS Needs Assessment, Secondary Version (McIntosh & Goodman, 2016), and the confidential, online, open-ended interviews. Questions included in the confidential, online, open-ended interview addressed teacher and staff perceptions of MTSS implementation at the middle school level; each interview question aligned to at least one of the research questions for this study.

Research Questions

The research questions for this study consist of three questions which examine teacher and staff perceptions related to MTSS implementation:

- How do middle school teachers and school support staff perceive implementation of a multi-tiered system of support?
- 2. How do these perceptions impact the buy-in and level of understanding of MTSS implementation?
- 3. In what ways do middle school teachers understand the MTSS framework?

These questions are explored throughout this dissertation in order to determine how teacher and staff perceptions of MTSS impact buy-in of the framework, overall understanding of MTSS, and how these areas can impact MTSS implementation. Each area of collected data contributed to the exploration of these research questions. Schools and districts can utilize the compiled existing literature and current research from this study in order to aid in exploring and implementing MTSS at the secondary level, as well as to work toward gaining teacher and staff perceptions of MTSS implementation.

Study Significance

Often times school-wide initiatives such as MTSS are implemented through a series of professional development sessions offered by district or building administrators with teachers being in the audience, rather than a part of the team sharing the initiative. Including teachers and staff in implementation of initiatives such as MTSS can increase the buy-in of these initiatives, which in turn can increase the success of implementation and sustainability. Research supports program benefits from including teacher perspectives when implementing new initiatives (Castro-Villarreal et al., 2014).

This study aims to collect data and examine teacher and staff perspectives on MTSS implementation at a suburban western Pennsylvania middle school in an attempt to highlight the importance of gaining teacher and staff input and perspectives regarding MTSS implementation. This study can provide the included school district with information regarding teacher and staff feelings and perspectives on the current implementation of MTSS within their school building as well as provide information to other school districts regarding the importance of considering teacher and staff perspectives when implementing a school-wide initiative. Additionally, the comprehensive review of literature discusses many aspects of research related to MTSS implementation, which can aid school districts in learning about best practices related to MTSS implementation. The study design, a single descriptive case study design, allows for a thorough and specific depiction of MTSS implementation within one middle school, and the results provide an analysis of teacher and staff responses which allow for an in-depth look at how teachers and staff perceive MTSS as well as how these perceptions can impact implementation.

Delimitations

This case study took place from October 2020 through December 2020 in one middle school in suburban western Pennsylvania. The sample for the study consisted of classroom teachers, special education teachers, special area teachers, and paraprofessionals. Participants within this study were determined based upon on job categories identified as valuable participants in the MTSS process. Those job categories consisted of general education teacher, special education teacher, special area teacher (off-team teacher), and paraprofessionals. Delimitations are choices made by the researcher that impact the study in some way. One delimitation associated with this study is that the researcher chose to conduct a single descriptive case study rather than to include multiple school districts in the study. Although including additional school districts within the study could have added to the body of research, choosing to focus on one school allows for a more in-depth view of one school's implementation of MTSS. Another delimitation is that the researcher chose to continue with the research process during the COVID-19 pandemic. As discussed throughout this dissertation, the COVID-19 global pandemic had a significant impact on educational models, expectations for teachers and school leaders, and the world in general. This pandemic likely impacted the results received throughout the data collection process. Lastly, not including additional stakeholders, such as school administrators and parents, was a choice made by the researcher. This study focused on perceptions of teachers and staff and the importance of gaining this perspective, rather than exploring input from parents and school administration.

Assumptions

Assumptions related to this study are that the participants felt comfortable enough with the interview process that all questions were reviewed and answered openly and honestly and that all participants were somewhat familiar with the MTSS process being implemented within the school building. The results of this study are found to be indicative of the overall teacher and staff perceptions and feelings of MTSS implementation within the school building. An additional assumption is that researcher biases are identified within the methodology section of the dissertation and they are not a concern regarding the fidelity of the study. Potential biases are related to the researcher being an employee of the school in which the study took place. Rather than this being identified as having a negative impact on the study, the researcher was able to tailor the study to this specific school setting by utilizing language in the interview with which the school employees were familiar, contributing to the fidelity and reliability of the study.

Definition of Terms

The following terms are utilized throughout the study and should be referenced based upon the definitions provided below.

Multi-Tiered System of Support (MTSS)

• "... a school-wide approach that addresses the needs of all students, including struggling learners and students with disabilities, and integrates assessment and intervention within a multi-level instructional and behavioral system to maximize student achievement and reduce problem behaviors" (IDEA, 2004, p. 1).

School-Wide Positive Behavioral Interventions and Supports (SWPBIS):

• "a widely implemented model for systematically supporting the social and behavioral development of students with and without disabilities, including those with and at risk for emotional and behavioral disorders" (George et al., 2018, p. 393).

Social-Emotional Learning (SEL):

• SEL is provided "...through a variety of educational approaches that promote students' capacity to integrate thinking, emotion, and behavior to deal effectively with everyday personal and social challenges. (1) SEL programs in schools aim to teach students specific SEL skills and also to create a classroom and school culture that enhances SEL skills. Both approaches typically involve training school staff to interact with students in new ways to promote students' competence" (Greenburg, Dornitrovich, Wiessberg and Durlak (2017)

Response to Intervention (RTI):

• "...a preventative system approach to improving schoolwide and individual achievement through high-quality universal instruction and additional tiered supports provided in response to student need. It includes collaborative teaming across general and special education. Decisions in academic RTI are based on data from validated screening and progress monitoring tools..." (McIntosh & Goodman, 2016, p. 6).

Mode

 Mode is defined as the most frequent value of a set of data within a set of numbers (Merriam-Webster, 2020). In this dissertation, mode is utilized in the results section to share the most frequent score on each element within the MTSS Need Assessment— Secondary Version (McIntosh & Good, 2016).

Conclusion

MTSS research at the secondary level is lacking and implementation at this level is more challenging than at the elementary level, due to requirements at the secondary level such as course credit and class periods. This study is especially significant as it not only discusses MTSS implementation at the secondary level, but it gathers teacher and staff perspectives on this implementation, which can have a large impact on the overall success of implementation. Data from three separate sources was gathered and analyzed as a part of this study in a qualitative, single subject case study design. A single subject design was utilized for this study to ensure an in-depth look at one middle school in the process of implementing MTSS. This dissertation will provide a full overview of implementing MTSS in a suburban middle school in western Pennsylvania and how teacher and staff perceptions have an impact on the implementation.

Chapter two of this dissertation will provide a thorough review of literature related to MTSS implementation. Topics explored in the review of literature include research concerning the history of MTSS and connection to School-wide Positive Behavioral Interventions and supports (SWPBIS), SEL, and RTI. Next, state and federal legislation related to MTSS implementation is discussed, including IDEA (2004), ESSA (2015) and state-wide training organizations such as the Pennsylvania Training and Technical Assistance Network (PaTTAN). Next, research related to MTSS implementation and the rational for MTSS is discussed. A discussion on district and administrative support related to MTSS effectiveness is also included, comprising of research related to superintendent perspectives and professional stakeholders, including teachers. Lastly, effectiveness of the MTSS framework is discussed, including the necessity of building a comprehensive system and the importance of fidelity when implementing research-based interventions at the secondary level.

The remainder of this dissertation is organized into five chapters, consisting of a review of literature, focusing on significant contributions to research relating to MTSS implementation. Chapter three consists of an overview of the methodology used to carry out this study, including an overview of the research questions, discussion of the interview approach, procedure and data collection methods, setting, participants, data analysis, credibility, authenticity, transferability, ethical considerations, and limitations. Chapter four consists of the results of the study, including an overview of the study and the results of the teacher benchmark assessment, Multi-Tiered Systems of Support Needs Assessment – Secondary Version (McIntosh & Goodman, 2016), and the online interviews. Details of the data analysis process in relation to the research questions and identification of codes and themes is also provided. Chapter five includes a thorough analysis of the confidential, online, open-ended interviews, including analysis of each of the themes and connection to research questions and existing literature. Chapter six includes a summary of the study, implications, practical implications, strengths, areas for improvement,

recommendations for future research, and recommendations for future practice. Lastly, the references and appendixes are shared.

CHAPTER 2 LITERATURE REVIEW

The purpose of this review of literature is to discuss research and perspectives on implementation of Multi-Tiered Systems of Support (MTSS). MTSS is widely implemented at the elementary level and a need exists for additional support in order for secondary schools to implement MTSS. This literature review explores research based upon the science of implementation with a focus on MTSS and framework implementation within school districts and systematic implementation strategies. Additionally, rationale for MTSS within schools, district and administrative support within MTSS, MTSS effectiveness and the need for comprehensive programming within the framework are explored. The Individuals with Disabilities Education Act (IDEA) of 2004 and Every Student Succeeds Act (ESSA) of 2015 and their impact on the shift from Response to Intervention (RTI) to MTSS and research on teacher and stakeholder input and perspectives on MTSS implementation are also discussed.

Secondary student outcomes depend highly on the support that students receive throughout their secondary school career. Outcomes for students can improve dramatically with the implementation of a comprehensive support system within secondary schools (Bohanon, Gilman, Parker, Amell & Sortino, 2016). Working toward a goal of eliminating failure for students who are considered at-risk, MTSS is a framework which combines initiatives focused on academic, behavioral, and social-emotional well-being for all students. This preventive approach, a three-tiered system with a focus on all students, emphasizes research-based core instruction and provides increased support for groups or individual students based upon data analyzed through universal screening assessments in the areas of academic, behavioral, and social-emotional learning (Avant & Swerdlik, 2016). Separate approaches to these areas exist: RTI focuses on academics, School-Wide Positive Behavioral Interventions and Supports (SWPBIS) focuses on behavior, and Social-Emotional Learning (SEL) involves teaching students skills related to self-management, self-awareness, decision making and other fundamental skills needed to build healthy relationships with others. These approaches do not always work in tandem which can cause confusion and a lack of cohesiveness within school initiatives. MTSS provides a comprehensive approach to these models. With an emphasis on school improvement and through the lens of strategic implementation planning, the MTSS framework provides an all-inclusive method for schools which can enhance the likelihood for success within these programs (Bohanon et al., 2016).

A Multi-Tiered System of Support approach involves integration of various initiatives such as SWPBIS, RTI and SEL initiatives. Research supports that integrated approaches (i.e., RTI and SWPBIS) show more success than separate approaches, especially since behavioral and academic issues are often interrelated (Nelson, Benner, Lane, & Smith, 2004 & Bohanon et al., 2016). Building the bridge from research-based approaches to practice is often a struggle in the field of education. Implementing MTSS is no different, involving a complete understanding of implementation strategies, research-based practices and a comprehensive approach to educational services (Eagle et al., 2015, Von der Embse, 2018).

School-Wide Positive Behavioral Interventions and Support (SWPBIS)

Integration of School-Wide Positive Behavioral Interventions and Support (SWPBIS) is another aspect of MTSS that is imperative to successful implementation of this multifaceted framework. George, Cox, Minch and Sandomierski (2018) define SWPBIS as "a widely implemented model for systematically supporting the social and behavioral development of students with and without disabilities, including those with and at risk for emotional and behavioral disorders" (George et al., 2018, p. 393). Implementation of SWPBIS should be concurrent with MTSS implementation, as a part of one system to support students with behavioral, social-emotional and academic needs. The Florida PBIS: MTSS Project aims at helping school districts establish procedures for MTSS within their schools and also provides training and consultation. George et al. (2018) studied school districts with high implementation rates of MTSS with SWPBIS integration and how those school districts have found success within these models. The authors discuss common themes identified through the participants' feedback regarding key areas necessary for sustaining a successful program. Those common themes were coaches who provide consultation and direct support to schools, buy-in from district leadership, communication, and data management at the district level (George et al., 2018). Similarly, Bohanon, Wahnschaff, Flaherty and Ferguson, (2018) discuss structural changes within staff and schedules within schools in response to SWPBIS and MTSS implementation. The authors recommend ongoing professional development, ensuring clear communication, discussing areas needing improvement, providing coaches, focusing on common goals and being forthcoming about feedback related to MTSS successes and next steps for improvement. SWPBIS is a tiered systematic approach in which students receive explicit instruction on skills such as expected behavior, self-regulation, and social skills. Students who exhibit inappropriate behavior may be referred to receive an intervention to address their area of need, which may increase in intensity if the student does not show progress or improvement over time (Bohanon et al, 2016). An approach which includes a focus on teaching expected behaviors is a necessary part of MTSS. Responding to disciplinary infractions causes loss of instructional time and removes principals and other administrators from focusing on building academic programming (Bohanon et al., 2016). Discipline is also often disproportionate across different ethnic groups. For example, students who are African American account for 48% of students in the United States

who have received more than one suspension outside of the school, while this population only makes up for 18% of the total enrollment in the entire United States (Bohanon et al., 2016). Decreasing the amount of time spent responding to disciplinary issues increases the amount of time teachers and other school staff can spend on instruction.

Social-Emotional Learning

Social Emotional Learning (SEL) is another educational initiative that must be included within an MTSS framework. SEL is a process which involves "…helping children and even adults develop the fundamental skills for life effectiveness" (Bohanon et al., 2016, p. 101). Also implemented through a tiered approach, SEL is similar to SWPBIS in that it involves direct instruction. Strategies focusing on self-determination and social awareness and decision-making are directly taught to all students and those who do not respond to or continue to show deficits in these areas are referred for further intervention (Bohanon et al. 2016, Freeman, Miller & Newcomer, 2015).

Response to Intervention

Response to Intervention (RTI) is another initiative which is imperative to include in an MTSS model. RTI involves applying research-based instructional strategies to comprehensive school curriculum which all students can access. Effective core instruction is a key component within the RTI model; instructional material and adopted core curriculum should be chosen with a focus on research-based instructional strategies in mind (Bohanon et al. 2016). A crucial step in the RTI process is universal screening. Through universal screening, students are assessed on grade-level standards, typically in the areas of mathematics and reading, and results are analyzed to identify students in need of remediation. These assessment results are discussed by teams which typically consist of a general education teacher, administrator, school counselor, and

interventionist. Through this team approach, determination of type and level of intervention are made. Teams continue to meet to discuss student data throughout the student's participation in the intervention. If the student is not making progress, a determination may be made to increase the intensity of the intervention, or the student may move from a small-group intervention to a one-on-one intervention. The original purpose of the RTI model was to provide a more systematic approach to the identification process for special education services. Building RTI into the MTSS process has allowed this initiative to evolve into a comprehensive support system for all students, rather than a method to determine a need for special education services.

Each initiative within the MTSS framework involves implementing core curriculum and being purposeful about teaching students skills in these various areas. Each initiative involves a team approach, research-based strategies and interventions, buy-in and participation from all staff members, and data-based decision making. Through implementing these initiatives within one cohesive school-wide framework, schools have been able to show considerably greater outcomes than schools who have not adopted this approach (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011).

State and Federal Legislation related to MTSS implementation

Individuals with Disabilities Education Act (IDEA) of 2004

In 2004, the Individuals with Disabilities Education Act (IDEA) was reauthorized to provide updates and clarity on providing special education services for students and included language related to RTI. The Office of Special Education Programs (OSEP) released questions and answers regarding response to intervention as it related to IDEA in 2007. As stated in this document, instructional strategies and services within RTI enable educators to provide students with intervention as needs arise. OSEP clarified that students who receive special education services under IDEA continue to be eligible for instruction provided through the RTI model.

The question was posed to the organization inquiring why RTI language was included within IDEA. OSEP responded referencing the research base of RTI and the increased reliability in comparison to the discrepancy model, which utilizes Intelligence Quotient (IQ) assessment compared to student performance on achievement assessments, for identifying students who have a learning disability (LD). IDEA (2004) authorized the use of RTI as a method of identifying students with LD (OSEP, 2007, Wixson, 2011). Gresham (2007), stated, "a student's inadequate response to an empirically validated intervention implemented with integrity can and should be used as evidence of the presence of LD and should be used to classify students as such" (p. 14).

Through these initiatives, RTI was built and utilized as an approach to more effectively identifying students with a learning disability. Today, RTI has evolved into MTSS, which abandons the use of RTI for special education eligibility purposes and supports a proactive approach in providing research-based instruction and intervention with the goal of a student not needing services through special education, in addition to other key initiatives as discussed above.

In 2007, OSEP proposed for state-level education agencies to develop RTI within their educational plans, and although not formally authorized as a policy until referenced in the Every Student Succeeds Act (ESSA, 2015), MTSS was the term used to describe these integrated plans (Sailor, McCart, & Choi, 2018).

The term MTSS was first formally referenced online by the state of Kansas in 2008 to describe whole-school efforts to educate all students and the term was first used in published print by Sugai and Horner (2009). Within IDEA (2004) MTSS is defined as "... a school-wide

approach that addresses the needs of all students, including struggling learners and students with disabilities, and integrates assessment and intervention within a multi-level instructional and behavioral system to maximize student achievement and reduce problem behaviors" (IDEA, 2004, p. 1).

MTSS offers school districts a method to address the problem of not only providing all students, including those with disabilities and considered high-risk, with access to high-quality research-based instruction and intervention, but it also provides a framework for combining whole-school initiatives such as SWPBIS and RTI into one comprehensive system.

Human Capability Theory is a philosophy to which MTSS aligns. This theory supports considering policies and procedures for refinement rather than providing specific services to certain students based upon identified deficits, as in the model for special education services. A whole-school reform supported theory, this method focuses on a proactive approach of providing adequate support for all students rather than focusing on individual student deficits. Supporting equitable delivery of educational resources for all students is another basis of this theory. This whole-school focused agenda ensures that students who qualify for special education services continue to receive the benefits of being instructed in the Least Restrictive Environment (LRE) and having access to the general education curriculum as well as the benefits of receiving services provided under IDEA (Sailor et al., 2018). MTSS, as aligned to this theory, supports the need of addressing quality, comprehensive programming for all students.

Every Student Succeeds Act (ESSA) 2015

ESSA, signed in 2015 by President Barack Obama, is the revised version of the Elementary and Secondary Education Act (ESEA) signed in 1965. ESSA aims to ensure the following: equity with a focus on disadvantaged and at-risk students, that all students be provided instruction based upon academic standards with a focus on college and careers, providing families and communities information regarding school performance on high-stakes testing, research-based interventions and practices, and ensuring accountability and action toward low-performing schools (US Department of Education, 2015). ESSA also includes language related to MTSS. MTSS is defined in the document as "a comprehensive continuum of evidence-based, systemic practices to support a rapid response to students' needs, with regular observation to facilitate data-based instructional decision making" (US Department of Education, Every Student Succeeds Act, 2015). This reference to MTSS paved the way for states to make their own interpretations of how MTSS can provide comprehensive services for all students.

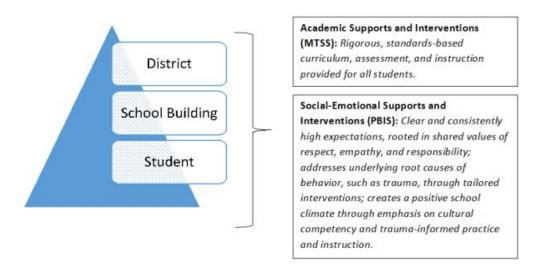
Many states have implemented their own plans related to MTSS implementation. The state of Kansas has implemented a conceptual framework related to MTSS at the school level. Focused on the vertical three-tiered system of "all, some, few", this framework captures key stakeholders (teachers, administrators, parents and families, specialists, and community partners), a goal statement, and six MTSS foundational foci: curriculum design, classroom management, staff development, instructional strategies, problem solving teams, and data-based decision making (Dulaney, et al., 2013).

Published in 2019, the state of Pennsylvania announced a consolidated state plan in which it discusses its use of MTSS as mandated within ESSA. Within this document MTSS is discussed as a priority for schools within the commonwealth and is referenced as a framework on which Pennsylvania schools are built. Pennsylvania is committed to providing technical assistance for Local Education Agencies (LEAs) related to MTSS implementation including academic and behavioral intervention implementation (Every Student Succeeds Act, Pennsylvania Consolidated State Plan, 2019). In fact, the commonwealth established an annual goal to increase the fidelity of implementation and amount of LEAs who implement MTSS and SWPBIS. Also referenced is a three-tiered system at the state level with an aim to provide tiered support to school districts in the area of MTSS, based upon the MTSS model itself:

Figure 1

Pennsylvania's approach to technical assistance regarding evidence-based interventions

Figure 4.5: Pennsylvania's Approach to Technical Assistance Regarding Evidence-Based Interventions



(Pennsylvania ESSA State Consolidated Plan, 2020)

Pennsylvania Technical Assistance and Training Network (PaTTAN)

In Pennsylvania, the Pennsylvania Technical Assistance and Training Network (PaTTAN) provides support to school districts implementing MTSS. This state-wide organization supports the use of district and school-wide cross-disciplinary teams to integrate academic, behavioral, and social-emotional research-based practices to benefit all students. Effective implementation of the framework, including ensuring students' needs are met through a problem-solving process based upon data, as well as fidelity of implementation, are emphasized (PaTTAN, 2020). Additionally, "A continuum of supports and services exists at all Tiers and is undergirded by high-quality professional learning, cultural responsivity, partnership and meaningful involvement with families, and dynamic decision-making that rests on the use of reliable and valid data sources. Sustainability (transformational change) is the ultimate implementation goal of a Multi-Tiered System of Support (MTSS) and is very much contingent upon Leadership, Organization and Competency (PaTTAN, 2020).

On its website, PaTTAN provides tools and resources to districts, including resources related to implementation, attendance, SWPBIS, preventing dropouts, universal screening, RTI, family engagement, professional development, and culturally responsive teaching. Included within the state's initiative to work toward improving MTSS implementation is a program offered by PaTTAN during the 2020-2021 school year, Secondary MTSS Series: Enhancing Middle/High School Partnerships, Practices & Outcomes. Middle school and high school teams have the opportunity to apply for participation in this program through an application process. The series focuses on schools who want to "work to adopt, implement and align evidence-based core/universal and supplemental academic, behavioral and social-emotional practices within a supportive infrastructure and with fidelity" (PaTTAN, 2020). School teams should consist of general education teachers, special education teachers, English as a Second Language (ESL) teachers, principals, school psychologists, and intervention specialists. Chosen districts will participate in a myriad of professional development opportunities, including sessions run by national MTSS leaders Mark Shinn and Dr. George Batsche (PaTTAN, 2020).

Implementation research and Rational for MTSS

Implementation of MTSS should be approached with an emphasis on school improvement initiatives and with an open mind focused on overall educational reform. A science-based approach of implementation can help schools take the steps needed to bridge the gap from idea to enactment. Endorsed by the National Association of School Psychologists (NASP), MTSS includes school psychologists and building administrators playing an essential role in MTSS implementation by emphasizing the importance of the key components of the framework: problem solving, data-based decision making, research-based interventions and fidelity of implementation (Eagle et al., 2015, NASP, 2009). Additionally, school psychologists and outside organizations, such as state level organizations like PaTTAN, have the ability to assist school districts in training and maintaining fidelity in these areas (Bohanon et al, 2016). School administrators must ensure that the appropriate amount of attention is given to the implementation of MTSS through appropriate resources and staff, procedural work such as scheduling, providing an appropriate amount of time for team discussion and interventions to occur, and attention to detail and effective communication. Additionally, systematic change related to building administrators and the focus on proactive leadership style emphasizing realistic change rather than a focus on management must be a priority (Eagle et al., 2015).

Effective implementation of MTSS involves ensuring that the district's mission and vision include language related to the guiding principles of MTSS (Bohanon et al., 2016). For example, if through MTSS a district is working toward implementing academic and/or social-emotional interventions, districts may consider embedding an emphasis on prioritizing the academic social-emotional well-being of all students within its mission or vision statement. Additionally, ensuring that the moving parts of an MTSS framework are strategically planned for within a school district's budget and calendar is necessary. When a district proposes implementation of a new model, such as MTSS, time should be planned for professional development focused on the pieces within that system such as implementing interventions and analyzing data (Bohanon et al., 2016).

A science-based process of implementation when planning for MTSS is a key ingredient for successful implementation (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005, Bohanon et al., 2016, Van der Embse, 2018). A science-based implementation model supports implementation through stages and is endorsed by the Office of Special Education Programs and used by the majority of states (Eagle et al., 2015). The stages of successful implementation consist of exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability (Fixsen et al., 2005).

During the exploration and adoption phase organizations must assess needs related to resources for evidence-based practices and resources at the organization and community level. One approach to this level of implementation is assessing needs and exploring interventions and approaches that meet those needs. The authors caution against confusing simply identifying a research-based intervention or approach with actually implementing the choice with fidelity (Fixsen et al., 2005).

Program installation is the phase that occurs after an adoption of a program or approach is made. During this phase, ensuring appropriate resources such as funding for technology, staffing and training is necessary before moving forward with the actual installation of the program. Strategic leadership by district and school level administrators is key in this phase of implementation. Administrators must arrange for professional development and plan for clear communication with teachers as this plays a primary role in successful implementation of an MTSS framework. "Effective and sustainable implementation of MTSS practices occurs through the building of staff competencies and system capacity for school-wide reform" (Eagle et al., 2015, p. 163). Program expectations or goals must also be defined during this stage. In MTSS implementation, goals such as a percentage of staff proficiency of understanding of the framework or percentage of fidelity of intervention implementation are possible program expectations that could be defined during the program installation phase. McIntosh and Goodman (2016) recommend the Reading Tiered Fidelity Inventory (R-TFI) as one tool for school teams to utilize as a measure of fidelity when implementing MTSS. This inventory allows teams to score themselves regarding their level of implementation of MTSS in all three tiers in the area of reading.

Initial implementation should occur following the program installation phase. During this phase, changes within the organization or school district will occur which can cause discomfort for some. "Changes in skill levels, organizational capacity, organizational culture, and so on require education, practice, and time to mature (Fixsen et al., 2005, p. 16). Uneasiness often occurs during this phase as money is being spent on the program(s) or approaches that were adopted and outcomes or successes within those programs or approaches have not yet been seen.

Full operation follows the initial implementation phase. During the full operation phase the adopted program or approaches become fully operational (Fixsen et al., 2005). The full operation phase of MTSS involves implementation of a baseline or benchmark assessment to determine student needs in the areas of academics, behavior, and social-emotional well-being, MTSS building and/or grade level teams would meet to discuss referrals and student data in all of these areas, and interventions to address areas of deficit would begin to be implemented. During the full operation phase of implementation, the hope is that the new approaches and programs become the accepted method of performance within the organization or school district.

Changes within the framework or implementation of approaches or programs may come as a result of challenges or new ideas presented based upon changes within the organization, school district, or community. These changes occur often during the innovation phase and can help to build upon the constructed framework or pose challenges to fidelity of implementation. It is recommended for organizations to first implement programming for a sufficient amount of time with fidelity prior to attempting to innovate or make changes.

Finally, organizations or school districts enter the sustainability phase after implementing their new programming or framework for approximately two to four years (Fixsen et al., 2005). During this phase, often times staff may need to be replaced with newer staff and re-training may need to occur. Other changes such as funding sources and district leaders may also change which can subsequently cause changes within the established framework.

Although science-based implementation phases are recommended, many school districts enter MTSS implementation at different phases. For example, some school districts begin MTSS with implementation of tiered reading and math support and plan to implement other initiatives, such as SWPBIS, at a later time. Additionally, some school districts may begin different phases of implementation at different times (Freeman, Miller, & Newcomer, 2015). Following a science-based implementation process ensures that school districts implement MTSS in the most thorough way possible, which can increase sustainability. Additionally, ensuring that school districts implement MTSS in a way that best fits their individual district needs is also key.

In addition to science-based phases of implementation, key implementation drivers are also recommended for thorough implementation. These drivers, as recommended by Fixsen et al., (2005), consist of competency drivers, organization and leadership. Competency drivers include training, performance assessment (fidelity measures) coaching, and selection.

Training includes ensuring that professional development is thoughtfully designed to increase knowledge required to implement MTSS; level training for tiers one through three enables implementers to participate in training most aligned to their level of work within the

MTSS framework. Performance assessment or fidelity measures ensure that buildings are implementing the framework with the greatest fidelity possible; this may consist of utilizing tools such as observations and self-assessments. Coaching within the MTSS framework allows school professionals to work alongside other professionals to discuss implementation of interventions and instructional strategies. Lastly, the selection competency driver means having a variety of professionals participate on the MTSS team and that these individuals are chosen mindfully, ensuring that the person's characteristics and expertise match their role within the team (Freeman et al., 2015).

Organization and leadership drivers are all key in implementation; effective organization ensures that decisions are made based upon collected data through universal screening assessments and school-wide data collection systems. Leadership drivers ensure that the district MTSS team is prepared to effectively deal with issues during implementation, such as technical issues and addressing possible resistance from staff (Freeman et al., 2015).

Implementation of a framework such as MTSS takes a thoughtful and planned approach by district and school-level administrators alike:

Thoughtful and effective implementation strategies at multiple levels are essential to any systematic attempt to use the products of science to improve the lives of children, families, and adults. That is, implementation is synonymous with coordinated change at system, organization, program, and practice levels (Fixsen, et al., 2005, p.3).

Among the most impactful areas that affect successful MTSS implementation are providing adequate professional development for staff with a focus on understanding the process, ensuring staff buy-in, which directly affects staff members' willingness to adopt and implement the new framework, having effective leadership within school to aid with the process of change from old to new practices, time for collaboration between staff members in order to discuss student data and progress, and an emphasis on understanding that this framework is not owned by one staff member alone. MTSS is an initiative focused on educating all students and every staff member plays a role (Harlacher & Siler, 2011, Sugai, Simonsen, Freeman & La Salle, 2016). Implementation logistics are certainly key, however, setting up systems to ensure sustainability within MTSS is also imperative. Sustainability of MTSS is negatively impacted by a lack of alignment within the system as related to student needs, misalignment of MTSS and other initiatives, a lack of relevance in the initiative and strategies rather than adopting a research-based approach to decision making, and a lack of leadership and dedicated resources (Sugai et al., 2016 & Hollingsworth, 2019). Middle school teachers, in particular, have been found to be skeptical of MTSS initiatives due to lack of the ability to implement strategies and interventions within an already stretched-too-thin school day and lack of professional development, which is often not differentiated based upon the teachers' needs (Hollingsworth, 2019).

Federal educational policies call for educational reform and a need for frameworks such as RTI and SWPBIS to meld into a comprehensive approach (Eagle, Dowd-Eagle, Snyder & Holtzman, 2015 & Hollingsworth, 2019). Although these programs are designed to support schools in providing academic and behavioral interventions for students who are not making progress, these programs are often implemented "in silos" (Eagle, et al., 2015), which is inconsistent and counterproductive. Due to these issues, the need for a more comprehensive framework arose, a Multi-Tiered System of Support, in which behavioral, academic and socialemotional interventions and practices exist within an integrated approach.

District and administrative support related to MTSS effectiveness

Superintendent perspectives

A collaborative approach and team effort focused on effective instructional decision making, goal setting and problem solving must exist when implementing the MTSS framework (Bean & Lillenstein, 2012). Any effort within a school district which requires systems level changes, including the school district's mission, vision, and values, must ensure the input and collaboration of various stakeholders within the organization. Although misconceptions are common around MTSS regarding how RTI, social-emotional learning, and SWPBIS can combine into one effective system, this framework is widely utilized as a catalyst for overall school reform.

Superintendents of schools are a critical piece in providing leadership and promoting overall buy-in for MTSS implementation within school districts. Additionally, they are "…seeking to reconcile this ambiguity so that one system is in place to support school improvement and increased student achievement" (Dulaney, et al., 2013, p. 31). MTSS works to consolidate the many initiatives with which school districts are faced and strives for a system which emphasizes continuous school improvement. Through collecting data based upon school superintendent perceptions and knowledge, school districts can work toward improving opportunities for successful implementation of MTSS. Through surveys of nine school superintendents, Dulaney, et al. (2013) collected data aimed at analyzing perceptions of these leaders to inform MTSS implementation. Interview questions focused on knowledge, culture, implementation readiness, MTSS capacity building and implementation opportunities and obstacles to implementation (Dulaney, et al., 2013). Superintendents reflected on struggles relating to common language within the MTSS framework, collaboration and building culture,

knowledge of teachers to implement the framework and investment into the program in an effort to build capacity for continuous improvement. Common language struggles relate to school employees' lack of understanding vocabulary related to MTSS. For example, only one superintendent interviewed in the study conducted by the authors was familiar with the acronym MTSS. Implementation buy-in must start from the top and make its way down through the school district hierarchy. Many of the superintendents referenced Professional Learning Communities (PLCs) as evidence that MTSS was being implemented within their schools (Dulaney, et al., 2013). PLCs are often used as a collaborative approach to analyzing data by common teams of teachers for certain groups of students. Although utilizing a PLC to analyze data could be an effective approach to ensuring data is collected and analyzed, this practice alone does not mean that MTSS is implemented within a school building.

The importance of collaboration was also highlighted through the data collected. One superintendent noted that within his or her school district, elementary teachers tend to practice more collaborative efforts than the secondary teachers when it comes to MTSS (Dulaney, et al., 2013), which could point to a lack of professional development and lack of focus on MTSS at the secondary level. Lastly, building capacity for implementation was cited as a struggle with effective MTSS implementation. Focusing on increasing building principal leadership of MTSS was suggested as a way to increase successful implementation of MTSS (Dulaney, et al., 2013). In order for principals to provide effective leadership around MTSS a "practice what you preach" method must be infused within the school's culture; providing individual schools the ability to implement practices that stem from the overall school district's vision of MTSS is one way to shift ownership of implementation to individual building administrators. Dulaney et al. (2013)

recommend additional research regarding implementation of MTSS with a lack of resources and funding.

Professional Stakeholders

Social workers and school psychologists are other stakeholders involved in MTSS; their involvement exists mostly at the levels of tiers two and three within the MTSS model. Due to a lack of research focusing on specific responsibilities relating to MTSS for social workers and school psychologists, Avant and Swerdlik (2016) conducted a study to collect additional research in this area. As referenced throughout this review of literature, in order to successfully implement MTSS within any school setting, extensive collaboration between school district employees must exist. MTSS implementation can change the role of many individuals working within the school setting; social workers and school psychologists are no exception. Social workers within schools implementing MTSS reportedly spend most of their time focusing on activities within tiers two and three, such as individual and group counseling, working with family-based organizations, and meeting with individual students and teachers. Although less time is spent within tier one, social workers also spend time working with families (Avant & Swerdlik, 2016).

School psychologists spend a significant amount of time consulting with school staff in order to support implementation of research-based interventions. Additionally, formal evaluations, report writing, and mental health and social-emotional counseling (both tier three activities) are also factored in as a part of a school psychologist's workday (Agresta, 2004 & Splett, Fowler, Weist, McDaniel & Dvorsky, 2013). Avant & Swerdlik (2016) found in their study that social workers and school psychologists collaborate frequently around MTSS initiatives such as identifying and analyzing student issues, identifying and implementing appropriate research-based interventions, and student data analysis.

Emphasized by Avant & Swerdlik (2016), interprofessional collaboration is boasted as a key component in a successful team approach to MTSS implementation. Defined as, "two or more professionals from different disciplines working together to meet the unique needs of the child and his/her family. Moreover, interprofessional collaboration means understanding that partnership is important because interdisciplinary knowledge is essential to address the multifaceted barriers to student learning" (Avant & Swerdlik, 2016, p. 61), this approach is a widely used and highly recommended approach to MTSS implementation. Increasing staff awareness of the job responsibilities and scope of knowledge of social workers and school psychologists allows school staff the opportunity to utilize these professionals in educating the whole child, an essential piece of MTSS. Although it is common for educators to work in isolation, "The skills of school-based professionals are best used with they are embedded within a multidisciplinary team that engages in crisis prevention, preparedness and response, and systematic collaborative problem solving" (Avant & Swerdlik, 2016, p. 61).

MTSS effectiveness

Avant & Swerdlick (2016) surveyed over three-hundred social workers and school psychologists and included in the collected data was information related to the benefits of MTSS. 85% of participants agreed that MTSS improved their district's use of data to make decisions regarding students, 65% indicated that MTSS allowed their building to implement interventions more effectively, and 60% agreed that MTSS aided in a more systematic approach to PBIS. Additionally, more than 50% reported increased collaboration among colleagues of different disciplines and improved evaluations. Schools which implement a comprehensive MTSS framework including research-based interventions and high-quality instruction for all students are able to increase the chances for successful outcomes for all (Utley & Obiakor, 2015).

Comprehensive systems

Comprehensive programming is imperative for a successful MTSS framework. School districts implementing these programs should ensure an approach which involves integration of all initiatives within MTSS. Harn, Basaraba, Chard, & Fritz (2015) emphasize the importance of capitalizing on already established programs, such as SWPBIS, when beginning implementation of MTSS. The similarities of these programs such as use of research-based strategies and interventions, data-based decision making, and communication through vertical tiers, allow for districts to implement these programs simultaneously. School counseling, mental health services, college and career readiness, in addition to SWPBIS, are all areas which should be integrated within an MTSS model.

A mental health crisis plagues today's youth; as many as 22% of students ages thirteen to eighteen will demonstrate symptomology related to mental health throughout their lives (Merikangas, He, & Burstein, 2010), and these numbers are projected to increase within the next ten years. Von der Embse (2018) examines how schools can address student mental health needs through an MTSS approach. Historically, mental health commonly addressed needs related to psychopathy, as highlighted in Dr. Kent Kiehl's "The Psychopath Whisperer: The Science of Those Without Conscience". In this book, the author takes the reader through historical treatment of those with mental health needs and highlights how this treatment has changed for the better throughout the 20th century (Kiehl, 2014). Today, mental health is best addressed through a proactive approach, similar to the approach emphasized through MTSS for academics or behavior. High incidence of mental health issues and disproportionate identification of minority

students in the area of emotional disturbance call for reform in the area of school-based mental health services (Skiba, Michael, Nardo, & Peterson, 2002). The use of universal screeners for mental health or social-emotional learning, coupled with screenings that are already being implemented by schools to catch students who demonstrate needs related to academic deficiencies or behavior, is a recommended proactive strategy. Additionally, evidence-based assessments, social-emotional interventions, progress monitoring, and professional development for teachers are key components of mental health and social-emotional programming within MTSS (Von der Embse, 2018).

Similar to the overlap between social-emotional tiered programming and academic and behavioral focused programming, school counseling programs also demonstrate overlap between these initiatives. Ziomek-Daigle, Goodman-Scott, Cavin & Donohue (2016) discuss the overlap between these programs and school counseling services, including coordinated activities, databased decision making, team collaboration, cultural responsiveness, preventative models, and working toward systematic change. Historically, school counseling programs have been developed based upon the school district's mission and vision statements and emphasize teaching in the areas of career and social-emotional education (Ziomek-Daigle et al., 2016). The American School Counseling programs support students' academic and behavioral success, therefore aligning directly with MTSS (ASCA, 2014). Positive outcomes have been reported from implementation of school counseling programs and implementing these programs within MTSS is the next step to ensuring comprehensive programming within multiple school initiatives. Capitalizing on the similarities and overlap between school counseling programs, academic goals, social-emotional programming, and SWPBIS, as stated above, allows for a fully inclusive school model.

Harn et al. (2015) conducted a study in which MTSS was implemented in the area of reading in two school districts within the pacific northwest of the United States. Both districts already had SWPBIS in place. The authors implemented tier two interventions in the area of reading utilizing the Read Naturally and Phonics for Reading programs, and tier three interventions consisted of Read Naturally and Reading Mastery in smaller group or individualized settings. The authors cite evidence that MTSS has shown strong evidence of providing students with enough support through preventative measures that some do not develop a learning disability (Harn et al., 2015). Additionally, the authors note that the effectiveness of MTSS increases when implemented in tandem with other school-wide initiatives such as SWPBIS due to the ability to utilize personnel who typically assist in this area, such as behavior interventionists or SWPBIS coaches.

SWPBIS is a school-wide proactive approach which focuses on positive behavior and school culture. Positive Behavior Support is "...an application of a behaviorally-based system approach to enhance the capacity of schools, families, and communities to design effective environments that improve the link between research-validated practices and the environments in which teaching and learning occurs" (Bieniek, School-Wide Positive Behavior Supports, p. 2, 2019). Punishment as a method to correct problem behavior has been proven ineffective and research supports positive behavior as a more reliable method of intervening and creating a proactive approach to behavior within schools. (Bieniek, School-Wide Positive Behavior Supports, 2019).

Integration of already established PBIS within an MTSS framework supports a more cohesive approach to initiatives. It is widely known and accepted that challenging behavior impedes learning; time spent by teachers addressing problem behavior results in lost instructional time and the need exists for proactive systems to address problem behavior in schools (Adamson, McKenna, & Mitchell, 2019). School-wide systems which also include classroom-based components benefit students as they can be proactively taught how to exhibit appropriate behavior. Adamson et al. (2018) support the need for the problem-solving approach through MTSS, including a behavioral piece to the MTSS framework; the same logic behind a schoolwide approach to academic, behavioral, and social-emotional teaching can apply to a classroom setting. Within this approach, a similar three-tiered system should exist, with tier one strategies for teaching acceptable behavior and tiers two and three strategies and plans, such as individual behavior contracts or a research-based intervention, in place to address the needs of small groups or individual students who need more targeted instruction (Adamson et al., 2019).

George, Cox, Minch, & Sandomierski (2018) studied key indicators of successful SWPBIS implementation within MTSS in schools in the state of Florida. The authors utilized measures to identify high-performing schools which implemented MTSS and then used qualitative measures to collect data focused on what made the implementation successful. Results indicated that schools with district coordinators for MTSS, instructional and behavioral coaches, an emphasis on district teaming, effective leadership and staff buy-in, systems to analyze data, direct support provided to schools, and effective communication were among the themes of positive contributors to MTSS and PBIS integration success (George et al., 2018).

MTSS program fidelity and research-based interventions

Program fidelity related to overall MTSS implementation and individual interventions is of significant importance when implementing MTSS. Typically, program fidelity measures focus on overall systems implementation, rather than individual program components. Originally used in the medical field, self-monitoring checklists are one way for teachers or interventionists to maintain fidelity when implementing individual or small-group interventions as a part of tier two or tier three MTSS (Nelson, Oliver, Hebert, & Bohaty, 2015). The more accurate the implementation of an intervention, the better the effects are. Although historically underused in the field of education, self-monitoring checklists can help ensure that interventions are being implemented as accurately as possible.

Another method of ensuring fidelity, with which research indicates has shown success, is providing frequent and meaningful feedback (Nelson et al., 2015). Coaching as a part of the MTSS model is critical; multi-level system for coaching teachers is one method of ensuring teachers receive coaching while implementing interventions within MTSS. Professional development for teachers only goes so far; often times teachers attend professional development sessions and receive little to no follow-up regarding the implementation of the strategies learned, or, worse yet, some teachers do not have access to meaningful professional development (Wood, Goodnight, Bethune, Preston & Cleaver, 2016). Compared to professional development alone, a multi-level coaching system has shown improvement in teacher performance of instructional practices. Personnel such as literacy or math coaches, intervention specialists, or other professionals could be used as a part of the coaching model. Within the model, teachers attend professional development sessions and then receive follow-up supervisory coaching, including targeted feedback following an observation of teaching. Another layer of the multi-level coaching system is side-by-side coaching. During this approach, a coach provides feedback in real-time to teachers during a lesson; this approach has shown an increase in fidelity of implementation of instructional strategies (Wood et al., 2016). These coaching models enable school districts to build in fidelity measures for teachers as a part of the implementation of MTSS. Hagermoser, Sanetti & Collier-Meek (2015) conducted a study regarding implementation supports in MTSS. The authors discuss an implementation strategy of Multi-tiered Implementation Supports (MTIS) as a part of MTSS implementation. This strategy emphasizes the importance of a tiered approach for implementation as well as aids in decision making regarding strategy use within MTSS. Tier one of this approach consists of typical consultation and data collection to determine whether or not additional support with implementation is needed. Tier two allows for a more intensive approach to consultation and may include two or three consultation meetings. The third tier of this support consists of ongoing consultation to support implementation (Hagermoser Sanetti & Collier-Meek, 2015). The authors implemented a study based upon this tiered approach to professional development. Six elementary school teachers participated in the study and results indicated that although all teachers responded somewhat to the program, the degree to which they responded and participated varied. The authors also found that an increase in the fidelity of interventions within the classroom decreased the amount of problem behavior occurrence within the room, therefore supporting various research perspectives regarding appropriate academic expectations yielding a positive effect on classroom behavior (Hagermoser Sanetti & Collier-Meek, 2015). MTIS as an implementation fidelity strategy is one method that school districts can implement in order to ensure reliability within the MTSS framework.

Utilizing tools such as universal screeners and data-based decision making to aid in the decision-making process regarding research-based interventions is key in MTSS implementation. Harn, et al. (2015) support the use of interventions in the area of reading which expand from solely focusing on phonological skills to include executive functioning and cognitive processing skill interventions. Additionally, interventions in the area of self-regulation were recommended; these interventions are "critical in a classroom setting as it supports students' sustained efforts toward the teacher's instructional goals, and keeps students engaged across the lesson and school day to support the acquisition of new skills and learning" (Harn et al., 2015, p. 15). They are also notably beneficial for students who struggle in the area of reading. Collaboration between team members and cohesiveness among school initiatives is also emphasized; the authors state, "rather than having teams think separately about academic and behavioral needs, we need our schools, teachers, and specialists to consider the overall needs of the students, which will require better collaboration across our specialists (academic interventionists/instructional coaches and behavior specialists) (Harn et al., 2015, p. 16).

Secondary level MTSS

College and career readiness is another focus point of school counseling programs, particularly at the secondary level. As has been highlighted throughout this literature review, combining school initiatives into the MTSS model improves operations within school systems and ensures that all students are receiving high quality instruction in various areas. College and career readiness (CCR) is no exception to this rule (Morningstar, Lombardi, & Test, 2018). Secondary level MTSS implementation has gained traction as systems within elementary schools continue to yield positive results. According to Morningstar et al. (2018) "Emergent research indicates RTI implemented within secondary schools can influence student academic and behavioral outcomes, but only when certain adjustments to secondary infrastructures are made" (p. 2). At the secondary level, emphasis on school reform continues to be an area focus, including improving school culture, flexibility with student scheduling, graduation requirements, and ensuring continuity with other district initiatives such as SWPBIS and school counseling programming (Morningstar et al., 2018). The authors also put an emphasis on ensuring students with disabilities are included in the "all" of the student body.

The expansion of MTSS already occurring in secondary schools provides an opportunity to merge systems and approaches, particularly given the past decade of focused attention on CCR. Importantly, this proposition does not entail creating a new system from the ground up but rather leveraging existing systems and practices to promote access to CCR opportunities that can impact all students, especially those with disabilities (Morningstar et al., 2018, p. 4).

Recommended domains within this proposed secondary framework to include CCR standards consist of the following: academic engagement ensured through providing academic and behavioral interventions, emphasizing and teaching a growth mindset perspective to students, teaching learning processes, focusing on executive functioning skills such as notetaking and organization, working to develop students' critical thinking skills, building positive relationships and social experiences through fostering effective communication skills, and a focus on postsecondary transition such as planning for college, independent living, and professional responsibilities such as resume writing and interviewing for jobs (Morningstar et al., 2018).

An integrated approach at the secondary level also has positive effects on graduation outcomes. Early Warning Systems (EWS) within MTSS is a proactive approach related to behavior management and attendance. Utilizing an EWS at the secondary level allows schools to analyze a combination of student data in order to intervene, teach, and change problem behavior, thus increasing a student's chances of graduating. The Pennsylvania Department of Education (PDE) suggests the following when implementing state-wide initiatives around EWS as related to MTSS: allowing school districts to choose which EWS works best for their district, utilize common metrics when analyzing data related to EWS, ensure early identification and intervention of students, implementation of quality, research-based interventions aligned to problem areas, utilize data from EWS to ensure continuous improvement, and involve families and students in the discussion (NCSI, n.d.).

In order to ensure a comprehensive approach to MTSS at the secondary level, evidencebased practices (EBPs) must be implemented within the classroom. Mahoney (2020) discusses the importance of implementing EBPs within inclusive classrooms at the high school level as a part of MTSS. Identifying areas of need is required prior to implementing EBPs; this identification can be achieved through a universal screener or other data-gathering assessment such as the Woodcock Johnson IV. Once need is determined, selection of an EBP and related training for the teacher or implementer can begin. Secondary teachers are typically highly skilled in teaching their content area but may not have sufficient background knowledge regarding implementing EBPs; thus, training on certain strategies and programs much be prioritized (Mahoney, 2020). Fidelity and implementation checks should also be built into this system.

Having a measure of effectiveness when implementing research-based interventions or a whole-school system of MTSS is imperative in order to measure growth and ensure effectiveness. McIntosh and Goodman (2016) created an MTSS effectiveness measure for the secondary level, which will be used as a data-gathering tool within this dissertation. This needs

assessment allows for district or school-based MTSS teams to measure themselves on a scale from "not implementing" to "fully and consistently implementing", regarding various elements of MTSS, such as EBPs, data-based decision making, shared responsibility and team-based problem solving, prevention, assessment and leadership. Measurement of the implementation of these MTSS components allows schools to identify areas of success and need in order to ensure complete and reliable programming.

Teacher and stakeholder input and perspectives on MTSS implementation

Naturally, as MTSS is a general education initiative, general education teachers commonly feel the weight of the program sits on their shoulders. Castro-Villarreal, Rodriguez and Moore (2014) conducted a qualitative study regarding teacher input on RTI. The authors note general education responsibility within the MTSS framework commonly includes administering universal screeners and benchmark assessments, delivery of research-based interventions, ensuring the general education curriculum is delivered with fidelity and differentiating instruction within the classroom. Due to this extensive involvement, as well as the correlation of student success within MTSS to teacher efficacy, perspectives of these key stakeholders is imperative. Personal beliefs, attitudes, and challenges of teachers regarding RTI within a southwestern United States school district were explored by the authors via a Likert Scale and open-ended questions. Results of the study were analyzed and categorized into emerging themes consisting of training and professional development, time to implement interventions, plan, and gather data, appropriate resources, knowledge of the RTI process, and paperwork (Castro-Villarreal et al., 2014). Teacher perceptions have often been overlooked when implementing school-wide programming and MTSS is no exception. Results of the study indicated that most teachers did not have a complete understanding of RTI which is consistent

with concerns relating to a lack of professional development on the subject. Additionally, teachers commonly misunderstood the components of RTI, and some indicated that they were aware of their misunderstanding. Overall, teachers who participated in this study expressed concerns regarding a lack of collaboration and communication which attributed to lack of reliability within the MTSS framework at their school.

Wilcox, Murakami-Ramalho, & Urick (2013) also examined teacher perceptions on MTSS. Findings from this mixed-methods study included three themes in relation to MTSS implementation: professional development needs, collaboration between professionals, and the need for assessment. Additionally, the authors concluded that teacher perceptions and point of view had an impact on implementation, regardless of the setting (Wilcox et al., 2013). Teacher perceptions have a direct impact on the success of MTSS; comprehensive professional development and considering teacher perceptions and viewpoints can be beneficial in increasing implementation success.

Obstacles relating to MTSS implementation are evident at the secondary level (Dulaney, et al., 2013 & Avant & Swerdlik, 2016). Lack of time for effective implementation of practices and interventions and lack of training and funding were all cited as hindrances to effective implementation by participants in the study conducted by Avant & Swerdlik (2016). Lack of support by district administrative personnel was cited as an obstacle by 25% of participants (Avant & Swerdlik, 2016).

Donnell and Gettinger (2015) conducted a study focusing on teacher acceptance of RTI in relation to their years of experience, belief congruence, professional development experiences, and self-efficacy in the state of Wisconsin. The authors found that three areas (self-efficacy,

belief congruence, and professional development experiences) correlated moderately with teachers' perceptions of RTI:

After controlling for all other explanatory variables, teachers whose beliefs were aligned with RTI (high congruence scores) had positive attitudes toward the reform initiative (high acceptability ratings (p<.001). This finding suggests that beyond focusing primarily on implementation requirements (i.e., "how to"), professional development efforts may need to address explicitly the theory and rationale for RTI (i.e., "why?"). Although training related to the technical aspects of implementation without an emphasis on the culture of the reform, such training will not ensure that enactment is aligned with the intent of the reform (Donnell and Gettinger, 2015, p. 55).

Another study on this topic was completed by Nunn, Jantz, & Butikofer (2009). The authors examined data from over four-hundred participants related to RTI implementation fidelity and teacher efficacy. The authors found a significant relationship between teacher efficacy and enthusiasm, persistence, and willingness to implement and uphold educational initiatives (Nunn et al., 2009).

Stakeholders in MTSS exist in addition to teaching professionals. Parents and community members are also key interested parties. Troisi (2014) examined the knowledge of parents regarding the MTSS process. Although parents differ in their amount of engagement in their child's education system, it is important to consider parent perspective, opinions, and knowledge of school-wide initiatives such as MTSS. Although small in scale, the study yielded results which indicate that although parents were knowledgeable of the MTSS process as a whole, gaps existed in regard to specific interventions and evaluations or assessments that have occurred.

Increased communication with parents and families regarding MTSS is recommended in order to enhance knowledge and understanding of the framework and to increase buy-in.

The need exists for additional research regarding teacher and stakeholder perspectives on MTSS implementation at the secondary level. Stakeholder input, particularly teacher perspectives, can have a significant impact on the operation of MTSS; therefore, input from these professionals regarding implementation and functioning within the system is imperative.

Summary

MTSS is a comprehensive framework for school districts to implement which emphasizes the importance of providing all students with high-quality education related to academics, socialemotional well-being, and behavior. This literature review focused on MTSS implementation and was divided into five sections. Section one focused on the Individuals with Disabilities Education Act, Every Student Succeeds Act and other federal and state initiatives. The federal initiatives, although open to interpretation by individual states, provide guidance for states on what is required for implementation. States have taken this language and implemented programming requirements for school districts related to MTSS, including professional development and consultation designs.

The next sections focused on systematic implementation strategies and district and administrative support related to MTSS implementation success. Fixsen, et al. (2005) provide ample research on implementation phases and strategies for comprehensive and successful implementation of initiatives within different organizations. These strategies can be utilized by school districts to aid in thorough implementation of MTSS. Research supports that administrative buy-in, a team approach and clear communication is critical in the implementation of MTSS. Including a diverse team of school professionals with various backgrounds, such as teachers, social workers, school psychologists, school counselors and administrators, is also key. The last two sections of this review involved MTSS effectiveness, comprehensive programming and research related to teacher and stakeholder input and perspectives on MTSS implementation, all of which are vital to consider.

Overall, sustainability within any new or implemented framework is imperative in order for the system to be successful. In MTSS, priority of effective communication and mutual approaches, administrator support and staff buy-in, integration of new programming and sustaining existing efforts, and ensuring dedicated resources such as personnel and researchbased curriculum and interventions, are all areas crucial to the sustainability. MTSS is a wellresearched initiative which is supported by the success of students if the components of the program are implemented with fidelity. Schools should ensure the implementation of MTSS is a priority as the academic, behavioral, and social-emotional well-being of students is all intertwined into the likelihood of success for all students.

CHAPTER 3 METHODOLOGY

Understanding teacher perspective related to implementing a school-wide framework such as MTSS is imperative. Teacher buy-in and willingness to participate directly impacts the success of the initiative. This study focuses on teacher perceptions of multi-tiered systems of support implementation at the middle school level and utilizes already existing data, new data compiled from an MTSS needs assessment completed by the building-based MTSS team, and asynchronous, open-ended, confidential online interview responses by teacher and staff members of a suburban, western Pennsylvania middle school. A qualitative approach to this study was the most appropriate because the study subject requires interpretation and conceptualization as well as personal involvement in understanding peoples' perceptions and feelings (Brown, Stevens, Troiano & Schneider, 2002). A qualitative research approach lends itself well to research related to the lives of people, behavior, or functioning within an organization (Strauss & Corbin, 1990).

Within this study, the grounded theory approach to qualitative research was utilized. Grounded theory, based upon the work by Glaser and Strauss (1967), consists of "systematic generating of theory from data, that is systematically obtained from social research, and offers a rigorous, orderly guide to theory development that at each stage is closely integrated with a methodology of social research" (Glaser, 1978, p. 2). This theory allows the researcher to become grounded in a set of collected data and create theories based upon this data (Tracy, 2013) and allows for research that is "generalizable" (Strauss & Corbin, 1990, p. 2). In the case study presented within this dissertation, the goal is for the research to be transferable to other school districts planning for MTSS implementation at the middle school level.

Research Questions

- How do middle school teachers and school support staff perceive implementation of a multi-tiered system of support?
- 2. How do these perceptions impact the buy-in and level of understanding of MTSS implementation?
- 3. In what ways do middle school teachers understand the MTSS framework?

Yin (2003) cautions against developing research questions that are too broad and do not allow the researcher to focus on an obtainable subject. Ensuring that the case study is reasonable in scope means that boundaries are established within the research regarding what will and will not be studied, similar to inclusion and exclusion data within a quantitative study (Baxter & Jack 2008). The research questions designed for this study align to the topic of the dissertation. An online interview was conducted as one of the data collection methods for this study; each online interview question associated with this study aligns to one of the research questions listed above. Similarly, each piece of data analyzed for this study was analyzed in order to answer one of the three research questions.

Interview Approach

An asynchronous, confidential, on-line, open-ended interview was conducted as one data collection method for this study. The interview questions for this study were developed to ensure an open-ended response to each question. Participants were informed of the purpose of the study and research questions during the consent process. All participants were sent a link to complete a confidential, asynchronous online interview with instructions on how to complete the form. The online interview questions were designed based upon the research questions and all questions aligned with at least one of the research questions in order to ensure focus on the research. The

Bailey Tarver SST (Student Support Team)/RTI Survey (2010) was utilized as a reference when creating the online interview questions for this study. The Bailey Tarver SST Survey is quantitative in nature and utilizes a Likert Scale in order to quantify teacher perceptions and understanding of SST and RTI. Although this survey was not edited to create the online interview questions within this dissertation, this already established instrument was informative in creating the interview questions. In this study, the questions were developed by the researcher in order to increase credibility and relevance to the subject matter. As an employee of the school district in which this study took place, the researcher was able to create the questions to allow a more personalized approach to the district and school participating in the study. Chenail (2011) suggests, "...researchers in the spirit of conducting naturalistic or discovery-oriented inquiries usually create study-specific questions for their interviews instead of utilizing pre-established questionnaires or survey instruments...In such a manner investigators become the instruments through which data for their studies are collected or generated" (Chenail, 2011, p. 1). Rather than a specific tool being the measurement by which research is collected, in a qualitative study, often times the researcher his or herself becomes the research tool. "It is through the researcher's facilitative interaction that a context is created where respondents share rich data regarding their experiences and life world. It is the researcher that facilitates the flow of communication, who identifies cues, and it is the researcher that sets respondents at ease" (Chenail, 2011, p. 1).

Creating original interview questions for this case study allowed for taking into consideration the school professionals as well as the current state of MTSS implementation within the building. This approach allowed for personalization of the questions in order to align specifically with the MTSS approaches utilized by the school. For example, building-based and team-based MTSS teams are utilized, so both of these approaches were captured in the interview questions in order to gain perspective on both approaches. The online interview questions are

included below.

Table 1

Asynchronous Online Interview Questions

	Mazzant Online Interview Questions	Aligned to research question #
1.	What does MTSS mean to you?	1, 3
2.	What does the MTSS team(s) process look like at your school? What is its purpose?	1, 3
3.	Who is responsible for MTSS in your school and what does this responsibility entail? How do you contribute to this implementation?	1, 2, 3
4.	What is the purpose and operation of the MTSS team(s) within your school?	1, 3
5.	What paperwork and/or documentation are required as a part of the MTSS process in your school? How would you describe this required documentation?	2
6.	What reading and math interventions are implemented in your school? Describe how these are provided as a part of the tiered framework of MTSS.	3
7.	Do you feel the MTSS framework is effective in your school building? In what ways is it effective or not effective?	2
8.	How do you collaborate with parents and fellow colleagues regarding the implementation of MTSS?	2
9.	In what ways are MTSS team meetings used to benefit students?	1
10.	How do you feel about the success of the MTSS process within your school?	2
11.	In what ways do you feel the MTSS process in your building can improve?	1, 2, 3

Procedure and data collection

Prior to participation, the researcher sent an email to all potential participations

requesting participation in the study (attached, appendix C). All participants were asked to read a

consent form which informed potential participants of the purpose of the study, who is eligible to

participate, where the study will take place, the time commitment of the study and what the study entails, any potential risks, how personal information would be protected, who to contact with questions, and how to stop being in the study.

This research study consisted of a single descriptive case study design. Case study design is commonly used and helpful in qualitative research focused on describing or exploring phenomena, individuals or organizations through multiple data points (Baxter & Jack, 2008). Case studies are built upon the constructivist paradigm which claims that truth is relative and based upon one's perspective. It "recognizes the importance of the subjective human creation of meaning, but doesn't reject outright some notion of objectivity" (Baxter & Jack, 2008, p. 545). This approach allows the researcher to form more of a personalized relationship with the participants which allows for a more empathetic approach to the research (Baxter & Jack, 2008). Yin (2003) recommends a case study approach when the following are present in the focus of the research: "how" and "why" questions, inability to change the behavior of the participants, interest in exploring the context of the research because it is seen as relevant, and unclear boundaries between the context and the phenomena itself. In this study, the phenomena of middle school teacher and staff perceptions of MTSS implementation were explored.

The first set of data collected for this dissertation, based upon a benchmark assessment on MTSS knowledge of middle school employees, completed in August 2019, December 2020, and May 2020, was analyzed. Similar to the needs assessment, this information was not collected in order to quantify the data, but rather to share additional information regarding the current understanding of MTSS by school employees. Questions included on these benchmark knowledge assessments are indicated below:

Table 2

August 2019 Teacher MTSS Benchmark Assessment Questions	January 2020 Teacher MTSS Benchmark Assessment Questions	May 2020 Teacher MTSS Benchmark Assessment Questions
1. A Multi-Tiered System of Supports (MTSS) is a systematic framework that utilizes a data-based problem- solving process to provide multiple tiers of instruction and intervention to ensure successful outcomes for who?	1. True or False: You need IEP, 504 or GIEP information to bring a student up at an MTSS meeting.	1. MTSS addresses which of the following needs of students? Check all that apply.
2. True or False: Multi-tiered Systems of Supports (MTSS) are used as an umbrella term that encompasses both response to intervention (RTI) and positive behavioral interventions and supports (PBIS).	2. Which of the following can be the focus of an intervention for a student? Check all that apply.	2. Why would a student be brought up at an MTSS meeting? Check all that apply.
3. Tiers are differentiated by the of the services provided.	3. Programs for which type of student deficit are currently being implemented at both grade levels?	3. What is the point of having an MTSS referral for a student?
4. A student with very intense instructional needs would typically receive:	4. What is used to determine whether a student needs a tier 2 or 3 intervention? Check all that apply.	4. True or False: RAMS Way is a part of MTSS.
5. Check all the information below that is needed to identify a problem about a Tier 1 student.	5. True or False: RAMS Way is a part of MTSS.	5. Which tier most directly applies to all teachers and students at the middle school?

Teacher Benchmark Assessment Questions

The second set of data collection consisted of results from the MTSS Needs Assessment, Secondary Version from "Integrated Multi-Tiered Systems of Support: Blending RTI and PBIS" by Kent McIntosh & Steve Goodman (2016). This needs assessment was completed by the MTSS building-based team at the school district in which the study was completed in October 2020. Members of the building-based team who participated in the completion of the needs assessment were the building principal, assistant principal, school psychologist, and intervention specialist. This assessment was not completed in order to collect quantitative data, but rather to paint a picture of the current level of implementation of MTSS at the middle school. Data collected and analyzed from this needs assessment is shared in the results section of this dissertation.

Lastly, an online, confidential, asynchronous interview using self-created questions was the third method of data collection for this study. Participation in the online interviews was voluntary and participants were kept confidential. The interview was used to gather qualitative data to inform the research questions. This method was chosen because the researcher, in addition to district level personnel, felt that school staff members would feel more comfortable sharing their perceptions and experiences with MTSS in a confidential format. Through an online interview format, participants are able to write their responses and reflect on their answers prior to submitting, which "contributes to the production of a closer fit between ideas, intentions, and their expression in writing" (Meho, 2006, p. 9). Additionally, Lewis (2006) advises that written responses in interviews, as compared to synchronous interviewing "…allows participants greater scope to think about any questions asked and, as such, often encourages more descriptive and well-thought-out replies…" (Lewis, 2006, p. 1).

Conducting interviews in an asynchronous, online format also allows the researcher to potentially reach additional participants who may not be available in an in-person format. Additionally, online interviewing is more comfortable for some participants who may be able to express themselves better in writing than in a spoken conversation. Time is also positively impacted by online interviewing; researchers can conduct many interviews at one time and this format also does not require transcription (Meho, 2006).

Setting

Participants were able to choose the location and time of the online interview; the interview was done in an asynchronous format and was provided online so participants could complete it at their convenience. Prior to beginning the interviews, participants were informed of the purpose of the study, approximate length of time required, details regarding the consent to interview, and purpose of the research study.

Participants

The school district in which this study was completed is a suburban school district in western Pennsylvania. The district itself consists of approximately 4,500 students, 715 of whom were enrolled at the middle school building in which the study was conducted during the 2020-2021 school year. The middle school consists of grades seven and eight. Staffing demographics for the middle school building consist of the following: one building principal and one assistant principal, 63 teachers, 10 paraprofessionals, two school counselors, one social worker, one school psychologist who oversees grades seven through twelve, and one intervention specialist who works with grades seven through twelve.

A sampling plan was constructed in order to identify proper participants for this study. Careful consideration of participants for interviews is an important step in conducting qualitative research; purposeful sampling, in particular, was used in this study in order to identify professionals who could aid in capturing the realm of thoughts on MTSS for all members of the building. Tracy (2013) recommends purposeful sampling in order to ensure that the data collected aligns with the research questions being sought. In this study, participants were requested based upon their job identification in the school in which the study took place. Participants were categorized into four groups based upon their job classification with a goal of at least five participants from each group to be interviewed. A total of 26 participants completed the interview, including five participants who indicated their role as "other". Participants who indicated their role as "other" were not included in the data analysis of this dissertation, as the study included the following job categories: classroom teachers, special education teachers, special area teachers, and paraprofessionals. The "other" category could have consisted of building secretaries, school counselors, school social worker, or building administrators. For the purposes of this study, only responses provided by teachers and support staff were analyzed. Purposeful sampling utilizing the specified groups was used in order to capture the full spectrum of teacher and staff understanding and perspective related to the implementation of MTSS.

Data based upon responses from 26 staff members was analyzed, and the table below includes the participant identification code and current role category of the participants.

Table 3

Participant Number	Job Category
1	Content area teacher
2	Off-team/Special Area Teacher
3	Content area teacher
4	Content area teacher
5	Content area teacher
6	Other
7	Off-team/Special Area Teacher

Participant Demographics

8	Other
9	Paraprofessional
10	Paraprofessional
11	Special Education teacher
12	Content area teacher
13	Special Education teacher
14	Special Education teacher
15	Paraprofessional
16	Content area teacher
17	Other
18	Special Education teacher
19	Content area teacher
20	Content area teacher
21	Other
22	Content area teacher
23	Other
24	Content area teacher
25	Off-team/Special area teacher
26	Content area teacher

Participant amount was not pre-determined, rather it was determined when saturation of data was reached. Saturation, defined as analyzing research until no new data emerges within the analysis (Brown et al., 2002), was used to determine when a sufficient number of participants

completed the interview. In this study, 26 total participants completed the interview process. The researcher did not have to send out more than one email request for participation.

Data Analysis

Coding was used to determine themes within the collected data. The constant comparative method was utilized to compare the data with the existing codes to determine whether or not it fits or should be divided to fit a new code. When coding data in a qualitative study, researchers can use a variety of methods, including manual coding or computer coding programs. In this study, manual coding was utilized. Upon the initial data collection and coding phase, the researcher worked to identify codes or phrases that were common among the interview responses, known as the primary-cycle coding phase (Tracy, 2013). Through utilization of the Grounded Theory Approach, the researcher utilized an iterative approach to research and data analysis in which theories were built upon throughout the data collection process and data was visited and revisited throughout the research process. After several cycles of coding the collected interview data, several common phrases were identified from the participant responses. After this initial phase of coding, the researcher compared and contrasted the responses and coded phrases based upon the job categories of the participants. From here, themes emerged in the data which were then connected back to the original research questions for this study.

Credibility

One goal of this research study is that school districts working to implement MTSS at the middle school level can utilize the research and findings in order to help with their own implementation. In order for the findings to be usable, they must also be credible. "Credibility is significant in creating confidence that people can act upon data and findings to make decisions in

their own lives, work, and families, or in future research settings" (Tracy & Henrichs, 2017, p. 6). Thick description and multivocality were strategies used to ensure credibility within this study (Tracy & Henrichs, 2017). Thick description, ensuring that the data is shown to readers, rather than just told, was achieved in this study through the extensive explanation of collected data, included in the results section of this dissertation. Multivocality was achieved through including various school professionals in the interview process in order to ensure that the collective voice of the school was reflected throughout the study, including when opinions or points of view did not necessarily align with the hypothesis of the study. Defined as "the inclusion of multiple voices" (Tracy, 2013, p. 237), multivocality ensures that multiple points of view are recognized throughout data collection and that participants' voices are heard when findings are reported, thus increasing the credibility of the study (Tracy, 2013). Self-reflexivity, defined as carefully considering the researcher's experiences and point of view in relation to the research itself, was also carefully considered throughout this research study (Tracy, 2013). For example, when analyzing the interview data collected, it was important for the researcher to recognize that some participants have more experience with MTSS than others, such as the general education teachers as compared to the special area teachers.

Authenticity

As a current employee of the school district in which the study was completed, and having known most of the participants personally, it was important to ensure that personal background, point of view, and current role within the school district did not have an impact on the data that was collected or analyzed. Although some may view this personal connection to research as a hindrance or ethical dilemma, in this case, it was viewed as fuel to feed the research; this additional perspective helped to shape the research approach and allowed for the study itself to be built. For example, the interview questions were designed to address the current program state of the middle school in which the study was completed; as an employee of this school who is involved in MTSS, the researcher was able to design questions which match the MTSS model at the school. Additionally, the researcher was able to easily interpret jargon used by the participants in interview responses related to the MTSS model specific to the school. The researcher is emic to this study, having an inside view of what the MTSS process consists of, which allowed the researcher to personalize the research questions to the school building in which the study took place. Emic researchers are involved directly in the research and through observations can gather data, make claims, and analyze in order to build theories (Tracy, 2013). Although being an employee of the district in which the study takes place has many advantages, it is important to acknowledge that participants may have felt obligated to participate in the study. Additionally, although all responses were kept confidential, employees may have felt uncomfortable sharing their true perceptions on MTSS with a fellow district employee.

A confidential, asynchronous online interview data collection method was preferred in this study specifically due to the researcher being an employee of the building. An in-person interview method, for example, may have caused nervousness or a lack of sincerity in responses by participants. Stacey & Vincent (2011) state "Interviews often incorporate sensitive questions so that interviewees may either consciously or subconsciously feel the need to agree, responding in ways that they perceive to be socially desirable, or that they think match the beliefs of the interviewer (response acquiescence). The tendencies for response acquiescence and socially desirable responses are important issues affecting the quality of interview data. (Stacey & Vincent, 2011, p. 1). The confidential format of the interviews increased the authenticity of the study for this reason. Confidential online interview participation allows for participants to provide input without feeling uneasy about sharing personal beliefs or perceptions.

Transferability

MTSS at the secondary level is not widely researched and can be challenging since secondary schools do not mirror elementary schools in terms of scheduling and course credit (Shinn, 2020). A wide range of transferability is a large benefit of the methodology and results of this study especially due to the need for additional research in this area. Although the interview questions were written to reflect the MTSS process of the school in which the study took place, the results and study itself can be transferred to any school district implementing MTSS at the secondary level. The ease of written communication provided by the researcher can also add to the transferability of the study (Tracy & Hinrichs, 2017). In this dissertation, the background information, methods, results, and future study implications are clearly communicated in order for another researcher to replicate or utilize the results to build programming in another school district.

Ethical Considerations

Prior to beginning this study, approval was received by the Institutional Review Board (IRB) of Slippery Rock University as well as from the school district in which the study was conducted. All participants were made aware of the study purpose and a consent form was received by all participants prior to participation in the online interview. The privacy of all participants was respected, and no personal identifying information was shared or documented; all responses were confidential. All collected data and interview responses were kept on a secure, password protected laptop. Upon completion of the study, all interview responses and data related to the content of the study were deleted.

Researcher bias is addressed within this study as the researcher is an employee of the school district in which this study took place. Particularly in qualitative research, the researcher needs to be aware of and discuss any possible bias within the research (Chenail, 2011). The researcher being a member of the population in which the study takes place can introduce concerns regarding researcher bias. These concerns can include the researcher only investigating areas within the organization that he or she is personally concerned with rather than investigating the entire entity or scope of the study itself (Chenail, 2011). In this study, this specific risk of bias is addressed through ensuring that a full spectrum of staff members from different job categories participate in the study.

Limitations

Although this case study allows for a narrowed focus on teachers and staff perceptions of MTSS within one middle school, the narrow scope can cause limitations within the research. Limitations within this study include a small sample size. In-depth and focused questioning was used to gather teacher and staff perceptions and feelings, rather than gathering less in-depth information from more participants. A 'quality over quantity' approach was favored in this study. Additionally, since all of the participants from this study work in the same building, the perspectives could be more limited than if multiple buildings were explored. The online asynchronous format of the interview process could also contribute to limitations. Although some people may be more effective writers than speakers and prefer this format, it is also possible that some may be more comfortable with providing input through conversation due to not being effective writers (Meho, 2006). Response errors are also possible throughout the interview process, contributing to possible limitations. Throughout the interview process, participants are "required to interpret the question, assess, retrieve and organize relevant

information in their memory, then evaluate whether this information is relevant to the interview question, as well as evaluating the information in terms of its threat to their personal goals (for example, self-esteem). Response errors could occur at any of these stages." (Stacey & Vincent, 2011).

Another possible limitation is the time period during which the study was implemented. This study took place during the COVID-19 global pandemic of 2020. Due to this large-scale risk, the district in which this study took place was operating on a hybrid model of instruction where students with last names A-K attended school one day, and students with last names L-Z attended on the next day. Additionally, some students attended school virtually and teachers were responsible for providing live-streamed instruction. This teaching schedule and technology change, among other changes, likely caused distraction and anxiety for teachers and school employees during this study. It should be noted that these feelings and disturbances may have an impact on the data that was received during the online interview.

Summary

Careful consideration of the setting, participants, data analysis, and risks associated with this study were taken into account during the creation and implementation of the study. By using multiple pieces of information in the data collection of this study, the researcher is able to provide a robust account of the current MTSS implementation level of the school in which this study takes place, as well as teacher and support staff perceptions of this implementation. The results section of this dissertation will explain the outcomes associated with the three methods of data collection as well as the codes associated with the interview responses and the overarching themes that were identified from those codes in connection to the research questions.

CHAPTER 4 ANALYSIS

MTSS implementation at the secondary level proves to be a difficult task. Coordination of services and interventions throughout the school day when students are taking part in classes for credit toward graduation makes implementing interventions a challenge. Many schools have traditionally implemented programs in silos, causing a disconnect between initiatives (Harlacher & Siler, 2011). Additionally, implementation of school-wide programming without taking teacher and staff perceptions into account can cause decrease in buy-in from teachers and staff, especially since teachers are primarily responsible for delivery of research-based interventions and strategies within tiers one and two (Castro-Villarreal, et al., 2014). Teacher understanding of school-wide systems has been found to have a positive impact on implementation of school-wide programming, specifically leading to increased collaboration, better outcomes related to intervention delivery, and an increase in data-based decision making (Castro-Villarreal, et al., 2014).

The purpose of this study is to explore teacher and staff perceptions of MTSS implementation at the middle school level. As a qualitative case study, this study focuses on one middle school in suburban western Pennsylvania, currently in year two of MTSS implementation. A qualitative design for this study served as a tool to conduct research on specific phenomena (MTSS) and was especially effective as the study aimed to evaluate a program. Additionally, utilizing a qualitative approach to this study allowed the researcher to explore the idea of MTSS through more than one lens, that is, teacher perceptions and knowledge of MTSS and program implementation (Baxter & Jack, 2008).

In order to provide background information on the middle school in which the study takes place, the researcher also includes teacher benchmark assessments focused on teacher knowledge of MTSS during year one of implementation, the 2019-2020 school year. Another piece of data shared as a part of this study is the Multi-Tiered Systems of Support Needs Assessment-Secondary Version (McIntosh & Goodman, 2016), completed by the buildingbased MTSS team within the middle school in which the study took place. This building-based team was established during year two of MTSS implementation, the 2020-2021 school year. New data collected as a part of the study came from a confidential, on-line open-ended interview consisting of ten questions in order for teachers and staff to provide input on their perceptions of MTSS within the school building. This study aimed to contribute to research on MTSS implementation at the secondary level as well as to highlight how teacher and staff perceptions can impact MTSS implementation within school buildings. It is important to note that during the data collection period for the on-line, open-ended interview for this study, the school in which the study took place was participating in a hybrid model of instruction due to the COVID-19 pandemic. This model of instruction consisted of students with last names A-K attending school 2-3 days per week in-person and students with last names L-Z attending on alternating days. Days when students were not in school in-person, students participated in virtual live-streamed instruction. This new model of instruction, along with a school year full of unprecedented changes in educational delivery models, may have had an impact on certain participants' interview responses.

The research questions for this study are included below. Research question one refers to the overarching research focus of this study and questions two and three are the supporting research questions.

 How do middle school teachers and school support staff perceive implementation of a multi-tiered system of support?

- 2. How do these perceptions impact the buy-in and level of understanding of MTSS implementation?
- 3. In what ways do middle school teachers understand the MTSS framework?

As a part of this study, many steps were taken to ensure the trustworthiness of the data collected and the study itself. Two characteristics of a meaningful and quality qualitative study are sincerity and credibility, both of which have been exhibited within the design of this study. Sincerity includes the practice of ensuring that the needs of research participants are met and that the researcher is transparent about the study itself, as well as his or her connections to the study (Tracy, 2013). In this study, participants were provided with a notice of consent to participate which included information regarding a minimal risk of breach of confidentiality and coercion, in an effort to increase transparency (Tracy, 2013). Since the participants and co-investigator were colleagues, the researcher knew each of the participants by name. Although the online interview was confidential and no names or personal identifying information were collected, the participants, as colleagues, were known by name and it was possible for the researcher to connect a response to a participant, based on the potential details that could have been provided within the responses. Additionally, the participants within the study are employees of the district in which the study took place, as is the researcher, which means that there was potential for undue influence, which is a form of coercion. Teachers and staff may have felt obligated to participate, but this study was completely voluntary. In this study multiple data points were utilized in order to view the study through more than one lens in an effort to increase the credibility of the findings (Tracy, 2013). Triangulation of the data was completed in order to ensure that the data was viewed from multiple lenses.

This chapter provides a complete and thorough explanation of the findings of this study, including a detailed overview of the themes identified regarding the open-ended interviews answered by teachers and staff on perceptions of MTSS implementation. An overview of the historical data collection (teacher benchmark data) and MTSS needs assessment data will be shared, as well as details of the themes and triangulation methods utilized to analyze the responses provided by teachers and staff. Results will be organized by research question and then broken down by each theme identified within each research question. Finally, overall conclusions based upon the results of the study will be discussed in chapter five.

Study Overview

Three sources of data were utilized as a part of this study. First, results of three teacher benchmarks on knowledge of MTSS given in the fall of 2019, winter of 2019, and spring of 2020, as a part of year one of MTSS implementation, were shared in order to describe the state of teacher and staff understanding of key initiatives during the 2019-2020 school year. This information is described in detail in the next section of this chapter. The second piece of data collected as a part of this study was the *Multi-Tiered Systems of Support Needs Assessment— Secondary Version* (McIntosh & Goodman, 2016), completed by the MTSS building-level team, which consists of the two building principals, School Psychologist, and Intervention Specialist (the researcher). This data collection is also reviewed in an upcoming section of this chapter. The third piece of data collected as a part of this study was the confidential, on-line, open-ended interview completed by teachers and staff. Staff and school demographic information, as well the setting of the interview is also discussed in detail in a later section of this chapter.

MTSS Teacher Benchmark

A benchmark assessment focusing on knowledge of MTSS was given to all teachers and staff during the 2019-2020 school year in an effort to measure growth based upon MTSS professional development sessions and overall implementation experience. The questions on these benchmarks corresponded with professional development provided to staff as well as areas of focus of MTSS throughout the school year. These assessments highlight the focus of MTSS implementation at the beginning, middle and end of year one of implementation of MTSS at the middle school in which the study took place. This data was analyzed not with the intention of quantifying MTSS knowledge, but in an effort to share MTSS implementation focal points and progress of implementation. 72 staff members participated in the beginning of year benchmark, 67 participated in the middle of the year teacher benchmark, and 62 participated in the end of year teacher benchmark. Below are tables which consist of the questions and answers on each benchmark assessment.

Table 4

Beginning of Year Teacher Benchmark

Questions	Results
1. A Multi-Tiered System of Supports (MTSS) is a systematic framework that utilizes a data-based problem-solving process to provide multiple tiers of instruction and intervention to ensure successful outcomes for who?	100% correct (all students)
2. True or False: Multi-tiered Systems of Supports (MTSS) are used as an umbrella term that encompasses both response to intervention (RTI) and positive behavioral interventions and supports (PBIS).	96.1% correct (True)
3. 3. Tiers are differentiated by the of the services provided.	92% correct (intensity)
4. A student with very intense instructional needs would typically receive:	96% correct (tier 3 interventions)
5. Check all the information below that is needed to identify a problem about a Tier 1 student.	 76% correct (goal statements, what students should know and be able to do, written in concrete, observable and measurable terms) 71% correct (data on student current performance, on expected performance, and on peer performance) 77% correct (a gap analysis to determine the difference between a. current and expected performance, b. peer and expected performance, and c. student and peer performance

Table 5

Middle of Year Teacher Benchmark

Questions	Results
1. True or False: You need IEP, 504 or GIEP information to bring a student up at an MTSS meeting.	95% correct (False)
2. Which of the following can be the focus of	100% correct (Academic)
an intervention for a student? Check all that	94% (Behavioral)
apply.	92.5% (Social-Emotional)
3. Programs for which type of student deficit	79% correct (Reading)
are currently being implemented at both grade levels?	91% correct (Executive Functioning)
4. What is used to determine whether a	97% correct (Teacher observation)
student needs a tier 2 or 3 intervention?	89% correct (Standardized test scores)
Check all that apply.	65% correct (Parent input)
	91% correct (Grades)
5. True or False: RAMS Way is a part of MTSS.	67% correct (True)

Table 6

End of Year Teacher Benchmark

Questions	Results
1. MTSS addresses which of the following	95% correct (Academic)
needs of students? Check all that apply.	95% correct (Social-Emotional)
	95% correct (Behavioral)
2. Why would a student be brought up at an	95% correct (Standardized testing data
MTSS meeting? Check all that apply.	indicates they are struggling in reading)
	96% correct (Parents and teachers have
	noticed a change in the student's behavior)
3. What is the point of having an MTSS	96% correct (to make sure that a student's
referral for a student?	deficits and interventions are documented for parents and future teachers to see)
4. True or False: RAMS Way is a part of MTSS.	87% correct (True)
5. Which tier most directly applies to all teachers and students at the middle school?	95% correct (Tier 1)

MTSS Needs Assessment overview

In addition to the benchmark assessments, data was collected for this dissertation using the Multi-Tiered Systems of Support Needs Assessment - Secondary Version (McIntosh & Goodman, 2016). This needs assessment discusses levels of MTSS implementation based upon a four-part scale from zero to three, with zero being "not implementing", one being "partially implementing", two being "mostly implementing", and three being "fulling and consistently implementing". This needs assessment was completed by the middle school building-based MTSS team, consisting of the school principal, assistant principal, School Psychologist and Intervention Specialist (the researcher). The meeting took place via Google Meet and was recorded, with the permission of all participants. The purpose of this assessment is to self-assess level of implementation in key areas related to successful MTSS implementation. Having a system to quickly provide information regarding performance or level of implementation within a school and to identify strengths and areas of need is a way to ensure that data analysis related to implementation does not become overwhelming for schools. After a needs assessment is completed, school teams can then identify key areas of priority on which to focus during implementation, and then use the assessment again to progress monitor as implementation continues (McIntosh & Goodman, 2016).

McIntosh and Goodman (2016) discuss the science of implementation as related to successful MTSS implementation. These stages, identified in order to provide schools with the ability to align implemented activities and initiatives with a certain stage of implementation, help to ensure implementation is on track by prioritizing certain areas in each stage and working proactively to prevent barriers to implementation (McIntosh & Goodman, 2016). The stages of implementation identified by the authors include Exploration and Adoption, Installation, Initial Implementation, Elaboration, and Continuous Regeneration. The figure below provides a visual of the stages.

Figure 2

Stages of Implementation (Adapted from McIntosh & Goodman, 2016, p. 240)

Focus	Stage	Activities	
Should we do it?	Exploration/ Adoption	 Understand implementation requirements. Evaluate "goodness of fit." Develop implementation commitment. 	
Work to do it right!	Installation	 Create leadership teams and data systems. Audit current resources and capacity. Plan and prepare for implementation. 	
	Initial Implementation	 Test the practices on a small scale to learn best methods for broad implementation. Provide intensive support to implementers. 	
Work to do it better!	Elaboration	 Expand to new areas, individuals, and times. Adjust practices and systems based on initial implementation. 	
	Continuous Regeneration	Make it more effective and efficient.Embed within current practices.Adjust to changing contexts.	

Similarly, Fixsen et al. (2005) identify the stages of MTSS implementation as exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability, as discussed in the literature review in this dissertation. These stages, along with the stages identified by McIntosh & Goodman (2016) can align with the MTSS Needs Assessment—Secondary Version in order to support schools in identifying not only their current stage of implementation, but areas in which to prioritize in order to move forward with the implementation of MTSS as well as areas of strength. This needs assessment should be utilized as a tool to aide schools and districts in identifying strengths and areas of needed growth related to MTSS, rather than an assessment that is utilized solely to identify a current score. Needs assessments "should be a part of an ongoing performance management cycle that includes both longer-range performance goals and shorter-cycle implementation targets" (Corbett & Redding, 2017, p. 6). In addition, a needs assessment is not a tool to be used in isolation but should contribute to a cycle of continuous improvement in educational planning (Corbett & Redding, 2017).

Although McIntosh & Goodman (2016) do not specify a minimum scoring threshold tied to successful implementation, or how scores directly align to implementation stages, based upon information provided within the assessment, schools and districts could expect to consistently score at a level of at least two (mostly implementing) throughout the needs assessment if the school or district is effectively implementing MTSS.

In this dissertation, this needs assessment served the purpose of sharing data related to implementation of MTSS within the school in which the study took place, including identifying areas of priority during year one of implementation as well as to identify areas of focus for year two of implementation, and moving forward. This assessment consists of nine overarching elements related to successful MTSS implementation in the areas of staff knowledge, universal screening, delivery of evidence-based practices, data-based decision making, shared team responsibility, problem solving techniques, contextual factors such as scheduling, curriculum, and funding, approach used to identify students with a specific learning disability, and leadership (McIntosh & Goodman, 2016). The next section of this chapter provides an overview of the level of implementation of MTSS, according to the Multi-Tiered Systems of Support Needs Assessment – Secondary Version (McIntosh & Goodman, 2016), in the school in which the study took place.

MTSS Needs Assessment results

Element one explores staff knowledge of MTSS implementation and utilization of a systematic approach to resolving system-level and student-level issues within the model. In this area, the school-wide MTSS team rated the building an average score of 1.7, which indicates the building is between the partially implementing and mostly implementing levels. The mode score within this element was two, mostly implementing. Areas of improvement identified by the building-based MTSS team within this element include ensuring that staff understand how MTSS relates to a problem-based model and ensuring that this model drives practices within MTSS. Approaching MTSS through a problem-solving model allows MTSS teams to work more efficiently toward actually solving problems, rather than spending time trying to figure out what process to follow when working toward solving problems (McIntosh & Goodman, 2016).

Element two discusses the use of universal screeners in order to gain information on all students in the areas of performance and growth achievement from fall, winter and spring, as well as throughout multiple years. This element also discusses the utilization of a specific, reliable tool for screening students in the areas of reading and math, mental health (social-emotional learning), and behavior. Within the assessment data collected, data should also be separated in order to assess subgroups of students consisting of, but not limited to, special education, English Learners, females and males, and others (McIntosh & Goodman, 2016). In this element, the building was scored at an average level of 1.4, partially implementing to mostly implementing. The mode score in this element was one, partially implementing. Element two of the needs assessment encompasses many aspects. Due to the wide scope of element two, scores within this element ranged from zero to three, with most action items for the school building being in the area of improving practices relating to problem behavior. Although this area shows

as an area of need, it is important to note that problem behavior may not be a main area of focus for the building due to few behavioral infractions and very few behavioral infractions resulting in suspensions. When utilizing a needs assessment, schools should use the data to inform their action plan for MTSS, prioritizing which areas should be focused on first based upon the needs of the students and building (Florida's MTSS, 2015).

Element three discusses the use of evidence-based practices in the areas of academics, including math and reading, social-emotional learning, and behavior at the tier one level, to all students, the two level, to some students, and tier three level, to few students who have an additional need. In this element of the needs assessment, the building was scored at an average level of 1.8, partially implementing to mostly implementing. The mode score in element three was one, partially implementing. During year one of implementing, the building worked to implement tier two research-based interventions in the areas of reading comprehension and executive functioning. Like many districts across the United States, the school building closed in March 2020 due to the COVID-19 pandemic. Virtual learning was implemented; however, this had an impact on the school's ability to continue research-based intervention implementation. This, as well as other impacts that COVID-19 had on the school's ability to implement MTSS in year one, were discussed as the building-based team completed the MTSS needs assessment. This example serves as a reminder that although schools can work to have all elements in place, at times there are unanticipated events that can have an impact on a school's ability to follow a specific timeline for implementation. Flexibility in implementation planning is key.

Element four of the needs assessment discusses the use of data-based decision making and the utilization of benchmark assessments and Functional Behavior Assessments (FBA) for decision making. The use of screening assessments to determine individual student needs in the areas of academics, social-emotional learning and behavior are discussed, as well as diagnostic assessments and progress monitoring in an effort to determine student growth and need, as well as program fidelity. Parental involvement in the MTSS process is also discussed in this element. In this element the building received an average score of 1.9, partially implementing to mostly implementing, with the mode score being 1, partially implementing. Element four discussed the school's implementation level of various assessments in order to inform MTSS. Screening assessments in the areas of literacy, math, social-emotional learning and problem behavior are frequently used at the tiers two and three levels, but screeners in the areas of literacy and math are currently the only universal screeners given to all students throughout the school year. Threes (fully and consistently implementing) were awarded to the school in the areas of screening and diagnostic assessments, but ones were given in the area of progress monitoring. Progress monitoring is essential following diagnostic assessments or universal screeners, to determine whether or not a student is making progress with an implemented intervention. Progress monitoring should be implemented more frequently than screeners, typically on a monthly or weekly basis. This data should then be used to make instructional decisions (McIntosh & Goodman, 2016).

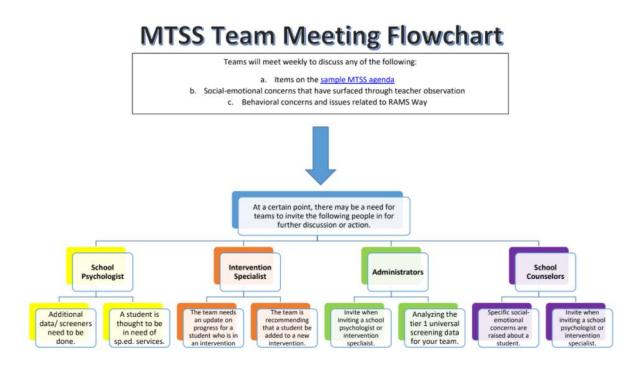
The fifth element of the needs assessment promotes a shared responsibility among all staff, including general education and special education teachers, support staff, administration, and non-teaching staff. All staff members should work collaboratively toward problem solving in the areas of academics, social-emotional learning, and behavior. Involving students and parents as problem solving partners is also recommended (McIntosh & Goodman, 2016). In this element the building was scored at an average level of .7, not implementing to implementing, with the mode score being a 1, partially implementing. This low-scoring element serves as the area of the

needs assessment in need of the most improvement, which aligns with the building's 2020-2021 building goal, "strengthen team and off team staff to support all students' needs through interventions and enrichment program" (Pine-Richland Middle School, 2020). This building goal serves as a priority action item for administrators and MTSS building-based team members to work toward implementing, as well an involving all teaching staff in the process. Steps toward meeting this goal are documented in a building action plan, complete with information regarding when action items should be completed, who is responsible for completing the item, and when the item should be or was completed (Pine-Richland Middle School, PRMS Building Action Plan, 2020).

Element six discusses the use of a team-based problem-solving approach at all tiers of the MTSS framework, including the use of problem-solving meetings at the building and team (grade) level, communication of student information during transition years, delegation of roles within teams, cross-grade and cross-curricular collaboration, and engaging parents in the problem-solving progress (McIntosh & Goodman, 2016). The building was scored at an average level of 2, mostly implementing, in element six. The mode of this element was a 2, mostly implementing. Team-based problem solving is something that the building is moving toward during the 2020-2021 school year. Through the implementation of a building-based MTSS team, the building hopes for individual teams, comprised of content area general education teachers, and in some cases, one special education teacher, to begin to implement MTSS discussions at the team-level, and then when needed, involve the build-based MTSS team. The flowchart below outlines the process of when teams should reach out to building-based MTSS team members.

Figure 3

MTSS Team Meeting Flowchart (Pine-Richland Middle School, 2020)



Element seven considers contextual factors related to MTSS implementation. Factors such as scheduling, funding, curriculum, community factors, and teacher union-related factors are discussed as a part of this element. These factors are considered prevention factors as implementing these factors can improve MTSS implementation from the start. The building was scored at an average level of 2, mostly implementing, with a mode level also of 2. Element seven captures problem-solving elements related to a variety of factors, mentioned above. A potential area of improvement identified within this element is ensuring that community factors are considered when working toward problem solving efforts within MTSS.

A systematic approach to identifying students with specific learning disabilities (SLD) is discussed in element eight. Discussion related to a duel-discrepancy approach to identifying SLD as well as utilizing research-bases strategies and interventions as a part of intervening due to issues in the areas of academic achievement, social-emotional needs, and behavior, is also discussed. In this element the building was scored at an average level of 1.1, partially implementing to mostly implementing, with a mode of zero. The district currently utilizes the duel-discrepancy model approach to identifying students with SLD. Although the MTSS framework is encouraged, since the district is newly implementing MTSS at the grades seven through twelve level, use of MTSS and intervention performance is not yet utilized as a method of identifying SLD.

Element nine discusses leadership in the area of MTSS, including administrative leadership and ensuring that staff receive appropriate professional development and training. The leadership team should ensure that appropriate funding and resources are provided to teams in order to successfully implement MTSS. Adequate technology, curriculum, and interventions must also be provided. Staff development opportunities, as well as opportunities to engage parents in the process, should also be priorities of implementation. The building was scored at an average level of 1.25, partially implementing to mostly implementing, in element nine. The mode of this data was 1, partially implementing. Although many aspects of MTSS implementation included in this element, such as organizing assessments, staff training, technology integration, coordination of resources, and ensuring an appropriate budget, are implemented or being actively worked on, an MTSS leadership team is only newly implemented this school year and this element will likely improve through current efforts being made to differentiate between team-based and building-based MTSS teams. Leadership serves as a key driver for MTSS implementation, encompassing vision, management and coordination, and facilitative administration. Effective leadership within MTSS implementation helps to ensure that schools are provided with direction to guide the process. Within the leadership driver it is

important to recognize that "the term leadership refers to the function of leadership rather than an individual's position within the organization" (McIntosh & Goodman, 2016, p. 208).

Overall, the MTSS Needs Assessment—Secondary Version (McIntosh & Goodman, 2016) serves as an effective tool to help districts and schools identify areas of success and need within MTSS implementation and can also help to identify areas to prioritize. Based upon the findings of this needs assessment, logical next steps in the implementation process for MTSS within this school building include continuing to work toward including all staff in the MTSS process and to solidify the functions of an MTSS leadership team. Although a needs assessment is an effective tool to help schools and districts organize and prioritize, the real work comes when this information is applied to MTSS practices. The table below depicts the MTSS Needs Assessment—Secondary Version (McIntosh & Goodman, 2016) as well as the mean and mode scores discussed by the building-based MTSS team.

Table 7

MTSS Needs Assessment Ratings

Element of MTSS	Current Implementation Score Mean	Current Implementation Score Mode
Element 1. Staff is knowledgeable about, organizes, and delivers school-based services using a multi-tiered model of service delivery. This service delivery incorporates both a systematic approach to the prevention of school difficulties for most students (a public health model) and a systematic approach to resolving identified system-level and student-level difficulties (a problem- solving model).	1.7 - Partially Implementing to Mostly Implementing	2, Mostly Implementing
Element 2. Identify and conduct periodic schoolwide screenings of all students to examine the overall effectiveness of our school, both currently and over time. Screening data are examined from a prevention orientation, and are used to evaluate the overall "health" of all students in the school. The data are also disaggregated to assess the achievement of subgroups (e.g., freshmen, females/ males, English language learners, students receiving special education services). Consider the reliability, validity, and usefulness of assessment tools. <i>Note</i> : Element 4 focuses on the use of screening data for purposes of identifying <i>individual</i> students at risk for or experiencing problems.	1.4 - Partially Implementing to Mostly Implementing	1, Partially Implementing
Element 3. Design and deliver evidence-based practices (differentiated instruction and systematic supports) for student academic achievement, academic behavior/ engagement, mental health	1.8 - Partially Implementing to Mostly Implementing	1, Partially Implementing

and personal adjustment, and appropriate

Element 4. Use assessment linked to data-based decision making, with a focus on problem solving. Include assessment for (a) screening/benchmarking decisions, (b) diagnostic and/or functional assessment decisions, and (c) progress monitoring decisions.	1.9 – Partially Implementing to Mostly Implementing	1, Partially Implementing	
Element 5. Promote shared responsibility among all teaching and nonteaching staff, administrators, parents, and students for prevention and problem solving. Of particular importance is collaboration between general and special education and collaboration between specialized support professionals and teaching staff.	0.7 – Not Implementing to Partially Implementing	1, Partially Implementing	
Element 6. Organize and deliver effective team- based problem solving at each tier in a multi-tiered framework.	1.9 - Partially Implementing to Mostly Implementing	1, Partially Implementing	
Element 7. Consider and incorporate contextual factors in prevention and problem solving. These include, but are not limited to, curricula, scheduling, cultural variables, students who are English language learners, resources, community factors, funding, contractual/union-related factors, and developmental considerations.	2 - Mostly Implementing	2, Mostly Implementing and 3, Fully Implementing	
Element 8. Systematically use a multi-tiered approach to identify and support students with learning disabilities and behavioral disorders, and make special education eligibility decisions, including use of a dual discrepancy and/ or functional assessment approach to	1.1 - Partially Implementing to Mostly Implementing	0, Not Implementing	

intervention fidelity. <i>Note</i> : High-quality practices in this element are related to and dependent on the use of practices identified in Elements 3 and 4.		
Element 9. Provide strong, ongoing leadership for MTSS administration, staff development, and supervision of activities/ personnel.	1.25 - Partially Implementing to Mostly Implementing	1, Partially Implementing

On-line Interviews

diagnosis and documentation of

Participants

Participants in the online, open-ended interview consisted of teachers and staff at a middle school in a suburban western Pennsylvania school district. An email request for participants was sent on October 22, 2020, including the link to the Google Form in order to participate in the study. This email included an explanation of the purpose of the study, the focus of the researcher's dissertation, the research questions, an explanation of the steps taken to increase confidentiality, the approximate amount of time the interview would take, as well as an attachment which included the informational consent letter for participants. This consent letter included potential risks or discomforts for participants, including the minimal risk associated with confidentiality and coercion, benefits associated with participation would be collected, voluntary participation information, and who to contact if questions or concerns arose during the process of the study. Signatures were not collected as a part of the consent process as the study was confidential. The researcher did not receive any questions or concerns from participants throughout the duration of the study. The online interview remained open for responses until

November 3, 2020, at which point the researcher determined that a sufficient number of responses from a variety of professional employees were collected.

For the purposes of this study, special area and off team teachers consisted of world language teachers, art, physical education, library, band, chorus, orchestra, family and consumer science, and technology. Special Education teachers consisted of life skills and autistic support, emotional support, and learning support teachers. General education teachers consisted of the subject areas of English, reading, social studies, science, and math. The "other" category consists of school secretaries, school counselors, and the school social worker. Included in the table below are participant demographics.

Table 8

	Number Requested to Participate in Study	Number Participated in Study	Percentage of Participation out of total teachers	Percentage of participation out of total participants
General Education Teachers	24	11	44%	42%
Special Education Teachers	6	4	66.6%	15%
Special Area Teachers/ Off Team	25	3	12%	11.5%
Paraprofessionals	9	3	33.3%	11.5%
Other	6	5	83%	19%
Totals	70	26	37%	n/a

Study Participants

Setting

Providing demographic information regarding the setting of the study allows school districts to compare their own districts and building demographics with that of the school utilized

within the study, in an effort to ensure the MTSS implementation practices discussed within the study are fitting for the school environment of the districts wishing to utilize the information presented. The demographics of the suburban western Pennsylvania middle school in which this study took place are listed below (Public School Review, 2020).

Table 9

7-8
725 students
13.1
9%
Top 20% in Pennsylvania
67%
87%
-

School Demographics

The online interview questions were created by the researcher for this case study. In creating original interview questions, the researcher was able to tailor the questions to the unique needs and current level of MTSS implementation within the school in which the study took place. The following questions were utilized for the online interview:

- 1. What does MTSS mean to you?
- 2. What does the MTSS team(s) process look like at your school? What is its purpose?
- 3. Who is responsible for MTSS in your school and what does this responsibility entail? How do you contribute to this implementation?
- 4. What is the purpose and operation of the MTSS team(s) within your school?

- 5. What paperwork and/or documentation are required as a part of the MTSS process in your school? How would you describe this required documentation?
- 6. What reading and math interventions are implemented in your school? Describe how these are provided as a part of the tiered framework of MTSS.
- 7. Do you feel the MTSS framework is effective in your school building? In what ways is it effective or not effective?
- 8. How do you collaborate with parents and fellow colleagues regarding the implementation of MTSS?
- 9. In what ways are MTSS team meetings used to benefit students?
- 10. How do you feel about the success of the MTSS process within your school?
- 11. In what ways do you feel the MTSS process in your building can improve?

Data Analysis

Data from the online interviews was analyzed based upon connections to the research questions for this dissertation. Each question within the online interview was connected to one or more of the research questions in an effort to ensure that participant responses would provide input on the research questions. In this section, data is broken down and analyzed based upon research question, with research question one being the first discussed.

Data triangulation, analyzing multiple data points in order to ensure that the information provided paints a complete picture, was utilized as a method of analysis within this dissertation (Tracy, 2013). Hand coding was used as a method to code the data collected from the online interviews. Codes were created through the analysis of the data collected from the online interview. Codes, defined as one word or a short phrase that identifies or assigns an attribute to collected data (Saldana, 2016) were utilized as a means to interpret, organize and categorize the responses provided by participants within the interview. Codes were then used to create themes based upon the information provided by participants. Each interview question was analyzed in connection to each research question to which they were aligned; some questions aligned to more than one research question and therefore the responses to those questions were analyzed in connection to more than one research question.

The first step in the data analysis process was to convert the interview results format into a Google Sheet, which allowed for the responses to be viewed in spreadsheet format. Manual coding was then used to identify appropriate codes for each research question. The researcher determined that a code was appropriate to assign to a certain research question when at least 20% (approximately five out of twenty-six) of responses included the word, phrase, or connection to either a certain word or phrase. Language nuances were considered as a part of this coding process and as this study is qualitative in nature and utilizes human language (written responses) to the interview as a part of the data collection method, it is understood that the interpretation of the data is subjective to the researcher's experience, as discussed in the limitations section of this dissertation. Various themes were recorded, which were built from key words identified within each response and emerged from the first analysis of data. The researcher then calculated the number of common responses which resulted in an emerging theme in order to determine whether or not the response was given by at least 20% of participants. If the theme was common throughout responses from at least 20% of participants, it was then analyzed in connection with other responses to create a theme for that research question. Below, each research question is discussed as well as the identified underlying themes for each. Analysis of responses in connection to job category (general education teacher, special education teacher, off-team teacher and paraprofessional) is discussed in chapter five of this dissertation.

Research Question One

The first research question is discussed in this dissertation is, how do middle school teachers and school support staff perceive implementation of a multi-tiered system of support? This research question aligned to the following questions within the online interview:

Question 1: What does MTSS mean to you?

Question 2: What does the MTSS team(s) process look like at your school? What is its purpose?

Question 3: Who is responsible for MTSS in your school and what does thisresponsibility entail? How do you contribute to this implementation?Question 4: What is the purpose and operation of the MTSS team(s) within your school?Question 9: In what ways are MTSS team meetings used to benefit students?Question 11: In what ways do you feel the MTSS process in your building can improve?

Responses to the interview questions aligned to research question one were analyzed.

Based upon the analysis of the interview results of questions one, two, three, four, nine and eleven, the first theme of the responses of most participants was that participants identified that support for all students and addressing individual student needs was a part of the MTSS process, as well as the need for all staff to be involved. The second theme identified is that communication with off-team teachers regarding the MTSS process is insufficient.

Research Question Two

Research question two in this dissertation is related to how staff perceptions impact the buy-in and level of understanding of MTSS implementation. This research question aligned to the following questions within the online interview:

Question 3: Who is responsible for MTSS in your school and what does this responsibility entail? How do you contribute to this implementation? Question 5: What paperwork and/or documentation are required as a part of the MTSS process in your school? How would you describe this required documentation? Question 7: Do you feel the MTSS framework is effective in your school building? In what ways is it effective or not effective?

Question 8: How do you collaborate with parents and fellow colleagues regarding the implementation of MTSS?

Question 10: How do you feel about the success of the MTSS process within your school?

Question 11: In what ways do you feel the MTSS process in your building can improve? Themes were identified based upon the responses to the interview questions aligned with research question two. Those themes consisted of participants identifying that all students are involved in the MTSS process and collaboration between all staff is needed for the MTSS process to be effective. Additionally, forms were discussed as a documentation method for MTSS. A third identified theme is that parental involvement was not discussed as a priority in the responses by participants.

Research Question Three

Research question three discusses ways in which middle school teachers understand the MTSS framework. This research question aligned to the following questions within the online interview:

Question 1: What does MTSS mean to you?

Question 2: What does the MTSS team(s) process look like at your school? What is its purpose?

Question 3: Who is responsible for MTSS in your school and what does thisresponsibility entail? How do you contribute to this implementation?Question 4: What is the purpose and operation of the MTSS team(s) within your school?Question 6: What reading and math interventions are implemented in your school?Describe how these are provided as a part of the tiered framework of MTSS.Question 11: In what ways do you feel the MTSS process in your building can improve?

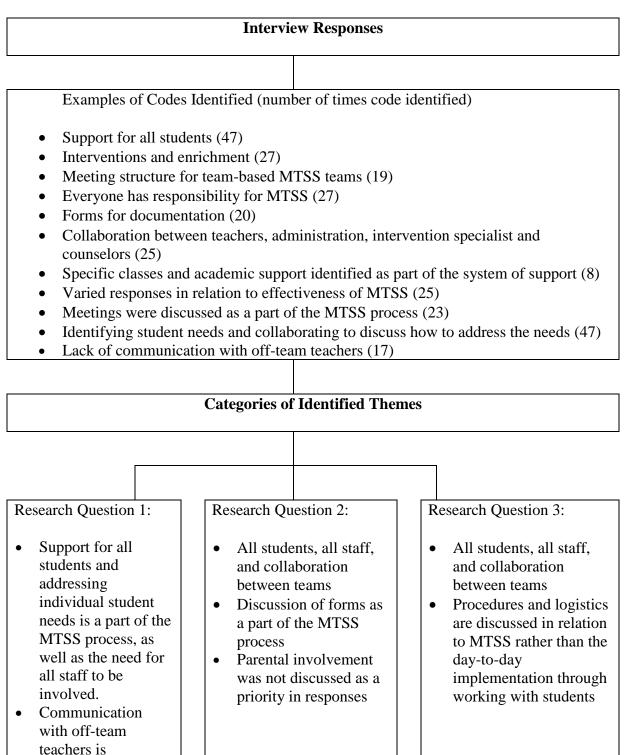
Staff understanding of the MTSS process is one measure that can help schools to identify areas of need or success within the implementation process. Based upon the analysis of participants' responses to these questions, two themes emerged. The first theme was that participants understand that collaboration between staff is needed as a part of the MTSS process. The second theme identified was that procedures and logistics were discussed in relation to MTSS rather than the day-to-day implementation through working with students.

The figure below depicts the process the researcher followed to create codes and themes based upon participant responses from the on-line, open-ended interview. The table begins by identifying general codes that arose from the interview responses and each code includes the number of times that it appeared within an interview response. This information is provided in order to inform the reader of the prevalence of each code. It is understood that since the prevalence of each code is gathered from multiple responses from multiple participants, it is possible that the same participant mentioned the code in more than one answer. This information, however, does not dispute the need to identify this information as important to the study and therefore each mention of the identified codes was included within the identified prevalence of the code. Lastly, codes were analyzed to determine common themes from the responses and these themes were categorized and aligned to each of the three research questions.

Figure 4

Data Analysis Process

insufficient



Summary

As discussed within this chapter, the results of the open-ended interview were analyzed by the researcher in an effort to identify codes within the responses. Following the identification of codes, which were created by identifying commonly used words or phrases within responses, codes were then analyzed by counting the number of times a certain word or phrase was used within a certain question's response by each participant. Words or phrases which occurred in at least 20% (five out of twenty-six) total responses were then used to create themes associated with each research question.

Chapter five of this dissertation will discuss the analysis of the identified themes from the interview responses and make connections from the findings of this study to the review of literature presented in chapter two.

CHAPTER 5 DISCUSSION

Thematic Analysis

In this chapter, the themes identified through the collected data paired with each research question will be analyzed based upon responses to the open-ended, online interview. This dissertation sought to collect research on, and analyze teacher and staff open-ended interview responses to three research questions:

- How do middle school teachers and school support staff perceive implementation of a multi-tiered system of support?
- 2. How do staff perceptions impact the buy-in and level of understanding of MTSS implementation?
- 3. How do middle school teachers understand the MTSS framework?

In chapter four, codes based upon collected teacher and staff responses were analyzed into overall themes as related to the research questions. Codes were identified based upon common teacher and staff responses and themes were identified based upon most common responses to each question. In this chapter themes will be analyzed, and detailed findings based upon teacher and staff positions will be discussed. It is important to note that the content area teachers who participated in this study are members of one of six teams; three teams are at the 7th grade level and three teams are at the 8th grade level. Level of understanding and implementation of MTSS may not only vary from participant to participant, but it may also vary depending on the team.

Research Question One

Research question one relates to how middle school teachers and school support staff perceive implementation of a multi-tiered system of support. The themes identified within this research question include the following:

- 1. Support for all students, including addressing individual student need, and the need for all staff to be involved
- 2. Communication with off-team teachers is insufficient

Theme one

The first theme identified within responses from participants relates to the need for all staff to be involved in MTSS and the idea that MTSS supports all individual students in some way. The MTSS Needs Assessment—Secondary Version includes a sense of shared responsibility and collaboration among all staff members as a key element of MTSS (McIntosh & Goodman, 2016). Responses from all participants (general education teachers, special education teachers, special area teachers, and paraprofessionals) were analyzed to determine how responses relate to answer the first research question for this dissertation.

In response to what MTSS means, as well as the purpose of MTSS, to general education content area teachers, teachers responded that MTSS works to support all students and one teacher referenced Response to Intervention (RTI), demonstrating a connection between the RTI system and MTSS. Nine out of ten content area teachers discussed the MTSS framework being in place to help students and to provide some sort of intervention or enrichment in order to support students. Additionally, two content area teachers referenced aspects of MTSS such as providing a safe environment within the school setting, additional opportunities for students and a focus on behavior and social-emotional learning in addition to academics, all of which points to

a deeper understanding of the MTSS framework. One content area teacher explained MTSS as simply "a method to help kids" (participant number 19) and two defined the acronym as their response to the meaning of MTSS. Support for all students and the need for collaboration between individuals was also an identified theme in the responses to the interview question regarding the MTSS process within the school. Content area teachers named participants involved within the MTSS process such as administrators, general education teachers and school counselors and weekly meetings where student needs are discussed. One content area teacher described the process as "watch, evaluate, discussion, intervention, support" (participant number 22), which suggests an arial-view understanding of the MTSS process, but does not support a connection to or detailed understanding of the MTSS process within the building. Overall, content area teachers did not address the building-level MTSS team, which is not unexpected, due to this team being new for the 2020-2021 school year, but this does point to a need to clarify functioning of MTSS teams within the building. Additionally, two content area teachers discussed not knowing or understanding the purpose of the building-based and team-based MTSS teams as they are not included in MTSS meetings. These responses continue to support the need for additional communication and clarification regarding the MTSS process as a whole. The benefits that MTSS provides for students was another interview question in which the theme of support for all students and collaboration between teams emerged.

Special area teachers have been a focus of additional involvement in MTSS for the middle school in which this study took place. In year two of implementation, the building-level MTSS team has realized that increased involvement from special area teachers would be beneficial for all students, which is why the building-level goal for the 2020-2021 school year focuses on the effort to involve special area teachers in MTSS: "strengthen team and off team

staff to support all students' needs through interventions and enrichment program" (Pine-Richland Middle School, 2020). In their response, two special area teachers referenced interventions and support for all students with one also including enrichment as an aspect of MTSS. The third special area teacher who participated in the study defined the acronym in response to what MTSS means to the participant. The sheer number of on-line interview participants from the special area teacher group may point to a need to increase these staff members' participation in and understanding of MTSS, as only three staff members from this job category participated in the interview.

Special education teachers referenced weekly meetings as a part of the MTSS process and highlighted that MTSS works toward meeting the needs of all students. One special education teacher discussed the importance of collaborating with teams, general education teachers, principals, intervention specialist, and school counselors. In addition, in response to the purpose of MTSS teams, collective input and discussion involving strategies, intervention and enrichment to assist students were mentioned. Two special education teachers responded regarding the building-level team, with one discussing that this team is responsible for organization of trainings, overall implementation, and ensuring time for collaboration, and the other referencing the MTSS team-based teams being responsible for identifying needs and the building-based team ensuring that the services are implemented.

Paraprofessionals have had little involvement in MTSS as a whole within the building in which this study took place; however, this group works directly with students, including implementing needed accommodations and interventions, many of which are determined necessary through the MTSS process, so the researcher felt it appropriate to involve this group in the study. Working toward a level of understanding for all staff involved in MTSS in some way is beneficial to the process as well as the school culture as a whole. Three paraprofessionals participated in the study and all were able to demonstrate a fundamental understanding of MTSS in response to the question discussing what MTSS means to the participant. Each included some level of a need for support in his or her response. Additionally, two responses included the need to implement interventions or additional support for students who are not making progress. One paraprofessional mentioned emotional needs of students being a part of MTSS and one other mentioned behavior and academics. In response to the purpose of MTSS teams, one paraprofessional responded with "I don't know", again demonstrating the need for additional training. One responded with a list of professionals included on the teams but did not discuss the actual purpose. The other paraprofessional referenced community support in relation to MTSS, which may be evidence of a misconception, also supporting the need for additional training.

Overall, theme one was identified in connection to four interview questions which also align to research question one in this dissertation. The connection of MTSS to the need for supporting all students and the need for collaboration is a positive theme identified through participant responses and shows that there is an overall understanding by staff of the need for these two areas within the MTSS framework.

Theme two

Theme two, in connection with research question one, discusses that communication with off-team teachers within the building is insufficient and this insufficiency may impact how these staff members perceive MTSS. As identified by Castro-Villarreal (2014), teachers often do not receive effective communication regarding implementation of school-wide systems such as MTSS and may not receive proper training on implementing programming, resulting in a lack of

buy-in and negative perception of the program. This lack of communication impacts staff perception, which makes communication and transparency of programming imperative.

As previously discussed, the building goal for the middle school in which this study took place focuses on the need to increase communication with off-team teachers (special area teachers) regarding MTSS. In connection to research question one, responses to the interview question which addressed how the MTSS process within the building could be improved, were analyzed in connection with this theme.

Content area teachers referenced a need for additional time for collaboration and planning as well as a need for additional resources to improve the MTSS process, although the type of resources needed was not specified. Five content area teachers referenced the need for additional communication with off-team teachers, with one referencing that the burden of work associated with MTSS should be shared among staff in the building. Additionally, one content area teacher referenced the need for proof that MTSS is working rather than just giving teachers and students more work (Participant 24).

Two special area teachers referenced the need for increased communication with those not typically involved with the MTSS process, with an emphasis on the benefits that this increased communication could have for students. The third special area teacher did not specify any areas needed for improvement in MTSS.

Special education teachers referenced the need for consistency and continuation of processes, including utilizing data for decision making, in order to improve the MTSS process within the building. These staff members are on-team teachers who participate in MTSS regularly which may be why this group did not reference the need for additional communication with off-team teachers. One special education teacher did reference the difficulty of consistency

with MTSS during the 2020-2021 school year due to the hybrid and full-virtual models of instruction in response to the COVID-19 global pandemic. This teacher compared the process this school year to the 2019-2020 MTSS process and recognized that some shortcomings of the program in relation to consistency and programming are likely in response to the instructional models (hybrid and fully virtual) currently in place.

Two paraprofessionals responded that they were unsure of what could be done to improve MTSS processes within the building which could point to a lack of understanding of MTSS. Additionally, one paraprofessional identified additional support and interventions for students in the area of math as an area needed for improvement.

Theme two discusses a need for additional communication with off-team teachers who are not typically involved in the MTSS process. This theme was consistent with a previously identified area of need by the building MTSS team and is an MTSS building goal for the 2020-2021 school year. Continued improvement in this area is recommended.

Connection to Literature

Teacher perception related to implementation of programming such as MTSS can have an impact on the fidelity and success of the program being implemented. Areas such as professional development, collaboration and assessment needs are referenced as areas in which teachers feel their input should be gathered (Wilcox et al., 2013). Additionally, Donnell and Gettinger (2015) found that teacher performance had a connection to their perception of programming. In the authors' study, teachers whose beliefs aligned with the implementation of RTI programming reported positive attitudes toward the implementation. Considering teacher and staff viewpoints and opinions of programs can have a positive impact on the implementation of the program. Teacher perceptions of programming can begin with how the program is implemented and what

impact the program has on an individual teacher. In order for perceptions to remain positive, teachers must not only understand the purpose of the initiative but also see how it is carried out and utilized on a daily basis by the staff already in place. The school in which this study took place is a middle school which uses the teaming approach. Each team of teachers consists of four general education teachers and one special education teacher, each team with a shared responsibility of MTSS. Teaming in MTSS increases collaboration amongst staff members and allows for the workload to be distributed among multiple team members rather than one or two people feeling the burden of too much work (McIntosh & Goodman, 2016). Collaboration amongst teams is also key in MTSS.

A team is a group that forms for a common purpose to achieve an outcome by working together. The purpose of teaming in education is to support staff members in their work to support students. This definition makes it clear that teams are systems that allow us all to work more effectively in achieving our aims. (McIntosh & Goodman, 2016)

Although communication with teams is imperative in MTSS, it is also important to remember to collaborate with and inform those who may not be a part of the immediate team. The identified theme of a need for increased communication with off-team teachers in regard to MTSS in the school in which this study took place supports that teachers and staff feel this is an area of need. The building goal focused on this concept shows that the school is working toward this improvement and already anticipated this challenge.

Research Question Two

Research question two relates to how staff perceptions impact the buy-in and level of understanding of MTSS implementation. This research question specifically explores the impact these two areas can have on MTSS implementation. The themes identified within research question two include the following:

- 1. All students, all staff, and collaboration between teams
- 2. Discussion of forms as a part of the MTSS process
- 3. Parental involvement was not discussed as a priority in responses

Theme one

The first theme related to research question two is the idea that all students and staff are involved in MTSS and that collaboration between teams is necessary. Teacher and staff perceptions and buy-in of program operation can have an impact on the level of efficacy of implementation by teachers and staff (Castro-Villarreal et al, 2014 & Donnell and Gettinger, 2015). For this reason, teacher and staff responses to the online, open-ended survey were analyzed in order to determine if there is a connect between the participants' perceptions of MTSS and their buy-in and level of understanding of the initiative. Responses from all those who participated in the online, open-ended survey were analyzed to determine how responses relate to the second research question for this dissertation.

In relation to theme one, content area teachers identified that all students and staff should be involved in the MTSS process in some way and that collaboration between teams is imperative. Content area teachers overwhelmingly noted that "everyone" is involved in the MTSS process with five content area teachers noting that classroom teachers are the key players in MTSS as they provide the most information about students and often times implement accommodations or interventions recommended by the MTSS team.

Two special area teachers noted that general education teachers and administrators are involved with and are responsible for MTSS, with one demonstrating understanding that MTSS involves everyone. The two special area teachers who mentioned general education teachers and administration did not indicate any understanding that their own positions as special area teachers are also involved in the MTSS process, again supporting the need for additional communication with off-team and special area teachers. This idea also supports that these teachers' level of buy-in for MTSS may be lacking if they feel they are not involved in the initiative.

Special Education teachers noted that everyone is involved in and responsible for the MTSS process. These teachers' responses indicated that they may have a higher level of buy-in and understanding than the special area teachers as their responses explained more about the responsibilities involved in MTSS rather than just naming team members involved. As one participant stated, "We are all responsible for MTSS. It is the job of teachers, administrators and counselors (just to name a few) to work together to identify needs and help students succeed in the curriculum" (Participant 14). Overall, the special education teachers who participated in the online interview demonstrated a sufficient level of understanding of the involvement of staff in MTSS.

Paraprofessionals who participated in the study may benefit from additional understanding of MTSS in order to increase their buy-in of the initiative. One paraprofessional named the assistant principal as the sole person responsible for MTSS, one was unsure, and the third indicated that he or she did not know who was "in charge" of MTSS and noted that he or she has never been asked to attend MTSS meetings and noted that he or she does not contribute to MTSS (Participant 15). This response indicates that additional training on MTSS in general as well as the contribution that all staff have for MTSS is needed.

Theme two

The second theme identified in relation to the second research question was that forms were frequently discussed as a part of the MTSS process. The idea that forms that must be filled out was discussed by teachers and staff in relation to MTSS shows that overall, the teachers and staff may perceive MTSS as another task or item on their to-do list for documentation purposes, rather than a framework put into place to combine educational initiatives related to academics, behavior, and social-emotional learning in an effort to benefit all students. MTSS must be seen as an overarching framework to assist teachers in identifying and providing appropriate services for students rather than a nuisance or another "to-do" in order for buy-in to be achieved. This understanding can be achieved through consistent program implementation paired with quality professional development focused on areas and current level of implementation.

Content area teachers discussed forms, paperwork, and documentation related to MTSS in response to an online interview question. Three content area teachers stated that data collection is an important part of the MTSS process; however, some others discussed a documentation sheet that is used by teams to discuss current student performance and updates on strengths and needs throughout the school year. This documentation sheet is also used to document supports (interventions, accommodations) put into place to assist students and to document how the student responds to these supports. One content area teacher was able to articulate the typical MTSS process in which general education teachers are typically involved in at the school: A referral form is completed when a student is initially identified. This form is then updated on a weekly basis based on information that is shared during MTSS team meetings. The documentation is shared among teachers, guidance counselors, and administrators in the building. Documentation of interventions are meant to 'follow' students from sixth grade at the upper elementary school to 7th grade and subsequently to 8th grade. (Participant 16)

Although this response is not an exhaustive account of the entire MTSS process, it does demonstrate an understanding of the steps followed when a student is referred to MTSS. Two content area teachers addressed how documentation can be utilized from year to year to inform teachers which interventions or supports students may have received during the previous school year. These responses support understanding of the importance of the documentation required for MTSS and may view it as more than just another piece of required documentation. Three content area teachers indicated that they did not know what paperwork or documentation is required for MTSS and one teacher indicated that the team has a Google Form for MTSS but the directions to fill out the form are unclear.

Off-team teachers yielded inconsistent responses in relation to paperwork and documentation required for MTSS. One off-team teacher identified, "data, grades, tests, quizzes, classwork, standardized testing, and STAR (STAR360)" (Participant 7) as documentation or paperwork required as a part of MTSS; these pieces of data may be useful for decision making in MTSS, but this teacher does not mention what type of documentation or paperwork is required for MTSS, such as a referral form, progress monitoring information, or intervention documentation. The second off-team teacher mentioned only that an MTSS referral form was

required and the third indicated he or she did not know what paperwork or documentation was required for MTSS.

Special education teachers were able to identify spreadsheets for data collection as well as the referral form as required documentation for MTSS. One teacher discussed that the documentation was used to collect information on discussions regarding students and another noted that data collection tools such as test scores are utilized as well. One special education teacher noted that a spreadsheet with student information is updated regularly, but specific information regarding the type of information collected or why it is important was not provided in any response.

Paraprofessionals indicated that they are not involved in any paperwork or documentation related to MTSS and therefore could not provide any input regarding this interview question. In a typical day in the school in which this study took place, a paraprofessional may keep behavioral documentation on a student, read a test or a quiz to a student, provide a reading intervention to a small group of students, support a student in numerous content area classes and report back to the special education teacher regarding student performance, and assist in various way in the general education and special education classroom. Paraprofessionals are very much a part the everyday work that is done to support students and therefore contribute to MTSS in numerous ways, although the responses to the online, open-ended interview as a part of this study would indicate that they are unaware of their impact and involvement in MTSS. Additional training and understanding of MTSS could increase buy-in and improve perceptions of MTSS, therefore increasing efficacy related to daily work and implementation.

Overall, teachers and staff were able to articulate that documentation and forms are required for MTSS, but little detail was given regarding the reason for the forms, why they are important, or how they connect to the bigger picture of MTSS. The information gathered through analysis of this theme shows that additional professional development is needed related to not only MTSS as a whole, but to the 'why' behind documentation and data collection and how these processes can be utilized to benefit students over time. In connection to theme two, additional professional development and training on required documentation for MTSS and how this data is beneficial would be appropriate. Increased teacher and staff knowledge on best practices related to documentation in MTSS could increase teacher and staff understanding of MTSS as a whole and consequently increase buy-in of the initiative.

Theme three

The third theme related to the second research question is that parental involvement was not discussed as a priority in responses. Parental involvement in MTSS is noted as a priority in the MTSS Needs Assessment—Secondary Version, in two separate elements. The importance of informing and including parents in problem solving and decision making as well as strategically engaging families in the MTSS process are both discussed as areas of importance when working toward full implementation of MTSS (McIntosh & Goodman, 2016).

In the online, open-ended interview, one question specifically asked for input regarding parental involvement in MTSS. Parental involvement was not indicated in a response by any participant outside of this one question.

Content area teachers mentioned typical communication methods such as email, phone calls, and parent/teacher meetings in response to how do staff collaborate with parents regarding MTSS. One content area teacher mentioned that he or she informs parents of plans put into place

via email, and another mentioned that he or she does not communicate with parents regarding MTSS as this is something that administration should do. This response may indicate a lack of buy-in to MTSS as well as a lack of understanding of how MTSS relates to and includes everyday instruction for all students. Content area teachers did not discuss the importance of informing parents of the MTSS process including why it is in place; this lack of detail in responses may be due to a lack of understanding of the process or simply due to a lack of detail provided in the response.

One off-team teacher indicated that he or she "communicates all steps with parents" (Participant 7); however, no details regarding what steps or information is included in that communication was provided in the response. Two other off-team teachers discussed their attempts to collaborate with colleagues regarding MTSS but did not mention collaboration with parents.

Special Education teachers mentioned regular communication, email, parent meetings and IEP meetings as methods of collaboration with parents. However, specifics regarding this communication or how it relates to MTSS were not provided. Similar to other teacher responses, special education teachers did not specify parent collaboration in relation to MTSS as a priority.

Lastly, paraprofessionals stated that they do not communicate or collaborate with parents. One paraprofessional discussed that he or she collaborates with colleagues in relation to MTSS by helping to implement the MTSS plan for students once the student begins the MTSS process, but specifics regarding the MTSS plan and process were not provided. The other two paraprofessionals who participated in the study indicated that they do not communicate with parents regarding MTSS. Overall, collaboration with parents was not identified as a priority by teachers and staff. Although communication and informing parents was discussed, collaboration with parents was not mentioned as a priority in MTSS.

Connection to Literature

Research supports that teacher and staff perceptions can have an impact on the buy-in and understanding of program implementation. Lack of training is cited as a reason that overall understanding of MTSS by staff members can be lacking (Avant & Swerdlik, 2016) and a lack of training can contribute to a lower level of understanding and consequently, have a negative impact on teacher buy-in.

The second theme related to the second research question was that forms were frequently discussed as a part of the MTSS process. In the responses received in the online, open-ended interview, procedural requirements related to MTSS, such as filling out forms, was frequently discussed by participants. ESSA includes language related to research-based interventions and fidelity related to implementation of MTSS, including documentation related to the commitment to "improve outcomes for all students, including high-performing students, English language learners, students receiving special education services, and those struggling with barriers to learning" (National Association of School Psychologists, 2016, p. 1). Although documenting these requirements is a necessary piece of the process of MTSS, the responses to the online, open-ended interview indicate that teachers and staff within the school that this study took place may view procedures related to MTSS, such as completing forms or other required documentation, as the most important or only piece of MTSS process is key to implementing with students as the priority. Understanding the whole MTSS process is key to implementing MTSS with fidelity in order for students to gain the most benefit. Ensuring staff proficiency of

the MTSS framework often occurs during the installation phase of implementation, and is key to successful implementation, including increasing program fidelity (Eagle et al., 2015 & McIntosh & Goodman, 2016).

The third theme related to this research question was that staff responses did not indicate an understanding or prioritization of parental involvement in MTSS. Parental involvement in education in general is imperative. A strong connection between parental involvement in school and students' academic achievement, standardized test scores, grade point average, attendance, enrollment in more challenging courses, and behavior, is evident. This connection holds true across families of various ethnic, economic and educational backgrounds (National School Public Relations Association, 2006). The research in this dissertation in connection to research question number two regarding teacher and staff buy-in and understanding of MTSS relates to a lack of connection of MTSS to parental involvement. Teachers and staff members interviewed did not discuss parental involvement as a priority in relation to MTSS, which may indicate a lack of understanding of the benefits of involving parents in school programming, or an overall lack of understanding of the MTSS initiative, which may point to a reason that teachers and staff choose to not connect parents to the MTSS initiative.

Overall, mixed results were received between the four groups of participants (general education teachers, special education teachers, off-team teachers, and paraprofessionals) in relation to research question two, which examines the connection between teacher and staff perceptions of MTSS and level of buy-in and understanding of the initiative. Overall teacher and staff groups demonstrated a fundamental level of understanding of MTSS and did demonstrate some buy-in for the initiative; however, additional training related to the MTSS framework

through focused professional development may contribute to increased buy-in and demonstration of more in-depth understanding by teachers and staff.

Research Question Three

Research question three relates to how middle school teachers understand the MTSS framework. The themes identified within this research question include the following:

- 1. All students, all staff, and collaboration between teams
- 2. Procedures and logistics are discussed in relation to MTSS rather than the day-to-day implementation through working with students

Theme one

The first theme identified within responses from participants relates to the level of collaboration between teams and the idea that MTSS supports all students in some way. This theme was identified in relation to all three research questions within this dissertation which shows that there is a strong indication that overall, teachers and staff understand and buy into the idea that the MTSS framework operates best when colleagues collaborate and that MTSS is a system which supports all students.

Theme one, in relation to research question three, which investigates teacher and staff understanding of the framework, was prevalent throughout the responses received from the online, open-ended interview questions. Responses to interview questions in relation to research question three in particular indicate that teachers and staff feel that collaboration and support for all students is an important contributor to the success of MTSS, which leads to the conclusion that there is a healthy level of understanding of the framework in relation to collaboration and purpose. When discussing how MTSS meetings benefit students, content area teachers indicated that time to collaborate and plan with team members was beneficial to students. One content area teacher indicated that it is helpful to discuss techniques that work with certain students. Another indicated that during MTSS meetings, "I hear good ideas from colleagues who share similar struggles with kids. There may be a strategy that works in another class that I can use in my own" (Participant number 24). Similarly, another content area teacher stated that MTSS meetings "help to keep those kids who need the most help at the front of our minds" (Participant number 20). Content area teachers were able to speak to how MTSS meetings benefit students and the information shared shows that there is an overall understanding of the purpose of the MTSS meetings and MTSS itself.

Off-team teachers were able to communicate the purpose of MTSS meetings, which indicates a level of understanding of the process, but were not able to speak to experience in participating in MTSS meetings and how those meetings may be beneficial to students. These teachers are not included in weekly MTSS meetings at the school in which this study took place and therefore may not have personal experience with attending MTSS meetings. Answers received from this group of teachers does indicate that there is a level of understanding of the purpose of MTSS. One off-team teacher stated that MTSS meetings "help them (students) if they are failing and help them show growth if they are exceeding expectations" (Participant number 7). Participant two indicated that MTSS meetings are used to benefit students by explaining that "Teams meet to discuss students who are struggling in some way and discuss what interventions are needed". Although this participant indicated that MTSS also includes students who may benefit from some type of enrichment. Special Education teachers who participated in the interview gave varied responses related to how MTSS meetings are used to benefit students. Two Special Education teacher participants communicated more short-sighted and specific ideas related to MTSS while two others explained a bigger picture of MTSS in relation to MTSS meetings benefitting students. Participant 11 indicated that during MTSS meetings, "Students get support and interventions along three different tiers continuously throughout the year." While this information briefly summarizes a piece of MTSS as a whole, it does not indicate that the teacher has a clear understanding of the purpose of MTSS meetings. Another Special Education teacher stated, "In order to get a picture of the whole child, it helps bringing the team together to discuss different aspects of progress" (Participant 13). While this participant was able to give a high-level explanation of MTSS, he or she does not demonstrate a complete understanding of the purpose of MTSS meetings within the response.

Paraprofessionals' responses indicate that additional training and collaboration is needed in relation to the purpose of MTSS meetings and MTSS as a whole. One paraprofessional indicated that he or she does not attend MTSS meetings and therefore did not have any input regarding the purpose of MTSS. Two other paraprofessionals' responses indicated that they have an understanding of MTSS benefitting students who are in need of additional support, but no mention of enrichment was given. One paraprofessional indicated "If a student is being discussed by MTSS, it is my understanding that we are already working on a plan to benefit or improve the students well-being" (Participant 10) and another indicated "I am not certain, but I would think it would benefit the students that need a closer look by their teachers and then find they do need an intervention" (Participant 15). These responses indicate that paraprofessionals would benefit from additional training regarding the MTSS framework as a whole as well as the purpose and benefits of MTSS team meetings.

Overall, some participants were able to demonstrate a high-level understanding of MTSS based upon the responses received by the online, open-ended interview. Although participants demonstrated an understanding of collaboration being a key aspect of MTSS, MTSS supporting all students, and MTSS benefitting students who are demonstrating some sort of academic struggle, there is little indication of an in-depth understanding of the MTSS process and MTSS team meetings, the inclusion of social-emotional and behavioral aspects for students, and the idea that students who may be in need of enrichment can also benefit from MTSS.

Theme two

Theme two, in relation to research question three, is that teachers and staff communicate their understanding of MTSS through discussions of procedures and logistics rather than in relation to the day-to-day implementation of working with students. The MTSS process certainly involves logistics related to planning, meetings, and staff in order for the process to be successful; however, the actual implementation, teaching, and work done with students is truly the core of what makes MTSS a successful system for schools to implement. The responses received in the online, open-ended interview in relation to research question three indicate that teachers and staff interviewed view MTSS as a series of meetings, documentation, and procedures rather than the actual act of intervening and enriching students in the areas of academics, social-emotional learning, and behavior. This misconception can have an impact on the level of staff buy-in necessary for the framework's success. It is difficult to see the overall purpose and success in an initiative if one is viewing it from a procedural standpoint rather than from the perspective of seeing student success from the initiative.

Many content area teachers indicated that time is needed in order to successfully implement MTSS, including additional meeting time. Overall, most content area teachers did not indicate an understanding of the ability to implement pieces of MTSS within the general education classroom. One content area teacher did indicate the importance of working with students in relation to MTSS by responding, "I feel that teachers who care make the most difference by adapting their work and reinforcing concepts. Differentiation in the classroom by the teacher is what's most important" (Participant 3). Discussion of meetings, forms, and documentation were common throughout the responses from content area teachers, rather than discussions of implementing strategies, interventions, and enrichment for students who would benefit.

Off-team teachers generally discussed meeting time as a major part of the MTSS process and the three participants in this job category did not discuss how MTSS could be implemented day-to-day in the regular education classroom to benefit students. One off-team teacher indicated that MTSS is very beneficial, he or she noted, "...completing referral forms and submitting them. Completing behavior and academic charts..." (Participant number 25) as ways that he or she collaborates with colleagues to implement MTSS. This response is one example of how MTSS may be viewed as procedural, rather than a framework to implement in order to benefit students.

Special Education teachers also indicated that meetings are a key piece of the MTSS process. Meetings and email were indicated as a way that one participant collaborates with colleagues. This response indicates that this participant may view necessary collaboration related to MTSS as procedural rather than actionable, related to working with students. Conversely, another participant indicated that during MTSS meetings "Observations are documented and then plans for testing or interventions are discussed" (Participant number 14). This response indicates a connection to working with students rather than procedural work. It is important to note that this online, open-ended interview took place during the 2020 COVID-19 global pandemic during which many schools experienced a necessary shift in educational models which interrupted typical progress in school initiatives and programming, including MTSS. One Special Education teacher's response took this into account when responding to a question in relation to the second theme for research question three. "Last year I could see the development, process, and even successes (in MTSS). This year due to the current situation, it is difficult—you can't meet/work with kids like we are used to doing. Plus we only see them every other day in person and online is tough" (Participant number 18). This response indicates that there was a change in the day-today programming related to intervening and working with students. So, although responses to interview questions indicate otherwise, this could be an indication that the aforementioned health crisis distorted the responses and teachers and staff do recognize that working with students and implementing strategies, intervention, and enrichment with students is the key to student success inside the MTSS framework.

Similar to other teacher and staff responses, paraprofessional responses show that procedural work and logistics are mentioned as a major part of the MTSS process rather than working with students. Additionally, paraprofessional responses continue to indicate a need for additional training related to the purpose of the MTSS framework, including the importance of intentional work with students.

The discussion of logistics and procedures related to MTSS indicates a need for additional training related to implementing research-based strategies, interventions and enrichment for students within the general education classroom. Few teachers and staff mentioned these pertinent areas of MTSS in their responses which is cause for concern as these areas being implemented in the classroom are how schools are able to see true success from MTSS implementation.

Connection to Literature

Collaboration within the MTSS process is key to its fidelity and overall functioning. Ensuring that all staff members are provided with professional development focused on understanding the MTSS process, increasing staff buy-in of the process, and ensuring that staff recognize that the MTSS process is not accomplished in a silo are just a few of the ways to increase the success of MTSS implementation. Staff buy-in has a direct correlation to staff willingness to implement a school-wide framework. Ensuring that an established leadership team is in place to oversee the process, encourage collaboration and ensure proper time for collaboration is provided is imperative (Harlacher & Siler, 2011, Sugai, Simonsen, Freeman & La Salle, 2016). The first theme in relation to research question three was that all staff and students are involved in the MTSS process; this understanding contributes to teacher and staff overall understanding of the MTSS process. Overall, teachers and staff who participated in the online, open-ended interview recognize that collaboration among staff is key and that MTSS is in place to benefit all students.

The second theme related to the third research question is that teacher and staff responses to the online, open-ended interview included discussion related to the logistics and procedures of MTSS rather than the actual day-to-day implementation of the framework through working with students. This misconception is directly related to the level of understanding exhibited by teachers and staff. According to Hollingsworth (2019), middle school teachers have been found to be doubtful of the MTSS initiative due to an already stretched too thin school day which causes a lack of time to implement interventions, as well as insufficient professional development related to MTSS. The teachers and staff who completed the online, open-ended interview are provided with at least one period per day strategically implemented to work directly with students, as well as a team planning time during which discussions related to MTSS occur once per week. In this case, a lack of time to implement with fidelity likely does not contribute to a lack of buy-in or misconceptions related to MTSS. Additional professional development on MTSS as a whole, including ways to implement research-based strategies, intervention, and enrichment within the general education classroom would be beneficial.

Summary

This chapter provided a thematic analysis of the qualitative data collected based upon the online, open-ended interview completed for this dissertation. Thematic analysis of the three research questions related to this dissertation was provided.

The analysis of the collected data for this dissertation uncovered major themes related to middle school teacher and staff perceptions of MTSS. The first research question for this dissertation was: How do middle school teachers and school support staff perceive implementation of a multi-tiered system of support? Through analysis of the collected responses related to this research question, three major themes arose. The first theme was that all students and staff are a part of the MTSS process. The next was that MTSS involves support for all students and MTSS addresses individual student needs. The third was that communication with off-team teachers is insufficient. These identified themes were explored and analyzed to discuss how the teachers and staff who participated in the online, open-ended interview perceive MTSS.

The second research question explored as a part of this dissertation was: How do these perceptions impact the buy-in and level of understanding of MTSS implementation? Three

themes arose through the analysis of the responses received in relation to this question. The first theme was that all students and staff are involved in the MTSS process and that collaboration between teams is key. The second was that forms were frequently discussed as a part of the MTSS process. The third identified theme was that parental involvement was not discussed as a priority in responses provided by participants. All three themes were discussed and analyzed in connection with how teacher and staff perceptions impact buy-in and level of understanding of MTSS.

The third research question addressed by this dissertation was: In what ways do middle school teachers understand the MTSS framework? Two themes emerged through the analysis of the responses given in connection to this research question. The first theme was that all students and staff are involved in MTSS and that collaboration between teams is key. The second theme was that procedures and logistics were discussed in relation to MTSS rather than the day-to-day implementation of MTSS through working with students. Both themes were explored and analyzed in relation to middle school teacher and staff understanding of MTSS.

This dissertation focused on middle school teacher and staff perceptions of MTSS. A qualitative approach was selected for this study as it sought to gather interpretation and perceptions as well as peoples' personal involvement and feelings in relation to a program (Brown, Stevens, Troiano & Schneider, 2002). A grounded approach to the qualitative research was utilized for this study. This approach allowed the researcher to become grounded in the collected data and create theories based upon the findings (Tracy, 2013); this approach allows for the research to be "generalizable" (Strauss & Corbin, 1990, p. 2). Credibility was ensured throughout this study as well as self-reflexivity, to ensure the researcher's experience and point of view were considered as a part of the study (Tracy, 2013).

Chapter six of this dissertation will include a complete overview of the study as well as a summary of the findings and conclusion. In addition, future implications for the research as well as recommendations for future practice will be explored.

CHAPTER 6 CONCLUSION

This study focused on middle school teacher and staff perceptions of Multi-Tiered Systems of Support (MTSS). The purpose was to determine what impact teacher and staff perceptions have on MTSS implementation and how teachers and staff understand MTSS. While MTSS at the elementary level is widely researched and implemented, research related to MTSS at the secondary level is insufficient and implementation is more difficult as logistics such as scheduling, and course credit come into play (Shinn, 2020). This study sought to provide schools and districts with research, strategies, and information regarding the importance of teacher and staff buy-in regarding MTSS implementation at the secondary level.

The design of this study was a single descriptive case study in order to collect qualitative data. This study consisted of collecting data from three sources in connection to the research question. The first source of data was a benchmark assessment focused on teacher MTSS knowledge. This benchmark was given during year one of MTSS implementation in the middle school in which this study took place, in August 2019, December 2020, and May 2020. The purpose of the benchmarks was to determine teacher level of knowledge related to MTSS concepts that were introduced throughout the school year, as well as to determine next steps for professional development focused on MTSS. The next source of data for this study was compiled from completion of an MTSS needs assessment by the building principal, assistant principal, school psychologist and intervention specialist (researcher). The MTSS Needs Assessment, Secondary Version from "Integrated Multi-Tiered Systems of Support: Blending RTI and PBIS" by Kent McIntosh & Steve Goodman (2016), was utilized to gather this information. The MTSS teacher benchmark and MTSS needs assessment were both completed in order to gather qualitative data; the information collected was not used for the purpose of collecting quantitative

data. The third data collection method in this study was through a confidential, on-line, openended interview completed by teachers and staff at the middle school in which this study took place.

Summary, Conclusions, and Recommendations

A qualitative research design was chosen for this study because teacher and staff perceptions were being analyzed, which requires in-depth research and descriptive language in order to communicate results in a thorough manner. The data analyzed in this study required conceptualization as well as interpretation of people's feelings and thoughts in response to interview questions. When research involves people's behavior or organizational functioning, a qualitative approach to the research is advised (Strauss & Corbin, 1990). Additionally, a qualitative approach is best when interpreting feelings and perceptions of participants (Brown et al., 2002). The overarching goal of this research study is for other schools and districts to be able to utilize the research presented in order to aid in implementation of MTSS at the secondary level.

This dissertation was focused on three research questions:

- How do middle school teachers and school support staff perceive implementation of a multi-tiered system of support?
- 2. How do these perceptions impact the buy-in and level of understanding of MTSS implementation?
- 3. In what ways do middle school teachers understand the MTSS framework?

The purpose of these questions was to explore the connection between teacher and staff perceptions, understanding, and buy-in in connection to the implementation of MTSS at the middle school in which this study took place. General education teachers have extensive involvement in MTSS, such as through conducting universal screeners and implementing research-based interventions. Due to this extensive involvement, teacher perceptions are key when considering MTSS implementation; teacher buy-in can impact efficacy and fidelity of implementation (Castro-Villarreal et al., 2014). Through exploring how teachers and staff perceive the implementation of MTSS, how these perceptions impact buy-in and level of understanding of MTSS, and how teachers understand the MTSS framework, schools and districts can gain a better understanding of the importance of gaining teacher and staff input and buy-in when implementing school-wide programming such as MTSS, as well as how to gain that input.

Summary of the Study

Research supports the need for additional studies related to MTSS implementation at the secondary level and teacher and staff perceptions related to implementation. Morningstar et al. (2018) discussed implementation of RTI at the secondary level and the positive effect of this framework on student academic performance and behavior. Additionally, the need for changes to existing systems and combining current efforts such as school counseling and SWPBIS in order to ensure the framework works effectively was discussed. A lack of administrative support, insufficient funding, and lack of training can also contribute to the challenge of MTSS implementation at the secondary level (Avant & Swerdlik, 2016). In addition, teacher perceptions can have an impact on the effectiveness of the MTSS framework, which supports the need for including teachers in implementation discussions and decision making related to MTSS (Donnell & Gettinger, 2015 & Nunn et al., 2009). The literature provided multiple perspectives to consider when implementing MTSS at the secondary level. This study sought to explore teacher and staff perceptions related to MTSS implementation at the middle school level. By

conducting this research and presenting the findings, schools and districts can utilize the findings to explore how and why to gain teacher and staff perspective on schoolwide programming implementation, as well as key areas related to successful implementation of MTSS at the secondary level.

This study utilized a qualitative, single descriptive case study design to explore middle school teacher and staff perceptions of MTSS implementation. By exploring teacher and staff perceptions of MTSS implementation the researcher was able to present existing literature as well as new research data in order to assist schools and districts in exploration of MTSS implementation. Specifically, this study explored: (1) how middle school teachers and school support staff perceive implementation of a multi-tiered system of support, (2) how these perceptions impact the buy-in and level of understanding of MTSS implementation, and (3) in what ways do middle school teachers understand the MTSS framework? The qualitative methodology assisted in studying teacher and staff perceptions of MTSS implementation at the middle school level through exploration of a teacher benchmark assessment, an MTSS needs assessment, and a confidential, online, open-ended interview. Presenting the research related to these questions can assist schools and districts in MTSS implementation at the secondary level.

The target population of this study was teachers and staff of the middle school in which this study took place. Since this study was a single descriptive case study design, one school was utilized as a part of the study. The sample size for the interviews consisted of twenty-six teachers and staff. Participants provided input to the interview questions through an asynchronous, confidential, online, open-ended interview in response to ten interview questions created by the researcher. A confidential, online interview was chosen as opposed to an in-person interview as some participants may feel uncomfortable in a face-to-face interview environment, which may cause a lack of sincerity in responses (Stacey & Vincent, 2011). As an employee of the school in which the study took place, the researcher was able to personalize the interview questions to align with MTSS implementation at the school. The small sample size in this study allowed for a narrower focus on teachers and staff input within one school building. Since the study took place in one middle school, additional perspectives from a larger sample size were not needed.

Prior to participating in the confidential interviews, participants were provided with detailed information regarding the study and interview process including the goal of the study, risks or discomforts associated with participation, benefits of participation, voluntary participation, the purpose of the study including the research questions, how participant information was protected, and who to contact with questions or concerns. As participation was confidential, participants were not requested to sign to indicate their consent, but a consent form was provided in order for participants to read and ensure understanding of their participation. Confidentiality was ensured in this study as participant names were not collected during the interview. Teachers and staff were asked to identify only their job category from a choice of general education teacher, special education teacher, off-team teacher, or special education teacher. Job categories were identified in order to analyze teacher and support staff responses in relation to their job. Each participant was assigned a participant number and was identified as such throughout the results section of this study.

Data for this study was gathered through three methods; the teacher MTSS benchmark, the MTSS Needs Assessment, Secondary Version (McIntosh & Goodman, 2016), and the confidential, online, open-ended interview. No teacher names or job categories were analyzed in the responses to the teacher benchmark assessment and this data was collected in an effort to explain the current level of MTSS implementation at the middle school in which this study took place. Results of these benchmarks were presented in percentages to indicate the level of staff understanding of MTSS implementation during year one of implementation, the 2019-2020 school year. The MTSS needs assessment was also completed and analyzed to provide information to the reader regarding current MTSS implementation. Results of this needs assessment were shared on a scale from zero to three to indicate the level of implementation of each element included in the needs assessment. The confidential, online, open-ended interviews were completed at a time convenient to the participant and all responses were written; no audio recording occurred. The researcher created the interview questions and each interview question aligned to one of the three research questions for this study.

Data from the confidential, online, open-ended interviews was analyzed by the process of manual coding. The first step was to convert the interview responses into a spreadsheet. Next, the researcher completed the primary-cycle coding phase in which the researcher identifies commonly used phrases within responses and uses these as codes (Tracy, 2013). Additionally, the constant comparative method was used. This method consists of comparing data with already identified codes to determine whether or not new data should be aligned to a current or a new code. When 20% (approximately 5 out of twenty-six participants) used a certain phrase, that phrase was then considered a code. Following the process of coding, themes were then created from the existing codes and were assigned to the research questions to which each theme connected.

The remainder of this chapter discusses the findings and conclusions related to each research question for this study. Additionally, current implications, strengths and weaknesses, and recommendations for future research and future practice will be discussed.

Summary of Findings

The research questions on which this study focused were related to how middle school teachers and school support staff perceive implementation of MTSS, how these perceptions impact the buy-in and level of understanding of MTSS implementation, and in what ways middle school teachers understand the MTSS framework. Each of these research questions was addressed throughout the confidential, online, open-ended interview, through one or more interview questions. Participant responses were analyzed through a coding process which identified responses that yielded common phrases or ideas. These codes were then quantified, and major themes were created which aligned to each research question.

The themes which aligned to research question one which addressed how middle school teachers and school support staff perceive implementation of MTSS, were: support for all students and addressing individual student needs is a part of the MTSS process, as well as the need for all staff to be involved and communication with off-team teachers is insufficient. Teachers and staff communicated throughout their responses that MTSS involves support for all students and that all staff members are important in the MTSS process. Prioritizing communication and student success, through intervention or enrichment, was discussed. Additionally, teachers and staff communicated that additional steps should be taken to ensure increased communication with off-team teachers in order to engage all staff members in the MTSS process for the benefit of students.

Research question two addressed how teacher and staff perceptions impact the buy-in and level of understanding of MTSS implementation. The themes identified in interview responses which aligned to question two were: all students, all staff, and collaboration between teams, discussion of forms as a part of the MTSS process, and parental involvement was not discussed as a priority in responses. Teachers and staff continued to communicate the importance of all students being involved in the MTSS process, as well as prioritizing collaboration between teams; these ideas were communicated in connection with how teacher and staff perceptions impact buy-in. Overall, it can be assumed that increasing collaboration and awareness of MTSS can increase teacher and staff buy-in to the framework. Additionally, teachers and staff discussed forms as a part of the MTSS process throughout interview responses. This shows that staff may focus on logistical practices and requirements associated with MTSS, such as required documentation through forms, rather than viewing MTSS as a comprehensive support system for all students. Lastly, teachers and staff did not indicate a connection between MTSS and parent involvement. Although parental involvement in the MTSS process is well-documented in research (McIntosh & Goodman, 2016), teachers and staff did not indicate parental involvement as a part of the MTSS process in interview responses. This finding supports the idea that additional professional development, perhaps focusing on how to involve stakeholders such as parents in the MTSS process, could be beneficial. Overall, mixed results were found in the themes related to research question two, but findings do indicate a need for increasing parental involvement in the MTSS process as well as professional development related to MTSS in order to increase teacher and staff buy-in.

The third research question in this study addressed the ways in which middle school teachers and staff understand the MTSS framework. Identified themes which aligned to this research question include: all students, all staff, and collaboration between teams and procedures and logistics are discussed in relation to MTSS rather than the day-to-day implementation through working with students. Teachers and staff continued to express support for all students and the involvement and collaboration of all staff members as an important part of MTSS; this

understanding indicates a fundamental understanding of MTSS, which is a positive finding. Throughout the interview teachers and staff commonly discussed logistics and procedures related to MTSS, rather than the process of supporting students in the classroom. Examples include discussion of meetings, documentation, and emails, rather than the act of intervening to support students by assessing, collecting data, and analyzing results to determine areas needed for intervention or enrichment. Again, this finding supports the need for additional professional development regarding the overall purpose and goals of MTSS at the middle school level. Understanding the actual implementation of MTSS, including data-based decision making at the classroom level, differentiation based upon student performance and need, delivery of researchbased interventions, monitoring student progress and making changes based upon this progress, is imperative. This deeper understanding, rather than simply demonstrating a fundamental level of understanding of definitions and key words related to MTSS, is essential for teachers and staff to demonstrate in order to be truly implementing MTSS at the classroom level. General education teachers are mostly responsible for implementing MTSS at the classroom level (Castro-Villarreal, et al., 2014) and therefore an in-depth understanding of day-to-day implementation is necessary, thus supporting the need for additional professional development focused on this area.

Theoretical Framework

Grounded theory was utilized as the theoretical framework for this study. This theory allows the researcher to create a theory based upon the analysis of collected data, rather than applying an already existing theory to the research (Glaser, 1978). "Generalizable" (Strauss & Corbin, 1990, p. 2) data can be derived from utilizing the grounded theory. This theory allows researchers to create or construct theories from gathered data (Chun Tie, Burks & Francis, 2019). Grounded theory "aims to generate theory that is grounded in the data" (Chun Tie et al., 2019, p. 1). Through use of this theory, the researcher was able to analyze collected data related to MTSS implementation, specifically through the use of analyzing the teacher benchmark assessments, MTSS needs assessment, and the confidential interview responses, and create theories based upon this analysis. Use of this theory supported the emic approach to the research, which allowed the researcher to have an inside view of the implementation of MTSS and to create theories based upon this view as well as the collected data. Researchers who take an emic approach are directly involved in the research and gather data through observations in order to make claims, and then analyze those claims in order to build theories (Tracy, 2013). The overall goal of this study was to allow for the research to be transferable and usable by other schools and districts who are interested in exploring teacher and staff perceptions related to MTSS interested in exploring teacher and staff perceptions related to MTSS is a staff perception of the secondary level.

Implications

The purpose of this qualitative single descriptive case study was to determine the impact of teacher and staff perceptions on MTSS implementation and overall understanding of MTSS in a western Pennsylvania middle school. The purpose of this study was addressed through exploring how teachers and staff perceive MTSS implementation, how these perceptions impact buy-in and level of understanding of MTSS implementation, and how teachers and staff understand MTSS implementation. The exploration of these ideas through a qualitative case study allowed the researcher to analyze and describe teachers' and support staff members' feelings and perceptions related to MTSS. The results of this study clearly communicate a call to action for schools and districts to ensure teacher and staff buy-in in relation to MTSS implementation at the secondary level. This area is under-researched and although the success of comprehensive, school-wide initiatives such as MTSS are backed by research, successful implementation at the secondary level is challenging. Schools and districts must prioritize implementation of this school-wide programming in order to provide the best support for all students. This section of this chapter provides an overview of the theoretical framework for this study as well as current implications, strengths and weaknesses, and recommendations for future research and practice.

This study confirms that utilizing teacher and staff input to gain perspective and perceptions related to MTSS implementation is imperative in guiding the process of MTSS implementation, including areas of focus for professional development. Schools and districts can benefit from this research by utilizing the strategies shared to aid in MTSS implementation as well as to implement the practices included in the study to gain teacher and staff perceptions related to the implementation. Utilizing tools such as a teacher benchmark, needs assessment, or interviews can help districts gain input from staff. Schools should also not underestimate the power of conversations to gain teacher input. General education teachers play a vital role in MTSS implementation; therefore, their perceptions of the program must be taken into consideration (Castro-Villarreal, 2014). A practical implication related to this finding is that schools should gain teacher and staff input when implementing MTSS in order to increase buy-in, thus increasing program fidelity and aiding student success.

Additionally, this study found that teachers and staff may have misconceptions related to MTSS, such as a focus on forms and other logistical and procedural aspects being a priority rather than the day-to-day work with students. Educational leaders should utilize this research by embedding a focus on working with students and implementing plans to assist students in areas of need or providing enrichment into professional development. Ensuring the focus of MTSS is

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on student success rather than logistics is imperative for program success. Professional development in this area is necessary in order to ensure that teachers and staff are providing appropriate support for all students.

Another finding in this study was that teachers and staff understood the need for collaboration and communicated a need for additional communication with off-team teachers regarding MTSS. This information is valuable as educational leaders can work to ensure that adequate planning time and time for collaboration between cross-team and off-team teachers is provided when implementing MTSS at the middle school level. Bohanon et al. (2016) discussed the importance of systematic change when implementing MTSS, which may include shifts in the current schedule. The authors also noted adequate time for team discussions and planning for intervention implementation is essential when implementing MTSS. School district leaders must understand and buy into the importance of staff collaboration and communication regarding school-wide programming. Increased time for collaboration can increase teacher and staff understanding of initiatives and also provide more time to plan for instruction using practices such as data-based decision. Schedules at the secondary level are one reason why MTSS implementation at this level can be difficult; making necessary shifts in a schedule in order to be able to provide additional support for students shows that administration is dedicated to an initiative and that they are willing to make changes in order for that initiative to be successful.

Strengths and Areas for Improvement

Organization and thorough communication of findings and data analysis processes contributed to the validity and strength of this study. Additionally, the review of literature provided a thorough overview of existing research connected to MTSS implementation at the secondary level, including the background of MTSS relating to the implementation of RTI, SEL,

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and SWPBIS, state and federal legislation related to MTSS implementation, the rationale for MTSS implementation, science-based implementation methods, district and administrative support for MTSS implementation and its impact on effectiveness, and teacher and stakeholder perspectives and buy-in. The confidentiality of the online, open-ended interviews contributed to the ability to gain sincere perspectives from teachers and staff as no personal identifiable information was collected. In addition, participants were able to complete the asynchronous interview on their own time, which also likely contributed to more valuable responses. Lastly, the findings of this study, including that teachers and staff may have a better understanding of the logistics related to MTSS rather than the overall process, are transferable and informative to other schools and districts interested in MTSS implementation at the secondary level.

Another significant strength to note in this study is that the researcher was an employee of the school in which this study took place. The researcher was able to create solid interview questions which aligned to the MTSS process within the school building, thus likely increasing the opportunity to receive quality and meaningful responses from the participants. The researcher had the opportunity to be emic in this study, which allowed for direct involvement in the MTSS implementation process in the school as well as the opportunity to collect data, make claims regarding that data, and analyze the information collected in order to create theories based upon the research (Tracy, 2013).

One possible area of improvement in this study was the small sample size of participants. Although the number of participants was sufficient, a larger sample size would have provided for additional input and perspective from additional staff members. Two attempts were made to gain interview participants, and perhaps an additional attempt would have garnered more participation. Additionally, an incentive for participation was not considered for this study, but incentivizing participation may have increased participants as well.

Another area of improvement could be that this study took place during the COVID-19 global pandemic, which had extreme impacts on not only education, but the world in general. During the 2020-2021 school year the school in which this study took place was faced with beginning the school year in a hybrid instructional model, where only half of the students attended school each day, and the other half attended the following days. During the at-home days, students participated in on-line, virtual, live-streamed instruction by their teachers. Teachers were faced with not only the typical day-to-day workload of teaching, but also with learning new technology and being responsible for virtual instruction on top of a typical class of students. Social distancing in the school setting as well as mandatory face coverings, although necessary, contributed to additional challenges for teachers in terms of student behavior. This situation may have had an impact on the interview responses received by teachers. It is possible that during a typical school year more teachers and staff may have participated in the online interview, and responses may have been more in-depth.

Recommendations for Future Research

This study was designed to address the need for additional research related to MTSS implementation at the secondary level. The researcher was able to present literature related to MTSS implementation, current levels of implementation at one middle school, and teacher and staff perceptions related to MTSS implementation. The results and findings validate that teacher perceptions can be valuable when working toward implementation of school-wide initiatives such as MTSS. Future researchers should work toward exploring teacher perceptions in other

schools and districts, using similar techniques and study design. Additionally, the findings of this study could be utilized for future practice related to MTSS implementation.

This study discussed middle school teacher and staff perceptions on MTSS implementation. The findings address the need for additional research on MTSS at the secondary level as well as information related to considering teacher and staff perceptions when implementing school-wide programming. Utilizing a single descriptive case study design, this study included one middle school in western Pennsylvania, including 26 teachers who chose to participate in a confidential, online open-ended interview. Additionally, data was gathered from a teacher benchmark assessment completed during year one of MTSS implementation as well as a needs assessment completed by the MTSS building team, in order to provide current levels of MTSS implementation for the school in which the study took place. A future study attempting to replicate the current research could include more than one school in the study, in an attempt to increase the sample size. A larger sample size would allow for additional input and perhaps additional job categories of school employees, such as school administrators.

This study focused on MTSS implementation at the middle school; a future study could include MTSS implementation at the high school level. Including high school level MTSS data and interview participants would contribute to the lack of research of MTSS at the secondary level. Shinn (2020) notes that MTSS implementation at the high school level is difficult when compared to elementary level implementation, especially due to scheduling and course credit. These are key aspects to consider when planning to implement MTSS at the high school level; therefore, a study focusing on high school implementation would be valuable. Additionally, any further input from interview participants, especially from a different school setting, would be a valuable contribution to research relating to MTSS implementation at the secondary level.

This study provided valuable research related to teacher and staff perceptions of MTSS at the middle school level. The identified themes indicate that teachers and staff from the school involved in this study recognize that MTSS involves all students and all staff, communication with off-team teacher regarding MTSS is insufficient, forms are identified as a key aspect of MTSS, parental involvement is not necessarily seen as a priority in MTSS, and that MTSS is mostly described through logistics and procedures rather than through the day-to-day work with students. Future researchers could utilize these findings to design professional development for MTSS implementation at the secondary level, focusing on the identified misconceptions from this study. The results from this study could aid future researchers, as well as educational leaders, in identifying teacher and staff perceptions of MTSS or other programs in their own schools. Additionally, this research can be utilized to explore ways to gain teacher and staff input regarding program implementation.

Recommendations for Future Practice

The research questions which this study sought to explore were: (1) how do middle school teachers and school support staff perceive implementation of a multi-tiered system of support? (2) how do these perceptions impact the buy-in and level of understanding of MTSS implementation? And (3) in what ways do middle school teachers understand the MTSS framework? These research questions allowed for the researcher to gain valuable information regarding MTSS implementation as well as interesting perspectives from teacher and staff participants. Future researchers are able to utilize the study design as well as the research gained in order to conduct additional studies to further the body of research on MTSS at the secondary level.

The findings from this study need to be utilized by leaders in the education field as well as education professors who desire to effectively implement MTSS and to ensure understanding of the framework. The information shared can help school officials explore ways to gain teacher and staff input on MTSS implementation as well as recognize the importance of this input. School leaders should also explore the themes presented based upon the interview responses in order to anticipate possible misconceptions related to MTSS implementation and proactively plan professional development based upon this information. Similarly, college professors should use this research to plan for lessons on MTSS including topics related to possible misconceptions that occur from teachers and staff who are currently implementing MTSS. Ensuring staff understanding and competencies related to MTSS aides in the overall implementation, fidelity, and ultimately the success of the program (Eagle et al., 2015).

In summary, placing value in teacher and staff perceptions of implementation of MTSS can increase program fidelity and inform school leaders of area of need related to MTSS knowledge. Additionally, ensuring professional development is provided to teachers and staff benefits the overall implementation of the MTSS framework; soliciting perceptions can aid in identifying areas of focus for professional development. Furthermore, prioritizing teacher and staff professional development to ensure teacher and staff understanding is key when implementing MTSS (Bohanon, et al., 2018, Eagle, et al., 2015, Freeman et al., 2015, Harlacher & Siler, 2011, Sugai, Simonsen, Freeman & La Salle, 2016).

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APPENDIX A: DISTRICT PROPOSAL

Dear Pine-Richland School District Senior Leadership Team,

My name is Emily Mazzant and I am the Intervention Specialist at Pine-Richland Middle School and High School. I am currently working on my doctoral degree in the area of Special Education at Slippery Rock University. This summer I have begun the process of working on my dissertation. Throughout my doctoral work I knew that I wanted to focus my dissertation on MTSS as this is a huge focal point of my current position at Pine-Richland Middle School and secondary level MTSS is still in the early stages of research.

I am thoroughly impressed with the level of implementation and amount of teacher knowledge demonstrated in the area of MTSS at Pine-Richland Middle School, having only been implementing MTSS for one school year. Through my research I have found that in addition to teacher knowledge of school-wide programs, teacher perceptions also play a large role in the success of these initiatives. Taking this information into consideration, I have decided to focus my dissertation on *middle school teacher and support staff perceptions of Multi-Tiered Systems of Support (MTSS) implementation.*

Pending approval of the Institutional Review Board of Slippery Rock University, I am submitting this document to request approval from Pine-Richland School District to conduct my study at Pine-Richland Middle School. Below you will find a detailed description of my study proposal, including: research questions, background information, proposed timeline and instruments used, participants, ethical considerations and confidentiality. If any additional information is needed, please do not hesitate to reach out to me. Thank you for your time and consideration,

Emily Mazzant, M.Ed. Intervention Specialist

Pine-Richland Middle School and High School

Topic: *Middle school teacher and support staff perceptions of Multi-Tiered Systems of Support (MTSS) implementation*

Research Questions:

- How do middle school teachers and school support staff perceive implementation of multi-tiered systems of support?
- How do these perceptions impact the buy-in and level of understanding of MTSS implementation?
- In what ways do middle school teachers and staff understand the MTSS framework?

Background information

Understanding teacher perspective related to implementing a school-wide framework such as MTSS is imperative. Teacher buy-in and willingness to participate directly impacts the success of the initiative. This qualitative, single descriptive case study aims to collect and interpret teacher and staff member perceptions of MTSS at Pine-Richland Middle School in an effort to utilize this data to build upon our already successful initiative of MTSS. A qualitative approach to this study is the most appropriate as the study subject requires interpretation and conceptualization as well as personal involvement in understanding peoples' perceptions and feelings (Brown, Stevens, Troiano & Schneider, 2002). A qualitative research approach lends itself well to research related to the lives of people, behavior, or functioning within an organization (Strauss & Corbin, 1990).

Outline of Research and Proposed Timeline

*Pending IRB Approval

• October 2020: As a baseline, utilize the MTSS Needs Assessment, Secondary Version from *Integrated Multi-Tiered Systems of Support: Blending RTI and PBIS* by Kent McIntosh & Steve Goodman (*permission received from publisher to utilize this assessment*)

• MTSS Needs Assessment - Secondary Version (Pages 26-33)

- This assessment will not be used as a quantitative measure, but to share information on the current level of implementation of MTSS at PRMS
- The PRMS building level MTSS team will be asked to complete this survey together
- Possibly to be completed during a focus group session and audio recorded to collect qualitative data regarding the discussion process
- October 2020: Utilize *Pine-Richland Middle School Staff Knowledge of MTSS Assessment* data from fall, winter and spring from the 2019-2020 school year to indicate school staff current level of understanding and current implementation level of MTSS
 - This data may also be utilized to show a trend in data related to professional development on MTSS throughout the 2019-2020 school year
- October-December 2020: Communicate and send out the open-ended survey to collect the qualitative data; utilize MTSS Perception Survey questions (self-created based upon MTSS implementation research). **Survey questions are included below*
 - Participation is voluntary; <u>Consent Form (draft)</u>

Participants

Careful consideration of participants for a survey is an important step in conducting quality qualitative research; purposeful sampling, in particular, will be used in this study in order to identify professionals who can aid in capturing the realm of thoughts on MTSS for all members of the building. Tracy (2013) recommends purposeful sampling in order to ensure that the data collected aligns with the research questions being sought. In this study, participants will be identified by the researcher based upon their potential to provide valuable input during the survey process. Within the survey, participants will be categorized into four groups based upon their job classification, with a goal of at least five participants from each group to complete the survey. Groups will consist of the following job categories: classroom teachers, special education teachers, special area teachers, and paraprofessionals.

A definite, predetermined number of participants has not been determined for this study; however, I am requesting to invite at least five staff members from each of the specified job categories from Pine-Richland Middle School to complete the survey. Additional participants

may be requested depending on the quality of responses.

	Mazzant Open-Ended Survey Question	Aligned to research question #
1.	What does MTSS mean to you?	1, 3
2.	What does the MTSS team(s) process look like at your school? What is its purpose?	1, 3
3.	Who is responsible for MTSS in your school and what does this responsibility entail? How do you contribute to this implementation?	1, 2, 3
4.	What is the purpose and operation of the MTSS team(s) within your school? Please discuss the building level and team level MTSS teams.	1, 3
5.	What paperwork and/or documentation are required as a part of the MTSS process in your school? How would you describe this required documentation?	2
6.	What reading and math interventions are implemented in your school? Describe how these are provided as a part of the tiered framework of MTSS.	3
7.	Do you feel the MTSS framework is effective in your school building? In what ways is it effective or not effective?	2
8.	How do you collaborate with parents and fellow colleagues regarding the implementation of MTSS?	2
9.	In what ways are MTSS team meetings used to benefit students?	1
10.	How do you feel about the success of the MTSS process within your school?	2
11.	In what ways do you feel the MTSS process in your building can improve?	1, 2, 3

Open-Ended Survey Questions

Ethical Considerations and Confidentiality

Research for this study will not begin until approval is received by the Institutional Review Board of Slippery Rock University as well as from the Pine-Richland School District Board of Directors. All participants will be made aware of the study purpose and written consent will be received prior to the survey request. The privacy of all participants will be respected and no personal or identifiable information will be shared or documented. Participant information will be coded according to job title or other methods that I deem appropriate as the researcher; no personal identifiable information of participants will be released and all responses are confidential. All collected data and survey responses will be kept on a secure, password protected personal laptop.

Benefits of participation for Pine-Richland School District

Teacher perceptions of school-wide programming such as MTSS can have a huge impact, positive or negative, on the implementation of the initiative. Pine-Richland Middle School has had tremendous success with MTSS implementation during the 2019-2020 school year. A natural progression of our MTSS implementation is to consider teacher and staff perspectives on the initiative. Through participating in this study, teacher input, perceptions, and feelings of overall MTSS implementation at the middle school will be gathered and analyzed. PRMS will have the opportunity to utilize the results of this study to improve, build upon, and take a step "up and to the right" for our overall MTSS implementation.

As an employee of Pine-Richland School District and member of the building-level MTSS team at PRMS, I am eager to work toward this personal goal of conducting a major research project and completing my dissertation while also contributing to PRSD.

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APPENDIX B: IRB APPROVAL



TO: Dr. Richael Barger-Anderson Special Education

James A. Chetin

FROM:

James Preston, D.Ed., Vice Chairperson Institutional Review Board (IRB)

DATE: October 21, 2020

RE: Protocol Approved

Protocol #: 2021-003-88-B Protocol Title: Middle School Teacher and Support Staff Perceptions of Multi-Tiered Systems of Support (MTSS) Implementation: A Case Study in a Suburban Pennsylvania Middle School

The Institutional Review Board (IRB) of Slippery Rock University has received and reviewed the requested modification(s) to the above-referenced protocol utilizing the expedited review process. The IRB has approved the protocol effective October 21, 2020.

You may begin your project as of October 21, 2020. Your approved protocol will expire on October 20, 2021. You will need to submit a Progress/Final Report at least 7 days prior to the expiration date.

Enclosed are copies of the approved consent and assent forms to be copied for participants to sign. (if applicable)

If you complete the study within the next year, please notify the IRB with a Final Report. The Final Report form and instructions can be found on the IRB website.

Please contact the IRB Office by phone at (724)738-4846 or via email at irb@sru.edu should your protocol change in any way.

APPENDIX C: PARTICIPANT EMAIL

Pine-Richland SD Mail - MTSS Survey



Emily Mazzant <emazzant@pinerichland.org>

To: MS_Employees <ms_employees@pinerichland.org>

Good morning,

Emily Mazzant <emazzant@pinerichland.org>

Thu, Oct 22, 2020 at 7:05 AM

Good morning,

As some of you know, I am in the process of working on my dissertation focusing on *middle school teacher and staff perceptions of MTSS implementation,* as a partial requirement for completion of my doctorate in special education. My study is focused specifically on MTSS implementation at PRMS. As a part of my study, I would appreciate it if you could please take some time to complete the attached brief, confidential open-ended interview/survey. No names or email addresses will be collected as a part of this survey and results will help us determine next steps in our MTSS implementation here at the middle school, as well as provide valuable input for my dissertation.

Please click this link to access the survey

Also attached is an informational letter regarding my study. Please feel free to reach out to me with any questions. I truly appreciate your time.

Thank you, Emily

Emily Mazzant

Intervention Specialist Pine-Richland Middle School and High School 700 Warrendale Road Gibsonia, PA 15044 (724) 625-4444 x1322 emazzant@pinerichland.org

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IRB informational consent letter Oct2020.doc

