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## BARRIERS WHEN IMPLEMENTING A MULTI-TIERED SYSTEM OF SUPPORTS

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BARRIERS WHEN IMPLEMENTING A MULTI-TIERED SYSTEM OF SUPPORTS

By

Chelsea Norton

THESIS

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Barriers When Implementing a Multi-Tiered System of Supports

This thesis by \_\_\_\_\_Chelsea Norton\_\_\_\_\_ is recommended for approval by the student's Thesis Committee and Department Head in the Department of \_\_\_\_\_SELPS\_\_\_\_\_ and by the Dean of Graduate Studies and Research.

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## ABSTRACT

### BARRIERS WHEN IMPLEMENTING A MULTI-TIERED SYSTEM OF SUPPORTS

By

Chelsea Norton

This mixed-methods study investigated the perceptions educators have during the initial stages of implementing the Multi-Tiered System of Support (MTSS) model. A survey and semi-structured interviews were collected to identify if the perceived barriers found in a rural context were consistent with prior research. Quantitative survey data indicated that participants felt confident about their practicing foundational skills of MTSS, and felt MTSS will benefit both staff and students. However, quantitative survey results also indicated a discrete difference in the data between the answers regarding participant confidence, knowledge, and the answers regarding attitude regarding time, resources, and leadership. Qualitative analysis from the survey and semi-structured interviews identified the following themes; (a) lack of time; (b) lack of training; (c) lack of resources; and (d) personnel buy-in; which are perceived as barriers for K-8 educators who will be implementing the MTSS model. When barriers exist, it can hinder the fidelity of the MTSS adoption, and in turn impact student achievement. (Perry 2019; Werts et al., 2014). These results should be considered when districts plan to implement the MTSS model. The data contributes a clear understanding of how educators feel about the MTSS adoption and what they foresee as issues for the district moving forward.

## DEDICATION

To my husband Cody. Without you, I would not be writing these words now.

To my girls, Breanna and Claire, for always pushing me to do better.

To my parents, Anne and Joseph Burke, who I wish were here now to celebrate this with me.

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This thesis follows the format prescribed by the Publication Manual of the American Psychological Association (APA), Seventh Edition.

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## **CHAPTER ONE: INTRODUCTION**

### **Professional Development**

The goal of professional development (PD) for teachers is to address needs of both the teachers, and indirectly the students, within the school setting. PD is provided by a variety of agencies, such as schools, districts, professional organizations, consultants, universities, Intermediate School Districts (ISDs) and teacher associations. Typically training models like workshops, conferences, in-service training, and graduate courses are used for PD to assist educators in improving student learning and teaching practice (Ganser, 2000).

Changes in educational policy and practice have increased expectations on educators to improve student learning and focus on student achievement. Legislation, including No Child Left Behind (2002), and Individuals with Disabilities Education Act (IDEA) emphasized more focus on the research-to-practice implementation (IDEA, 2004). Teachers are expected to use evidence-based practice to address the needs of their students and as the student need intensifies, teaching strategies have to evolve. Moreover, the rapidly changing technology and recent use of brain research to meet the needs of students with increasingly diverse backgrounds are influencing the content of professional development (Kedzior & Fifield, 2004).

Intermediate School Districts (ISD) and school district leaders, including central office and building level administrators, are charged with designing PD programs for the educators to participate in throughout the school year (Perry, 2019). The needs of the students and the staff in the schools are reflected in the content of the PD. The obligation to design PD rests on the ISDs and administrators as they are closely immersed with the students and educators.

It is a challenge for school districts to provide effective PD; to meet the variety of staff and student needs can be problematic. Using professional learning that addresses the adult learner, and changes the teacher's practices in order for student learning outcomes to improve can be effective for both staff and students (Trotter, 2006).

Ganser (2000) described important components to keep in mind when planning professional development which included, the content, the process, and the context. The content should focus on specific supports to address the central issues teachers experience daily. Professional development should directly relate to student achievement and teacher development with an unequivocal line to improved practice.

The process in which administrators develop PD differs depending on the population of students. Key factors that contribute to student learning, regardless of the process, are important to identify when planning professional development. The culture and community in which the school resides impacts the context of professional development. As Ganser (2000) explains, accessibility to resources and activities for educators are important to consider. Continuous improvement of the individual, school, and organization should be a goal for effective professional development.

Effective professional development addresses how and what teachers learn (Darling-Hammond et al., 2017). As research continues in that area of designing professional development, Darling-Hammond et al. (2017), found seven characteristics for effective PD:

1. Is **content-focused**
2. Incorporates **active learning** utilizing adult learning theory
3. Supports **collaboration**, typically in **job-embedded contexts**
4. Uses **models and modeling** of effective practice

5. Provides **coaching and expert support**
6. Offers opportunities for **feedback and reflection**
7. Is of **sustained duration** (p. 4).

In addition to the focus on effective PD, legislation through the Individuals with Disability Education Act (IDEA) (2004) stresses the importance of using scientifically-based practices in schools.

### **Individuals with Disabilities Education Act**

IDEA (2004) is a federal statute that protects the rights of students with disabilities and guardians and ensures access to free and appropriate public education for students who receive special education services. This statute also includes that all children identified with a disability, ages 3 to 21 will receive programming to address their needs. The use of effective practices when educating students with identified disabilities is one purpose of IDEA (2004).

As IDEA (2004) reaches the public-school sector, districts are required to provide services to students ages 3 to 21 that address their unique needs. This requires districts to have practices and processes in place to both identify and educate students with disabilities within the school setting. This requirement results in extensive training for educators and other school personnel to best meet the needs of these students. IDEA (2004) stresses the importance for the use of scientifically-based research. The use of scientifically-based research, requires districts to use interventions that must be strongly supported by evidence from well-conducted research studies. The evidence-based interventions, do not require the systematic and investigative process research-based practices include but, evidence-based practices were reached through the medium of research. The two terms are related, as evidence-based is dependent on the research

completed. As a result, IDEA (2004) requirements are impacting the model of instruction educators are using and the types of professional development needed for educators.

When identifying a student with a disability, an evaluation process occurs to identify which eligibility they would qualify for. The state of Michigan has 13 eligibilities a student can qualify under to receive special education services. One of those eligibilities is Specific Learning Disability (SLD) (MARSE, 2013). IDEA (2004) established the criteria for identifying a student with a SLD. One of the criteria needed for a student to have a SLD is documented continued regression, or lack of progression when exposed to high quality, evidence-based instruction and interventions. With these criteria, districts can discriminate between the students who are struggling due to a disability versus those who impacted because of lack of consistent, effective, evidence-based instruction (MDE, 2020).

It can be difficult to create the procedures, practices, and policies needed to address what using data-driven systems with evidence-based practices would look like. However, one comprehensive framework has been developed that incorporates a data-driven approach with the use of consistent evidence-based interventions and it meets the needs for the SLD evaluation process. That framework is the Multi-Tiered System and Supports (MTSS) (MDE, 2020).

### **Multi-Tiered System of Supports**

A Multi-Tiered System of Supports (MTSS) model addresses part of the federal statute IDEA (2004). MTSS is a model used to provide a process based on a student's response to scientifically-based research interventions so educators are better able to differentiate between students who are struggling because of inadequate instruction and those who are struggling because of a suspected disability (Werts et al., 2014). MTSS derived from the Response to

Intervention (RtI) and School-Wide Positive Behavior Intervention and Supports (PBIS) models commonly used in public schools (MDE, 2020).

RtI continues to be a key essential element to the implementation of MTSS. It includes a tiered delivery of services and supports to address student need (MDE, 2020).

MTSS includes the PBIS framework that uses a proactive approach to creating a safe and effective school (MDE, 2020). Focusing on prevention of problem behavior through the development of prosocial skills is a key component of PBIS. A school using PBIS would use data-based interventions to address problem areas, concerns, students, and interventions using school-wide, classroom-wide, and student-specific supports. The goal of PBIS is to decrease disciplinary referrals, and address the behavioral needs of students (MDE, 2020). PBIS focuses on skill building for students in order for them to demonstrate appropriate behavior, remain in school, and limit their violations of the student code of conduct in order to avoid chronic suspensions or removals from school (MDE, 2020). There are five essential components when implementing the MTSS framework to ensure valid implementation and adoption; (a) team-based leadership, (b) tiered delivery system, (c) selection and implementation of instruction, interventions and supports, (d) comprehensive screening and assessment system, (e) continuous data-based decision making (MDE, 2020).

**Team-based leadership.** Team-based leadership is the first of five essential components. The team-based leadership component is when a group of knowledgeable educators within a district or building collaborate to provide whole-child support to align the district with the framework (MDE, 2020). This includes supports that address the child's social, emotional, academic, and behavioral needs. This team has authority and responsibility to lead and coordinate MTSS implementation across the district. Monthly meetings are expected of this team

to review the status of MTSS related activities, ensure appropriate actions are taken to reduce barriers to successful implementation and to support school level MTSS data systems and processes. The team is composed of key stakeholders, including school leadership, data personnel, general and special education educators, families, or other identified stakeholders (MDE, 2020). The collaboration of these professionals contributes to successful implementation of MTSS and learner achievement.

**Tiered Delivery System.** The second essential component is the tiered delivery system. This tiered delivery system is a responsive framework that provides interventions to meet the whole child. There are three tiers and they are intended to be layered with intensification of supports matched to the students' needs. This has been referred to as Response to Intervention (RtI) (MDE, 2020). Tier 1 is the universal instruction designed to meet the needs of all learners. This tier typically addresses 80% of the student population the needs of students who need no further intervention. Tier 2 is the first intervention platform that contains supplemental or targeted interventions for students who require support beyond the universal design that tier 1 offers. Tier 3 supports those students who demonstrate a severe and persistent academic or nonacademic need that requires individual interventions. These interventions could include one-on-one counseling services, special education services, or positive behavioral interventions (MDE, 2020).

Students may receive all three tiers within their day. For example, a student could receive tier 1 support in their general education classroom, tier 2 support with a reading interventionist, and tier 3 support in the form of weekly meetings with the counselor for emotional needs. The tiers are intended to be fluid and overlap instead of a ladder that a student's needs must climb (MDE, 2020).



**Selection and Implementation of Instruction, Interventions and Supports.** Selecting instructional practices, interventions, and supports that address the learner’s needs is the third component of MTSS. The district should have an initiative inventory of various practices, interventions, assessments, supports, and mandates to provide clear options for educators to use (MDE, 2020). The district or building team should have a written process that includes this inventory so it aligns with the building or district vision.

**Comprehensive Screening and Assessment System.** Each school building or district should implement a comprehensive assessment system that coordinates multiple assessments and measures that are both valid and reliable. A comprehensive screening and assessment systems are the fourth essential component of MTSS (MDE, 2020). The comprehensive assessment system should use an outcome-driven approach that provides monitoring and evaluation of students' needs. District or building teams are responsible for providing guidance on assessments, the development of a written process, explaining the assessment and screening options, and administration directions for those assessments (MDE, 2020).

**Continuous Data-Based Decision Making.** The last essential component of MTSS is the requirement for continuous data-based decision making. To address the needs of the whole child a system of data to analyze, evaluate, and plan strategies that support sustainable and systemic improvement is needed (MDE, 2020). Data-based decision making includes data collection practices from multiple data sets that are reviewed regularly. The district or building team determined the effectiveness of the data collection system and the needs and progress of learners three times a year. The team ensures time and resources are allocated to support continuous data-based decision making (MDE, 2020).

Implementation of these key components requires expertise in a variety of areas (Mason et al., 2019). Research used to develop best practices are not often implemented or identified by teachers without teacher training or learning (Mason et al., 2019). Practitioners using MTSS have identified a research-to-practice gap that occurs when evidence-based interventions are expected to be adopted by educators (Hagans & Powers, 2014). Practices that have little evidence or are not based in research (e.g., grade retention) continue to exist in the public-school setting. In addition, interventions that have been proven to be effective by scientific research are not implemented as intended. These factors are leading researchers to explore barriers that may exist when implementing MTSS (Hagans & Powers, 2014).

### **Justification of Study**

Barriers that exist when implementing and practicing the MTSS model hinder fidelity of the framework (Perry, 2019). When MTSS is not implemented with the integrity (methods that are honest and verifiable) and sufficiency (accomplishing the required objectives) needed, student populations are negatively impacted. In turn, this impacts a school's ability to discriminate between students who have a disability and those who need least restrictive evidence-based interventions to succeed, as outlined in the RtI framework. Barriers impacting implementation or practice hinder students' access to progress (Werts et al., 2014). Many factors, including professional development become one of the key components of implementing a successful MTSS model.

### **Purpose of the Study**

The purpose of the study is to examine barriers identified by teachers during the early stages of training when initiating an MTSS model in effort to provide administrators with feedback. Extensive training, PD, and coaching is required for a school district to adopt and

implement MTSS. IDEA (2004) calls for a framework to be in place to meet the needs of students with disabilities and to better identify their disability. Examining barriers at the early stages would inform district leadership early on of the perception's educators are having in regards to MTSS and, in turn, create opportunity to address perceptions.

### **Research question**

What barriers exist when initiating an MTSS model in a rural school district?

### **Theoretical Framework**

**Social Learning Theory.** Social learning theory is the theoretical framework underpinning this study. Social learning theory provides a theoretical approach that integrates both the cognitive aspects and the social effects on learning (Watson, 2013). Adults demonstrate self-efficacy skills, which means they believe they have the capability to execute behaviors needed to perform skills or activities to meet expectations. Educators have the opportunity to use their self-efficacy skills when learning in social situations through professional developments and training. One aspect of the social learning theory is observational learning. Adults construct and choose behaviors that are influenced through observation. When learning through observation, adults will demonstrate or model the behaviors that they believe will help them be successful (Watson, 2013).

To create impactful observational learning, and individualized approach is necessary. This individualization should consider the adults' prior experiences and knowledge. Introducing new knowledge to adults requires a renegotiation of behaviors. The success of this new knowledge and application of the knowledge is dependent on the adult's prior knowledge and self-efficacy skills (Watson, 2013).

The teacher's view of their own self-efficacy in relation to their motivation and confidence impacts their ability to acquire and practice new knowledge (Watson, 2013). Prior knowledge impacts the level of observational learning and the social effects on their learning. Teachers' experiences and attitudinal qualities influence their reaction and perceived benefit of PD (Mason et al., 2019). Beginning level educators require extensive modeling in combination with exposure to content knowledge to increase self-efficacy and demonstrate the expectations of the PD. Veteran teachers come to training or PD with extensive prior knowledge and they have had the opportunity to put those observed behaviors into practice.

### **Researcher Positionality Statement**

The researcher proposing this study is a special education teacher at a rural elementary school in the district that is involved in this study. This district is rural based on the National Center for Education and Statistics (2006). The researcher is in her eleventh year as an educator and is employed in the rural district where the MTSS framework is being initiated. The researcher is a white, thirty-two-year-old female and has two children who attend an elementary school in the district.

## CHAPTER TWO: REVIEW OF LITERATURE

Researched literature related to teacher professional development includes both large- and small-scale studies (Desimone et al., 2002). There is a substantial amount of research surrounding best practices and using expert knowledge to change teaching practice through PD (Desimone et al. 2002). Using evidence-based methods in the classroom is now an assumed skill set as teachers endeavor to improve student learning in the classroom. In order to support teachers creating classroom learning that is based on research, professional development must be impactful enough for the educators to be effective in their profession.

Mason et al. (2019) identified a research to practice gap within educators and their PD. Evidence-based interventions and practices often remain unavailable to practitioners. Barriers present themselves as educators, administrators, and other school personnel navigate the expectations surrounding professional development. When applying this to the MTSS framework, it requires schools and educators to shift many current processes, procedures, and practices. This expectation requires extensive training with procedures and policy change in a school district (MDE, 2020).

Adopting MTSS in a district has been found to be difficult and overwhelming (Mason et al., 2019). However, the benefits of adopting MTSS includes growth in student achievement and decreased student removals (Perry, 2019). Components of MTSS meet the requirements of IDEA (2004); it allows for teachers to meet the unique needs of the students with identified or suspected disabilities.

**Specific Learning Disability.** One of the components that led to the development of the MTSS model comes from, as Werts et al. (2014) explained, “Decades of dissatisfaction with procedures and practices of determining eligibility for students with specific learning disabilities” (p. 1). In the state of Michigan, in order for a student to qualify for special education services the student needs to be identified as having a disability in one of thirteen areas (MARSE, 2013). Specific Learning Disability (SLD) is one of the thirteen areas. SLD is defined as,

a disorder in 1 or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations (MARSE, 2014, p. 37).

In order to determine eligibility for SLD a Multidisciplinary Evaluation Team (MET) must use one of two evaluation methods to support qualification. The first option to determine eligibility for SLD is analyzing data provided by members of the evaluation team to identify if the student has “a pattern of strengths and weaknesses in performance, achievement, or both, relative to age, state approved grade-level standards, or intellectual development” (MARSE, 2014, p. 37). Fiorello et al. (2014) explored the use of patterns of strengths and weaknesses (PSW) as a tool to identify students with SLD, finding that using a pattern of strength and weaknesses in conjunction with an MTSS model would better identify students who have an SLD. McGill et al. (2016) examined several deficits with using a solo-PSW model to determine

SLD. The deficits found were lack of consistent methods used by psychologists, lack of training, specifically with the use of multiple sources of data dependent on clinical judgment. Further research is needed to determine if PSW is the most reliable evaluation strategy (McGill et al., 2016).

The second evaluation method used for determining SLD, is identifying if the student is continuing to make insufficient progress in one or more academic areas when exposed to “scientific, research-based interventions” (MARSE, 2014, p. 37). If the student is not making sufficient progress, then the student would qualify for special education services under SLD. Further, according to MDE (2020) the RtI model from MTSS, when implemented with fidelity, is sufficient enough to provide the evaluation team with the necessary data to identify students who need more intense intervention through an Individualized Education Plan (IEP) with special education services under the eligibility of SLD (MARSE, 2014). IDEA (2004) steered districts to implement responses to scientifically-based research interventions to assist educators in differentiating between struggling learners and inadequate instruction. Students in the tier 1 or tier 2 area of a tiered delivery system would show growth in their academic achievement with the exposure to evidence-based classroom interventions. A student who is not showing growth, or a non-responsive student, would need further intervention. Ideally, responsive students succeed in their learning due to the evidence-based teaching in the classroom. Non-responsive students would demonstrate a need for more intense instruction (Werts et al., 2014).

Due to the conflicting literature on PSW, districts are shifting towards the use of scientifically-based research interventions to justify students becoming eligible in SLD. This creates a district-wide shift to put the MTSS framework into practice. MTSS incorporates more than just the RtI strategies for SLD identification. MTSS addresses the whole child, including

their cognitive, physical, behavior, social, and emotional needs (MDE, 2020). MTSS provides educational settings with a framework to organize the processes and procedures for supporting students' learning. MTSS is not one specific intervention, it is referred to as a framework because the structure is designed to be used to create a district-wide systematic infrastructure where the outcomes are effective teaching and efficient use of evidence-based practices (MDE, 2020).

**Barriers.** Implementation of the MTSS framework requires extensive professional development, resource allocation, and support from leadership at the district-level and state-level. Literature has identified extensively the barriers that can prevent successful implementation (Hagans & Powers, 2019; Mason et al., 2019; Perry, 2019; Werts et al., 2014). Hagans and Powers (2014) developed a recommendation guideline to eliminate barriers when implementing MTSS in California. Key barriers included, school level beliefs and practices, pre-service preparation for teachers and administrators, and leadership including district-level and building-level.

Mason et al. (2019) participated in a partnership with eight elementary schools and university faculty. The goal of this partnership was to implement mathematics intervention through an MTSS framework. The eight elementary schools scored the lowest in the district on the state accountability mathematics assessment. Educators and administrators participated in 15 hours of PD to implement a system of intervention using data-based decision making to achieve evidence-based mathematics practices (Mason et al., 2019). A focus group interviews were conducted with school team, including administrators, instructional coaches, and teachers to identify barriers in implementing a mathematics MTSS. It was found that the groups of professionals identified staff time, knowledge base, school size, resources, and a change agent, as barriers to implementation (Mason et al., 2019).



Werts et al. (2014) surveyed 207 educators and 587 statements from the educators were coded to identify barriers when implementing RtI, a foundational principle of MTSS. A common theme throughout the participant statements was the burdensome process and time MTSS takes for educators. The amount of data required to drive instruction and programming in addition to the increased time dedicated to meetings, collaboration, and conversations led teachers to feel that MTSS was cumbersome and difficult to implement. Attitudes of teachers shifted with the requirements expected to put MTSS into place. Teachers noted that when they used MTSS instead of their previous practice of referring students to a special education evaluation without data-based decision making, it created more work for them (Werts et al., 2014). Perry (2019) and Mason et al. (2019) found staff resistance impacted the success of MTSS and was a barrier to implementation. Staff knowledge base, buy in, and readiness skills demonstrated attitudinal qualities that did not transfer into successful training.

The school climate, or trend of educators' opinions, impacts a school's ability to implement MTSS successfully (Mason et al., 2019). If educators' knowledge base, skills, or beliefs are not aligned with the skill set needed to implement MTSS with fidelity, errors can occur (Perry, 2019). Hagans & Powers (2014) explained that if school personnel have skill deficits, motivation deficits, or don't feel MTSS will make a difference in their school, MTSS will not be beneficial in the way it is intended to. Perry (2019) identified the barrier as the need to consider school personnel's current knowledge, skills and beliefs.

Various amounts of training were provided to the educators in the literature discussed previously, however lack of training was found to be a barrier in that same literature (Hagans & Powers, 2019; Mason et al., 2019; Perry, 2019; Werts et al., 2014). A key component of MTSS is professional development and training for educators and other school personnel (MDE, 2020).

Training can vary between a few days of in-service training to a year-round MTSS coach that is employed through the district or university partnership.

Hagans and Powers (2014) proposed training to promote a better common foundation in the content is necessary prior to specializing in content or implementing a MTSS framework. Mason et al. (2019) found a research-to-practice gap, and teachers identified the need for ongoing coaching or training throughout the implementation. Werts et al. (2014) found teachers had a lack of training, specifically general education teachers, and felt administration needed to identify and meet the needs of teachers who were struggling with implementation of MTSS.

Frustrations with leadership was a common theme and barrier across literature (Hagans & Powers, 2019; Mason et al., 2019; Perry, 2019; Werts et al., 2014). Educators identified the need for school administrators to continue to provide resources for teachers. Data-collection consistency, using common programs was identified as a problem area for implementation for teachers. When leadership did not prioritize training and consistency with programs, MTSS was not implemented with fidelity. Lack of ongoing training and coaching was included in this barrier that educators viewed as a responsibility of the administrators to arrange (Mason et al., 2019). The commitment level from administrators was aligned with this barrier. Educators found it difficult and found themselves unmotivated to use the MTSS framework due to lack of engagement from administrators (Werts et al., 2014). Research indicates establishing the need for change among major stakeholders before proceeding with system changes. Administration needs to demonstrate collaborative qualities to better represent the needs of the educators and students with developmental goals for MTSS stakeholders (e.g., university faculty) (Hagans & Powers, 2019).

In summary, educators identified barriers that included, school level beliefs and practices, lack professional development and training, lack of resources, and leadership.

### CHAPTER THREE: METHODS

The purpose of this a descriptive survey along with semi-structured interviews with key informants, is to identify perceptions of educators when implementing an MTSS model in a rural school district.

**Survey.** The first data source was a descriptive survey designed to identify barriers when implementing an MTSS model in a rural K-5 elementary school and 6-8 middle school. The district is undergoing a three-year transition to the MTSS framework. A PD plan is being established during those three years that will focus on the adoption and implementation of the MTSS framework. District staff, the local ISD, Northern Michigan University, and support from the University of Minnesota launched this process in the winter of 2022 with introductory training for staff.

The researcher used a survey to assess perceptions of a population of educators within the district. A survey instrument was chosen due to the desire for the sample to participate anonymously (Creswell, 2020).

The survey identified educators' perceived barriers when initiating an MTSS framework in a rural school district. Based on the review of literature, previous researchers have found barriers when implementing the MTSS framework and the impact those barriers have on student success (Hagans & Powers, 2019; Mason et al., 2019; Perry, 2019; Werts et al., 2014).

Educators at four elementary schools and one middle school were contacted and recruited to participate in the survey. The population of educators included content area teachers, general education teachers, elective teachers, special education teachers, ancillary services providers (speech-language pathologists, occupational therapists, and physical therapists), and Title I teachers.

In following basic practice of ethical survey research, a brief overview of the researcher's study and purpose was sent to teachers via their school district provided email (Fowler Jr., 2014). The teachers were emailed a survey link to participate anonymously. An incentive was given through a random drawing for teachers who elected to identify that they participated through a confidential sign-up. The incentive was given to the teacher whose name was randomly drawn by the researcher, in private, to ensure confidentiality. This was articulated through the original email. Building and district administration are aware of this study and will receive the findings.

The survey was dispersed in April 2022 to all educators at the five schools. The survey was open for two weeks. It was shared three times over the course of the two weeks in an attempt to increase participation. Data were analyzed from May 2022 to August 2022.

When the survey was open, the researcher identified the number of completed surveys every 48 hours. Reminders to complete the survey was sent via email to the educators one week prior to the survey closing date and again two days before the survey closing date. The drawing for the incentive took place the day after the survey closed to ensure immediate reinforcement.

The survey consisted of 13 questions. Eleven of the questions were fixed-choice questions. The first question asked for the years of teaching experience the participant has. Ten of the fixed choice questions used a five (5) point Likert scale. Strongly Disagree = 1 Disagree = 2, Neither Agree nor Disagree = 3, Agree = 4, Strongly Agree = 5. Descriptive statistics were completed on the fixed choice questions. The researcher used summary statistics to find the mean, median, and confidence interval in responses. Summary statistics provided the researcher common readiness, perceptions, and attitudinal qualities in the educators' answers. Data was organized using Microsoft Excel Spreadsheet program.

Open-ended questions were reviewed by the researcher and sorted into thematic areas (Braun & Clarke, 2006). Braun and Clarke (2006) outline the six phases to using a thematic analysis on qualitative data. In the first phase, the researcher familiarized herself with the data, which included reading through all the responses. During phase two the researcher generated initial codes, which included short phrases and key words. Phase three began when all the data was coded and collated and the researcher had a list of codes to use. From the codes the researcher derived themes. At the end of this stage, a collection of main themes and sub-themes were available to the researcher. During the fourth phase a comparison of themes against each other took place to see if the themes related, and if there was enough data to support the themes, or if it was necessary to create a new theme. Phase four blends into phase five where the researcher defined what each theme meant and gave definition to the identified themes. In the final phase, phase six, the researcher provided a written discussion of the data after the final analysis. This write up provided evidence of themes and an analytic narrative of the data. This data was used during the semi-structured interviews. The anonymous survey results and data will be held on the researcher's password protected computer to ensure confidentiality (Fowler Jr., 2014). Using both qualitative and quantitative data the researcher drew conclusions about the perceptions of barriers the educators have for implementing MTSS.

**Semi-structured interviews.** In August of 2022 semi-structured interviews were conducted with identified teacher-leaders from each school building. In the fall of 2021, during the early stages of MTSS training, two teacher leaders from each of the four elementary school, and two teacher leaders from the middle school, were selected by district administration to take part in 10 three-hour sessions. Those teacher leaders were asked via email to participate in an interview regarding the topic of MTSS and educators' perceptions in the spring and summer of

2022. Participants who agreed signed a consent form documenting they understand that the interview is voluntary and confidential. The interview was conducted in classrooms, in-person, in a one-on-one setting.

The interviews were recorded and transcribed on the researcher's computer. Brief notes were taken during the interview by the researcher. The semi-structured interview questions are provided in Appendix D. The purpose of the interview was to member-check the survey data. There are four big-idea questions with some probing questions within. The interviewer asked leading questions to extend data and corroborate the survey findings. The interviews were semi-structured which allowed the researcher to adapt the question based on the participants responses.

Braun and Clarke's (2006) six phases for thematic analysis was used on the qualitative data from the transcripts and handwritten notes. This data was analyzed the same way the qualitative data was analyzed from the two open-ended questions. Braun and Clarke (2006) outline the six phases to using a thematic analysis on qualitative data. These interview transcripts went through a thematic analysis completed by the researcher. The researcher familiarized herself with the data, as she was active participant in the interview, took brief notes, and asked the questions during the interview. Transcribing the verbal data completed phase one. During phases two through three, the researcher generated initial codes, data was coded and collated, and a collection of main themes and sub-themes were available to the researcher. During the fourth phase a comparison of themes against each other took place to see if the themes related. In phase five the researcher defined what each theme meant and gave definition to the identified themes. At the end, in phase six, the researcher provided a written discussion of the data after the final analysis. This write up provided evidence or support of new themes or previously identified

themes from the survey. The founded themes from the data identified barriers teachers had when implementing the MTSS framework.



## CHAPTER FOUR: RESULTS

### Quantitative Results

This mixed methods study examined the perceived barriers educators identified during the early stages of training when implementing an MTSS model. Quantitative data was gathered through a survey. The 13-question survey had two open-ended questions and 10 fixed-choice questions that used a five (5) point Likert scale; Strongly Disagree = 1 Disagree = 2, Neither Agree nor Disagree = 3, Agree = 4, Strongly Agree = 5. The survey was sent to staff from four elementary schools, grades kindergarten through fifth, and one middle school, grades sixth through eighth. The survey was open for 14 days to approximately 120 educators and produced 58 responses. The researcher used summary statistics to analyze the findings.

Quantitative data derived from the fixed-choice questions identified teachers' previous knowledge, experience, and perceptions of implementing MTSS. Table 1 provides detailed summary statistics resulting from survey responses. The researcher used a 95% confident interval to identify how far away the populations answers would vary from the mean. This was used to better identify if there was or was not a large variation in answers, to determine the reliability.

The results included, two survey questions that asked participants whether they felt MTSS would benefit MAPS students and this response had the highest mean of 4.33 ( $\pm$ .176), reflecting participants agreeing with that statement (Table 1). When asked whether the participants believe MTSS will benefit educators, the mean response result was 4.19 ( $\pm$ .176) reflecting participants agreed with that statement. In questions where participants identified whether they used and feel confident with RTI and PBIS, the survey responses show a mean of 3.76 ( $\pm$ .196) which reflected that 95% of answers were within the "Neither Agree nor Disagree"

to “Agree” (Table 1). Questions that addressed whether the participants felt they had the time and leadership support to implement MTSS had a mean of 3.26 ( $\pm.254$ ) and 3.33 ( $\pm.215$ ), resulting in a range of “Neither Agree nor Disagree” to “Agree”. It should be noted that the question regarding whether participants have the resources to implement MTSS, the mean of 2.6 ( $\pm.215$ ) was the only mean between “Disagree” and “Neither Agree nor Disagree.”

Table 1

*Fixed Choice Survey Responses. Survey response options were: 1- Strongly Disagree, 2- Disagree, 3- Neither Agree nor Disagree, 4- Agree, 5- Strongly Agree*

Survey Fixed Choice Questions	Mean	SD	Variance	SE	Count	Upper 95% CI	Lower 95% CI
1. I use Response to Intervention (RtI) in my teaching practice.	3.98	0.84	0.71	0.11	58	4.2	3.76
2. I am confident in using RTI.	3.76	0.75	0.56	0.1	58	3.95	3.57
3. I use School-Wide Positive Behavior Intervention and Supports (PBIS) in my teaching practice.	3.76	0.93	0.87	0.12	58	4	3.52
4. I am confident in using PBIS.	3.9	0.86	0.75	0.11	58	4.12	3.68
5. I find MTSS training applicable and useful to my teaching practice.	3.86	0.9	0.81	0.12	58	4.09	3.63
6. I have time to successfully implement MTSS.	3.26	0.97	0.95	0.13	58	3.51	3.01
7. I have the resources necessary to implement MTSS.	2.6	0.81	0.65	0.11	58	2.81	2.39
8. The leadership through the support of guidance of University of Minnesota will be able to support me when adopting the MTSS model.	3.33	0.86	0.74	0.11	58	3.55	3.11
9. Adopting the MTSS framework will benefit MAPS students.	4.33	0.65	0.43	0.09	58	4.5	4.16
10. Adopting the MTSS model will benefit MAPS teachers.	4.19	0.68	0.46	0.09	58	4.37	4.01

Quantitative results indicated that participants felt confident and have knowledge of foundational practices in MTSS. In addition, participants expressed that they feel MTSS would benefit MAPS students and staff. Results also indicated that participants feel significantly different when asked if they have the time and resources to implement MTSS.

Questions one through six on the survey asked about the participants' confidence and knowledge of both PBIS and RTI. Figure 1 identified the means and their upper and lower confidence intervals for all fixed choice questions. The mean results indicated that participants' responses ranged between "Neither Agree nor Disagree" to "Agree" when asked if they are using and confident in using RTI and PBIS, two foundational principles of MTSS (Figure 1). Data shown in Figure 1 demonstrated that participants' responses ranged between agreeing and strongly agreeing that adopting the MTSS framework would benefit MAPS teachers and students. When participants were asked in questions six through eight whether they felt they have the time, resources, and leadership, the means ranged between disagree and neither agree nor disagree. There is a discrete difference in the data between the answers regarding the confidence, knowledge and attitude qualities and the data from the questions regarding time, resources, and leadership. Figure 1 shows that the confidence intervals do not overlap in these questions, illustrating a very important distinction between the two groups of answers. The qualitative theme of lack of time and resources aligns with the quantitative findings displayed in

Figure 1.

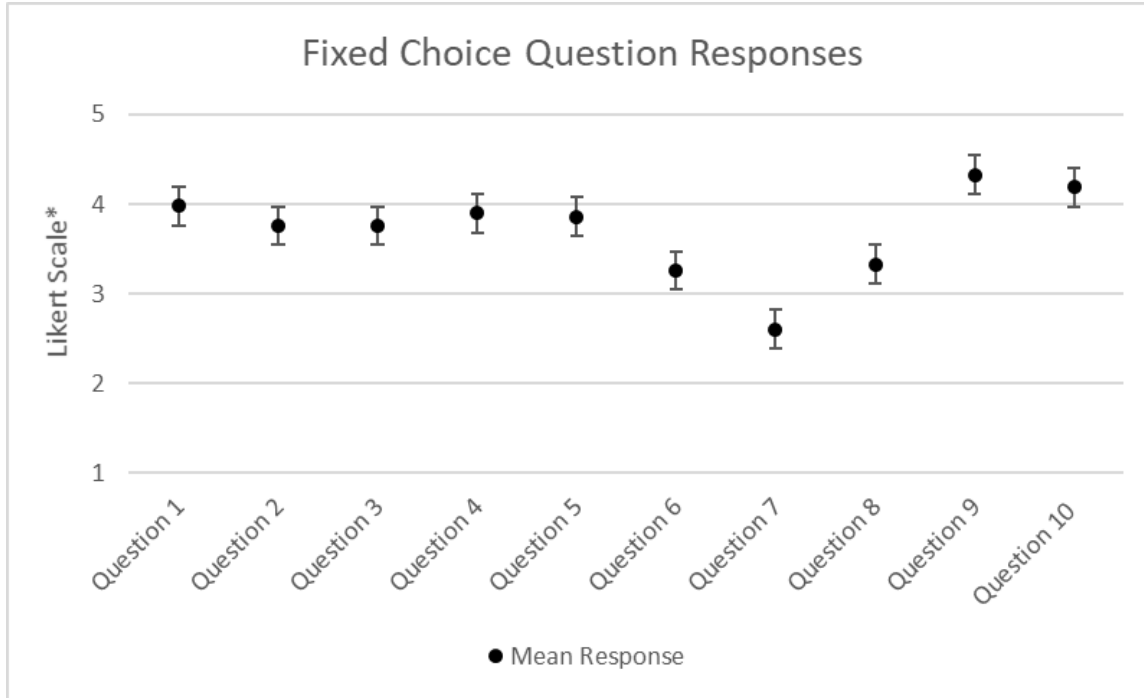


Figure 1: This figure shows the mean responses for the fixed choice survey questions.

\*1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree

### Qualitative Results

Qualitative data was collected using two different sources first, through two short answer questions on the survey and, second using semi-structured interviews with teacher-leaders identified by district administrators. Of the 58 survey participants, 100% of the participants answered the two open-ended questions: “What factors would hinder successful implementation of MTSS in your school? Please elaborate in three or more sentences.” and “Based on the factors you mentioned above, what would prevent those factors from hindering a successful implementation?” A qualitative thematic analysis was completed on the 116 answers from these questions. Using the open-ended survey data, the researcher sorted responses into thematic areas

(Braun & Clarke, 2006). The results of the short answer responses revealed four themes: (a) lack of time; (b) lack of training; (c) lack of resources; and (d) personnel buy-in (Appendix E).

The second data source, semi-structured interviews were completed with teacher-leaders. The proposed plan for this study included interviewing 5-10 teacher leaders. Due to the lack of participants, outlined further in the limitations of this study, only three interviews took place. This adjusted the format of the interviews and the questions.

The interviews were conducted in the teacher's classrooms. The interviews were recorded and then transcribed on the researcher's computer. The interviews consistent of four questions with additional probing questions. This researcher developed the four interview questions with probing questions, using member checking, based on initial findings from the fixed-choice questions and open-ended questions in the survey. These initial themes and ideas led the conversation throughout the interview. The expansion on the initial themes and codes integrated the qualitative and quantitative findings into the interview. The researcher used Braun and Clarke's (2006) six phases of thematic analysis on qualitative data. Transcriptions of interviews along with the brief notes taken by the interviewer, were coded and collated. Themes and sub-themes were identified, compared against one another, and given definitions. The results of the interviews identified two themes: (a) concerns with personnel buy-in; and (b) concerns with lack of time. In what follows, I will describe the results of the thematic analysis by providing evidence from the fixed-choice survey options, followed by evidence from the open-ended survey items, and then results from the semi-structured interviews.

**Lack of Time.** Survey results show that 24.8% of participants identified lack of time as a perceived barrier (Appendix E). Open-ended statements included a need for more time during both their work day and additional professional development sessions in order to successfully

implement MTSS in the MAPS district. Participants expressed a desire for sufficient time to learn the strategies, implement the strategies, and collaborate with team members. Current workload or daily expectations were mentioned to interfere with the time required to implement a new initiative. Interviews were consistent with this finding. Lack of time was also found as a perceived barrier from the interviewed participants. An interviewee stated, “I think always lack of time. Teachers already don’t have enough time to do what they want” (Participant #1, personal communication, August 18, 2022).

**Lack of Training.** Survey results show that 20% of participants feel lack of training would be a barrier to successful MTSS adoption (Appendix E). Participants’ responses included desires for specific aspects of training like adequate PD, intensive training, continued training, and sequenced training. One respondent wrote, “We need intensive PD on this. All buildings need to receive the same message and trainings on this.” Of the surveyed participants, 22.7% identified that providing training would prevent unsuccessful implementation. Keywords like, *adequate, clear plan, intentional, and quality* were mentioned in conjunction with the types of training that would prevent unsuccessful implementation.

**Lack of Resources.** Survey results show that 17.7% of participants perceived lack of resources as a barrier (Appendix E). This overarching theme was developed from the code words like money, personnel, materials, and equipment that were used in conjunction with the word resources. Teachers felt resources were necessary to implement the MTSS framework. A respondent wrote, “Staff need resources to implement with fidelity, consistently across the district” and others used phrases like, ‘lack of,’ and ‘not enough’ joined these codes to contribute to this overarching theme. Resources were not identified as a theme in the semi-structured interviews. Of the respondents for the short answer questions, 22.7% expressed that providing

resources, which included money, personnel, and materials, could help prevent unsuccessful implementation.

**Personnel Buy-In.** Survey results show that 16.2% of participants perceived issues with personnel, staff buy-in, and attitudes as a barrier when implementing MTSS (Appendix E). This theme was found in both the short answer survey questions and the interview questions.

Interviewees identified that staff attitudes and buy-in would be the most influential factors in successful implementation. Comments like, “If they don’t agree with it, they're definitely not going to put forth the effort to make it run smoothly...” and, “You can have all the resources, all the time, and all the training, but if the staff isn’t buying-in, it doesn't matter” (Participant #2, personal communication, August 18th, 2022; Participant #3, personal communication, September 2nd, 2022).



## CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS

### Overview

MTSS continues to expand into schools across the state of Michigan (Newell et al., 2021). Results from this study align with the findings in the reviewed literature in Chapter Two of this study. The purpose of this study was to examine the perceived barriers identified by teachers during the early stages of teacher training when initiating an MTSS model. Using a mixed-methods approach through the use of a survey and semi-structured interviews, results indicated four main themes as perceived barriers; (a) lack of time; (b) lack of training; (c) lack of resources; and (d) personnel buy-in.

Mason et al. (2019) found barriers which included time, staff resistance, lack of training, and lack of leadership as barriers through the survey they conducted. However, the most prevalent barrier they found was time. Time to implement, train, and collaborate was a perceived issue. This aligns with the findings of this study, as lack of time was the most prominent barrier for qualitative data from the survey responses and interviews. This study also found personnel buy-in which is similar what Mason et al. (2019) found with staff resistance. Lack of training was found as a barrier in both this study and Mason et. al (2019). This study did not identify leadership as a perceived barrier but it should be noted that leadership was an initial code during the qualitative analysis but there was a small number of responses that included lack of leadership or issues with leadership as a perceived barrier and therefore did not continue through the analysis as an overarching theme. When educators were asked what could be done to prevent barriers, leadership actions were found in 15.5% of the response.

The identified theme of personnel buy-in is likewise with the theme of school-level beliefs that Hagans and Powers (2019) found. However, Hagans and Powers (2019) school-level belief barrier was centered around the concerns from educators regarding the skill-level needed to implement MTSS, and the overall attitude of educators having satisfaction with current practices. In contrast, the theme of personnel-buy in from this study was derived from educators who identified that this could be “just another fad” or educators did not think MTSS will work for the district (Participant #3, personal communication, September 2nd, 2022). While both themes are centered around educators’ perceptions of the MTSS framework, the core reasoning differs.

Lack of time was a continued barrier in both this study and Werts et al. (2014). Werts et al. (2014) surveyed educators regarding the implementation and adoption of the RtI process. The RtI adoption was perceived as a burdensome process that would take a significant amount of time and was perceived as a barrier from the surveyed educators (Werts et al., 2014). Similarly, this study found teacher attitudes, or lack of teacher buying as a barrier for successful implementation. Although, this study did not find knowledge gaps as a barrier as Werts et al. (2014) did, the lack of training theme was similar. The barrier of knowledge gaps that was identified in Werts et al. (2014), was based upon the lack of training and previous knowledge in the educators who were surveyed. In this study, educators identified a high confidence level with the foundational practices of MTSS (RtI and PBIS), however they identified the need for more training and felt a lack of training was present and this resulted in an overarching theme.

## **Limitations**

The limitations to this study should be considered when applying these results to other populations of educators.

The study was completed two years after the COVID-19 pandemic shutdown in March of 2020. Educators burn-out has increased during this time, as virtual learning increased the expectations of teachers and families (Trinidad, 2021). Employee shortage constrained the availability of teachers and substitute teachers across the state (Kilbride et al.,2021).

Administrators and teachers were often forced to meet the needs of students with little to no additional resources (Trinidad, 2021). When the researcher reached out to administrators to identify teacher leaders to interview, a few administrators informed the researcher that they did not send teachers to the training; this was in part because of a lack of substitute teachers and employee shortage. When interviews were conducted all participants said they were not given time during the school day to watch the training videos and had to complete the videos on their own time. Participants also informed the researcher that they did not give their full attention to the videos and its content.

Of the teacher leaders who did complete the training videos, although seven were contacted, only three agreed to be interviewed. Due to the time of year that this study took place, interviews were held in the summer. Teachers did not respond to emails or they were not available to meet during the summer months. Due to the lack of participants available to interview, results may not reflect the perceptions all educators have. Further, the member checking structure of the interview questions was to cover the initial findings of the quantitative and qualitative data from the survey, which allowed the researcher to focus the interview topics and ideas around the results of the survey which reflected a larger population of educators in the

district. The nature of member checking in the interviews and the order in which the questions were asked primed the interviewees and may have influenced their responses to questions on the interview.

### **Recommendations for Future Research**

Research reviewed for this study took place prior to COVID-19; however, common barriers and themes continue to exist with and without the influence of COVID-19 on educators in schools. Further research is needed to establish the strategies districts can take to address these perceived barriers. If perceived barriers are present in educators in districts implementing MTSS, how were those eliminated, and what was the educators perceived success rate of MTSS in those districts? While this study provided district administration feedback on educator's perceptions, research has focused heavily on the impact of MTSS on student achievement and addressing student need, but little research has been done on educator's perceptions within those districts and the benefits or drawbacks for the educators using MTSS.

Avenues for further research could include, perception surveys, interviews, or focus groups of educators in districts who have gone through the MTSS training and are actively using the MTSS framework within their district. Educators throughout the K-12 level should be considered for this research to better identify the variety of needs, perceptions, and issues that could arise across all grade levels and content areas.

Specific to this study's findings, research could expand on the identified themes and the root causes. This could include what previous practices took place in districts and how those practices brought those themes forward. Why did teachers identify (a) lack of time; (b) lack of training; (c) lack of resources; and (d) personnel buy-in, as barriers? Research could look at what factors have caused these perceptions to develop and the relationship between past initiatives,

training, or similar framework adoptions. Looking at how previous professional development was given, and how that impacted these themes, would be a recommendation for future research. This recommendation preemptively addresses and provides solutions for the identified themes for future initiatives in order to limit perceived barriers and enhance student achievement.

## **Conclusion**

This study found four themes from the qualitative analysis; (a) lack of time; (b) lack of training; (c) lack of resources; and (d) personnel buy-in; that are perceived as barriers from K-8 educators who will be implementing the MTSS model. Quantitative data indicated that participants feel confident and are practicing foundational skills of MTSS. Quantitative results also demonstrated that teachers feel MTSS will benefit both staff and students. In regard to whether participants feel they have the time and resources, those results were significantly different and ranged between “Disagree” to “Neither Agree nor Disagree”. This quantitative data aligns with the perceived barriers found in the qualitative data. When barriers exist, it can hinder the fidelity of the MTSS adoption (Perry 2019). When barriers impact implementation, student achievement is affected (Werts et al., 2014). These results should be considered when districts plan professional development, training, and support to educators when implementing the MTSS model. The data contributes a clear understanding of how educators feel about the MTSS adoption and what they foresee as issues for the district moving forward. This data enables districts to initiate proactive approaches in addressing educators’ perceptions and attitudes towards the MTSS adoption in order to enhance successful implementation.

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## APPENDIX A

### Consent form for survey

*This is located on page one of the survey. Once consent is received, participants will be directed to the survey. If consent is not given, the participant will be directed to a disqualifier page.*

Northern Michigan University

School of Education, Leadership, and Public Service

Barrier When Implementing a Multi-Tiered System and Support

IRB Approval #: HS22-1261

Please read this consent form carefully. We are asking you to complete this survey in order to investigate some of the barrier's educators perceive when implementing a MTSS Framework at MAPS. This information will be shared with administration to better inform future professional development.

If you agree to participate, we would like you to provide honest answers and give as much detail as possible.

It will take you approximately 10 minutes to complete this survey.

Your part in this study is anonymous. That means that your answers to all questions are private. No one else can know if you participated in this study and no one else can find out what your answers were. Any reports will be based on group data and will not identify you or any individual as being in this project.

The risks from being in this study include the possibility of anxiety related to questions about your experiences.

You will not have any costs for being in this research study. You will not be paid for being in this research study. Taking part in this research study is completely voluntary. If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify. Risks to this study are minimal. Completing this survey would result in time away from other obligations of daily living which would be the only potential risk.

Any questions you have regarding the nature of this research project will be answered by the principal researcher who can be contacted as follows: Chelsea Norton (906-236-2671) [cnorton@mapnset.org](mailto:cnorton@mapnset.org) or [chburke@nmu.edu](mailto:chburke@nmu.edu) or Dr. Lisa Eckart of the Human Subjects Research Review Committee of Northern Michigan University (906-227-2300) [leckart@nmu.edu](mailto:leckart@nmu.edu).

To give consent below select "yes," if you no longer wish to participate in this study select "no."

## APPENDIX B

### Survey Sent to K-8 Educators

#### **1. How long have you been teaching?**

0-5 years

6-10 years

11-15 years

16-20 years

20+ years

#### **2. I use Response to Intervention (RtI) in my teaching practice.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

#### **3. I am confident in using RtI.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

#### **4. I use school-wide Positive Behavior Intervention and Supports (PBIS) in my teaching practice.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

#### **5. I am confident in using PBIS.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

**6. I find MTSS training applicable and useful to my teaching practice.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

**7. I have the time to successfully implement MTSS.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

**8. I have the resources necessary to implement MTSS**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

**9. The leadership through the support of guidance of University of Minnesota will be able to support me when adopting the MTSS model.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

**10. Adopting the MTSS framework will benefit MAPS students.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

**11. Adopting the MTSS model will benefit MAPS teachers.**

Strongly Disagree    Disagree    Neither agree nor disagree    Agree    Strongly Agree

**12. What factors would hinder successful implementation of MTSS in your school? Please elaborate in three or more sentences.**

**13. Based on the factors you mentioned above, what would prevent those factors from hindering a successful implementation?**

## APPENDIX C

### Interview Consent Form

Northern Michigan University

School of Education, Leadership, and Public Service

Barrier When Implementing a Multi-Tiered System and Support

IRB Approval #: HS22-1261

Please read this consent document carefully before you decide to participate in this study.

Dear [teacher name]:

#### Purpose of the research study:

I am writing to invite you to participate in a research study. The purpose of the study is to gather information about teacher perceptions when implementing a MTSS framework in a rural school district. I am inviting you to be in this study because you were identified as a teacher leader in your school and took part in the MTSS training in the Fall of 2021.

#### What you will be asked to do in the study:

If you agree to participate, you will take part in a semi-structured interview about your perceptions and experiences with the MTSS training and framework.

The information found in this study will be shared with administrators in MAPS to better inform them of the needs and perceptions of MAPS educators.

Time required:

This interview will take approximately 30 minutes to complete and will not last more than one hour.

Risks and Benefits:

You will not have any costs for being in this research study. Taking part in this research study is completely voluntary. If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify. Risks to this study are minimal. Completing this interview would result in time away from other obligations of daily living which would be the only potential risk.

Incentive or Compensation:

There is compensation or other incentive for participating; therefore, you will not be adversely affected in any way if you choose not to participate.

Confidentiality:

This interview will be confidential. Your name and personal information will not be shared. The information you provide relevant to the study will be analyzed and used in this study. The Northern Michigan University Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. An audio recording of the interview will be made, however once the transcription of the interview is completed, the recording will be destroyed.

Voluntary participation:

Your participation in this study is completely voluntary. You have the right to withdraw from the study at any time without consequence or penalty.

Whom to contact if you have questions about the study:

Any questions you have regarding the nature of this research project will be answered by the principal researcher who can be contacted as follows: Chelsea Norton (906-236-2671) [cnorton@mapnset.org](mailto:cnorton@mapnset.org) or [chburke@nmu.edu](mailto:chburke@nmu.edu) or Dr. Lisa Eckart of the Human Subjects Research Review Committee of Northern Michigan University (906-227-2300) [leckart@nmu.edu](mailto:leckart@nmu.edu).

Agreement:

If you wish to participate in this study, please sign the form below. A signature will indicate agreement to participate.

Participant's Name: (Print) \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I understand that I will be audio recorded by the researcher. These files will be kept by the researcher on a password protected computer. I understand that only the researcher will have access to these files.

Interviews may be using audio recorded to assist with the accuracy of your responses. You have the right to refuse the audio recording. Please select one of the following options:

I consent to audio recording: Yes \_\_\_\_\_ No \_\_\_\_\_

Sincerely,

Chelsea Norton

Education Specialist Candidate, NMU

## APPENDIX D

### Semi-Structured Interview Questions

#### **Topic: MTSS Training, Perceived Barriers, Survey Results**

Introduction: *“Thank you for sending your consent form via email. Do you have any questions about that document? Remember this interview is completely voluntary and your name and personal information will not be released. Last month I sent out a survey, if you participated in it I would not know. Here is a list of the questions. Please take a minute to review these questions if you need. During this interview I will ask you a little bit about your involvement with the MTSS framework in the Fall of 2021 then I am just looking to have a conversation about factors that may hinder or promote successful implementation of the MTSS Framework here at MAPS.”*

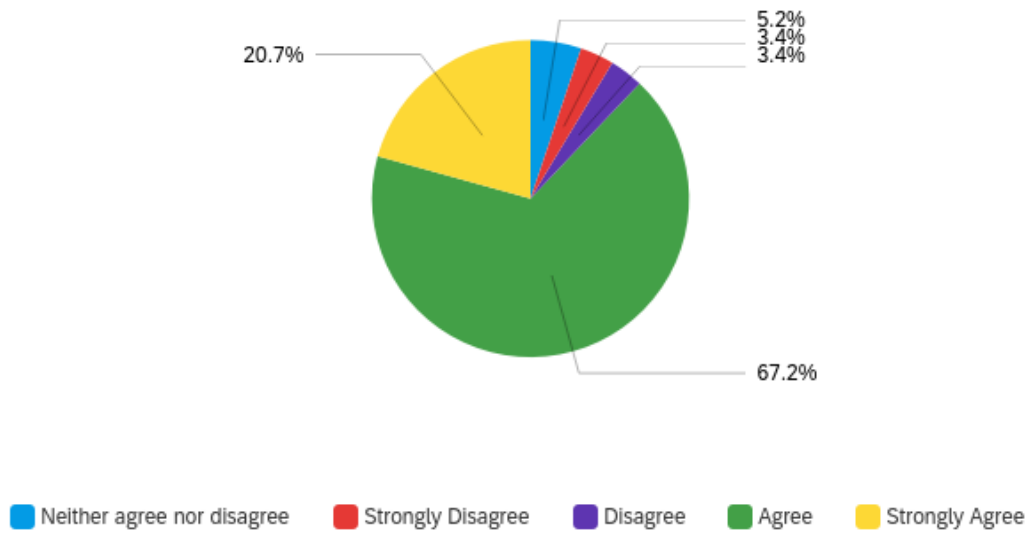
1. Tell me a little bit about your involvement/experience as a teacher leader with the MTSS training in the Fall 2021.
  - a. Follow up: What was the format of the training, content, how often did you meet?
  - b. Follow up: What previous experience do you have with MTSS?
2. Here are some of the preliminary results of the survey I sent out.
  - i. a. Address perceptions of common themes
  - ii. b. Can you speak to this identified theme?
3. As a teacher leader in your building what are some perceptions, feelings, thoughts, educators are having about this MTSS adoption?
  - i. a. What do you feel attributes to these perceptions?
4. Any final thoughts, concerns, or questions about anything we’ve discussed here?



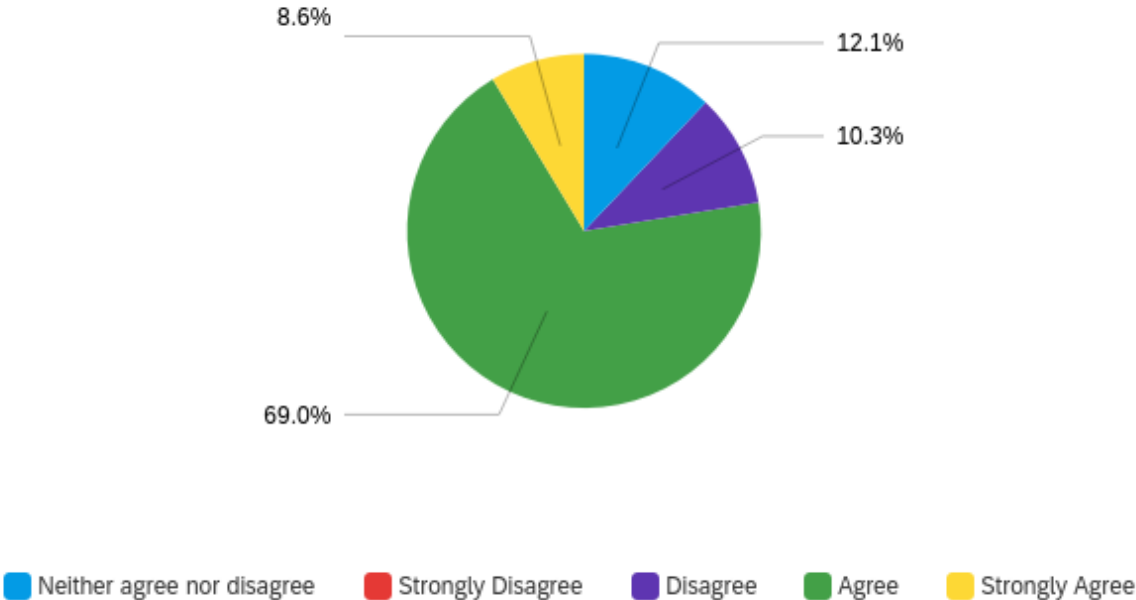
## APPENDIX E

### Fixed Choice and Short Answer Survey Results

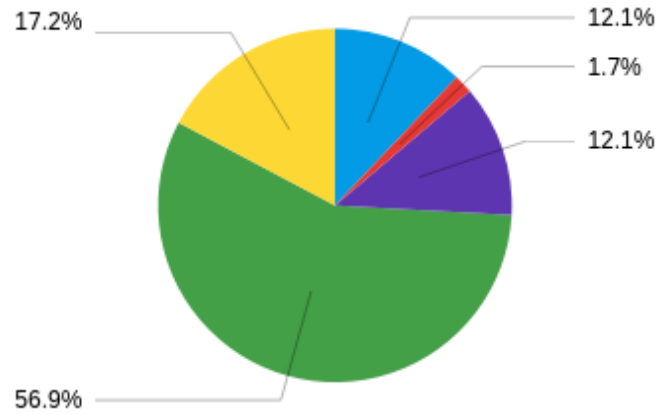
Q3 - I use Response to Intervention (Rtl) in my teaching practice.



Q4 - I am confident in using RTI.

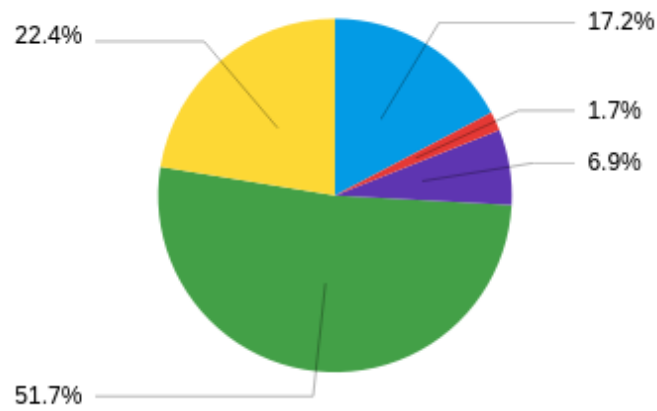


Q5 - I use School-Wide Positive Behavior Intervention and Supports (PBIS) in my...



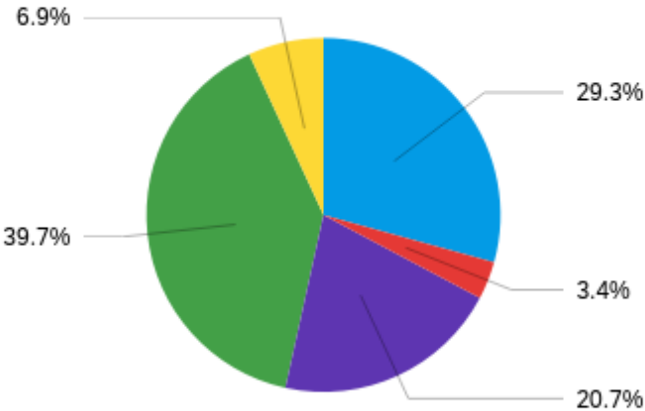
■ Neither agree nor disagree ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

Q7 - I find MTSS training applicable and useful to my teaching practice.



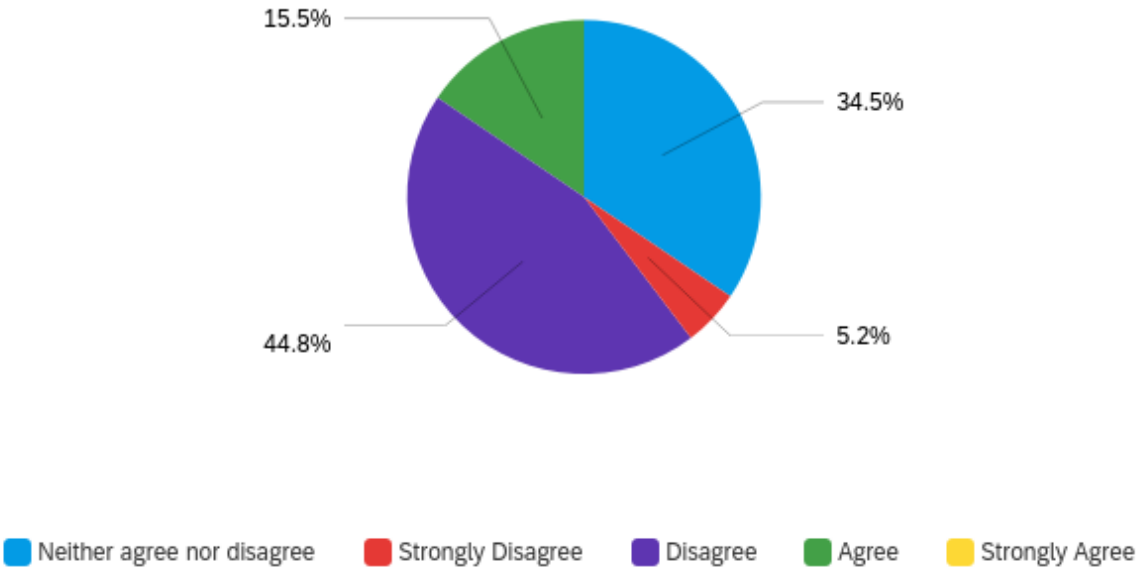
■ Neither agree nor disagree ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

Q8 - I have time to successfully implement MTSS.

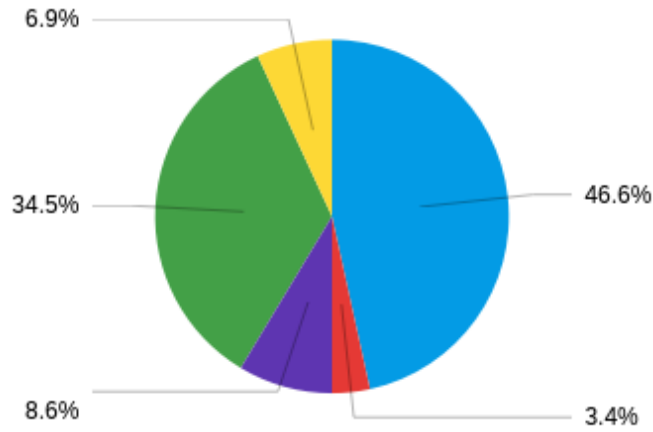


■ Neither agree nor disagree   ■ Strongly Disagree   ■ Disagree   ■ Agree   ■ Strongly Agree

Q9 - I have the resources necessary to implement MTSS.

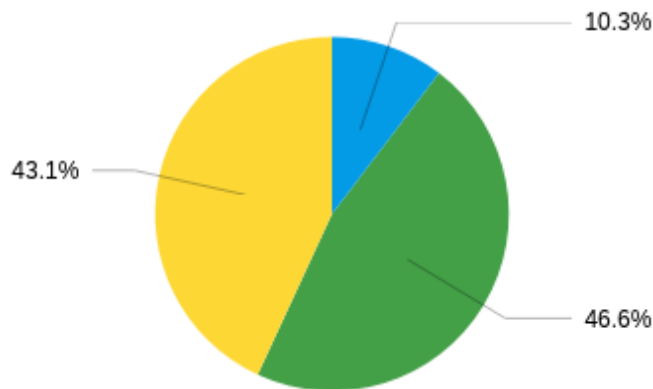


Q10 - The leadership through the support of guidance of University of Minnesota w...



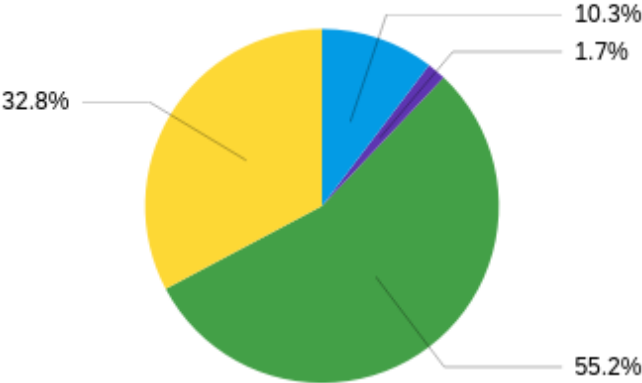
■ Neither agree nor disagree ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

Q11 - Adopting the MTSS framework will benefit MAPS students.



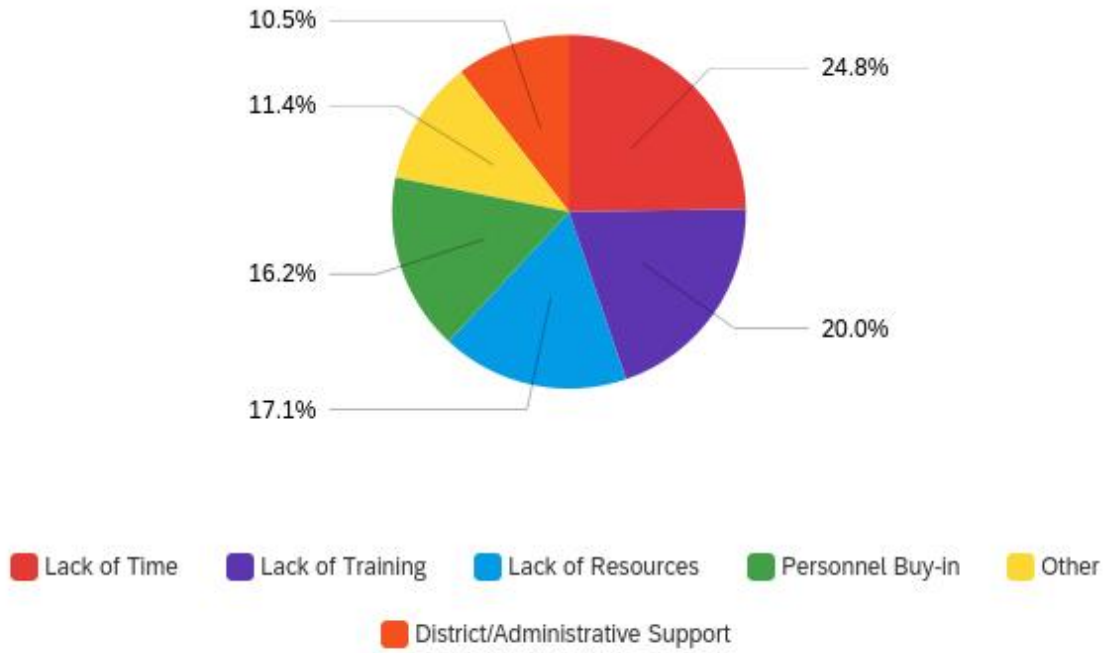
■ Neither agree nor disagree ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

Q12 - Adopting the MTSS model will benefit MAPS teachers.



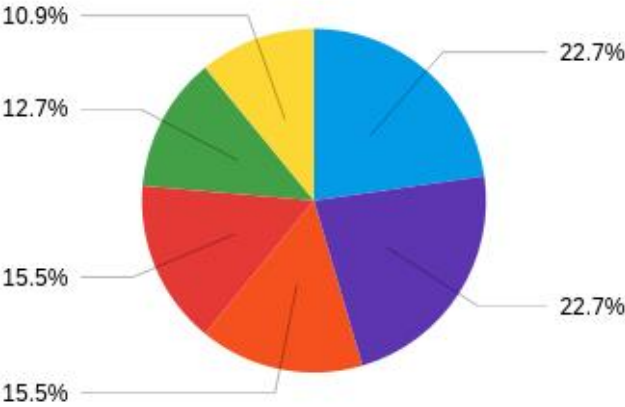
■ Neither agree nor disagree   ■ Strongly Disagree   ■ Disagree   ■ Agree   ■ Strongly Agree

### Q.13 Themes





Q14Themes



- Provide Necessary Resources
- Provide Training
- Leadership Actions
- Provide Time
- Address Attitudes/Buy-in
- Provide Communication

## APPENDIX F



Graduate Studies and Research  
Marquette, MI 49855-5301  
906-227-2300  
[www.nmu.edu/graduatestudies/](http://www.nmu.edu/graduatestudies/)

### Memorandum

**TO:** K.C. Holder  
Chelsea Norton  
Derek Anderson  
Travis Smith

**DATE:** December 20, 2022

**FROM:** Lisa Schade Eckert  
Dean of Graduate Studies and Research

**SUBJECT:** **IRB Proposal HS22-1261**  
**IRB Approval Date 1/13/2022**  
Proposed Project Dates: **12/31/2021 – 8/31/2022**  
“Barriers implementing multi-tiered system and supports (MTSS) in a rural district: A case study.”

Your proposal “Barriers implementing multi-tiered system and supports (MTSS) in a rural district: A case study.” has been approved by the NMU Institutional Review Board. Include your proposal number (HS22-1261) on all research materials and on any correspondence regarding this project.

- A. If a subject suffers an injury during research, or if there is an incident of non-compliance with IRB policies and procedures, you must take immediate action to assist the subject and notify the IRB chair ([dereande@nmu.edu](mailto:dereande@nmu.edu)) and NMU’s IRB administrator ([leckert@nmu.edu](mailto:leckert@nmu.edu)) within 48 hours. Additionally, you must complete an Unanticipated Problem or Adverse Event Form for Research Involving Human Subjects.
- B. Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participant.

- C. If you find that modifications of investigators, methods, or procedures are necessary, you must submit a Project Modification Form for Research Involving Human Subjects before collecting data. Any changes or revisions to your approved research plan must be approved by the IRB prior to implementation.

Until further guidance, per CDC guidelines, the PI is responsible for obtaining signatures on the COVID-19 Researcher Agreement and Release and COVID-19 Research Participant Agreement and Release forms for any in person research and following any COVID guidelines in their research location.

All forms can be found at the NMU [Human Subjects Research webpage](#).