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District Leaders' Perception of Multi-Tiered System of Supports Implementation: A Qualitative Study

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Educational Specialist

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ABSTRACT

District Leaders' Perception of Multi-Tiered System of
Supports Implementation: A Qualitative Study

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Multi-Tiered System of Supports (MTSS) is a model that can be implemented in school buildings with the support of school district leaders. However, the voices of district leaders involved in MTSS implementation are limited in the research. This study sought to investigate what district leaders perceived as impacting factors towards MTSS implementation and draw conclusions about impacting factors from their opinions. Ten district leaders in a mountain west state of the United States were interviewed via Zoom and had their transcripts analyzed for impacting factors using a form of thematic analysis. All participants were involved with MTSS at their district in some form. This study identified four themes from the data: Personnel Involvement, Pervasive Influences, Foundations and Framework, and Supports Beyond the Site Level. Within each theme, multiple constructs came across which may be beneficial to those looking to implement MTSS or would like to better sustain MTSS implementation in their schools.

Findings of this research study can directly impact districts and schools in their planning stages of MTSS implementation that could lead to longer and stronger sustainment of MTSS in their schools. Some examples of ideas drawn from the data include how school systems may want to consider the personnel they currently have access to or could potentially gain access to; they may want to consider emphasizing data and dedicate time to work on MTSS implementation; they may want to consider creating a strong structural foundation so that future implementation will be better sustained, such as structuring practices in a way that they can continue despite changes in personnel; they may want to consider which outside supports they have available to them to assist in supporting implementation.

Keywords: Multi-Tiered System of Supports, district leaders, implementation science

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CHAPTER 1

Introduction

Multi-Tiered System of Supports (MTSS), sometimes referred to as Response to Intervention (RTI) or *Positive Behavioral Interventions and Supports* (PBIS), is generally accepted as a school-wide instructional model used to help students with academic or behavioral difficulties receive timely and responsive support. MTSS is made up of three tiers, with the amount of support increasing throughout tiers (Utah Multi-Tiered System of Supports [UMTSS], n.d.-a). In Tier 1, core instruction is provided to all students. Those students who do not show improvements with only Tier 1 supports can then receive Tier 2 supports. In Tier 2, a subgroup of the student population (approximately 15%) receive more concentrated instruction along with the Tier 1 support (UMTSS, n.d.-b). Those students who do not show improvement with Tier 1 and Tier 2 supports alone or have significant needs (approximately 3–5%) receive Tier 3 supports, which are intensive, individualized instruction to address these students' needs (UMTSS, n.d.-c). Across all MTSS tiers there is a focus on data-based decision making, evidence-based instruction and interventions, screening, and progress monitoring (National Center on Response to Intervention [NCRTI], 2010).

Prior research has demonstrated that effective MTSS implementation is no easy task. Various factors related to school characteristics have been identified as facilitators or barriers of MTSS implementation. These components include time, school size, training, leadership, staff attitudes, grade level, access to resources, and knowledge and skills (Castro-Villarreal et al., 2014; Dulaney et al., 2013; Mason et al., 2019; Rinck, 2018; Werts et al., 2014). Each of these components can serve as a facilitator or barrier, depending on if they are present at the school or not. For example, if a school does not have enough time and training, or if the school has a very

large student population, it is going to be much harder to implement MTSS. Conversely, if a school has prioritized MTSS, provides ongoing coaching, and is not overwhelmed by the student population, MTSS will be easier to implement.

Considering these barriers and facilitators, this study will explore the unique perspective of school district leaders involved in guiding MTSS implementation in their district. District leaders' perceptions may reveal other factors that need to be considered to effectively implement MTSS and determine if district leaders' perceptions align with the existing literature, which primarily focuses on building leaders and teachers involved in MTSS. This study will address the following research question: According to district leaders, what impacting factors influence MTSS implementation?

CHAPTER 2

Literature Review

Overview of Multi-Tiered System of Supports

MTSS is generally accepted as a school-wide prevention and intervention model used to promote student achievement and well-being. Previously schools may have followed a wait-to-fail model, where students were not receiving needed services in a timely manner (Blackburn & Witzel, 2018). In contrast, MTSS uses a three-tiered model to help students receive needed supports and instructional strategies in a timely manner and in a way that matches their needs.

MTSS efforts that focus on behaviors can be referred to as PBIS. The purpose of PBIS is to help schools implement more proactive staff behavior (such as having teachers continually teach and promote the behaviors they expect from their students), instead of turning towards reactive behavior, such as detentions or suspensions (Ryan & Baker, 2014). MTSS strategies that address academic concerns can be referred to as RTI. RTI can help address challenges that students are having in areas such as reading (McEwan-Adkins, 2009), and mathematics (Clarke et al., 2010). This paper uses the term MTSS to describe PBIS and RTI practices. Whether MTSS is used specifically for behavior or academics, or if both are integrated into one system, the guiding principles are the same (McIntosh & Goodman, 2016). MTSS is a model that involves implementing three tiers of instruction or supports, with each tier becoming increasingly intense and focused on specific learning needs.

Tier 1

Tier 1, or the Universal tier, addresses school-wide needs where all students are given robust, core instruction. This instruction, or core program, is delivered by the teacher to all students in the classroom (National Center on Intensive Intervention [NCII], n.d.). Typically, if

80% or more of the student population is responding well to this instruction, it will continue to be utilized. If less than 80% of the population are responding well to the universal strategies, the school team over Tier 1 is charged with problem solving to adjust the instruction until the generally accepted minimum 80% receptiveness is achieved (UMTSS, n.d.-d).

An example of a Tier 1 reading intervention would be to increase the amount of student exposure to informational text, which could be accomplished by encouraging teachers of various subjects across the school (not just English) to foster reading (Brozo, 2010). Using such an intervention would encourage all students to be better readers but is also an example of how to prevent at-risk students from falling behind in their reading skills.

Tier 2

Tier 2, or the Targeted tier, meets the needs of a smaller subgroup of the student population (approximately 15%) who do not respond well to Tier 1 initiatives alone. Students receiving Tier 2 supports receive additional group interventions that are more concentrated, along with (not in lieu of) the Tier 1 support (UMTSS, n.d.-b). The goal of this tier is to have the students sufficiently respond to the instructional strategies so that they can have positive outcomes with only Tier 1 instruction (NCII, n.d.).

Examples of a Tier 2 intervention include social-skills training and Check-in, Check-out (CICO), both of which can be used to address at-risk students in need of behavioral support (Rodriguez et al., 2016). Social skills trainings allow for groups of students to learn how to better communicate, make decisions, and acquire other skills needed to thrive socially (U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse, 2013). CICO involves having students check in with their instructors at the beginning of class to establish goals related to behavior and check out with the instructor at the end of the class to earn

some reward if they have met their goals (Intervention Central, n.d.). Both social skills and CICO allows students to be provided with simple supports that can be easily accessed and utilized by most students- common elements of any Tier 2 intervention. Progress monitoring data are gathered and used to determine if the instructional supports are effective in helping students meet grade level expectations.

Tier 3

Tier 3, or the Intensive tier, is made up of approximately 3–5% of the student population who do not respond well to receiving only Tier 1 or Tier 2 support. At this tier, students receive individualized, intensive support, in addition to receiving the support from the other two tiers as needed (UMTSS, n.d.-c). Additionally, to ensure successful Tier 3 support is given, qualified instructors should provide the instruction in the smallest group possible. When one-on-one instruction is provided to Tier 3 students, substantial progress can be expected (Wanzek & Vaughn, 2010). Progress monitoring is frequently done so that instruction can be adapted to students' needs in a timely manner.

An example of an effective Tier 3 intervention is the reading comprehension strategy, *TWA*: Think before reading, think while reading, think after reading. TWA allows students with reading difficulties to better summarize and pinpoint important information in text by learning what they should focus on during various phases of the reading process (Mason, 2004; Wanzek & Vaughn, 2010). To properly utilize this strategy, we would assume that the student would need individual support to make sure they are learning how to think critically and would have to apply it to various and frequent reading circumstances in the classroom, thus being intensive.

Components Within the Multi-Tiered System of Supports Model

Across all MTSS tiers there is a focus on the following: data-based decision making, evidence-based instruction and interventions, screening, and progress monitoring (NCRTI, 2010). Each component will be addressed below.

Data-Based Decision Making

The data used in data-based decision making comes from that gathered during screenings, progress monitoring (NCRTI, 2010), end-of-year state testing, or school-wide office discipline referrals. Data-based decision making, a practice highly associated with sustaining MTSS implementation (McIntosh et al., 2013), can be most effective when data teams are created and used to answer specific questions. Data teams typically include teachers, administrators, and relevant practitioners. Establishing specific questions allows the team to know what exactly to do with all the data they have gathered. It is also helpful for there to be *data fluency*, meaning all staff involved in MTSS should have a mutual language and comprehension of why data are collected, the importance of different kinds of data, and how data will be analyzed to make decisions (Arden & Pentimonti, 2017).

Instruction/Intervention

Within each tier of MTSS, researched and evidence-based instruction or intervention should be provided. The purpose of this instruction is to meet or exceed academic and behavioral expectations identified by the school. Additionally, one or more types of intervention or instruction can be provided within each tier to help the students succeed (NCRTI, 2010).

As previously mentioned, the support increases across the tiers, and thus the instruction or interventions used are more focused and tailored to the needs of the student. An example from Shapiro (2014) illustrates how the type of instruction differs between tiers: Two second-grade

students might be at different levels in their reading skills, and thus require different tier interventions. One of the students might have a firm grasp on phonics but have difficulty with reading fluency and require Tier 2 support. However, the second student might not have a strong comprehension of phonetics, and thus need more intensive, Tier 3 support.

The intervention or instructional strategies that are provided for such students should meet certain requirements, such as providing enough opportunities for the student to practice the skill and gain assistance if needed, helping the student learn in a way that they can transfer the skill to other situations, and providing instruction that is comprehensive and detailed enough for the student to properly acquire the skill (Fuchs et al., 2017). The second student would thus require instruction that provides more opportunities for participation and assistance, more help with transference, and more comprehensive instruction than the first student, to name a few of the differences in instruction.

Screening

Screening allows teachers and teams to see whether students are performing at expected levels, or above or below expectations. Screening is used to help determine what kinds of instruction will be provided and if specific students need to receive support from a higher tier (Lane et al., 2012). An initial screening is often conducted at the start of the school year and can be repeated during the school year. After this initial screening, more rigorous screening and data collection should be conducted to determine the particular needs of students who are not mastering the core curriculum and need additional support (NCRTI, 2010).

MTSS screening is most effective when it is applied proactively, instead of retroactively. In other words, screening should be implemented before students have substantially underperformed at school. Doing so increases the prospect of students receiving the personalized

support that they need (Marchant et al., 2009). Additionally, gathering and analyzing data from multiple data sources can increase informed decision-making by school personnel. For example, screening data could include multiple qualitative measures such as surveys and focus groups, but could also incorporate quantitative data, such as office discipline referrals (Irvin et al., 2004; Marchant et al., 2009).

Progress Monitoring

Progress monitoring should happen throughout the course of MTSS implementation and varies in frequency based on tier (e.g., it could be several times per year at Tier 1, and weekly by Tier 3). The purpose of progress monitoring is to determine how well the student is responding to instruction. Progress monitoring can also convey how helpful the instruction and interventions are, which can then be adjusted if they are not effectively aiding progress (NCRTI, 2010).

When determining what progress monitoring tool should be used, some suggestions include forming a team of experts who can help decide which tool to use, identifying the needs and priorities that should be met by the tool, and examining research and psychometric properties of the tool (NCRTI, 2012).

Progress monitoring data are only effective if it is accurately presented in a way that informs instructional strategies. For example, progress monitoring data (and fidelity checks) should be collected frequently and during scheduled intervals (NCRTI, 2013a). The data should then be graphed clearly and effectively (including components such as goal and trend lines) to communicate to relevant stakeholders whether current instruction is helping students improve (NCRTI, 2013b; NCRTI 2013c).

Stakeholders

There are various team members involved in MTSS implementation. Team members can include district and school building leadership and experts, as well as the teachers who will be implementing the day-to-day procedures of MTSS. However, there can be many other key players. Averill and Rinaldi (2011) stated:

> In addition to offering a multi-tier approach to assessment and intervention, MTSS integrates a systemwide continuum of supports. Such structures activate homeschool-community relationships and bring together partners from the education, mental health, family, social service, medical, juvenile justice, recreation and cultural domains within the multi-tier system. These collaborations, together with educational leadership at the district and school levels, promote the formation of wraparound structures, supports and practices to help students succeed in school. (Averill & Rinaldi, 2011, p. 92)

In summary, MTSS requires the collaboration of many individuals fulfilling a variety of roles. These roles include delivering a range of instruction, modifying instruction based on student needs, and working in teams to gather and analyze data to make instructional decisions. Effectively implementing MTSS requires focused effort at both the school and district levels, ensuring that implementers have the capacity to implement with fidelity. Administrative and communication strategies also need to be in place to ensure that implementation is sustainable and adapts to meet the needs of students. The principles of implementation science are also key contributors to effective and sustained MTSS implementation.

Implementation Science

As previously mentioned, a critical aspect of MTSS implementation is the use of evidence-based interventions and instructional strategies. However, making sure that these

evidence-based approaches are implemented using efficient strategies is a science of its own, appropriately known as implementation science (Lyon, 2005). There is likely to be poor implementation of a new procedure if it is simply printed in a manual. Poor implementation can also look like providing training to the relevant staff but not in a way that would be meaningful (i.e., fragmented implementation; Metz et al., 2007). An example of fragmented implementation would be if staff received training on how to provide one-on-one crisis counseling, but were instructed only through a PowerPoint, without a demonstration or time to practice the skills under the trainers' supervision and continued practice with coaching over time. In contrast to these ineffective methods, Metz et al. (2007) describe proper implementation as *implementation for impact*, meaning the implementation is carried out in a way that will produce sustained use of the practice and demonstrate actual benefits. Implementation for impact includes proper training (i.e., professional development), ongoing coaching, and additional implementation drivers.

Implementation drivers are considered the "key components of capacity and infrastructure that influence a program's success. They are the core components needed to initiate and support classroom, building, and district level change" (National Implementation Research Network [NIRN], n.d.-a, Definition section, para. 1). There are three implementation drivers which embody the fundamental components of proper implementation. These drivers are Competency, Organization, and Leadership, each of which will be addressed below.

Competency Drivers

Competency drivers are anything that increases the appropriate knowledge and skills needed for MTSS to be effectively implemented by teachers and administrators. These include professional development and ongoing coaching addressed in detail below, as well as selection, readiness assessments, and fidelity assessments. Selection means setting specific criteria that will

be used to help determine which staff are qualified to start implementing the program, in this case, MTSS (NIRN, n.d.-b). Readiness assessments are used to determine how capable and motivated an organization (e.g., the school district) is for change. Conducting readiness assessments allows the district to know what adjustments need to be made to "set a strong foundation for interventions" (Capacity Building Center for States, 2018, p. 1). Fidelity assessments are used to make sure that staff are following implementation protocol correctly. The data gathered from these assessments are then used to make needed improvements (NIRN, n.d.-b).

  Professional Development. Constructive professional development can be defined as, "structured professional learning that results in changes in teacher practices and improvements in student learning outcomes" (Darling-Hammond et al., 2017, Defining and Studying Effective Professional Development section, para. 1). Aspects of well-designed professional development may include features such as providing "adult learning methods that more actively involved learners in using, processing, and evaluating their mastery of newly acquired knowledge and skills" (Dunst & Trivette, 2009, p. 171).

  Ongoing Coaching. According to Fixsen et al. (2009), the purpose of the coach is to "[provide] 'craft' information along with advice, encouragement, and opportunities to practice and use skills specific to the innovation" (Fixsen et al., 2009, p. 534). Ongoing coaching must be provided to those who implement MTSS to make sure that they are properly applying the skills and procedures they have been taught during professional development. One way of viewing coaching is through a behavioral perspective, meaning that coaches should look for ways to encourage the desired behavior from the implementers, and utilize antecedent interventions and consequence manipulation. These can take the form of reminders and prompts (i.e., antecedent

intervention), or feedback on implementation fidelity with good behavior being rewarded (i.e., consequence manipulation; Freeman et al., 2017).

Organizational Drivers

Organizational drivers include data systems used to make decisions, facilitative administration that monitors MTSS impact, and system interventions to deal with change or expansion. Some districts might have specific policies or procedures in place to make sure MTSS is implemented properly (Freeman et al., 2015). Data systems should be used to collect data that is "reliable, reported frequently, built into everyday routines, accessible at the classroom and building levels and used to make decisions at the student, teacher, and building level" (NIRN, n.d.-c, Decision Support section, para. 1). Facilitative administration makes sure staff are organized, working efficiently, and show the level of commitment needed to make things run smoothly. They also use the data that is gathered to make decisions. Systems interventions involves making sure that there are effective ways to work with those at the building, district, or even state level to make sure problems are addressed at the right level.

Leadership Drivers

Leadership drivers tackle technical challenges (problems with clear solutions) and adaptive challenges (more complicated problems with less immediate solution; Freeman et al., 2015; Heifetz & Laurie, 1997). Leadership drivers should be maintained at the district and building level (Payno-Simmons, 2018) and can help other staff understand the importance of the program being implemented (NIRN, n.d.-d). Though it is not required for a leadership driver to hold an official leadership title, they may be referred to as the change agent. Change agents lead staff members through the implementation process by "inspiring, guiding, goal setting, conflict resolution, resource provision, and adjustment of organizational policies and procedures, so that

appropriate implementation strategies are used and barriers to implementation are addressed"
(Forman & Crystal, 2015, p. 279).

Awareness and proper utilization of such implementation drivers increases the likelihood of successful MTSS implementation. However, when one or more of the drivers is not properly considered, barriers preventing proper implementation of MTSS will occur.

Perceived Barriers of Multi-Tiered System of Supports Implementation

While there are established structures on how to implement MTSS effectively, like all evidence-based practices, there may be a research-to-practice gap. This means that despite the resources and outlines on how to implement a program, such as MTSS, schools might still struggle to assure high implementation fidelity and improve student outcomes. In this section, we will examine some of the barriers that could lead to this gap. Some of the known barriers faced across different types of MTSS (e.g., mathematics, reading), different grade levels, and different tiers will be addressed.

Multi-Tiered System of Supports Focus Area

One study by Mason et al. (2019) found the barriers of mathematics MTSS implementation for one school district included the following: time, school size, mathematics content knowledge, want for more professional development/follow-up, establishing a clear change agent (i.e., who's leading change), and access to resources. Castro-Villarreal et al. (2014) found that in implementing MTSS reading practices, similar to implementing math focused MTSS practices, teachers perceived that there was not enough quality training and resources, and not enough time to allocate towards MTSS. Additionally, they believed that MTSS was too long and complex of a process and required too much documentation. Others have found staff

members' attitude, such as resistance (i.e., not being able to get staff to value MTSS and/or want to implement it) to be a barrier (Werts et al., 2014).

Grade Level

As mentioned, collaboration is an important part of MTSS implementation. However, Dulaney et al. (2013) found that it is harder to instill collaboration at the high school and middle school level than at the elementary school level. This seems to be because elementary school teachers tend to frequently collaborate on grade level teams and have more in common with teaching material. In contrast, because of the departmental structure of secondary schools, teachers are more focused on their individual subject areas and styles of instruction (even with regards to working with teachers in the same subject area). Additional implementation barriers mentioned in this study included a lack of resources in rural districts, and a lack of framework provided by the state.

Screening

An additional implementation barrier may be screening inappropriately. For example, schools should be careful that they do not provide quick and easy screenings that will ultimately overidentify too many students as in-need of Tier 2 support (NCII, n.d.). It was suggested in NCII that schools should allocate time in providing an additional round of screening in identifying students in need of services, instead of just relying on one very basic screening. While this will take more time for screeners, it will benefit schools in the long run, as providing these additional services to children who do not really need them will be expensive and deprive students of an appropriate educational experience (NCII, n.d.). However, as previously mentioned, school personnel often feel that they lack the time to commit more fully to MTSS.

Due to such conflicts, the field is still working to recognize the specific needs of building teams that are implementing MTSS, as well as identifying plausible solutions.

Facilitators

To improve any research-to-practice gap with MTSS, it is beneficial to understand factors that contribute to effective MTSS implementation. Facilitators found in the literature include knowledge acquisition, utilization of specific tools and practices, and mindset.

Knowledge Acquisition

A study by Rinck (2018) interviewed two school's principals and other staff who had successfully implemented MTSS and outlined the importance of building foundational knowledge before implementation. For example, in Rinck's study, one school's staff mentioned how gaining a background on PLCs made the transition to understanding MTSS easier. Additionally, staff at both schools found that university partnerships and modeling practices were components that helped form this foundational knowledge. Providing proper background knowledge about MTSS to the teachers would also help them feel more at ease. For example, explaining the MTSS triangle (i.e., a common diagram used to convey the different tiers) and what is expected at each tier, or having them previewing practices before they were expected to implement them. Further knowledge was gained by the districts through internal programs like professional development, and external programs, such as conferences. Additionally, there should be open communication with school staff so their questions can be answered quickly.

Tools and Practices

Successful tools mentioned by Rinck (2018) were district-created PLC rubrics for the schools to monitor how they were doing, and school-created spreadsheets to keep relevant data

organized. Practices included monitored walk-throughs, gradually introducing new MTSS steps, and embedding and aligning MTSS into other school activities, practices, and policies.

The main facilitators of mathematics MTSS implementation identified by Mason et al. (2019) included: concrete strategies and availability of resources (such as manipulatives and online tools), which teachers were able to use immediately. In other words, with the increasing expectations and demands placed on teachers, they need practices and tools that they can quickly obtain, learn, and use.

Mindset

Rinck (2018) addressed how schools could facilitate MTSS by maintaining a staff mindset that is open to risks and failures, and that focuses on keeping the *big picture* in mind. Staff mindset and momentum can also improve by showing staff the students' progress, and by observing other schools outside of the district who are implementing MTSS. This mindset can also be improved or maintained by focusing on the character, not just the resume, of individuals up for hire.

Murin (2016) claims that MTSS provides school personnel with the opportunity to embrace a growth mindset, rather than a fixed mindset. One growth mindset change that needs to occur in schools implementing MTSS is for the practice to be "viewed as 'a best for all model' rather than as another short-lived program" (Murin, 2016, p. 98). This entails that if staff are convinced that the program works, they will have more program buy-in, and they will be more willing to implement MTSS. Conversely, if staff hold the fixed mindset view that MTSS is just a phase, there will be less buy-in, and poorer implementation.

Conflict Between Barriers and Facilitators

One aspect that must be considered when overviewing the barriers and facilitators of MTSS is how certain methods might be facilitators of successful MTSS implementation when they are available or already accepted, yet a barrier when they are unavailable, or unaccepted. For example, Mason et al. (2019) mentioned how a lack of resources was a barrier to implementation, yet when resources where readily available they facilitated implementation. Also previously mentioned, a school staff's mindset could be a barrier, such as staff resistance (Werts et al., 2014), or a facilitator, such as having staff who focus on the big picture (Rinck, 2018).

Therefore, a district must determine what is being prioritizing over MTSS that is preventing the availability of resources, time, and energy needed to create systems change. For instance, a district might be dedicating more time and funds towards a drug-use prevention program than towards MTSS professional development and coaching. Or a school's teachers might be focusing more on improving test scores, than implementing effective MTSS instruction. Ultimately, to implement MTSS effectively, stakeholders must identify what is preventing and promoting their investment into the program and consider making the needed adjustments.

Roles of District Leaders in Implementation

The stakeholders of interest in this thesis are the district leaders. While the district MTSS leadership team can include individuals that spend most of their time working at the building level (such as teachers and school building administrators) or outside agencies (Freeman et al., 2015), the focus of this thesis is those who work primarily at the district level, such as district administrators, MTSS coordinators, or trainers.

According to Rorrer et al. (2008), the role of district leadership on reform has been historically undermined. However, district leaders play many important roles as institutional actors. Rorrer and colleagues determined four important roles the district can play when engaging in reform:

- *Providing instructional leadership* by having a commitment to their cause for reform, providing proper support to those whom they lead, and having the expertise and resources needed to execute reform.

- *Reorienting the organization* by making structural changes to achieve the district's goals and altering the culture and customs of the district as needed.

- *Establishing policy coherence* by properly shaping policies to best aid the district and allocating the resources needed to achieve district goals.

- *Maintaining an equity focus* by acknowledging the wrongs and inequity of the district in the past and focusing on currently promoting equity which will close achievement gaps.

These same roles can be utilized by district leadership when implementing MTSS. However, it should be noted that MTSS implementation varies across districts (Freeman et al., 2015). These differences may include the following: who attends leadership meetings, how information is conveyed to stakeholders, what technological resources they have access to, and what data collection system is used. Even though MTSS implementation strategies may vary across districts, several aspects are vital.

One qualitative case study on MTSS by Dulaney et al. (2013) interviewed school superintendents on MTSS implementation. The study discovered three important findings, the first being that a framework for implementation and a common language should be developed.

This means that district leaders should be aware of what MTSS implementation will look like, and how it gets communicated across the district. Everyone should know what the acronyms used stand for, or signify (such as MTSS, RTI or PLC). The second finding was that there should be a culture of collaboration across the district. This could be encouraged by having the district set aside time for collaboration by implementing student late-start, or early-out days. Lastly, this study emphasized that effective change must focus on building capacity. For example, that could involve the superintendents creating district leadership teams, having teachers become collaborative team leaders, and focusing on student data to facilitate the direction of change.

Basing their claims on the works of others, Averill and Rinaldi (2011) shared ideas that district leadership should consider with the implementation and sustainability of MTSS. Two of these were consensus and infrastructure. With regards to consensus, it should be understood across stakeholders why MTSS should be implemented. Additionally, they should be willing to support and maintain its use. This consensus can lead to the cooperation of building the MTSS framework that would most benefit the school involved. With regards to infrastructure, the district should create structures that allow the proper implementation of MTSS to be achieved. This might involve looking at, adjusting, or creating new district policies, or practices (Averill & Rinaldi, 2011).

McIntosh and Goodman (2016) claim that, "By promoting fundamental objectives based on effective practices, prioritizing important initiatives, and seeking alignment of high priority practices, the district can provide a general vision for the direction of its schools," (McIntosh & Goodman, 2016, p. 209). Thus, the involvement of district leaders is imperative to promoting system-level changes. The more that district leaders take part in MTSS implementation and engage in their role as institutional actors, the more successful the program can be expected to

be. Additionally, involved district leaders will then have the unique position of understanding the overarching struggles and strengths found across their schools.

Purpose

The purpose of this research is to investigate district leaders' unique perceptions of the schools who are implementing MTSS, as much of the prior literature focuses only on those at the building level. Understanding the perceptions of district leaders is one way to help determine what might be needed to narrow any research-to-practice gap found in MTSS implementation. Additionally, as districts are promoting and providing training in MTSS, the perceptions of district leaders can help states determine what resources and trainings need to be prioritized. Furthermore, this understanding will allow us to know if the perceptions of district leaders align with the existing research literature.

CHAPTER 3

Method

Approval to conduct this research was granted by Brigham Young University's

Institutional Review Board (IRB). See Appendix A.

In this section, the participants and setting of the study are described, as well as the

procedure for collecting and transcribing interviews, the data analysis process, steps taken to

increase trustworthiness of this qualitative study, and the positionality statement of the primary

researcher. The use of a qualitative approach (i.e., gathering and analyzing interview data) was

appropriate for this study as it allowed us to obtain a rich detail of school district leaders'

perceptions and experience regarding impacting factors related to MTSS implementation. The

specific qualitative research analysis used was a form of thematic analysis (Braun & Clarke,

2006), which is a process where the researcher familiarizes themselves with the data, identifies

specific ideas coming from the data, and aggregates and connects these ideas into broader

themes. This style of analysis was thus considered appropriate to gather meaning from the

various thoughts and opinions of our participants.

Participants and Setting

District leaders from four school districts in a western state in the United States

participated in this study, each of whom were involved in helping with MTSS (whether referred

to as MTSS, RTI, PBIS or another tiered-supports name) implementation at their district. Eleven

participants were recruited and interviewed through convenience sampling and snowball

sampling. One participant asked to have their interview removed from the study as they did not

feel comfortable with it being a part of the study, so data analysis occurred across 10

participants. Three of the districts each had two participants involved in analysis (i.e., six of the

total participants). Once district had four participants. Dworkin (2012) states that the literature varies from 5 to 50 participants as being sufficient for a study involving qualitative interviews. Our study falls within this range considered appropriate for acquiring the data sought after.

Informed consent to participate was gathered from participants before starting the interviews. Participants were informed at the start of the interview that their participation was completely voluntary and if there were any questions they preferred not to answer, that they could skip them. It was also disclosed that their answers would not be shared with the other interview participants and their name would be changed to protect their privacy. Interviews were conducted through the online videoconferencing platform Zoom. Participants were offered compensation in the form of a $25 Amazon gift card, which was sent to those who wished to receive it after completion of their interview. Table 1 includes information of general demographic information of the participants.

Table 1

Demographic Information on Participants Included in Data Analysis (N=10)

Gender		Ethnicity		Age		Highest Earned Degree		
Female	Male	Caucasian/ White	Asian	Mean	Range	Master's	Education Specialist	PhD
3	7	9	1	48.3 years	38-63 years	5	1	4

Participants' Official Job Titles

When participants were asked what their official job titles were, answers varied. Four of the participants held director positions: Director of Special Programs, Special Education Director, Director of Elementary Education, and Director of Secondary Education. One participant was the Superintendent of Schools and one was the Assistant Superintendent of Student Services. One participant was a Social Emotional Learning Specialist, one was a Tiered Supports Coordinator, one was a principal/program specialist for behavior in the special education department, and one was an assistant principal. It should be noted that the assistant principal is still considered an MTSS district leader as they also shared in the district trainer/coordinator of the support role. Participants had been at their current role from less than a year to being in their eighth year (with approximately half of positions being held for about two or less years).

Additional Demographic Information

Six of the participants came from two school districts with student populations in the range of approximately 10-15,000 students, and four came from two districts with student populations in the range of approximately 55–75,000 students. While participants were asked this question during interviews, numbers were later compared with those reported online.

All participants came from districts were there was district effort in place to support MTSS implementation (e.g., academic, behavioral) at some level. For example, one participant shared that "[We] have some schools that we've continued to help be intentional with more intensive supports and then, like I said, it's a districtwide effort in terms of getting some of those key practices in place, like having a school level Tier 1 problem solving team." Other examples include how two participants came from a school district where MTSS for behavior was piloted

by the school district the prior school year with a cohort of six schools, and one participant

shared how MTSS is "a district wide initiative—it is our framework for school improvement."

When asked how long their district had been participating in MTSS answers varied. As

mentioned, one district had just piloted their MTSS for behavior the year before (but additional

time was taken for planning prior to that). Participants from other districts shared "Two years,"

"formerly, probably for about three years," or were unsure of how long their district had been

participating in MTSS. Participants from one district provided varied answers, such as "This is

the eighth year" and "If you want to translate RTI to MTSS— yes, 15 years."

Procedure

To gather information about district leaders' perception of MTSS implementation, the

primary author conducted and video-recorded semi-structured, open-ended interviews utilizing a

template of 10 broad questions and optional probes (see Appendix B). She also asked unscripted

follow-up questions as seemed appropriate. Interviews ranged from approximately 20–60

minutes with the mean length being approximately 38 minutes. Five of the participants'

interviews were between ~20–30 minutes, one was between ~35–40 minute, and four were

between ~50–60 minutes. This variance between interview times could be attributed to different

factors, such as some participants provided more elaborate or succinct responses and/or were

possibly asked more of the probes from the script than others. Prior to interviewing participants,

the researcher had the opportunity to conduct a pilot interview with a university faculty member

who had previously held a school district position and receive feedback afterwards from the pilot

interviewee, one of the secondary authors, and a graduate researcher conducting a similar study.

All interviews were transcribed by a team of research assistants using the transcription

produced by the Zoom recording as a rough base for transcribing. Once a transcription was

completed, a secondary reviewer (usually the primary author) reviewed the transcription while reviewing the video recording to make sure that information was documented accurately. After transcriptions were completed, a digital copy was sent to participants to briefly look over to check for accuracy and respond to the researcher with any questions or clarifications about the transcript. Six of the ten participants responded, none with concerns of the transcript. Prior to the start of in-depth data analysis, the primary author read over all transcripts to get a general idea of what impacting factors came across the data.

Data Analysis

Data were analyzed using a form of thematic analysis, a method that helps researchers organize and establish meaning in their qualitative data (Braun & Clarke, 2006). The analysis took place within three iterative phases. Below, the general outline of each phase is elaborated on and presented in Figure 1.

It should be noted that when statements were identified as impacting factors, the researcher looked for information such as mentions of supports/facilitators to MTSS implementation, barriers/needs related to implementation, concepts that the participant stated were of impact in general, or that could be interpreted as an impacting factor. With regards to supports, they were coded for concepts such as whether the participant included it as support that they or their district provided for their schools (e.g., "We give all our teams trainings") or a support that they identified as being important, helpful, or something they would recommend, or something they felt their building level staff appreciated or brought up before. Barriers could include things like what those district leaders believed had gotten in the way of, or could potentially get in the way of, implementation, needs of their schools, or things that their building staff have mentioned.

Figure 1

General Organization of Coding Process
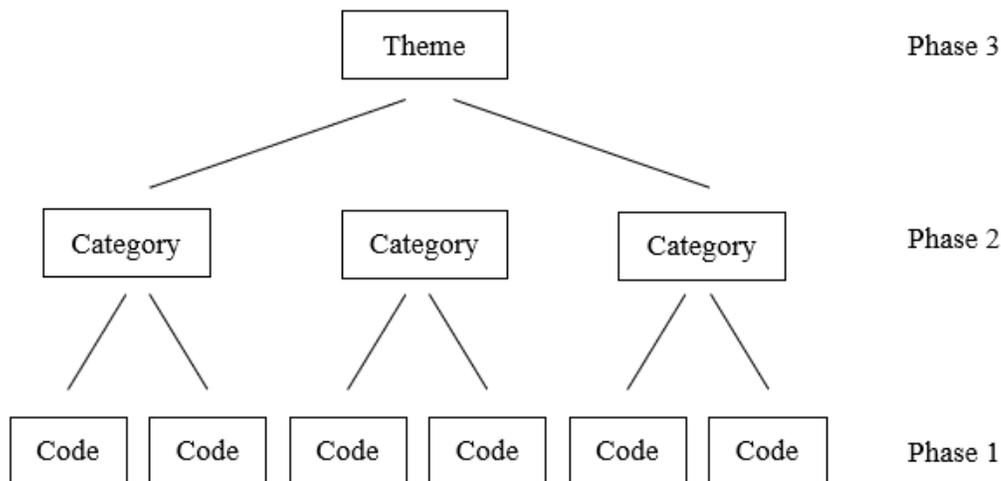
Note. Thematic coding was an interactive process that contained frequent shifting and sorting of data. Therefore, this figure provides only a generalized outline of the coding processing.

Phase One

Phase One started with the primary researcher creating spreadsheets to track open and a priori codes, along with their inclusionary criteria. The a priori codes were impacting factors (i.e., barriers or facilitators) that appeared more than once in the literature review. These included the following: time, staff attitudes, access to resources, and knowledge/skills/training. The inclusionary criteria for a priori codes started off with representative ideas of the code found in the literature and were expanded upon as new ideas presented themselves in the data. Open codes and their inclusionary criteria were created and developed as statements were analyzed. See Appendix C for examples of open codes and their inclusionary criteria as well as the a priori codes and their inclusionary criteria.

The transcripts were first analyzed within-case (i.e., analyzing the information presented within individual interviews) for ideas that fit into defined open or a priori codes. During the within-case analysis, participants' statements deemed of relevance were organized in an individual spreadsheet and labeled with an open or a priori code(s). An outside coder (i.e., additional reviewer) surveyed the transcripts and each participant's coding sheet to confirm or critique the use of statements and their assigned codes. Some statements were presented to a third reviewer/expert in the field to help provide additional insight. There were initially 30 open codes detected at this point of Phase One.

After the within-case coding, coded statements were reviewed across-case. This meant that if multiple statements across transcripts were labeled with the same code, they were placed into an appropriately labeled document and these statements were evaluated on how they worked together. Sorting and shifting of statements and evaluation of appropriate labels for codes was done as needed. During this stage of Phase 1, coded statements were also broken down and organized into more descriptive ideas of the codes. It should also be noted that some statements contained multiple key details or ideas within them that allowed the statement to fall under multiple codes or code descriptions. For a code to remain a part of further data analysis, it had to have at least four strong statements from more than one participant. At the end of this stage of Phase One there were 15 open and the 4 a priori codes remaining. Appendix D outlines these codes, as well as representative ideas of the code.

Phase Two

In this phase, codes were aggregated into cohesive categories. This review also led to some sorting and shifting of data. Five categories were created in Phase Two (See Appendix E). Additionally, coded statements that contained concepts that did not appear to be frequently

mentioned or initially fall well into a code during Phase 1 were reviewed during Phase 2 when all the main concepts coming across the data were known and established. During this review, statements could be found acceptable to become a part of previously created code or deemed to still not be frequently mentioned enough to warrant the creation of or inclusion in a code.

Phase Three

Further review of categories and their codes led to the combining of two of the categories, (a) Laying the Foundation and (b) Attention to Framework, as the codes within these categories were more closely related or better defined as one body of ideas. This aggregating was approved by an expert in the field (i.e., one of the secondary authors who has been involved in MTSS research and providing MTSS support). As a result of this aggregation four final themes were created: (a) Foundation and Framework, (b) Personnel Involvement, (c) Supports Beyond the Site Level, and (d) Pervasive Influences. Additional sorting and shifting were done as needed.

Trustworthiness

Rigor in qualitative research can be ensured by examining the trustworthiness of the study. Many qualitative researchers have accepted Lincoln and Guba's (1985) four criteria for trustworthiness: credibility, transferability, dependability, and confirmability. Each is explained below and how they were addressed in this study. Additionally, the primary researcher's positionality statement is shared, as it adds to the trustworthiness of the study.

Credibility

Credibility is considered the qualitative researcher's equivalent to internal validity, and judges how well the structure of a study will produce results that align with reality (Lincoln & Guba, 1986; Merriam, 1998). The two methods of credibility that were used were analyst

triangulation, and member checks (Lincoln & Guba, 1986). Triangulation was used by having transcriptions created by one research assistant and reviewed by another research assistant. Triangulation was also used in Stage 1 of coding by having an additional reviewer look over all transcripts and comparing them to the primary author's coding sheets. A third reviewer was occasionally used to provide feedback as well. This study also increased its credibility by utilizing member checks, where the transcripts of interviews were sent back to the 10 participants via email, and they were asked to skim over them to check for accuracy and if they had any questions or clarifications about the transcript to let the primary author know. Six of these participants responded and none shared concerns with their transcripts. When asked to look over the transcript and share if they had any questions or clarifications, one of the six responded saying, "Yes, I would be happy to." suggesting that he had not looked at it yet, but also stated that "It looks good," suggesting that he had at least briefly looked at it. This participant did not provide any additional follow-up after this email.

As mentioned, there were originally 11 participants with one participant having their interview removed from the study as they did not feel comfortable with having it be a part of the study. When this participant had initially reached out with concerns about their interview, the primary author emailed them a copy of their transcript prior to their final decision being made, and thus they also underwent a form of member check. It should be noted that this participant's transcript was only completed by the primary author without a second reviewer.

Transferability

Transferability is considered to be the qualitative researcher's equivalent to external validity and determines how well the results can transfer to other circumstances (Lincoln & Guba, 1986; Merriam, 1998; Shenton, 2004). The authors address transferability by providing

rich detail of the study was provided, such as background information on the participants and the districts they work in (while maintaining participant confidentiality) and the general steps taken to acquire and analyze (i.e., binding the data into themes) the data.

Dependability

Dependability is the qualitative researcher's form of reliability (Shenton, 2004). When focusing on dependability, a researcher gives in-depth information about the process of their study so others can attempt to replicate (Lincoln & Guba, 1986; Shenton, 2004). Based on the works of others, Korstjens and Moser (2018) mention the use of an audit trail (i.e., a detailed log of the researcher's steps) to increase dependability. The primary researcher used a form of audit trail which includes various, specific steps taken during this study more detailed than is outlined here.

Confirmability

Confirmability helps ensure that a qualitative study is as objective as possible. In other words, rather than focusing on the researchers' opinions, it helps ensure that the study provides an honest representation of the participant's perceptions (Shenton, 2004). Recent literature has continued to support the use of the audit trail to also addresses confirmability (Korstjens & Moser, 2018). Reflexive journaling can help with confirmability as well (Lincoln & Guba, 1982). In her form of a reflexivity journal, the primary researcher occasionally recorded specific incidences of potential or real subjectivity presented during the completion of the study.

Additional steps of trustworthiness that helps represent the participants fairly and justly was taken by having all of the research participants' voices represented in the data analysis, with each voice presented at least once in the Findings section. Some voices were represented more

than others in the Findings, but this was most likely usually done to simply demonstrate a well-said quote embodying an idea.

Positionality Statement

The primary researcher is a graduate student in the field of School Psychology which places a value on systemwide supports like MTSS. She had only had one known prior interaction with a district leader before the commencement of interviews, nor did she have a background in the MTSS process prior to starting this research. Therefore, her opinions regarding MTSS implementation and impacting factors associated with the practice were shaped primarily by the literature review and her participation in the study. This positionality could increase the trustworthiness of the study as it may have reduced bias through the data analysis and reporting of findings.

CHAPTER 4

Findings

The purpose of data analysis was to determine what school district leaders identified as impacting factors during MTSS implementation. In other words, we examined what district leaders suggest supports/facilitates MTSS, what do they identify as barriers/needs, or what generally impact MTSS implementation?

Four themes were identified, each described below with their respective codes (Figure 2), and examples of ideas brought up related to those codes. Themes are organized by prevalence (i.e., most coded statements falling within them). Codes are presented by their prevalence as well (i.e., generally, which codes had more statements associated with them). Examples of participant quotes are shared with each code. These quotes have been formatted and edited in a way for clarity of reading while still trying to maintain the participants intended thought, such as deletion of redundancies or simple sentence restructuring.

Figure 2

Synoptic Theme and Code Figure

1. Personnel Involvement	2. Pervasive Influences
- Strong Teams - Coaches/Coaching - Staff Attitudes - Leadership	- Access to Resources - Data - Time - Covid-19

3. Foundation & Framework	4. Supports Beyond the School-Site Level
- Culture - Structure/Systems - Integrative Practice - Roll Out - Site Driven - School Level	- Knowledge - District Support - Communication Loops - Funding - State Support

Note. Themes are numbered by prevalence, left to right. Codes within each theme are ordered by general prevalence, top to bottom.

Theme 1: Personnel Involvement

The data suggest that MTSS is a people-dependent practice, meaning that staff members' involvement and opinions impacts the success of the practice. Four codes comprised this theme: Strong Teams, Coaches/Coaching, Staff Attitudes, Leadership.

Strong Teams

Various aspects of teams were pervasive throughout transcripts. Ideas included (a) having teams structured with district support, (b) using the right people as team members, (c) having diverse or representative team membership, (d) having teams that meet, (e) teams using data, (f) teams being collaborative, (g) teams having a common goal/vision, (h) mentions of district teams, (i) and the importance or mention of Professional Learning Communities (PLCs). For

brevity, only two examples are provided. Each example embodies multiple ideas. The first is an example of teams structured with district support and using the right team members. The second is a quote that mentioned PLCs, having common goals, cooperation, and using data.

J2: I think helping principals understand their roles and understand how to build a strong team around them was something that I would have liked to have taken just a little bit more time…. "you should have a really strong core that is part of your team" and also letting them know that it doesn't necessarily have to be stereotyped by position, right? Sometimes they're just some really talented teachers that lend to the culture of a school that make all the difference on a team, right?

J8: (*When addressing barriers*) … Maybe they have a team that's not very collaborative…. So I think what we run into, I guess if we're looking at that, when I talk to teachers that might feel a little frustrated, sometimes it's, you know, that PLC piece is a really important part of identifying and providing interventions. And so, if they have a team that's not functional, not as functional as they should be, you know, that's a frustration. It's really the idea that all the students belong to all of us and so you kind of have to take ownership of all the students together in meeting their needs. You know, teachers need to be unified in the goals and objectives that they're trying to accomplish. And so, if you have someone that's kind of rogue, that's non cooperative, that's - that's probably the barrier that we see sometimes. You know, that lack of collaboration or cooperation or someone that doesn't bring their data that they need to bring to be effective and are not very collected.

Coaches/Coaching

Many participants identified coaches as being a support that they provide in their district or shared the importance of coaches and having access to coaching. It was also suggested that there is a benefit to having coaches provided from different specialties, such as having coaches from both general education and special education.

J9: Well, I've already mentioned coaching a couple times. I am a huge advocate for coaching and the research is clear that, you know, systems level coaching and instructional coaching are important factors associated with sustained implementation. And, you know, so if those are important factors to facilitate that, they're also detrimental. The lack of coaching is then detrimental to implementation.

J1: (*When asked about facilitators to MTSS*) … Like they [schools] might have like had a really great experience with the Special Ed coach we provided, but there were other schools that maybe saw them more as outsiders and they relied a lot more on that Teaching and Learning coach. So, if we had not had really both supports in place, we would have had a harder time kind of providing what we needed at their school from the district. And so, I think that that was really a helpful aid, is to have coaches provided from two angles, where if they utilize them both very well: Fabulous. But if they kind of chose to rely more on one than the other, they weren't left without support and without district resources.

Staff Attitudes

The findings suggest that staff members' attitudes about MTSS matters. Representative ideas that came across in this code included the following: (a) resistance to change (e.g., teacher resistance, building leadership resistance), (b) buy in (mentioned at building staff level,

administrator level, and district level), and (c) whether continuous attention is given, and efforts are put towards MTSS.

J10: (*When asked if there was anything they wish they had known or been trained on before starting their work to implement MTSS as district leader*) … They're [teachers] really resistant to change…. As an administrator, when you start talking about implementation of anything … they just get really resistant to any kind of change. And that's frustrating in our line of work. I think that's one of those processes that I wish I would have had more of a heads up. Now, what I would have done with that information, I don't know.

J1: I think the one barrier would be buy-in. Like as far as like when they're actually trying to implement certain things, like getting buy-in from the staff … cause usually you're asking people to do a little bit more work…. And so, I think that sometimes the pushback, or the buy-in, is related to that.

J7: … when we progress, we may relax a little bit or we may become a little stagnant, you know, right, in our efforts. We have to be continuously improving, continuously asking questions about what we're doing and how it's impacting student success…. So, I think our level of comfort is really important to us and I don't think I really understood that at the beginning. I think we were so caught up in the data collecting and in trying to make connections to learning that we forgot sometimes about the dispositions of our staff and the biases that may exist.

Leadership

The data suggest that leadership can be a powerful force in MTSS implementation. For the Leadership category, ideas that were evident in the data include the following: (a) importance

of leadership, such as on one's teams or established at multiple levels and (b) importance of administrators specifically.

> J6: So, I can't get past the point that really MTSS leadership is probably Ingredient Number One or Factor Number One. You've got to have somebody who will outlast the complaining, and the undermining, and the excusing, and the "Oh, we're already doing this," and … be in it for the long game and be determined to see that process through….

> J2: The biggest thing that they can have is an administrator that feels that MTSS is important, especially PBIS. So, they have to have that building level leadership. Even with the six schools last year, those that excelled— they all did well… they all made progress— but those that excelled had an administrator who was really into MTSS, who really wanted to make a change in his or her school. So that was, that's what they really need.

Theme 2: Pervasive Influences

The Pervasive Influences theme was comprised of four codes: Access to Resources, Data, Time, and COVID-19. Access to Resources was pervasive in the sense that it is a broad concept with various types of resources being identified by participants. Data were mentioned within various other codes and could therefore be interpreted as a pervasive aspect of MTSS implementation. Time was pervasive in that it is needed to implement the practice of MTSS (be that to meet with teams or provide intervention). And COVID-19 was pervasive in the sense that it was identified as halting or altering aspects of MTSS implementation.

Access to Resources

Analysis of participants' responses suggests that having access to various types of resources and tools benefits MTSS implementation. Some statements identified broadly the need for resources and tools, while others mentioned the usefulness of data collection tools, such as quality assessment methods, or planning documents/self-assessment that help school personnel know where to start with implementation. Participants also brought up intervention supports (e.g., having access to quality interventions or a tool to help find good interventions). Additionally, participants also mentioned access to personnel, such as substitutes or MTSS coaches and teaching assistants. In other words, people are a resource that impact MTSS implementation. For brevity, only two examples are provided: one on data collection tools and one on personnel.

J2: (*When asked what advice they would give to someone looking to implement MTSS*) … I would definitely recommend something like what we've been using as far as the PBIS Planning Worksheet, which is a very loose thing, that just-Here are some pillars of PBIS. Where [are] you guys at on that? Rank, you know, level it out, and then decide on which one is your priority and create an action plan, right?

J11: (*When asked about what barriers they might bring up to one of their leaders*) Again, I think it comes back to having more people available to help. So having coaches, having people that that's specifically their job is to support MTSS implementation so that they're trained, they really know what they're doing, they can answer the questions, they can be there for their small amount of schools, rather than surface level for a whole bunch of people, cause I feel like that was really effective.

Data

Data had a pervasive influence in that it was a part of main ideas that fell into various codes: Structures/Systems, Strong Teams, Access to Resources. Therefore, data can be considered an important component to MTSS implementation. Those data concepts previously mentioned included the following: (a) structured data collection (such as having a consistent data collection protocol across schools in a district implementing MTSS or having clear assessment methods), (b) having teams looking at data (e.g., having access to ways to collect and use data, teams tracking interventions), and (c) having access to data collection tools (such having the right assessment method).

J7: (*When asked what indicators let them know when effective MTSS implementation was taking place and what evidence they used to decide this*) … we developed this common protocol across all schools. That was key, because it's one thing to evaluate, right, it's one thing to collect data, but we're collecting data in all these different aspects or these different components or areas and, you know, school A and school B are different. That makes it very difficult for us to really understand the impact that we're having through an MTSS framework. By having a common protocol, our schools are becoming more aligned at gathering the right data - the data that would have a greater impact.

J2: And one of those hiccups really was data, as that we couldn't move forward in good faith with the program if we didn't provide teams with a way to collect data and use that data to make decisions in their schools. And so, that was a big deal for me.

J6: (*When asked what needs building teams may have*) … I think that the second thing would be if that outside assessment were to not just be arguably subjective, but

could have some objectivity in it with data collection tools that would allow the school to look objectively at what it is that our standards of performance as it relates to things around behavior or academic performance, and in, a lot of that could be not just achievement, but also growth type systems.

Time

Having time to implement MTSS is crucial as it is well known that schools are already easily kept busy. Some participants simply stated that more time is needed without specific elaboration on what that time would be used for. Some participants mentioned the impact of competing initiatives (i.e., things that take away time and energy from MTSS), such as those brought on by the COVID-19 pandemic. Another idea mentioned was the benefit or need for built-in time in staff member's schedules to work on MTSS, whether this was time to meet and collaborate with other staff members, or built-in time to provide interventions to students. Example quotes of these main ideas (i.e., a general need for time; competing initiatives; built in time for MTSS) are presented below.

J9: (*When asked about needs*) I mean, time is always the answer to that question at any level, is more time to do things.

J6: I think some of the barriers would be competing initiatives— that there's the idea that there's a lot of things that are distracting us. I mean, an obvious one right now as to why there isn't a lot of what you'd call is 'marked progress' being made on MTSS development right now is the competing initiative of COVID safety and health management support right now. I think that there's a lot of people spending a lot of time on an unnecessary competing initiative that's come in.

J3: I think going back to time, I think that's a factor. I think that if you don't have those built-in times to do that, it's easy to go away. I think with teachers, they can fill their time with lots of different things, as well as administrators. So, if you don't have a specific time that you meet that's done every week or every other week, whenever it is that they meet, then I think MTSS or PLCs or whatever you're using to move that forward will go away.

COVID-19

As interviews took place during the COVID-19 pandemic, some participants mentioned the impact that this event had on their implementation. An idea mentioned was that the pandemic put implementation on hold (i.e., was essentially a competing initiative). Another idea was how the pandemic caused practices or learning to go virtual. Examples include the need to have virtually accessible interventions, how it was difficult to switch to online meetings, or generally statements on how trainings became virtual. A sample of each idea is shared below:

J1: But everything has been put on hold because— and I feel like I have some empathy for this being an administrator at a school as well— that there's been so much to do with COVID, just putting all new policies and procedures and things like that in place that we have to for the safety and health of our staff and students— that it's kind of fallen off people's radar. I know it's kind of on the radar, but it's not the biggest priority right now. So, we're still waiting to hear word about how to roll for Year Two, as far as even bringing in a new cohort.

J11: So, in our meetings this year, because we only had half of our students in the building, there haven't been the behavior issues like they typically have. So that's been a big thing that they mentioned is we're not seeing that the behavior issues and needs for

those interventions, but it's more academic because students are behind from the soft

closure, and COVID, and virtual learning that that's the bigger need this year is trying to

help students who are behind and help students who are struggling virtually— with

virtual learning— to come up with interventions they can do virtually and interventions

that can help that way.

Theme 3: Foundation and Framework

Many participants identified various impacting factors related to the creation and

maintenance of strong frameworks to support the implementation of MTSS. The data can be

interpreted to suggest that MTSS should be intentionally and systematically implemented and

that how a school is currently organized and structured can influence implementation. Six codes

led to this theme: Culture, Structure/Systems, Integrative Practice, Roll Out, Site-Driven, and

School Level. Each is elaborated below.

Culture

Prevalent ideas within the Culture code included (a) having MTSS be viewed as a long-

term practice, framework or way of doing business, (b) having MTSS not be a person-based

practice (i.e., a practice that can survive even if certain staff members are no longer involved in

implementation), (c) placing continuous attention and efforts is put towards MTSS, and (d)

having a districtwide culture or expectations of MTSS implementation. Many of the quotes

reflected multiple facets of this code.

> J2: [We need to] help the teams learn, help there to be a culture in the school and
>
> a system in the school that survives different principals, that survives staff members
>
> coming in and out, that just is an expectation that when I go to a [redacted] School
>
> District school: Who's on the [team]? Right? When did they meet? What's our next

initiative? Right? What are we currently working on? How do we gather data? That those things are always just there for the next principal to look at.

J4: As I said before, they've got to see this as ongoing support and not just another initiative, but it is who we are. [Redacted] School District is an MTSS district.

J6: I think that people can get distracted by what they'll feel is an urgent thing politically to respond to, where if the organization doesn't continue to let people know that MTSS is the system for solving problems in general as a culture, it can fall aside. So, I think that … besides the idea that there's a competing initiative, it could be also the idea if someone would say to me, 'I don't hear people talk a lot about MTSS right now.' So, in other words, we've moved on to another initiative or another fad. And so, initiative fatigue could be something that creeps in right there, right? That they just feel like [they] 'can't do one more thing,' or 'It doesn't look like this matters to my supervisors anymore.'

Structures/System

Many participants shared about the importance of having various components of MTSS be structured or systematic. Representative ideas for Systems and Structures included the following: (a) having structure/system at various levels, (b) having a structured intervention system or structured way to address students' needs, and (c) having structured data collection. The first quote below (J1) emphasizes having structure/system at various levels and the second quote (J8) emphasizes having a structured way to address student's needs and having structured data collection.

J1: Okay, the very first one that comes to my mind [when asked about impacting factors] is the system or structure that is put in place. I think that that has been the hugest one, and to [District]'s credit … that they just really thought through the system of how to

support teams, how to set things up both at the district level and at the school level with that school BEST [team]. So, kind of that the system and expectations around what it meant to be part of this I think is like really the— one of the primary things.

J8: (*When asked what they would say are the biggest impacting factors to implementing MTSS*) Do you know, I think a well-structured system on identifying where students are at and what they need and identifying students that may be falling into a Tier 2 or Tier 3, and having a clear plan on how we're going to work with those students. We can identify them, but if we can't identify them and provide quality help to them, it's not very effective for us. And I think one of the obstacles is probably just clear assessment methods— making sure we're identifying where holes are and a clear pathway and identifying how we're going to fix those holes so we're not providing an intervention in an area that doesn't need an intervention, but really, really hone in specifically, laser like, on what kids need and providing that.

Integrative Practice

Integrative practices were mentioned in various forms (i.e., having structures or systems already in place assisting in, or at least not competing with, MTSS implementation), with the main ideas being to (a) have other practices and MTSS align, (b) their being involvement from multiple departments, and (c) both district and school building involvement. An example of each idea is shown in order below:

J7: I think if I understood from the beginning more about implementation science and how that as a system we may be engaging in great work, but we may inadvertently not even know that some of the tensions that exist between some of the initiatives that we are doing, that even though we may be working very, very hard, we may not be as

efficient in all moving in the same direction. So, one of the things we've kind of taken a step back to look at is understanding how to analyze the data for student learning— understanding how we can take the various initiatives that we have and make sure that we're not getting a lot of tension or friction, and therefore we're losing energy and we're losing stability, we're losing our ability to progress.

> J1: *(When asked about what they see as the biggest supports, facilitators, or aids when implementing MTSS.)* … also, absolutely, kind of that interdisciplinary, inter-department collaboration and connection because it really cannot just be an initiative that's coming from one department. I don't think you ever get great buy-in or implementation if it's too one sided.

> J11: I think it's important to have an alignment between, like, the school goals, the district goals, and MTSS, so that, again, everybody's working towards the same thing and that we're not being siloed, but that the teams are working together for a specific vision, looking at the data, and then also having those interventions readily available.

Roll Out

Roll out can described in the following ideas: not attempting to roll out MTSS too quickly, not rolling out beyond capacity/readiness, and taking the time needed for staff to receive it well. In other words, the data suggest that how a school or district decides to roll out MTSS may influence the practice's success. One quote that incorporated the main ideas discussed in this code is shared below:

> J1: I feel like there is a desire at the district level to roll this as fast as possible…. We would love this to be district wide, but we are trying to help them understand what supports are necessary and we can't roll out faster than we have capacity to support,

otherwise I just don't think the implementation would be well-supported, well-received, well-done at the schools. And so, I think that we're experiencing some of those challenges as far as our capacity to support the rollout of MTSS [team], or the PBIS end of this. But I think that a lot of good decisions are being made at every level to kind of understand that and see what would be needed and to have conversations about how fast could we roll this [out].

Site Driven

This code involved various ideas related to consideration of site-specific factors. Examples of ideas presented in data include taking a site-based approach to implementation and being aware of where each school is at. One mentioned how it is hard to identify broadly what needs schools have or what supports are provided to schools regarding MTSS implementation, because it really depends on the site. Two examples of this code are provided below:

J2: It was important for us to make sure that everything that we did, although structured, was going to be site-based because, kind of like I've explained, we've had a smattering of good programs over the years that some teams have retained and we didn't want to destroy any of the good stuff that was in there, so that we have to respect the fact that different schools were at a different level.

J4: (*When asked about supports provided by the district*) … And I think that's a really tough question, because it really does depend on the school and the culture and the environment of each individual school. So, I would need to place myself as an individual team member at a specific school.

School Level

Some participants suggested that MTSS is easier to implement in elementary school and more challenging in the secondary/high school level. It also appeared that MTSS implementation in middle schools is more doable than in high schools. One representative idea that came across was that (their) elementary schools have been doing MTSS longer. Examples of other, less-frequently mentioned ideas included that elementary teachers are with the same students all day, and secondary teachers teach more students. The following quotes are dialogue between the participant and interviewer when they were asked how they thought building teams in their district perceived MTSS:

J8: You know, I think at the elementaries they perceive it as being something critical…. It's a little easier to have the students all day long, and so there's more time and you have the students in a way that you can do that a little bit better than at the secondary. Middle school, I think they've come a long ways with it as well. I think they do a good job in identifying those…. [At] the high school level, [they're] doing much, much better, but I still think it's a little bit of a struggle in their teams on identifying, you know again: where my student is, where they should be, and what am I going to do if they don't, if they're not learning without just moving forward. And in kind of getting that—that down, so.

Interviewer: What do you think causes it to just be harder for the upper grades?

J8: You know, I think that in the elementaries, they own the students a little bit more, if that makes sense. They take ownership of the students in their learning. They have them all day long. The students are more teacher-directed, so that

there's just a natural push that way. And the other part is I think we just got started

on it earlier. And if I'm a secondary teacher, I have 160 students.

Theme 4: Supports Beyond the School Site Level

The findings of this study suggest that, when it comes to MTSS, schools can benefit from

receiving support outside of what is already at their site. Codes under this theme include

Knowledge, District Support, Communication Loops to Solve Problems, Funding, and State

Support, and Funding.

Knowledge

The findings suggest that district leaders recognize having access to ways of increasing

staff knowledge as being important. Three representative ideas were evident in the data: (a)

districts recognize professional development as a support that they provide or an impacting

factor of MTSS implementation, (b) working with experts, and (c) and having access to outside

perspectives (e.g., external evaluations or outside coaching perspectives). An example of each is

shown below.

J3: You know, sometimes they [teachers] get into meetings and wonder, 'Okay,

now what?' So, I think it's our responsibility to make sure that they're trained well

enough to know what those meetings look like, how that MTSS should work, and […]

how this is going to impact kids. Because I think, really, once a teacher understands that

part of it, they'll do whatever they can to make sure they can impact students.

J2: You do have to have somebody that's knowledgeable…. I think districts

reaching out if you don't have an expert in your district. Not every district has somebody

who feels very comfortable with MTSS at that level to train. So, you have to have some

knowledgeable folks, whether that be from an institute of higher education like

yourselves, right? I know I've benefited over time from trainings, being part of some

things with [names Universities] and my own training at [The University Name].

J6: (*When asked what indicators would let them know that effective MTSS is*

taking place in their district and what evidence they use to decide that) … I think that

something that we're realizing that we need to do also, besides that self-evaluation

though, is really identify how can we be informed by an external evaluation, right? I

think sometimes that idea of only seeing what you see, and there can be some, a little bit

of blindness within the organization as to what it is that we don't see or don't know. So, I

think that coupling that self-evaluation with an external-reviewer evaluation is another

important part to assessing and monitoring progress in implementation.

District Support

Many participants mentioned the importance of having (a) district support/involvement

(e.g., districtwide implementation, districts prioritizing or emphasizing MTSS, providing

resources) or (b) higher-level district support, such as school board support, district director

support, or assistant superintendent or superintendent support. An example of one type of district

support mentioned and example of one type of higher-level district support are mentioned below.

J4: … it really is critical that it [MTSS] is a district implementation. I've seen

districts implement it at one school or at five schools and the impact is much less because

it's just seen as another something. It's not seen as a way to achieve student growth and

teacher improvement…. it's critical— critical that it's supported at the district and it

becomes integrated into your district improvement framework.

J1: (*When asked about facilitators*) I definitely think that the district support

(meaning like above us, like the high-level district support) because so many of the things

we've done could not have moved anywhere without having district directors and multiple district directors (like I said, Student Services, Special Ed, and Teaching and Learning).

Communication Loops to Solve Problems

Another finding was districts having communication loops, or in other words, staff needs can get reported back to district personnel so schools can get support (such as a district staff member working with school teams and reporting back to the district or district staff working to problem solve directly in the schools). While not always presented in the context of being a barrier or facilitator, participants' mention of these communication loops implies the presence of an impactful system for addressing needs.

J8: (*When asked if there are similar or different impacting factors at the district level*) Well, whatever we do hopefully is impacting at the school level. So, I don't know that we ever see a different impact at the district level versus a school level. Other than just trying to make sure that if they need support, that they're getting support. We have what we call our 'principal partnership tool' that as a district, we divide out and we meet regularly with the principals to see what kind of support they need. So, if a school is seeing a deficit— sometimes they'll find something in their data that's really concerning to them. And so, then they'll have some dialogue with the district to see what kind of support we can provide, whether it's training, or whatever that might be, that might be helpful at the school level. So really, it's the classroom levels where the impact is. We just help support that.

J3: (*When asked, "What kind of barriers, do you think, or would they [staff] even bring up any specific barriers to you?"*) Yeah, we get those occasionally. I mean if we sit

in a meeting at a PLC, a BLT [building level team] meeting— and that's why we're there, is if there are barriers that come up and we can, we can help work them through those barriers, talk through those things with them and help them, you know, understand.

Funding

The data suggest that MTSS is a practice that benefits from having funding. Representative ideas that came across with regards to funding include funding for personnel (e.g., substitutes, coaches) and receiving state funding. Below is a general quote on the impact of funding, followed by one each more specific with the two codes mentioned.

J9: Funding is always, always an issue, of course, for any initiative. So, with funding, that can facilitate more coaching, more training, the data pieces, [recording] of data. And the lack of funding, you know, conversely serves as a barrier in those areas.

J6: (*When sharing about barriers*) … Another thing that could be out there is, again, the capacity within their building. Just saying, 'I've lost some of the staffing that helps me do all these interventions.' 'We can't do extended day programs anymore because we just don't have the money to hire people to work after school.' Or, 'we used to have staff who specifically were trying to help students in this whole area of social emotional learning that I think can be an MTSS initiative and this individual now is so tied up with something else, or we have lost the funding or support [to] have that person with us anymore.'

J8: (*When asked about needs*) I think they [the schools] have a lot of supports. I think they— the state now provides TSSA [Teacher and Student Success Act] funding, I don't know if you're familiar with that, but spending that goes specifically to the schools and most of the schools have used that specifically to run this. So, I think if you were to

ask the principals at the different schools, I think they feel like they've been adequately

supported.

State Support

Some participants mentioned the importance of having state support or partnerships.

Examples of state support mentioned included such things as state supported training and

resources, and states providing systematic support. State funding is highlighted in the Funding

code. Two example quotes of state support are provided below:

J3: I think being able to have statewide support, you know, from the [Redacted]

State Board of Education level was important. That was pretty imperative for us to be

able to see that support from them. I think that, you know, that training had to come from

somewhere and they took that on and facilitated that which was nice and so those are all

things that are beneficial, you know, to know that you've got that from the state level, that

they're supporting you and helping you through that process.

J4: The state office [redacted] State Board of Education is critical. And the fact

that they have an MTSS focus and the fact that they have supports for MTSS at the state

level. And I've had this conversation with them as well. It is improving, all the time. And

I think the more that the state sees it as a school improvement framework and provides a

systematic support and having that conversation at the state level, the more that's going to

strengthen what happens at the district and the school level. That's a part of the greater

system.

CHAPTER 5

Discussion

MTSS is a preventative and responsive school-wide model implemented to address

students' various levels of academic and/or behavioral need. While various facilitators and

barriers of MTSS implementation have been identified in the literature, district leaders'

perspectives of these factors have not been frequently considered. In this qualitative study,

district leaders' perspectives were analyzed and resulted in the creation of four themes, or broad

ideas related to impacting factors of MTSS implementation: Personnel Involvement, Pervasive

Influences, Foundation and Framework, and Supports Beyond the Site Level. The ideas

presented in each theme overlap in many ways, and therefore, how they are structured and

presented in this study are just one way to cohesively examine the perspectives of district leaders

who are involved in MTSS implementation. This section will explore how the findings connect

to the prior research and literature that informed this study.

Theme 1: Personnel Involvement

The study results suggest that staff members' involvement and opinions impact the

success of MTSS in schools. The four codes that created this theme were Strong Teams

Coaches/Coaching, Staff Attitudes, and Leadership. The district leaders interviewed discussed

the importance of several facets of personnel involvement within these codes. For example,

participants reported that schools needed access to coaches, that building administrators were

key in guiding implementation, and that teams should work collaborative with the right

personnel as team members. Furthermore, the idea that staff attitudes influence MTSS

implementation came across, such as whether there is resistance to change. These codes align

with prior literature, writers, and experts who have emphasized staff's attitudes, leadership,

teams, and access to coaching as contributing to best practice or being impacting factors in MTSS implementation (Metz et al., 2007; Murin, 2016; NIRN, n.d.-d; Rinck, 2018; UMTSS, n.d.-d; Werts et al., 2014).

Theme 2: Pervasive Influences

Previously mentioned impacting factors for implementation shared in the literature include having resources and time for MTSS (Castro-Villarreal et al., 2014; Mason et al., 2019), which were also shared by our participants. Additionally, data-based decision making has been claimed to be important for sustaining implementation (McIntosh et al., 2013). These three components also aligned with our Pervasive Influence theme. As previously mentioned, our four codes in this theme are the following: Access to Resources (e.g., personnel, intervention supports); Data (e.g., structured data collection and having teams look at data), Time (e.g., having built-in time to collaborate and intervene), and COVID-19 (e.g., putting implementation on hold). The presence and impact of the COVID-19 pandemic could not have been predicted previously by researchers or practitioners of MTSS, but nonetheless has impacted implementation and will be a factor of potential consideration going forward in the field.

Theme 3: Foundation and Framework

Basing their claims on others' work, Averill and Rinaldi (2011) have suggested that district and school leadership should consider the formation of structures that promote MTSS implementation. The Foundation and Framework theme suggests that MTSS should be intentionally and systematically implemented and that how a school is organized and structured can influence MTSS implementation. This theme included six codes. The first three (Culture, Structure/Systems, Integrative Practice) promote ideas such as building a practice that is built to last and not dependent on the presence or absence of certain stakeholders (e.g., one school

administrator), systematically creating structures needed for effective MTSS implementation (e.g., intervention strategies or data collection), and having other practices in alignment with MTSS. The other three codes (Roll Out, Site Driven, and School Level) promote ideas such as not implementing the practice beyond current capacity, respecting individual schools needs or level of implementation, and consideration that MTSS may be more easily implemented in elementary school settings based on their structure. Previous research has considered components of these codes, such as gradually introducing new MTSS steps (i.e., Roll-Out; Rinck, 2018), aligning MTSS into other school activities, practices, and policies (i.e., Integrative Practice; Rinck, 2018), or the challenges of implementing in a secondary setting compared to an elementary setting (Dulaney et al., 2013). Culture as we define it (e.g., MTSS not being person-based, being established as a district expectation), and ideas related to MTSS benefitting from being site driven have not been emphasized in the previous research literature but are present in the current study. When looking at these codes together, the following concept can be interpreted from the data: MTSS should be adopted and viewed as a lasting framework that is built with consideration of the school's individual circumstances.

Theme 4: Support Beyond the Site Level

The findings of this study suggest that MTSS implementation can be supported and improved in the schools if implementers receive outside supports. Receiving outside support to enhance practice has been previously documented in the literature. For example, the impact of knowledge enhancing activities such as professional development or working with experts has been noted (Castro-Villarreal et al., 2014; Mason et al., 2019; Rinck, 2018). Additionally, district support has been viewed as a part (but not an independent predictor) of continued implementation (McIntosh et al., 2013) and open communication with school staff (Rinck,

2018). Our theme of Supports Beyond the Site-Level emphasizes other factors such as access to state support (e.g., training or resources), and having funding to support implementation. This theme and some of it specific codes are outline in the following section as they related to implementation science.

Implementation Drivers

A component of implementation science is implementation drivers; implementation drivers are general constructs that support implementation of a practice (Fixsen et al., 2005; NIRN, n.d.-a). There are three established implementation drivers: Competency Drivers, Organizational Drivers, and Leadership Drivers. Components of the data align with the ideas of the implementation drivers even though the participants did not explicitly talk about implementation drivers.

Competency Drivers include practices that increase school staff's skills and expertise, such as coaching and training. Therefore, the code of Coaches/Coaching mentioned in the Personnel Involvement theme and the code of Knowledge in the Supports Beyond the Site Level theme are direct mentions of this driver being seen as an impacting factor in MTSS implementation.

Organizational Drivers can be described in three parts: Decision Support Data Systems (DSDS), Facilitative Administration, and Systems Intervention (NIRN, n.d.-c). DSDS suggests that systems need to make decisions using data and relates directly to the Pervasive Influences category of Data. Facilitative Administration can be described as emphasizing "the internal processes, policies, regulations, and structures over which a school, district or implementing organization has some control" (NIRN, n.d.-e, Definition section, para. 1) and can involve communication loops to address barriers in MTSS (Freeman et al., 2015). Facilitative

Administration can therefore be seen as related to the Foundation and Framework theme as well as aspects of the Supports Beyond the Site Level code of Communication Loops. The last component of Organizational Drivers, Systems Interventions, also correlates with the Support Beyond the Site Level theme as its focus is on working with outside sources to aid implementation (NIRN, n.d.-c). Examples mentioned in the recent literature developed from the works of others include partnerships and funding (Freeman et al., 2015).

Furthermore, the Leadership Driver aligns with how we saw Leadership form as a code in our data. Again, the participants seemed to be applying key pieces of implementation drivers in MTSS even though they did not explicitly label them as such.

Implications for Practice

The findings of this research study can directly impact districts and schools in their planning stages of MTSS implementation that could lead to longer and stronger sustainment of MTSS in their schools. With regards to Theme 3, Foundation and Framework, districts and schools looking to implement MTSS should focus on creating a strong structural foundation so that future implementation will be better sustained. As J1 noted, one of the biggest impacting factors for her was that "[The district] really thought through the system of how to support teams, how to set things up both at the district level and at the school level with that school BEST [team]." The data suggest that practices should be structured in a way that they can continue despite changes in personnel. This planning stage would also be an ideal time to determine how to align MTSS with other practices already in place in the schools, get multiple department and leadership levels invested, and set clearly outlined practices. It will also be the time to identify what are the individual school's unique needs or current structuring so that they are not expected to do things they are underprepared for or have already established. Districts

and secondary schools should also consider setting up structures that will be more accommodating for the secondary environment, so that they can more successfully implement MTSS.

Districts and schools will also need to consider the personnel they currently have access to or could potentially gain access to, as MTSS requires people involvement at various level (i.e., Theme 1- Personnel Involvement). School systems should consider who would be critical on their teams, who can provide coaching and strong leadership, and prepare ways to address various staff attitudes, such as plans on how to address resistance to change, increase buy-in, and prevent fatigue.

The findings suggest that educational systems can better sustain MTSS implementation if supports are accessible outside of the individual, school-site level (i.e., Theme 3). Schools and districts should assess what district and state supports are available or could be obtained, what communication loops can be strengthened or established between schools and the district, as well as what professional development opportunities and funding is available or could be obtained to foster stronger implementation.

Furthermore, school systems should consider the pervasive influences identified (i.e., Theme 2). Specifically, strong data collection systems should be established, with data frequently reviewed by teams. Additionally, schools may benefit from having dedicated time to work on MTSS implementation for teachers to collaborate and provide intervention, so that competing initiatives will not deter from implementation. As resources were addressed in the data, it could also be beneficial to identify what specific resources are needed to improve practice and to take inventory of what resources are currently available or could be allocated to schools. Last, at the time of the conclusion of this study, the immediate effects of COVID-19 pandemic

were subsiding. However, long-term or potentially reoccurring effects of the pandemic are unknown. Therefore, district and schools may need to be mindful of structuring their MTSS in a way that it can survive unanticipated influences or can be more easily re-instated when unforeseeable events occur.

Implications for Future Research

While this study has provided insight into district leaders perspectives on how to improve MTSS implementation in schools, additional research can be conducted to strengthen our understanding. For example, this study utilized a relatively small sample size from one state in the United States. To better generalize results, additional studies could be conducted with larger sample sizes of district leaders who are involved with MTSS in different parts of the country. The participant opinions gathered could also reach beyond the district level to those who aid in MTSS implementation at a regional, district, or national level.

While research has been conducted examining district leaders' and school staffs' perceptions of MTSS implementation separately, studies have not yet compared district leaders' perceptions to their school staffs. Such studies could (a) provide a more cohesive examination into what various districts and their buildings identify as impacting factors into MTSS implementation, (b) provide insight into how well district leaders are aware of their own school buildings' needs, and (c) evaluate how reliable current communication loops are between district and schools.

This study did not focus on participants' level of experience or expertise with MTSS. Future research could specifically investigate seasoned district leaders' perceptions, such as those who have helped districts implement MTSS for a set number of years or who have experienced implementation through various stages. Additionally, while this study involved

personnel from school districts implementing MTSS, the quality of their implementation is unknown to the authors. Future research may also want to incorporate direct measures of their participants' MTSS implementation to add to the validity or understanding of their statements.

Additionally, our results suggest that implementing MTSS may be easier in elementary schools than in secondary schools. The field may benefit from investigating the perceptions of district leaders who have successfully implemented MTSS in their secondary schools so others may have a better understanding of how to implement properly at that level.

Furthermore, this study was conducted during the COVID-19 pandemic, which temporarily (and, potentially, permanently) shifted many schools' day-to-day procedures. Future research could investigate the long-term impacts of the pandemic on MTSS implementation.

Limitations

As previously mentioned, this study consisted of a relatively small sample size of participants from one part of the United States, and therefore the results may not align with the contextual factors of other geographic locations. Additionally, many of the participants were familiar with one of the secondary authors and therefore may have responded differently knowing the primary author works with her. Convenience sampling and snowball sampling were used, which could have influenced or limited the variety of participant opinions gathered.

Additional limitations come from the qualitative nature of this study. While steps to increase credibility were taken, bias and subjectivity cannot be ruled out. It is possible that transcriptions may have been interpreted different from the true intentions of the participant's message. For example, when district leaders were asked about supports they provided to schools, it was assumed by the primary researcher that those things they identified were than something the participant believe to be helpful to implementation. However, the participant may have been

sharing about resources provided by the district without implying their effectiveness in implementation. Furthermore, many statements were hard to decipher true meanings or determine whether they were strong or clear enough to include in analysis and interpretation of results.

Conclusion

This study was conducted to learn about district leaders' perception of impacting factors related MTSS implementation. Four main themes were created from data analysis. The first theme suggests that MTSS is a very person-dependent practice, where staff members' involvement and attitudes have impact. The second theme reflects pervasive factors, such having resources, having access to, and using, data, having time, and how the COVID-19 pandemic impacted implementation. The third theme suggests ideas such as that those implementing MTSS should consider how the practice interacts with current school structures and frameworks and how they should implement the practice intentionally and systematically. The fourth theme suggests that having access to supports from outside the school building level (e.g., district or state support) can influence practice The knowledge of these themes and their more descriptive features (i.e., codes) could potentially benefit to those who are looking to implement MTSS in their school(s) or who are currently implementing but want additional insight into how to sustain implementation.

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APPENDIX A

Institutional Review Board Approval Memorandum

Memorandum

To: Ellie Young
Department: BYU - EDUC - Counseling, Psychology, & Special Education
From: Sandee Aina, MPA, HRPP Manager
     Wayne Larsen, MAcc, IRB Administrator
     Bob Ridge, PhD, IRB Chair
Date: August 07, 2020
IRB#: IRB2020-317
Title: Exploring the Perceptions of Educators Who are Implementing Multi-Tiered Systems of Support (MTSS)

Brigham Young University's IRB has approved the research study referenced in the subject heading as exempt level, Category 2. Please note the comment about data sharing and submit a modification if necessary to change the consent language.

This category does not require an annual continuing review. Each year near the anniversary of the approval date, you will receive an email reminding you of your obligations as a researcher and to check on the status of the study. You will receive this email each year until you close the study.

The study is approved as of 07/21/2020. Please reference your assigned IRB identification number in any correspondence with the IRB.

Continued approval is conditional upon your compliance with the following requirements:

1. A copy of the approved informed consent statement can be found in iRIS. No other consent statement should be used. Each research subject must be provided with a copy or a way to access the consent statement.
2. Any modifications to the approved protocol must be submitted, reviewed, and approved by the IRB before modifications are incorporated in the study.
3. All recruiting tools must be submitted and approved by the IRB prior to use.
4. Instructions to access approved documents, submit modfications, report adverse events, can be found on the IRB website, iRIS guide: http://orca.byu.edu/irb/iRIS/story_html5.html
5. All non-serious unanticipated problems should be reported to the IRB within 2 weeks of the first awareness of the problem by the PI. Prompt reporting is important, as unanticipated problems often require some modification of study procedures, protocols, and/or informed consent processes. Such modifications require the review and approval of the IRB. Please refer to the IRB website for more information.

APPENDIX B

Interview Question Guide

Opening Remarks:

Thank you for agreeing to speak with me. It should take approximately 45 minutes. The primary goal of this interview is to learn about your experiences with what it takes or may take for district and building level teams in your district to implement MTSS. Please note that in this interview MTSS is an umbrella term which can include RTI or PBIS, with a focus on addressing academics and/or behavioral needs. This interview is completely voluntary and if there is any question you prefer not to answer you can skip it. Your answers will not be shared with the other interview participants and your name will be changed to protect your privacy. There are no right or wrong answers so please answer with candor and honesty. Do you have any questions? Are you ready to begin?

Demographic Information: This list of demographic questions will be asked to every interviewee in order to properly describe the sample of the study.

1. What is your gender?

2. What is your ethnicity?

3. What is your age?

4. What is your highest earned degree?

5. What is your official job title?

6. How long have you been in that role?

7. How many students are in your district?

8. How long have you been helping with MTSS in your district?

9. How many school buildings are in your district?

10. How many of the schools in your district are participating in MTSS?

11. Is MTSS a districtwide initiative or do schools determine whether to participate?

12. How long has the district been participating in MTSS?

Background:

Broad Question: Let's talk about district-level MTSS implementation. What can you say about that?

Probe: What roles and responsibilities do you have in district MTSS implementation?

Probe: What does the day-to-day of MTSS implementation look like?

Probe: How do you feel MTSS implementation is going in your district?

Probe: Please give me some specific examples of how MTSS implementation is going in your district.

Broad Question: What indicators would let you know that effective MTSS implementation is taking place? What evidence do you use to decide?

Broad Question: Is there anything you wished you had known or been trained on as a district leader before you started working to implement MTSS in your district?

Building Level Teams:

Broad Question: Based on your experience, how do you think building level teams in your district perceive MTSS?

Probe: currently?

Broad Question: Let's talk about support provided by your district level administrators. Suppose you somehow changed this very moment into one of your building team members involved with implementing MTSS – and I asked you about support currently provided from the district – what would you say?

Broad Question: What needs (if any) do you feel your building level teams have relative to MTSS administration {implementation]?

Impacting Factors:

Broad Question: What are the biggest impacting factors to implementing MTSS? Or in other words, what factors will determine whether MTSS will be easier or more difficult to successfully implement?

Probe: ...at the building level?

Probe: ….at the district level?

Broad: Suppose an administrator from another school district approached you asking about tips or strategies you would suggest to teams looking to implement MTSS. What would you tell them?

Probe: You mentioned _____ tell me more about that. What's your experience with that

Broad Question: What do you see as the biggest supports, facilitators or aids when implementing MTSS? (what helps facilitate MTSS)

Probe: ...At the district level?

Broad Question: Let's say I am a building level team member and I come to you and say, "I just feel there are barriers to implementing MTSS at the building level." Describe what you feel the team member would say next. * in your district what are the barriers?

Probe: If you had an opportunity to speak to one of *your* leaders about possible barriers to district implementation what would you say?

Probe: How do you think the leader would respond to you?

Concluding Remarks:

"Thank you so much for sharing your time and your thoughts with me. This will be very helpful in understanding MTSS implementation at the building and district level. Is there anything else you want me to know about your thoughts about MTSS? If after looking over my notes, I have any questions, may I contact you? Keeping convenience and confidentiality in mind, what form of communication would you feel most comfortable using?" Other district leaders I could interview?

APPENDIX C

Examples of Phase One A Priori and Open Coding Spreadsheets

Figure C1

A Priori Code Spreadsheet Example

A Prior Code	Inclusionary Criteria
Time	Not enough time to allocate towards MTSS to fully commit; MTSS takes too long Time to practice principles that have been taught with other duties for classes; competing initiatives- taking time away; system in place that provides team with time to meet
Staff Attitudes	Buy-in/ believe in the program; focusing on big picture; open to risks and failures; growth mindset v. fixed mindset Resistance to change; student driven focus; staff feel capable; district and staff attitudes?
Access to Resources	Resources to support various tiers (comrehensive, evidence-based); rubrics; organizational matierials; manipulatives; online tools; quality resources; quick and easy to use tools; enough coaches/trainers (manpower); centers the right assessment methods; external evaluation tools; objective tools; substitutes
Knowledge/Skills/Training	Foundational knowledge acquired before implementation; watching others demonstrate skills- modeling (model district); conferences; professional development; university partnerships; state partnerships; concrete strategies to use; gradually introducing new concepts; individual coaching; outside perspectives shared; universal and individual training; tying passions with best-practice; up-to-date on research;awareness; knowledge of "Why MTSS?"; meeting with expert

Note. Blue font this spreadsheet was used to track inclusionary criteria added to the code during within-case coding.

Figure C2

Open Code Spreadsheet Example

Open Code	Inclusionary Criteria
Roll-Out	Rolling things out appropriately; whether the district or admin roll out MTSS in small groups or all at once, organically or abruptly; patience; considering learning curves, readiness; rolling out to sustain implementation; not depleating resources too quickly
Key Stakeholder	Whether key stakeholder in buildings are supporting initiative- teacher or admin; having people who can really get others on-board; who know the school or district or teams well; credible; those in it for the long-haul
Culture	What are the values or beliefs of the school or district staff. Examples: collaborative v. noncollaborative, open/honest v. closed communication, resistant v. adaptive/willing. What questions are being addressed; culture of MTSS; MTSS not just being one person; not something thats going away anytime soon
Covid	Going virtual and impacts from that; less students in class; Covid disrupting school systems
Effective, Strong Teams	Teams that frequently meet, review data often/thoroughly, and/or progress monitor; team being greater than the individual; working towards a common goal; teams can be refered to as PLCs; teams that are collaborative/supportive/enjoy each other; importance of teams at various levels; representative teams; strong teams at building and district level; safe and respectful; teams that do what they should/act with fidelity

APPENDIX D

Phase One Code List With Representative Ideas

- **Time:** (general) more time, competing initiatives (including covid), built in time for MTSS.

- **Staff Attitudes:** Resistance to change, buy-in (mentioned at various levels).

- **Access to Resources:** general (e.g., resources, tools), data collecting tools, interventions/intervention supports, tools that help you know where to start, MTSS personal and substitutes (i.e., manpower).

- **Knowledge**: Training, working with experts.

- **Coaches/Coaching:** general, coaching in different specialties (e.g., gen ed *and* special ped coaches), to provide individualized supports.

- **Roll Out:** not too fast with roll out/being patient with process, not rolling out beyond capacity/readiness, time needed to change staff attitudes.

- **Culture:** MTSS viewed as lasting structure, not person based, districtwide culture.

- **COVID-19**: put things on hold, has impacted trainings (e.g., virtual (2), or has limited them (2)).

- **Strong Teams**: general, well-defined/structured, using the right people as team members, diverse/representative membership, meeting/ meeting regularly, using data collaborative, common goal/vision, strong district teams.

- **Leadership**: general/leadership, importance of administrators.

- **Funding**: for personal (e.g., subs, coaches, others), state funding, general.

- **Grade Level**: Easier in elementary, harder in secondary/high school. Middle school more doable than high school.

- **Site-Driven:** having things be site-based, how you roll things out depends (i.e., what's already established or the level a school is already at).

- **Communication Loops to Solve Problems**: a system where needs are being reported back to the district so schools can get support, such as a coach or district staff member working with school teams and reporting back to the district; district personnel who help schools problem solve.

- **Maintaining Priority**: whether continuous efforts is put towards MTSS.

- **District Support**: having district support, district priority, higher-level district support.

- **Integrative Practice**: involvement from multiple departments, districts *and* schools working towards MTSS, have other practices and MTSS align.

- **Partnerships/Other's Support**: state support/partnership, university partnership (looser), misc. support/partnership from others.

- **Structures/Systems**: various types mentioned, but couple that came a little more through included structure/system at various levels, structured way to address student's needs (little weak in places), structured assessment (2 strong quotes)/data collection (2 strong quotes).

APPENDIX E

Grouping Codes Together Into Categories

People Involvement

- ***Strong Teams***: general, well-defined/structured, using the right people as team members, diverse/representative membership, meeting/ meeting regularly, using data, collaborative, common goal/vision, strong district teams, PLCs.

- ***Coaches/Coaching***: general, coaching in different specialties (e.g., gen ed *and* sped coaches).

- ***Staff Attitudes***: Resistance to change, buy-in mentioned at various levels-building staff, admin, district leadership), whether continuous attention is given and efforts is put towards MTSS.

- ***Leadership***: general/leadership, importance of administrators.

Pervasive Influences

- ***Access to Resources***: general (e.g., resources, tools), data collecting tools (including assessments), interventions/intervention supports (undertone of evidence-based), tools that help you know where to start, man-power (i.e., MTSS personnel and substitutes).

- ***Data***: structured data collection, having teams look at data, having access to data collection tools.
- ***Time***: (general) more time, competing initiatives (including covid), built in time for MTSS.
- ***COVID-19***: put things on hold, has impacted trainings (e.g., virtual, or has limited them), misc. (2 virtual, 1 facilitator).

Supports From Outside the Site-Level

- ***Knowledge***: Training, working with experts, outside perspectives.

- ***District Support***: having district support, district priority, higher-level district support.

- ***Communication Loops to Solve Problems***: a system where needs are being reported back to the district so schools can get support, such as a coach or district staff member working with school teams and reporting back to the district; district personnel who help schools problem solve.

- ***Funding***: for personal (e.g., subs, coaches, others), state funding, general.

- ***State Support***: state support/partnership.

Attention to Framework

- *Culture*: Whether MTSS is viewed as a lasting structure and lasting structures are built, not having this be a person-based practice, whether continuous attention and efforts is put towards MTSS, having districtwide culture.

- *Structures/Systems*: structure/system at various levels, structured intervention system/ structured way to address student's needs, structured data collection.

- *Integrative Practice*: having other practices and MTSS align, involvement from multiple departments, districts *and* schools working towards MTSS.

Laying the Foundation

- *Roll Out*: not too fast with roll out/being patient with process, not rolling out beyond capacity/readiness, time needed to change staff attitudes.

- *Site Driven***:** having things be site-based, how you roll things out depends (i.e., what's already established or the level a school is already at).

- *Grade Level:* Easier in elementary, harder in secondary/high school. Middle school more doable than high school.