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An Examination of Specific Learning Disability Identification Post Participation in the Michigan Department of Education Transformation Zone

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AN EXAMINATION OF SPECIFIC LEARNING DISABILITY IDENTIFICATION POST PARTICIPATION IN THE MICHIGAN DEPARTMENT OF EDUCATION TRANSFORMATION ZONE

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The identification of students with specific learning disabilities has evolved since the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA) in 2004. This reauthorization gave state agencies parameters that disallowed using the severe discrepancy model for identification as a stand-alone method. In response to this change, Michigan provided Intermediate and local school districts with further guidance that disallowed the use of the severe discrepancy model for identifying children with Specific Learning Disabilities (SLDs) and instead required Intermediate School Districts, on behalf of their local districts, to choose one of three models, including Patterns of Strengths and Weakness (PSW), Multi-Tiered Systems of Support/Response to Intervention (MTSS/RTI) or a combination based approach which includes both the PSW and MTSS/RTI models. Research within the field of Special Education is robust, and the various models utilized for identifying students with SLDs continue to be highly debatable (Fletcher & Miciak, 2019; Hale et al., 2006; Maki & Adams, 2020). As research within the field of special education continues to contest the benefits and challenges of the utilization of the various models for the identification of SLD, states and school districts must decide which route for identification best meets the needs of the students and districts they serve.

In 2016, as a result of a need to promote the coordination of systems-based approaches along with supporting the improvement of outcomes for students with disabilities, the Michigan Department of Education (MDE) began a project with the National Implementation Research Network (NIRN), which partnered with two Intermediate School Districts to implement the Transformation Zone (TZ). While this project was designed to implement systems of support for all students at the state, regional, and local levels and not address the challenges of SLD identification, this study aimed to examine whether post-participation in a comprehensive system change framework focused on MTSS impacted the SLD identification rates in participating districts. This study also analyzed various levels of the educational system as it sought to examine whether there was any change in the eligibility rates over the last ten years in the area of SLDs across the State of Michigan. Analysis for this quantitative study included descriptive statistics, ANOVA analysis, and Chi-Squared analysis to answer the research questions.

The results of this study supported the understanding that, over time, SLD identification rates have continued to decline statewide; in addition, the implementation of a comprehensive system of support that focuses on systems of intervention can delay the need for special education for students when appropriate and identification rates for SLDs continue to be more prevalent in males versus females. This study also found a relationship between participation in the TZ, including a robust alignment of MTSS/RTI and a lower identification rate of students as SLD. Recommendations are included for further research within the field to understand the long-term impact of comprehensive systems of MTSS/RTI and the identification of students with SLDs.

AN EXAMINATION OF SPECIFIC LEARNING DISABILITY IDENTIFICATION POST PARTICIPATION IN THE MICHIGAN DEPARTMENT OF EDUCATION TRANSFORMATION ZONE

by

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Erin E. Senkowski

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INTRODUCTION

"Children with learning and attention issues are as smart as their peers and with the right support can achieve at high levels, but a lack of early or effective interventions leads too many kids on a downward spiral**."**

-*Mimi Corcoran, CEO of the National Center for Learning Disabilities*

As defined under the Individuals with Disabilities Education Improvement Act (IDEIA, 2004), federal law identifies 13 disability areas for students ages 3-21 to be eligible to receive special education services. Eligibility for special education occurs in one of the following areas: cognitive impairment, emotional impairment, deaf or hard of hearing, severe multiple impairments, speech and language impairment, early childhood developmental delay, physical impairment, otherwise health impaired, traumatic brain injury, visual impairment, specific learning disability, autism spectrum disorder, and deaf-blindness. Of these disability areas, students with Specific Learning Disabilities (SLDs) are identified at a rate significantly higher than any other (National Center for Educational Statistics, n.d.). Within the field of research surrounding the identification of students with SLDs, many researchers and educators recognize there are concerns with the approaches (or Model) used to identify students. However, limited research links the usage of the various models to identification rates.

Background

The identification of students with SLDs is complex. Educational teams must balance the unique situations, needs, and appropriate access to instruction for each student. Across the United States, 7.3 million students are eligible for special education services, and of those students, 33% or 2.4 million have been deemed eligible under the SLD category (National Center for Educational Statistics, n.d.); this equals approximately 14% of all students enrolled in public schools nationwide. Furthermore, the national statistics are staggering when examining SLD

identification rates through the lens of gender. According to the National Center for Education Statistics (n.d.), during the 2018-2019 school year, 18% of males versus 10% of females were eligible for special education services in the K-12 setting. In addition, the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5) indicates that SLD identification was two to three times more prevalent in boys than in girls (American Psychiatric Association, 2013).

To adequately understand the complexity of identifying a SLD, it is critical to understand the operational definition of the disorder. The Michigan Administrative Rules for Special Education (2022) define a specific learning disability as:

> A disorder in one or more of the basic psychological processes involved in understanding language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Specific learning disabilities do not include learning problems primarily resulting from visual, hearing, or motor disabilities, cognitive impairment, emotional impairment, autism spectrum disorder, or environmental, cultural, or economic disadvantage. (p. 37)

Understanding and analyzing this definition is essential to implementing robust practices to correctly identify students as having a SLD. Such practices are integral in identifying and developing interventions for special education students.

Models to Identify Students with Specific Learning Disabilities

From a national perspective, identifying students with SLDs remains a moving target. Researchers nationwide identify that the lack of shared understanding of federal law has led to a

continual professional divide among practitioners and researchers around the characteristics, validity, and reliability of the multiple assessment models used for identification (Williams et al., 2016). As a result of various research within the field and to address perceived and factual inconsistencies in identification practices across the nation, the IDEIA (2004) redefined the allowable eligibility processes for states to utilize when identifying students with a SLD. As part of the reauthorization, the federal regulations mandate that states can no longer utilize a severe discrepancy model as the only Model for identification (34. CFR 300.8 (c) (10)).

The severe discrepancy model (SD), which has long been used within the field since the passage of the All Handicapped Children Act of 1974 or PL 94-142, compares a child's intellectual quotient and academic achievement to determine if there was a difference between the two (National Association of School Psychologists [NASP], 2022, Evans, 1990).

Practitioners have commonly used a discrepancy of 15 to 18 points to determine whether a child had a SLD. In this instance, a child struggling in reading, for example, may have an average IQ of 90. However, within reading, that child may have an achievement score of 68. This discrepancy and the child's below-grade level performance in reading would qualify them as SLD under this model. The challenges that arise from this model lie with the lack of identification for children who score below average (below 85 and above 70 on an IQ test) and whose academic achievement is commensurate with their IQ. These learners, while struggling and likely performing below grade level under the SD model, would not qualify as a child with a specific learning disability, thus excluding them from the beneficial supports in a special education setting (O'Donnell & Miller, 2011). In addition, while this method was widely utilized within the field between 1974 and 2004, research began to emerge, identifying no direct correlation between IQ and achievement when assessing whether a child has a SLD (NASP,

2022). These findings led lawmakers within the reauthorization to exclude the Severe Discrepancy (SD) model as a singular source for identification and, subsequently, pushed states to move away from its continued use.

As a result of the disallowable use of the stand-alone SD model, federal regulations were also amended to permit the use of a process based on the child's response to scientific, research-based intervention and other alternative research-based procedures for determining whether a child has a SLD (IDEIA, 2004). For this reason, three models that identify whether a student has a SLD have emerged. These models include Patterns of Strengths and Weakness (PSW), Multi-Tiered Systems of Support/ Response to Intervention (MTSS/RTI), and combination-based approaches that utilize both PSW and MTSS/RTI Model.

The Patterns of Strengths and Weaknesses (PSW) is a standard Model for identifying SLD students. PSW utilizes a set of identified criteria to examine whether the student is exhibiting any weaknesses in particular areas of academic achievement compared to other variables. While there is contradicting research surrounding the effectiveness of this method, it is widely used in the field (Fletcher, et.al, 2018).

This method relies upon using test scores in academic achievement versus the progress within interventions to determine eligibility, similar to the MTSS/RTI method. This model does not require that educational teams consider whether a student who has received research-based interventions is progressing academically, including whether the interventions match the student’s deficit area and the student's response to the interventions. Even though this is not a requirement of the methodology, it brings forth concern in the field as school psychologists continue to utilize it to identify students without a comprehensive understanding of how students

are progressing within the intervention supports in the classroom (Beaujean & Phipps, 2016; McGill & Busse, 2017).

In comparison to the other model(s), the use of Response to Intervention (RTI) or Multi-Tiered Systems of Support (MTSS) has long been studied and utilized as a comprehensive system to support the academic achievement of students in the general education setting to address learning deficiencies, before a referral for special education (Decker et al., 2012). MTSS/RTI is widely utilized across the educational setting and supported under federal law. The processes of MTSS/RTI under the foundational tiered-based approach can effectively be utilized to respond to skill deficits across the educational setting (Fuchs et al., 2003). The MTSS/RTI system is designed to support all learners, especially those struggling to meet grade level expectations, with researched interventions to close any areas of academic deficit before moving towards a school-based special education referral (Decker et al., 2012). This includes implementing the system with fidelity to align student needs appropriately and developing research-based interventions to close learning gaps (Fuchs et al., 2003; Kratochwill et al., 2007). Challenges with this model lie within the subjective design of the MTSS/RTI system at the individual district level. The model requires the school-based team to ensure that an effective program design has occurred to support students appropriately. Comprehensive screening, intervention, data collection, and team-based decision-making are all essential components of a well-designed MTSS/RTI system in a school.

As a school district is required under federal law to evaluate students upon identifying a suspected disability for any child ages 3 to 21, the district must balance the evaluation mandate while implementing a comprehensive student support system. In response to the increased use of MTSS/RTI in the school setting, the United States Department of Education Office of Special

Education and Rehabilitative Services (OSEP) issued a memo in 2011 stating there was a concern in the field that the MTSS/RTI method was being utilized to stop or delay potential special education evaluations for students. The central issue was that some districts continued requiring students to move through the often lengthy process of implementing interventions and tracking progress before moving to a special education referral and comprehensive evaluation (Department of Education & Office of Special Education and Rehabilitative Services, 2011). The concern identified by the United States Department of Education, in combination with a lack of clearly defined components of MTSS/RTI systems at both the federal and state levels, has caused districts to quickly develop ineffective processes that do not adequately support students across the educational arena (Burns & Ysseldyke, 2005). The lack of guidance at both levels has caused some districts to move away from "progress in MTSS/RTI" as a standard model for determining whether students qualify as having a SLD, as the development is complex and requires intentional work focusing on the system of support for all learners at all levels within the school. The abandonment of this model for SLD identification can be linked to inconsistent interventions and data collection that do not appropriately identify a student's area of deficit, even though this model shows promise in correctly identifying students as SLD (Reschly, 2014). These challenges have continued to impact local school districts across the United States as they seek efficient, comprehensive, and effective systems to support the appropriate identification of students with learning disabilities (Hollenbeck, 2007; Reschly, 2014).

As a result of the legislative changes and a new understanding of SLDs, the shift away from using the discrepancy model has widely been supported in the field. Therefore, states have been left to determine the eligibility practices for use, with minimal federal guidance on the practices that produce the most accurate results for identification. This lack of direction and

clarity at the national level has continued to cause a deeply rooted debate about the what, how, and why of various methods (Mahan, 2021). The discussion on which model adequately meets the standards set forth to determine whether a child has an SLD continues to dismay providers in the field nearly 20 years after the 2004 reauthorization of the IDEIA.

Since the 2004 reauthorization of IDEIA, the nation has seen more than a 15% decline in the number of children identified as having a SLD (Kavale & Spaulding, 2008). This decline has been widely attributed to the allowable use of various models for SLD identification nationwide and the prohibition of using the severe discrepancy model alone (Kavale & Spaulding). As states have implemented the change in model, each state agency has the autonomy to select any allowable processes for determining eligibility within their regional and local school districts. In combination with multiple identification practices in place at various levels of implementation, practitioners nationwide have continued to implement procedures at varying levels of fidelity (Cortiella & Horowitz, 2014; Maki et al., 2015). As educators grapple with past practices and understand current best practices in determining student eligibility, students with SLDs remain the most prevalent disability of students receiving services in the United States, highlighting the need for comprehensive, accurate, and practical model tools for practitioners in the field (The National Center for Learning Disabilities, 2017). Further discussion of the two models and their effectiveness will be discussed later within the literature review.

Michigan's Approach to Specific Learning Disability Identification

In Michigan, the MTSS/RTI, the PSW, or a combination-based approach are identification methods that are allowable methods for identifying learning disabilities in students (IDEIA, 2004). While these two models provide different routes for identification, each presents implementation challenges. The Michigan Administrative Rules for Special Education (MARSE,

2021) require each Intermediate School District (ISD) to implement a standard model across the local districts under its jurisdiction. In addition, in 2017, Michigan developed a state-level document for practitioners entitled *Michigan Criteria for Determining the Existence of a Specific Learning Disability*. This document provides the field with guidance on the allowable models for SLD identification. Within the state, the Michigan Department of Education (MDE) has identified the following as options for determining eligibility for students in the area of SLD:

(a) a student's response to scientific, research-based interventions or

(b) a model of a Pattern of Strengths and Weaknesses

(c) a combination of the two approaches

(Michigan Identification of SLD, 2017).

Each ISD must determine which process will be used within all schools in their region. The MDE also requires the educational community and parents to know the district's processes by posting the model used on the ISD website. Thus, each school district must develop a systemic plan to operationalize the state criteria for the district's use (MDE, 2017).

During the 2021-2022 school year, a survey was conducted by the Michigan Association of Intermediate School Administrators (MAISA) and the Special Education Instructional Leadership Network (SEILN), which is made up of the 56 ISD Directors of Special Education. The survey found that 56% of ISDs in Michigan use PSW to determine eligibility, 37.5% use a combination approach, and 6% utilize MTSS/RTI only. This data demonstrates the variations between ISDs across the State of Michigan. While the most common model for identification in Michigan was overwhelmingly through the PSW model, in and across Michigan, the use of MTSS/RTI continues to gain traction at the local and state levels (SEILN, 2021).

In addition to the allowable use of MTSS/RTI for SLD identification, MDE identified using MTSS/RTI as part of their Top 10 Roadmap to address the concern with Michigan student achievement scores across all subgroups. As a result, the MDE focused on improving outcomes for Michigan PK-12 students (Michigan Top 10 Strategic Plan, 2021). The Michigan Department of Education MTSS Practice Profile (2020) supports local districts in developing systems that align with the whole-child approach. This document examines all facets of a child's learning, from academics to social-emotional learning, to implement comprehensive structures across the general and special education arenas. The broader alignment of the whole child supports within the state continues to identify the need to align systems within MTSS/RTI across the school to create meaningful problem-solving teams that support intervention practices. This change of practice within schools has the potential to provide supporting information for SLD identification (Maki & Adams, 2020). This comprehensive focus has allowed MDE to develop a support system and guidance document on the support needed within a local district to implement MTSS/RTI.

While there was no apparent connection within the field between the department's work promoting MTSS/RTI to support all students and the process for potentially utilizing MTSS/RTI as the framework for SLD identification, school-based teams are challenged with competing processes between PSW and MTSS/RTI requirements through school improvement and the potential impact on the eligibility practices for special education. This challenge comes as both models seek different data points for the determination of SLDs, creating ineffective processes for the identification that often cause increased work, time, and inefficient practices (Dowd-Eagle et al., 2015). These competing processes over time continue to highlight the need for improved practices that align across all levels of the educational system. Practices that

appropriately identify, intervene, and support students in the learning environment that best meets their needs are critical as they provide educational teams with data to support student-level decisions. When correctly collected and analyzed, this data identifies whether students respond to provided interventions by closing learning gaps or whether additional interventions or support may be needed in an educational setting.

Michigan Department of Education Transformation Zone

During the 2014 school year, Michigan received a Needs Intervention status from the United States Office of Special Education and Rehabilitation Services (OSERS) for implementing the IDEIA statewide. This determination began a range of corrective actions, including developing a State Systemic Improvement Plan (SSIP) that focused on enhancing outcomes for students with disabilities, primarily in literacy. The Michigan Department of Education worked closely with the National Implementation Research Network (NIRN), a project funded through the IDEIA, and the Federal Office of Special Education Programs (OSEP) to support the ongoing implementation of the SSIP by the MDE. To support this area of improvement, MDE identified the need to focus on developing MTSS systems in schools. Through the process of systems development, work then moved to a focus at the ISD level to aid in developing a support system for local districts. As a result, the Transformation Zone (TZ) project was developed and launched through the partnership between NIRN, MDE, and select ISDs to design support systems utilizing the Implementation Science framework. During the 2016 school year, the Michigan Department of Education sought out Intermediate School Districts to participate in this project designed initially to improve literacy outcomes for students with disabilities.

To begin participating in the TZ, ISDs were asked to identify whether they would be interested in participating. ISDs that identified themselves as interested participants embarked on a comprehensive selection process that utilized the central tenets of Implementation Science to determine readiness for the project. Selection occurred through a competitive selection process between the MDE and the ISD with the support of the NIRN. Selection in this project allowed the ISDs to become pilot regions for implementing transformative practices aligned to improving student outcomes and become model ISDs for the state. As part of the initial competitive selection process for the project, the ISDs embarked on a process that focused on their readiness and capacity to support local district implementation within systems development.

Upon completing the ISD selection process, the state agency selected two ISDs for full participation and one ISD as a thought partner. The ISD identified as a thought partner already had established practices in MTSS and would guide the other two ISDs as they developed their practices with their regional participants. Upon previously embarking on a similar process for implementing systems of MTSS within their regional entity, the thought partner ISD provided the other two participating ISDs with background and expertise surrounding the development of a comprehensive system. While the previous work of the thought partner was not grounded in the framework of implementation science, a study on the implementation of the MTSS framework within that ISD found that the implementation of comprehensive practices of MTSS caused SLD identification rates to decline by over 19% across the ISD post-implementation (Barrett & Newman, 2018). The study's results conducted by the thought partner provided support and expertise to the participating ISD in developing systems.

Upon selection as full participants, the two ISDs began an intensive year-long process and partnership with individuals from NIRN and MDE to develop comprehensive

implementation frameworks and establish procedures at the ISD level. This work was driven by each ISD Regional Implementation Team (RIT). Members of the RIT included various individuals from general and special education and ISD leadership to support the process and work at the regional level. This included ISD-level participation in developing the Michigan MTSS Practice Profile, continual implementation of systems development at the ISD level, and assessment through the Regional Capacity Assessment (RCA). This tool examines the readiness and systems at the ISD level to support districts within their ISD for appropriate implementation.

After a year of work, the two ISDs embarked on their selection process with districts within the ISD to engage in further work with MTSS and subsequent implementation of practices. This process included site visits to districts, interviews, and a review of district-level data to determine readiness and identify levels of support for implementation across the district. This comprised of buy-in and full participation at the district, building, and classroom levels. Upon completing the mutual selection process, each ISD selected three local school districts for participation. All six districts demonstrated commitment to implementing systems work to develop district and building levels to support the alignment of MTSS practices to support TIER 1 instruction. MTSS was selected as the effective innovation for all six districts. Upon entering into the partnership, districts were administered the District Capacity Assessment (DCA), a similar tool to the RCA, designed to collect baseline systems-level data that would be utilized to support the development of comprehensive systems within their district. This tool, developed by NIRN, was utilized three times per year to assess the progress and fidelity of implementation of MTSS across the district. While SLD identification was not considered part of the project, developing systems around MTSS could lead to developing a sustainable model that would produce necessary data for educational teams to determine SLD eligibility.

Each district fully implemented the TZ during the 2018-2019 school year. While the COVID-19 pandemic impacted the implementation during the 2019-2020 and 2020-2021 school years, the three selected districts within the ISD for this study continued to utilize resources to support improving educational outcomes for all students. Subsequently, each focused on TIER 1 instruction, with the design to move into TIER 2 and TIER 3 intervention supports upon full implementation. As a result, the district's school psychologists simultaneously utilized data collected as part of TIER 2 and TIER 3 interventions within the educational evaluation process. While districts continued to utilize the PSW model to identify SLD, the new data collected allowed deeper consideration of the student's progress in research-based interventions as a factor in the evaluation process.

As a mandatory component of the agreement for participation in the TZ, local school districts and the ISD were required to participate in various professional learning activities. This professional learning took place during the initial phases of the TZ and continued throughout the project. This professional learning occurred in a variety of formats that included online learning modules of the foundations of Implementation Science (NIRN, 2021), professional development on best practices in teaming, coaching and supporting the professional learning of educators, and in-person coaching from individuals from MDE, NRIN, and the ISD based upon the district identified needs through the District Capacity Assessment (DCA). In addition, representatives from the ISD who participated in the TZ contributed to developing the MTSS Practice Profile. The MTSS Practice Profile has driven the MTSS implementation efforts across the state post-TZ (Michigan Department of Education, 2021).

Throughout the project, the various types of professional development were critical to creating a robust understanding of the key components of a comprehensive student support

system. To identify the needs of the individual district, each district team has completed multiple rounds of the DCA. This assessment, conducted three times per year, provided the necessary insight to identify further areas of need for professional development and identify when the district had reached the point of full implementation of MTSS. All three districts scored high enough on the DCA to be considered at full implementation by the conclusion of the 2019-2020 school year. Table 1 demonstrates the scores for each implementation driver at the district level. It is important to note that each of the districts scored low in the area of competency, and as a result, professional development and focus within the areas of coaching and training continued to occur at the ISD level. This training focused on the coaching systems, instructional practices, and the MTSS Practice Profile. In addition, upon completion of the TZ project, districts could choose whether to continue to assess implementation status through the use of the DCA. As a result, only one district, continues to assess the implementation of the system utilizing the DCA on a three-times-per-year basis in support of the ISD.

Table 1

Full Implementation Timeline for TZ Participating Districts

DCA (Drivers)	District 1	District 2	District 3	Full Implementation
Leadership	87%	73%	80%	Spring 2020
Organization	80%	60%	78%	Spring 2020
Competency	29%	36%	29%	Spring 2020

All three districts within one of the participating ISDs were selected for this study due to the participation of the school psychologist, special education administrator, a dedicated MTSS coordinator, and building and district-level administration throughout the project. This shared leadership approach to supporting struggling learners was deeply embedded within the district. As a result, the districts selected have developed comprehensive leadership teams at the building

and district level that support the development, implementation, and continued revision of a comprehensive MTSS/RTI system that aligns resources and needs for their student population. In addition, the selected ISD strongly desired to shift to an MTSS/RTI approach for SLD identification across all the local districts within the region.

Problem Statement

Researchable Problem

Special education practitioners continually face challenges with a shared understanding and consistent implementation of a model for learning disability identification. This is due to the need for consistent procedural guidelines and frameworks at the state and federal levels to guide practices (Fletcher & Miciak, 2019). The lack of consistency across the country in implementing the IDEIA regulations promotes disconnect within the field, particularly in SLD identification (McGill & Busse, 2017). Using data to drive eligibility decisions aligns with the 2007 shift of SLD identification parameters in Michigan to comply with federal law. This shift removed the severe discrepancy model as the single allowable tool to determine eligibility, and in Michigan, this prompted the use of the severe discrepancy model being disallowed. On behalf of their local entities, ISDs had to determine which of the three models would be used by all districts under their jurisdiction: (1) PSW, (2) MTSS/RTI, or (3) a combination-based approach of the two methods.

It has been over a decade since the change in eligibility model in Michigan that no longer allows for the use of the severe discrepancy model. Unfortunately, research has yet to be conducted to examine the impact on eligibility trends over time since the disallowable use of the severe discrepancy model in Michigan. My study aims to examine SLD identification rates within three districts that have fully implemented a comprehensive system of MTSS through Implementation Science as a former participant within the MDE TZ. In addition, this study will

examine the change, if any, to the SLD identification rates within the districts post-implementation compared to other districts that did not implement MTSS/RTI through the structures of Implementation Science.

Related Studies on SLD Identification

In their study on the empirical research trends for SLD identification from 2003 through 2013, Williams et al. (2016) identified that even after including additional model for identification after 2004, many practitioners across the country continued to utilize the severe discrepancy (SD) approach. This model, which continues to be allowed by the federal rules as long as it is not the sole model, can continue to be utilized for identification purposes. As a result of the continued use of the SD model, Maki et al. (2015) found that 67% of states still allowed for the use of the severe discrepancy approach, and 20% of states explicitly prohibited its use. In addition, only 16% of states allow using the MTSS/RTI model for SLD identification. This was critical information to the field, as researchers continue to identify that the SD approach was inaccurate in determining SLDs; however, it continues to be utilized nationwide. In addition, as part of this study, Maki et al. (2015) also found that the guidance surrounding the use of PSW for identification also dramatically varies from state to state. This lack of consistency and direction from the federal level has resulted in continued variability across the country regarding which students become eligible for special education services and which do not (Unruh & Mckellar, 2013). Challenges with the PSW model and the shared knowledge across the field of the inaccurateness of the SD model indicate a critical need for a reexamination within the field as to the most effective model for identifying SLD.

As a proponent of the PSW model, Hale et al. (2010) produced a white paper for the National Association of School Psychologists that sought to identify best practices that must occur to

appropriately develop a comprehensive system of identifying and subsequently servicing students for special education. Those practices are as follows:

- That the IDEIA should not be amended and should remain consistent in the definition of SLD and strengthen the statutory requirements in SLD identification procedures
- that neither SD analyses nor failure to respond to intervention alone was sufficient for SLD identification
- To meet SLD statutory and regulatory requirements, the most effective identification method was an approach that identifies a pattern of psychological processing strengths and weaknesses and achievement deficits consistent with the pattern of processing weaknesses
- Children with SLD need individualized interventions based on specific learning needs, not merely intensive interventions designed for students in general education.

As Hale and Fiorello (2017) identified, an empirically validated MTSS/RTI model could prevent learning disability identification and support students before referrals to special education. Hale et al. stress the importance of their research, stating that even through solid systems of MTSS/RTI, comprehensive evaluations should occur for SLD identification purposes. This allows for assessing cognitive and neuropsychological processes that should be used for special education identification and intervention purposes. This alignment between general education interventions and special education eligibility continues to promote a solid need to ensure that systems are aligned at the district level to collect meaningful and high-quality data that drives educational decisions.

Researchers who are critics of the PSW and discrepancy model argue that both models have questionable diagnostic flaws, including not considering all factors that may impact a

student's achievement (Kranzler et al., 2016; McGill & Busse, 2017). As the IDEIA loosely regulates how states can choose to implement SLD identification procedures, there continues to be a wide variability across the country as to how, which, and who will be determined as having a SLD after the evaluation period (Maki et al., 2015; Reschly, 2014). This lack of regulatory requirements at the federal level has allowed states to develop inconsistent practices that do not carry over from one state to the next, thus challenging the consistencies of students identified as SLD across state lines.

In a different study related to SLD identification, O'Donnell and Miller (2011) identified that as school psychologists have become more confident of the practices within the MTSS/RTI model being utilized in their district, they are more likely to utilize the information as a component of a comprehensive evaluation. However, within the study, researchers identified that data collected and supported for interventions at the elementary level was much more reliable than that at the secondary level. This study and others identify the continual complexities of the appropriate model for SLD identification and challenges within the field when regulatory standards are left up to the state level for clarification and support.

Literature Deficiency Statement

States and, in many cases, regional and local school districts have been provided with the autonomy to select the model that best meets the needs of its students. Unfortunately, no studies could be found addressing the eligibility rates of students with SLDs at a state, regional, or district level post-legal changes at the federal level. In addition, research within the field points to the need for local school districts to develop robust systems of MTSS to support student needs (Barrett & Newman, 2018). Research needs to be conducted to examine the systemic implementation of MTSS and its subsequent impact on SLD eligibility. Currently, no studies

examine whether post-implementation of an MTSS systems change relates to the SLD eligibility for students within the district utilizing the Implementation Science (IS) framework.

Significance of Study

Identifying students with a SLD has continued to be a highly debatable topic within special education. With every model for identification, proponents and dissenters continue to cause angst and a need to clarify best practices within the field. To gain a stronger understanding of the impact of local control in the determination and selection of model practices, schools within the State of Michigan continue to rely on past practices without a more profound understanding of what the research identifies as successful and unsuccessful practices.

While most ISDs in Michigan use a PSW model for identification, examining the intersection with SLD eligibility within the scope of MTSS was critical. As MTSS/RTI is deeply rooted in a systems-based approach, which includes providing research-based interventions to struggling learners, using data through the intervention process was vital in determining whether a student meets the criteria for SLD. This study aims to examine the development and full implementation of a system of MTSS in three Midwestern school districts through the use of Implementation Science. This study will examine whether any change in SLD eligibility rates within districts where extensive professional development and alignment of the tenants of IS occurred as part of the MTSS systems development had any impact on SLD identification within the district. This research has the potential to provide the field with a deeper understanding of whether the development of systems through the framework of IS promotes comprehensive systems that gather the necessary data needed for SLD identification through interventions and effective teaming processes.

Purpose Statement and Research Questions

My study aimed to examine the outcomes of the Michigan Department of Education (MDE) TZ in the three participating local school districts in one ISD and its impact on Specific Learning Disability Identification as it relates to developing MTSS practices through the work of Implementation Science. This study examines eligibility rates over the last ten years compared to districts within the region that did not utilize IS practices. To analyze the purpose of the study, the following research questions were identified:

1. Since the change in SLD eligibility guidelines in Michigan, has there been a change in the SLD eligibility rates at the regional level across the 56 ISDs between 2013 and 2023?
2. Since the change in SLD eligibility guidelines in Michigan, what has occurred with the SLD eligibility rates at the district level within the identified ISD between 2013 and 2023?
3. During the 2022-2023 school year, was there a difference in the identification rates for students with SLD in the three districts selected for participation in the TZ compared to the other nine districts within the identified ISD when examining the variables of student gender and student grade level at identification?

Theoretical and Conceptual Framework

The foundational understanding of systems theory guides the theoretical framework for this study. This framework, rooted deep in understanding the components within a defined system, was best understood when examining the relationship between the components versus the components in isolation (Wilkinson, 2011). Systems theory allows for a framework for analyzing complex problems by taking into consideration the relationships and interactions within the system (Wilkinson). As part of the educational arena, the way in which practices are

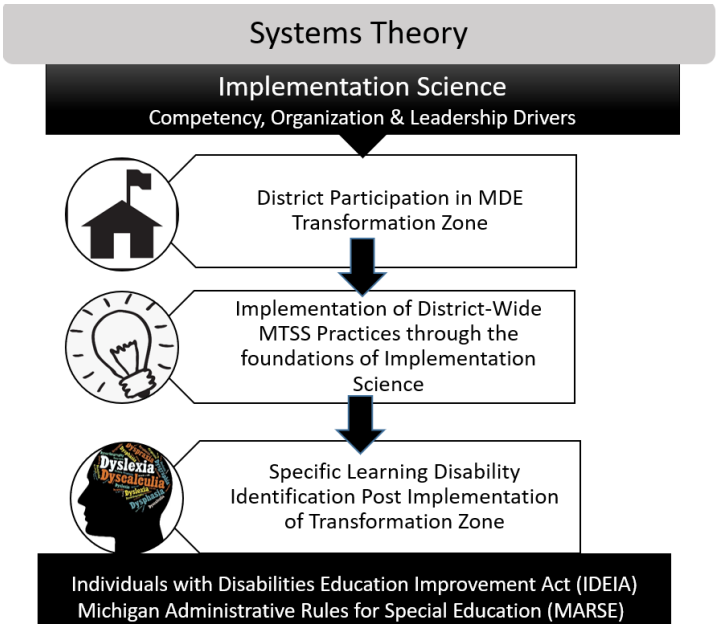
implemented to provide effective implementation on the change, align to the foundations of systems theory which provides a critical examination of the relationship of systems within the educational system. A change to student outcomes was not done in isolation but instead due to various factors related to the defined change (Wilkinson).

Educational change through the lens of systems theory was often divided into two types. The first, defined by Banathy (1991), was called piecemeal change, where the system adjusts to change outcomes. In comparison, systems change theory entails transforming the current paradigm into a new version through time and consistent practices (Reigeluth, 1994). As a result, this study focuses on the foundations of systems theory in developing the research questions to determine whether the focus on developing comprehensive systems for MTSS/RTI had any secondary impact on the identification of students with SLDs.

To implement any change in the educational arena, changing a broader system was complex and critical to engaging in long-term sustainable practices that improve student outcomes. To develop the framework of this research, I also chose to utilize the conceptual framework of Implementation Science from the National Implementation Research Network (NIRN, 2021) as the basis for examining how the system was being implemented and developed to shift practices for SLD identification at the ISD level. In addition to the guiding foundational framework of NIRN, I utilize the understanding of the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA) and the Michigan Administrative Rules for Special Education (MARSE) as foundational components of the study. The overarching component of the conceptual framework, as shown in Figure 1, was the critical understanding of IS, systems change, and the intersection with the state and federal laws (e.g., IDEIA and MARSE).

Figure 1

Conceptual Framework



According to the National Implementation Research Network [NIRN] (2021), to adequately support the development of a systems-based approach to the alignment of supports and services, IS, as developed by NIRN, includes a comprehensive framework for implementing systematic changes (Horner et al., 2019). This framework utilizes the foundational process of organizational adjustments strategically implemented over 2-4 years (Fixsen & Blase, 2008). This study expands into a more profound understanding of the link between implementing a comprehensive system of MTSS and the subsequent impact of students being identified as SLD related to systems implementation. It was critical to the field to gain this knowledge as it will provide a basis for whether current practices or changes in the understanding of MTSS within a district effectively reduce eligibility rates, a driving factor in the change at the federal level in 2004**.**

The central focus of this study was the SLD identification rates after full implementation of the comprehensive MTSS/RTI system compared to districts that still need to receive intensive

professional learning around MTSS/RTI. As this intensive project focused on implementing MTSS practices beginning at TIER 1 instruction for all students, the development of a comprehensive system of MTSS focused on aligning the components of Implementation Science. Utilizing these key components behind the systems change theory, new practices within the district have begun to emerge. IS developed through NIRN was one framework designed to address the challenges of implementing systems change to adequately support the development of a systems-based approach to the alignment of MTSS practices (Horner et al., 2019). NIRN identifies three drivers to support the implementation of new practices within a setting: competency, organization, and leadership. These identified drivers are needed to support proactive, consistent program implementation to improve outcomes (NIRN, 2021).

Competency drivers are mechanisms to develop, improve, and sustain administrators' ability to implement a program. Within the competency driver, selection, training, coaching, and performance are critical to sustaining (Metz & Bartley, 2012). By identifying the competency drivers, school districts utilizing the theories of implementation science can identify and utilize critical practices that support the development of a sustainable student support infrastructure. This includes hiring practices to ensure that individuals working with students have a strong understanding of the foundational requirements to implement a successful system of support to improve student outcomes.

The second driver, the organization, focuses on the tools necessary to create effective school environments and cultivate new working methods for educators (NIRN, 2021). The three key components are decision support data system, facilitative administration, and systems intervention (Charlton et al., 2018; Forman & Crystal, 2015; Metz et al., 2015). The first was that decision-support data systems create ways for teams to gather process, outcome, and fidelity data

that need to be collected, analyzed, and reported over time to make comprehensive and collective decisions (NIRN, 2021). Facilitative administration systems account for creating a supportive organizational context and engaging in learning and improvement based on best practices and the use of data. This driver supports a team approach to identifying barriers that may occur due to the focus on these systems. Finally, systems intervention focuses on the external variables, policies, environments, systems, and structures that impact the successful implementation of the intervention (NIRN, 2021).

The third implementation driver of leadership focuses on providing purposeful leadership strategies for the various challenges that arise when implementing a systems change (NIRN, 2021). In the case of the implementation of a system of MTSS, it focuses on having the necessary individuals who can make decisions on behalf of the organization part of the process to appropriately provide guidance, allocate resources, and make decisions that continue the effective functioning of the organization during the systems work (NIRN). Under the umbrella of IS, the conceptual framework of this study continues to expand and develop.

Participation in the MDE TZ was a critical part of the framework of this study as districts selected for work within the TZ received specific professional development and coaching in IS, which guided the development of a comprehensive MTSS/RTI system. This work promoted a collective understanding of MTSS/RTI at the district level and supported the development of practices at the building level for full implementation. The five essential components identified by the MDE TZ of the comprehensive MTSS/RTI system that include the following areas: team-based leadership, comprehensive screening and assessment system, tiered delivery system, selection and implementation of instruction, interventions, and supports, and continuous data-based decision-making processes (The Michigan Department of Education [MDE], 2021).

Upon reaching full implementation of the system of MTSS/RTI, the next component of the conceptual framework can be analyzed: whether participation in the MDE TZ impacted SLD eligibility rates within the participating districts. While the three districts being studied have traditionally utilized a PSW model for eligibility, the full implementation of the TZ has shifted the eligibility procedures for SLD to allow for MTSS/RTI data to support eligibility decisions.

Methods Overview

This study examined the eligibility trends and potential relationship between participating in the MDE TZ and identifying children with SLDs within three Midwestern school districts post-implementation of a comprehensive system for MTSS. A quantitative approach was utilized for this study. This study will primarily examine a data source from a publicly reportable site that includes (1) comparison data across the 56 regional entities for SLD eligibility between 2013- and 2023 and (2) specific regional and local data presented at the aggregate district level for the 2022-2023 school year. As a result, a range of analyses were conducted. These analyses will include descriptive statistics, between-subjects ANOVA analysis, and chi-squared regression analysis to examine whether the MTSS/RTI system implementation relates to SLD eligibility within the district.

Chapter Summary

As the field continues to implement and develop practices that best meet the needs of students with SLDs, additional attention must be paid to the impact of the data on identification rate trends. This chapter provided an overview of current status of SLD identification practices and procedures from a local, state and national level. In addition, an overview was provided the current state of the development MTSS/RTI systems development in the state of Michigan. This study will analyze three Midwestern school districts that have implemented a system of MTSS

utilizing the foundations of Implementation Science. It examined state, regional, and local district SLD eligibility trends, including any relationship to the project's participation and the identification of students based on grade level and gender. A conceptual framework for this study was designed around the understanding of systems theory, Implementation Science and its relationship to federal and state laws surrounding special education and supporting students with disabilities.

CHAPTER II
LITERATURE REVIEW

The need for regulatory requirements for any area of SLD identification model continues to pose a challenge to practitioners in the field (Maki & Adams, 2020). Within their white paper, Hale et al. (2006) identify the critical challenge faced in the field as practitioners are left to decide which model to utilize without a deep understanding of the best practice for identification. As the field continues to evolve with instructional practices and the development of educational systems that appropriately identify struggling learners, comprehensive support systems continue to be a critical component of the educational setting. One critical area of contention within the field was moving towards a subjective qualitative approach that encompasses the MTSS/RTI method to identification that moves away from the quantitative practices of the past SD model (Fletcher-Janzen & Reynolds, 2010). As the MTSS/RTI model relies upon subjective cut scores surrounding data in the intervention process determined at a local level for identification, this leaves much of the eligibility requirements up to the individual district in determining whether students qualify as having a SLD. The use of subjective data points does not provide consistent, quantifiable markers as to what qualifies a student as not responding to interventions to determine whether they have a SLD (Maki et al., 2015; Unruh & McKellar, 2013). Utilizing data that adequately supports, identifies, and intervenes with struggling learners was critical to educational teams as they used it to make relevant, accurate, and productive educational decisions that improved student outcomes.

Within this literature review, a deeper analysis will occur surrounding research on the primary allowable models for SLD identification in Michigan: Patterns of Strengths and Weakness (PSW), Multi-Tired Systems of Support/Response to Intervention (MTSS/RTI) along with a proposed combination-based approach. In addition, this review will examine the research

surrounding discrepancies in identifying students based on gender and the need for comprehensive professional development for educators to promote robust learning environments for all learners.

Patterns of Strengths and Weakness (PSW)

The PSW method is the most commonly utilized process for determining whether a student has a SLD in Michigan (Special Education Instructional Leadership Network [SEILN], 2021). The IDEIA (2004) defines the term pattern of strengths and weakness for the determination of SLD as:

> The child exhibits a pattern of strengths and weaknesses in performance, achievement, or both relative to age, state-approved grade-level standards, or intellectual development, which the group determines to be relevant to the identification of a specific learning disability using appropriate assessment, consistent with §§300.340 and 300.305 (34 CFR. §300.309. a.2.ii)

The foundational goal of the PSW model was to identify the underlying progressing deficits related to the student's area of SLD (Beaujean & Phipps, 2016). As a result, this method assumes that the processing deficits of an individual are not simply casually and predictably linked to the child's disability but also that those processing challenges provide a level of relevance to the educational planning for the student (Hale et al., 2006). Accordingly, the field finds this method most closely linked to the SD model, causing psychologists to often lean toward its use due to its reliance on test scores and not systemic instructional changes required as part of the MTSS/RTI method (Beaujean et al., 2018). In addition, the method does not require a commitment to often complex and challenging work involved with systems-level changes as required in MTSS/RTI model (Beaujean).

In 2015, more than half of all states permitted the use of PSW (Maki et al., 2015). This method has a range of challenges presented in its efficacy and consistent use to determine whether a student was experiencing a learning disability adequately. For example, Lyon and Weiser (2014) identify, through a survey of current SLD diagnostic research, that there needs to be more consensus within the field that consistently defines precisely how eligibility should be defined through PSW. They also found no consistent PSW models that do so. There are many different modalities, including cognitive and achievement-based approaches, which include using cognitive and achievement scores to determine an area of weakness (McGill et al., 2016). However, they must be consistently implemented and recommended at the state and federal levels.

With the various models utilized under the PSW approach, dual discrepancy/consistency was the most common. Within their study, Beaujean et al. (2018) identified that under the PSW model, using cognitive profiles on students as part of eligibility decisions for SLDs continues to be widely implemented and often misused. Under this use, clinicians within the field assume that SLD is marked by unexpected academic difficulties when the individual has an average or better-than-average IQ score. Within this model, psychologists administer various subtests from nationally normed instruments that assess intelligence across seven abilities: fluid reasoning, comprehension-knowledge, visual processing, short-term memory, auditory processing, long-term storage and retrieval, and processing speed. Psychologists can utilize various normed referenced assessments to assess these areas, hence the cross-battery assessments (Beaujean et al.). However, Beaujean et al. identified that this model relies heavily on IQ tests, which the field has long refuted as a reliable tool in SLD identification. As a result, researchers recognized the need to identify that this commonly utilized model meets the criteria for an evidence-based

assessment defined under federal law, subsequently causing psychologists to spend time implementing assessments with a very low probability of accurately identifying SLD (Kranzler et al., 2016). Determining whether a student has a deficit area and a coinciding area of strength was vital to identifying students through the PSW model.

Students being evaluated need to demonstrate weaknesses and strengths, which poses challenges in utilizing the PSW model. Not all low achievers will identify as having a strength and corresponding weakness (Flanagan et al., 2011). This challenge lends itself to children who are low achievers and struggling learners not to be identified as SLD or in any other area of special education, and subsequently not being provided with the necessary support to succeed in the school setting and close their learning gaps (McGill et al., 2016). Therefore, schools need to understand the challenges of utilizing the model to identify SLD and the impact of data presented on instructional decisions for the student (Flanagan et al., 2011). In contrast to the SD model, PSW emphasizes the clinical judgment of the school psychologist for patterns of strengths and weaknesses and identifies areas of low achievement (Schultz et al., 2012). As a result, school psychologists must have a high level of training in the theory of cognitive abilities, casual cognitive achievement relationships, and advanced test interpretation skills for PSW to be implemented in the educational setting (Fiorello et al., 2012). This challenge, alongside inconsistent guidance at the state level, has presented implementation challenges for determining SLD at the local district level.

Supporters of the use of the PSW model for identification determined that the inclusion of the examination of the cognitive process was a critical factor within the model that was missing from other approaches (Beaujean & Phipps, 2016; Hale & Fiorello, 2017). In a study by Hale et al. (2006), researchers surveyed learning disability experts. They found consensus

amongst them that measuring different cognitive abilities was a critical component necessary to make an SLD eligibility determination. In comparison, critics of the model argue the exact opposite surrounding the creation of cognitive profiles (Fletcher et al., 2018) and note that using cognitive profiles creates two significant problems: stability and utility (Watkins, 2000). Stability was a concern as an individual's strengths and weaknesses differ across time and instruments utilized (Miciak et al., 2015). The utility identifies the challenges with making diagnostic decisions from profiles of test scores, arguing that learning disabilities fall on a continuum versus being categorical entities like other disability areas (Lichtenstein, 2014).

A challenge of the PSW model was the identification process for determining PSW and its relationship to academic achievement scores. In a study by Liu et al. (2017), researchers analyzed the relationship between the specific cognitive patterns of students in reading, writing, and spelling from the Kaufman Test of Education Achievement- Third Edition (KTEA-3) and the identified areas of strength and weakness within their educational evaluations for SLD. Researchers identified in this study that students who scored low on the KTEA-3 were generally in line with similar errors made on cognitive processing tests. For example, students with higher intelligence scores outperformed others in phonological processing, word reading, and decoding errors. However, Liu et al. found that students with lower intelligence scores produced more errors on the KTEA-3, identifying a clear link between intelligence and achievement. This study provides solid empirical data to support the use of PSW model within the field.

In another study, Koriakin et al. (2017) found similar evidence in mathematics that identifies students with different cognitive PSWs, who also differ in the errors they make on academic achievement assessments. In their study, the researchers examined the use of the KTEA-3 to determine whether students who made similar errors were identified as having high

intelligence and low processing speed. They compared scores on the KTEA-3 to determine if there was a relation between the two. The findings of this study indicated that students who demonstrated the identified profile had similar errors to those with low cognition and low processing in geometry and simple addition. Such findings support the empirical data demonstrating that students with particular PSWs will demonstrate different performances on math achievement, thus leading educators to identify appropriate interventions and supports for student learning. Koriakin et al. identify the importance of utilizing the information from the PSW framework to drive the selection of intervention and the subsequent student response to such interventions to provide a comprehensive framework for addressing academic concerns.

Developing a framework for identifying a student in one of the six areas of SLD was a critical component of making an appropriate special education identification for a student. The National Association of School Psychologists (2022) identifies the following as critical components of a SLD evaluation utilizing the PSW model from Alfonso and Flanagan (2018):

- collection of data from multiple sources over time
- identification of student's cognitive and academic strengths and weaknesses
- evaluation of intra-and inter-individual differences among a student's cognitive abilities
- determination of parallels between a student's cognitive functioning and academic weaknesses
- assessment and evaluation of exclusionary factors
- evaluation of ecological validity of findings
- determination of negative impact on associated life functions

Implementing these components and the specific process to obtain the critical information associated with deciding eligibility was often left open to the evaluators within the field. This was due to the subjectivity of the model and the local determination of what scores are identified as weaknesses versus strengths. In addition, research within the field continually identifies that a lack of consistent processes, frameworks, and guidance about the PSW model causes challenges with its accurate use in the field (Maki et al., 2020). In addition, research continues to show mixed results on the actual ability of the PSW model to identify true cases of SLD (Kranzler et al., 2019; Maki et al., 2021; McGill et al., 2018; NASP, 2022). This inconsistency promotes challenges in providing special education support and services to students with disabilities under the IDEIA.

In support of the findings from other researchers on the ineffective use of the PSW model, a study conducted by Miciak et al. (2015) examined the criteria utilized for the SLD identification with the PSW model compared to the SD mode. Miciak et al. found that out of 177 already eligible students, only 25 were eligible using both frameworks. This significant difference between the two groups identified that both methods produce inconsistent results as the reliability and validity lie on that of the assessor rather than the data to support improvement in academic and learning outcomes. Miciak et al.(2015) identify the importance of seeking alternative identification methods that can be implemented with fidelity and produce robust student-level data on learning outcomes. In support the research conducted by Miciak et al. (2015, p. 55) identified problems that occur with the appropriate identification of students as SLD through the use of the PSW model, including the following;

- The statute does not mandate that cognitive skills be addressed, just their magnification

- Proponents have conducted little research on how PSW models work and are related to instruction (Schneider & Kaufman, 2017)
- PSW was predicated on a straw-person view of RTI. No stand-alone RTI identification method existed, and a comprehensive evaluation was always required regardless of the identification method.
- Psychometric issues with discrepancy scores are well known, especially using right cut points, profile interpretations, and difference scores (Francis et al. (2005); Stuebing et al., 2012).

The research found that the PSW model was challenged in providing consistency across the evaluation and identification process. For it to be effective as an identification model, it must consider effective instructional and intervention practices to close the gap with struggling learners.

Multi-Tiered Systems of Support/ Response to Intervention (MTSS/RTI)

The use of MTSS/RTI for SLD identification was deeply rooted in the instructional delivery framework that involves screening, the use of interventions through a system of support that focuses on student needs and intensity of intervention starting in the general education classroom, and repeated progress monitoring to determine the effectiveness of the interventions (Fletcher et al., 2018). Districts across the country have significant autonomy to set their systems of MTSS/RTI to align their available resources to meet the student's individual needs. This umbrella of support allows individual districts to develop a comprehensive framework of programs and services for all students, not simply those identified as potentially having a learning disability (National Joint Committee on Learning Disabilities, 2005). This approach was designed not to supplant special education services but to provide students with research-based

interventions within the general education classroom environment before entering the special education system. How students progress through the designed MTSS/RTI framework and the subsequent outcomes of those interventions are linked to effective data collection to determine potential eligibility. Studies of the MTSS/RTI model have identified that the fidelity of implementing a well-developed system was critical to the successful implementation and the subsequent obtainment of data to make student eligibility decisions confidently.

As an identification tool, a sufficient lack of progress within the MTSS/RTI process means that a student may not respond to increasingly intensive interventions and may suggest that a child is experiencing a learning disability (Gartland & Strosnider, 2020). Fletcher et al. (2018) visualize the difference between the two models in Figure 4, which depicts the route students' progress through the special education referral process through previously utilized models, including PSW and SD, versus using the MTSS/RTI model. As seen in Figure 4, the emphasis was placed on research-based interventions and progress monitoring to determine whether the student was closing the learning gap and responding to the interventions or whether the team should consider a comprehensive evaluation for special education. As seen in this model, when utilizing the screening-treatment response, children who do not initially meet eligibility requirements return to the treatment and are further evaluated due to their non-response to the intervention. As demonstrated, the evaluation process using the MTSS/RTI model begins when adequate screening, treatment, progress monitoring, and progress determination have occurred through a comprehensive intervention process.

School-based teams must be aware of the critical components needed to implement a successful system of MTSS/RTI within a school setting. Vanderheyden et al. (2007) outline the following as following factors for successful MTSS/RTI approaches;

- Correctly identify students who need intervention
- Deliver intervention that effectively resolves the learning problem for the majority of students exposed to the intervention
- Monitor the effects of intervention and troubleshoot to ensure intervention integrity and positive learning effects
- Make decisions about the need for more intensive or less intensive interventions
- Link resulting MTSS/RTI data to referral and eligibility decisions in special education
- Link resulting MTSS/RTI data to system programming changes (e.g., resource allocation, professional development, program evaluation) (pp. 225).

Districts commonly utilize a three-tiered practice to develop their MTSS/RTI systems. Students move through the three tiers as necessary. Tier One includes universal instruction and screening. Tier Two consists of supplemental interventions, and Tier Three supports students who need intensive interventions prior to referral to special education (Fletcher & Vaugh, 2009).

Through the use of MTSS/RTI, positive findings have included a reduction in the achievement gap at the Kindergarten through the third-grade level for students who are at risk for academic failure (Simmons et al., 2008). Within the study examining the academic performance of 41 kindergarteners at risk of reading difficulty, researchers concluded that through the use of small group interventions that were aligned to children's deficit areas over the school year, children who received the intervention responded positively and moved consistently from the 30^{th} to 50^{th} percentile by the end of their kindergarten year. This study demonstrates the

importance of early and consistent intervention within the field to support learning deficits. These interventions continue to be critical in supporting the development of comprehensive systems that support the unique learning of all children (Soukakou et al., 2011).

Comprehensive Evaluation Structure for SLD through the Use of MTSS/RTI

The continued use of MTSS/RTI positively impacts student growth across various settings. Even with research showing the positive effects of MTSS/RTI, educational systems continue to face challenges. One challenging area was the development of supports that accurately identify specific learning disabilities using MTSS/RTI (Fletcher et al., 2018). In their study, Maydosz and Maydosz (2015) identified that general educators must be well-trained in special education supports, timelines, and how to differentiate instruction to support struggling learners. In addition, concerns were presented within their study of the potential for misidentification of students within the RTI processes, including over-identification of male and minority students. Researchers within this study identified factors such as general educators not implementing systems with fidelity, overlooking gifted students as potentially eligible, and delaying special education evaluations as areas of caution with implementing RTI/MTSS for eligibility determinations.

When examining whether the MTSS/RTI model has the potential to overidentify children as SLD, Kranzler et al. (2020) found in a sampling of 30 students identified as SLD through the MTSS/RTI model and compared their test scores on an IQ and achievement test with same age peers not identified as SLD, their study found that 73.3% of the students with SLD had scores below the mean of their peers and over half had IQ scores below 90. This indicates that, in some cases, using the RTI/MTSS model for identification purposes can over-identify students with below-average IQ scores. To address this finding and others within the field, Fletcher et al.

(2018) discuss the use of a system for using MTSS/RTI and components of the PSW methods to evaluate students with SLD that balances student achievement and the child's response to intervention

Fletcher et al. (2018) conceptualize the approach for SLD identification in a hybrid model that considers the need for a comprehensive evaluation as required in IDEIA (2004) and incorporates the key components of a system of intervention-based responses to student needs in a comprehensive learning environment while considering the federal requirements. Fletcher et al. identify that the goal of any evaluation should be to intervene as quickly and as early as possible to close the achievement gap. School personnel can comprehensively view a student's needs by breaking the SLD evaluation process into an extensive examination of the three critical areas of low achievement, instructional response, and examination of exclusionary and contextual factors. This knowledge will assist in determining whether the student meets the often-complex criteria for SLD, thus ensuring a critical response to student needs and subsequent interventions in general or special education.

The IDEIA (2004), identifies exclusionary factors for determining SLD: learning problems primarily resulting from visual, hearing, or motor disabilities; cognitive impairment; emotional impairment; autism spectrum disorder; or environmental, cultural, or economic disadvantage (IDEIA, 2004). These exclusionary factors are critical to ensure that all children are adequately identified. However, with the hybrid approach for identification, Fletcher et al. (2018) have implemented criteria for the inclusion of adequate instructional response within this model versus the exclusionary nature of access to instruction utilized through the PSW and SD models. This shift allows for the components of an MTSS/RTI system and student-level response data to be utilized as part of the SLD identification process. This leads to a comprehensive approach to

understanding the students' learning, individual needs, and response to interventions in their deficit areas.

Components of Successful MTSS/RTI Leadership Framework

As part of the Michigan Continuous Improvement Process (MiCIP), the document identifies five key components to the infrastructure of a comprehensive support system. These elements include (a) Team-Based Leadership, (b) Continuous Data-Based Decision Making, (c) a Comprehensive Screening and Assessment System, (d) Selection and Implementation of Instruction, Interventions, and Supports, and (d) a Tiered Delivery System. The Michigan Department of Education developed the MTSS Practice Profile (2020) in response to the understanding of the critical components of an effective system of MTSS/RTI in the school setting. This comprehensive document supports the development and implementation of MTSS/RTI systems across the educational spectrum in Michigan. One critical component of the MDE MTSS Practice Profile, deeply rooted in the tenets of implementation science, was shared leadership at the building and district levels to create effective decision-making teams (Michigan Department of Education [MDE], 2020). This intentional design of team-based leadership was a foundational component of the work conducted with districts as part of the MDE TZ and the implementation of comprehensive systems of MTSS (MDE, 2020).

As Multi-Tired Systems of support continue to be implemented across various settings in the school environment, the perspectives and support of the school leadership are critical to the successful implementation. This support was imperative to the subsequent system change that must occur to be sustainable. At the building level, the principal and other school administrators directly influence student learning and achievement (Frigmanski, 2014; Heck, 2010). As principals begin to ingrain and support effective implementation practices, many key leadership

activities are needed to implement effective systems change. Within their study, Furney et al. (2005) identified key themes that leaders needed to support to develop systems that could develop and sustain a comprehensive level of support for students. These leadership activities include (a) creating a culture and shared vision, (b) building a collaborative work structure, (c) enabling need-based teacher support and professional learning, and (e) reviewing and participating in policy changes in collaboration with other administrators in the district.

Choi et al. (2020) similarly identified within their study the positive impact of school leadership on MTSS/RTI implementation. Researchers found that as school leadership moves towards a team-based approach to implementing MTSS/RTI, they can better reallocate existing resources to focus on improving student outcomes (Chio et al.). In addition, it was identified that school leaders improved their leadership skills and saw a higher success rate in implementation and overall systems change versus schools that did not utilize a school-based leadership team for decision-making. Within their study, Chio et al. identified that the role of the school leader in an MTSS/RTI process was critical in developing the system to develop comprehensive supports that align with the needs of the students and their academic gains (Chio). Developing shared leadership within the school setting to effectively implement a strong system of MTSS/RTI was necessary to change systems and practices for student interventions.

Developing and implementing a leadership framework that collectively meets the needs of the MTSS/RTI system was often challenging for school administrators. While traditional approaches to school leadership surround a single point of leadership expertise, the concept of team-based leadership often challenges not only the leadership style of the principal but also that of the individuals they lead (Dowd-Eagle et al., 2015). Setting aside individual perspectives and instead allowing the team's voice to move the system forward was a crucial component of a

strong structure of MTSS/RTI. In turn, this allows for a shared vision and unity across the individuals implementing the evidence-based practices within the educational system.

Creating a school-based leadership team that can appropriately support the implementation of MTSS/RTI practices in the school setting was vital to success in the long-term implementation and the instillation of a comprehensive student support system. Team members should include individuals with strong leadership skills and decision-making authority within the building or district (Splett et al., 2017). As a member of the district-level implementation team, the school psychologist's role was crucial but often overlooked as school-based teams are developed in the early tiers of MTSS. As a result of this omission, the district-level teams are not prepared to impact the special education eligibility processes within their district (Splett). A district implementation team needs a membership of individuals with adaptive and technical leadership skill sets, as these are necessary to implement a system of MTSS/RTI (Dowd-Eagle et al., 2014). School psychologists bring expertise to the team, much like other members, particularly in MTSS/RTI. Including these professionals early on in the MTSS process was critical to creating a system that provided necessary intervention and balanced the child's obligation to the district (Department of Education, 2011). School Psychologists provide professional learning and monitor the implementation of effective interventions at a district level. This practice allows individuals in the role to build the capacity to understand other professionals further through a consultation process and a systems-based approach (Erchul, 2011).

The district implementation team's role in MTSS/RTI was vital in identifying evidence-based practices, developing a vision, and implementing resources (Kittelman et al., 2020). Each school and district must develop a teaming structure that meets its unique needs. This could be done through various practices, including district, building, and grade-level teams (Kittelman et

al., 2021). These teams are imperative to the selection and successful implementation of evidence-based practices. Bambara and Kunsch (2015) in their study identified the following as guiding questions for the evaluation of whether a team was functioning effectively and efficiently:

1. Does the team have the necessary and appropriate team members?
2. Does the team use data for decision-making and informing action?
3. Does the team have a process to communicate and interact with key stakeholders at the school or district level?
4. Does the team use efficient meeting procedures?
5. Does the team have access to the resources needed to fulfill the purpose of the team? (pp. 47-49)

Identifying a team's functioning was necessary for implementing a comprehensive district-level leadership team for MTSS/RTI. The team members assigned to the MTSS/RTI leadership team must ensure that the educators they are working with have the training, coaching, and support necessary to implement evidence-based practices through the MTSS/RTI framework (Kittelman et al., 2021). In addition to supporting the individuals implementing evidence-based practices, strong teams promote sustainability when staff turnover occurs (Kittleman et al.).

As the leadership team's development for MTSS/RTI continued, the team's understanding of purpose was essential to developing a comprehensive system. Multi-tiered support systems are characterized by the regular collection and use of data that identifies students who require support beyond universal instruction (Bruhn et al., 2020).

In their study on educational teaming, Nese et al. (2021) found that schools commonly had single teams at each tier versus having an integrated team across the school's MTSS/RTI

system. This challenge identified by the researchers examines that there was no direct correlation between the number of teams, where the team was at within the stages of implementation, and the subsequent correlation to increased student outcomes. Therefore, schools should not focus on how many teams but instead on how they are addressing challenges and identifying support for struggling learners through a team-based approach (Nese et al.). The focus on team-based leadership was an essential component discussed throughout the literature. While team-based leadership has been identified as a need, only a few studies examine the impact of the individual makeup of those teams at the district level. Freeman Miller and Newcomer (2015) in their study discuss the importance of having a defined team to support the development of a cohesive support system through MTSS/RTI as systems are developed and implemented at the secondary level.

The components of a comprehensive MTSS/RTI system are critical to utilize the information collected for potential special education eligibility adequately. Developing a robust problem-solving process that provides input from various educational experts was critical in determining whether a child can be evaluated for special education services (Reschly, 2014). Early intervention was critical for all children, especially those at risk for future identification within special education. Therefore, developing MTSS/RTI systems that comprehensively meet the needs of the students within the district was necessary and critical for all students' long-term success.

SLD Identification Trends Regarding Student Gender

In the research, various groups are often overrepresented in special education identification and the identified trends (Maki et al., 2020). Most commonly, race, socioeconomic status, and gender are areas where specific groups are identified at higher rates across eligibility

areas than their counterparts (Maki). For this review and study, gender was a factor that was examined. According to the National Center for Education Statistics (n.d.), during the 2018-2019 school year, 18% of all males versus 10% of females were eligible for special education services. In addition, the DSM-5 identifies that SLD identification was two to three times more prevalent in boys (American Psychiatric Association, 2013). Within their study that examined the eligibility of over 44,000 students identified as having SLD, Coutinho et al. (2002) found a solid link to the likelihood of a male child being identified as SLD when the child also came from a low socioeconomic background. This study aligns with what was commonly experienced in lower socioeconomic schools, where males are more likely to receive special education services than their female classmates (Maki & Adams, 2020). This often-experienced phenomenon in schools was commonly attributed to males exhibiting behaviors often seen as disruptive and attention-seeking, thus prompting interventions earlier to address behavioral and academic challenges (Wehmeyer & Schwartz, 2001).

Academic challenges across the educational setting are typical for students with SLD; however, how they manifest themselves between male and female students was compelling. In a study examining over 490,000 second-grade students, 5% were identified as having a SLD. Quinn and Wagner (2015) found that as a child's reading impairment became more severe, the higher likelihood the students were to be male. This study also concluded that there is no link between referral basis and gender. This key finding indicated that even if students within this study were more vocal about their frustration and inability to learn, they did not have a higher likelihood of being referred for special education services (Quinn & Wagner). In a similar study on gender differences in SLD, Giofre et al. (2022) found that when examining children on the Weschler Intelligence Scale for Children, Fourth Edition (WISC-IV), female students with a

SLD in mathematics consistently outperformed their male peers in the coding subtest. This study provides insight into the often complex and highly debatable use of IQ testing and subtests in determining whether a child has a SLD (Giofre et al.). Critics within the field often supported the innate bias of the use of IQ testing of such testing for subgroups during the evaluation process.

The overrepresentation of males with the specific learning disability area of special education was essential to acknowledge as eligibility decisions were being made and model was being chosen at the district level. Educators and evaluators can address these inconsistencies by understanding the difference in learning habits between males and females. Through comprehensive professional development in supporting all learners in the broader educational system, educators can better support students across the MTSS/RTI system.

Teacher Professional Development in MTSS/RTI and Educating All Learners

As the educational landscape has changed over the years, the importance of inclusive practices in the school setting through MTSS/RTI continues to be imperative as districts appropriately determine whether a student is making sufficient progress. Cosier (2010), in a study on the relationship between inclusive education and the achievement of over 1300 students with disabilities, found that students' academic achievement increased when being educated within an inclusive setting. Results of the study found a direct relationship between being educated with non-disabled peers on grade-level content and higher scores on academic achievement testing. This study identifies the positive impacts on student achievement for all students when educated in an inclusive setting. It directly links the importance of utilizing interventions and effective MTSS/RTI systems throughout the K-12 setting, whether they have been identified as having a disability or not (Cosier).

Under federal law, schools must educate all children in their Least Restrictive Environment. IDEIA (2004) states:

> Each public agency must ensure that—
>
> (i) To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and
>
> (ii) Special classes, separate schooling, or other removals of children with disabilities from the regular educational environment occur only if the nature or severity of the disability is such that education in regular classes using supplementary aids and services cannot be satisfactory. (§300.114).

This requirement not only requires that every child be placed primarily into the general education environment first but that Individualized Educational Placement Committees (IEPCs) must have sufficient documentation to support the change of placement into a more restrictive placement that removes them from full access to the same education as their non-disabled peers. This federal mandate can often challenge even the most veteran educators. With national statistics as high as 1 in 5 students who exhibit a Specific Learning Disability (The National Center of Learning Disabilities [NCLD], 2021), it was without a doubt that teachers in every classroom across the country would be expected to educate students with a SLD in their classrooms daily. Inclusive education was mandated through federal law and a reality for all teachers; however, how educators embrace or support students with unique learning needs significantly impacts students' long-term success.

The impact of the appropriate identification of individuals with disabilities and access to a high-quality learning environment continues to be paramount both in the educational field and

in the post-secondary outcomes of students. Research continues to support that students with SLDs have higher rates of chronic absenteeism, are twice as likely to receive out-of-school suspension, are nearly three times more likely to drop out of high school, and almost one-third of all incarcerated youth have a documented learning disability (Horowitz et al., 2017). These statistics highlight the importance of appropriately identifying students for special education so children can access high-quality interventions and support them in an environment where they can work towards high academic standards and gain meaningful post-secondary training and support opportunities. However, to do so, students with SLD must have the same opportunities for success as their peers and be perceived by those educating them as having the ability to achieve high standards despite their learning disabilities.

The study by McCloskey et al. (1999) on the inclusionary practices of students with SLD with their non-disabled peers identified that over time, there had been a significant decline in the number of students who are educated in settings with no regular exposure to non-disabled peers and curriculum in the general education setting. While the practices within the school environment have shifted, this study continues to shed light on the importance of professional development in the system of MTSS/RTI and the requirement of educating students within their LRE. In addition, having a solid understanding of the comprehensive system design and its focus on improving learning and outcomes for all students can provide psychologists with relevant educational data on the impact of the disability of the student and subsequent interventions that support their learning and growth (Hale et al., 2006).

In a study by Woodcock and Nicoll (2022), 182 secondary-level teachers in Australia were surveyed on their beliefs on the impact of inclusive education and supporting all learners within their classrooms. The study's findings demonstrated that teachers who strongly believe in inclusive

education and the positive benefits of educating all students in an inclusive setting were more likely to accept students with SLD and the challenges they presented. In addition, the study also captured that teachers considered beginning or novice teachers were much more likely to hold strong beliefs about the benefits of inclusive education practices than experienced teachers. The study also found that beginning and novice teachers were much more likely to show sympathy and patience towards students with SLD and their unique learning styles versus their colleagues with more than ten years of experience in the field. This study demonstrates that teachers who do not have strong positive feelings toward inclusive education practices are likelier to have less sympathy and lower expectations toward students with SLD. As a result, students are more likely to fail within their classrooms, and the teachers are less likely to change their instructional practices to meet the unique learning needs of students with SLD (Woodcock and Nicoll).

When addressing the need for clearly defined training on instructional practices for educators, Ford (2013) identified that educators who have been trained in practices such as co-teaching, differentiated instruction, peer-mediated instruction, and instructional interventions were more accepting of supporting students with SLD in their classrooms and felt strongly about their abilities as an educator to provide them with the necessary tools to promote learning and see growth in academic outcomes. This leads to more prepared educators and thorough educational planning processes for teachers (Ford, 2013). Challenging teachers' perceptions of students with SLD while providing the necessary tools to support and educate them adequately was critical to supporting educators in the inclusive setting. In a study examining the need for comprehensive professional development on inclusion and supporting all learners conducted by DeSimone and Parmer (2006), researchers identified that general education teachers teaching students with SLD in an inclusive setting often identify critical challenges to educating students in their classrooms. These challenges

include (1) having a limited understanding of the specific learning disability of the student and how it manifests in their learning, (2) the ability to collaborate with special education teachers to support the most beneficial resources for students with SLD, and (3) not feeling as though teacher preparation programs in higher education adequately prepare students for the expectations of an inclusive classroom and the ability to balance the unique learning need of the students.

To address new teachers' challenges, preservice programs have begun implementing teacher preparation courses that address the importance and understanding of educating all students in their least restrictive environment. This change promotes a stronger educational workforce that understands the federal regulations and mandates surrounding inclusive education and the benefits to the children in the classrooms. In their study on preservice teachers' exposure and support in inclusive practices, Gao and Mager (2011) found that preservice teachers who were educated on how to support students with disabilities in their classrooms were found to be more accepting and supportive of the unique learning needs of students in this setting. However, this study identified that preservice teachers did not feel comfortable supporting students with behavioral challenges and often continue to perceive negative feelings about the abilities of students and the likelihood of academic success in an inclusive classroom. This continues to identify the importance of assessing teachers' beliefs and the impact of those beliefs on the education of students with SLD and the use of MTSS before eligibility for special education services.

Chapter Summary

As identified in the review of studies as part of this literature review, the educational field continues to find challenges in selecting a comprehensive, defensible, and universally supported method for identifying children with a specific learning disability. In addition, it was vital to

examine the tools necessary to support the inclusion of students with specific learning disabilities and know potential identification challenges across groups. When examining the support needed through an MTSS/RTI route for SLD eligibility, focusing on a child's LRE and the benefit of participation in general education for as much time as possible was critical in determining whether children are responding appropriately to the identified intervention. Further research in the field was necessary to examine the impact of implementing MTSS practices through the lens of SLD eligibility, including the intersection between schools with strong school-based leadership teams focused on shared leadership to collectively gather accurate data to identify and intervene with struggling learners.

CHAPTER III

METHODS

My study examined whether post-participation in a comprehensive system change framework focused on MTSS impacted the SLD identification rates in participating districts compared to non-participating districts. My study examined eligibility rates over the last ten years compared to Intermediate School Districts within the state in the State of Michigan and local school districts within one region. In addition, my study examined what has occurred with SLD identification rates post-full implementation of MTSS between participating and non-participating districts, comparing gender and grade level at identification. To analyze the purpose of the study, the following research questions were identified:

1. Since the change in SLD eligibility guidelines in Michigan, has there been a change in the SLD eligibility rates at the regional level across the 56 ISDs between 2013 and 2023?
2. Since the change in SLD eligibility guidelines in Michigan, what has occurred with the SLD eligibility rates at the district level within the identified ISD between 2013 and 2023?
3. During the 2022-2023 school year, was there a difference in the identification rates for students with SLD in the three districts selected for participation in the TZ compared to the other nine districts within the identified ISD when examining the variables of student gender and student grade level at identification?

Research Design, Approach, and Rationale

This quantitative research study utilized a non-experimental design based on data from the publicly reportable MI School Database and district-level eligibility data found within the regional database for special education, Ed Plan. A non-experimental design was chosen as it

allows for the correlation of two or more variables, in this case, the model chosen and the change in SLD eligibility rates, either positive or negative (Creswell & Creswell, 2018). Existing data collected and reported by the state and housed in a database accessible to the public provided the information needed to examine SLD eligibility trend data over the past ten years.

A combination of the ISD and local-level data on eligibility rates was utilized to conduct the analysis. A post-positivism approach was utilized as it allowed me, as the researcher, to accept implementing a system of MTSS/RTI as a valid explanation for the outcomes (Creswell & Creswell, 2018). Post-positivism was an approach to knowledge but was also implicitly an assessment of the nature of reality (Fox, 2008). I chose this approach in my research as it sought to identify whether the variable being researched adequately identifies the reason for the outcomes.

In the development of this study, it was identified that more research was needed to develop and implement a system of MTSS/RTI that adequately supports the identification of students with a specific learning disability—examining the use of Implementation Science through the lens of MTSS systems development and subsequent post-implementation impact on the SLD identification rates provided further information on the approach to developing sustainable systems with a lasting impact on student outcomes. This understanding can lead to a broader discussion of needed changes at the state and ISD levels regarding best practices and guidance for students with learning disabilities.

Population, Sample, and Setting

This study's broader population involves states that allow for criteria for determining SLD to be based upon the discretion of their local districts. This broader population consisted of local school districts and regional educational entities nationwide that can select PSW,

MTSS/RTI, or a combination model in determining SLD, thus leaving the development of the identification system to the local control. This broader population does not include educational entities within states where specific eligibility criteria are mandated through state law, policy, or administrative rules.

The specific sample for my study included aggregate data from the state and ISD under which the three identified districts are located. The database sample included publicly available district and ISD data on the percentage of eligible students with an SLD. ISDs in Michigan could choose between PSW or MTSS/RTI versus other states with rigid state-level guidance that dictates the chosen eligibility model. The districts being examined within the specific sample continued to implement a PSW model for identification; however, post-professional learning and participation within the MDE TZ have implemented systems within the K-12 setting that allow for MTSS/RTI practices to support SLD identification. The districts selected for this study were chosen due to their participation in the MTSS TZ at the K-12 level.

Instrumentation and Data Description

There were two primary sources of data. The first was the collection of data through the MiSchool Database concerning SLD eligibility from 2011-2023 for the ISD in which the districts were located. Data was examined at the aggregate and local district levels to compare the data trends between the district and regional levels. Data was analyzed through three groups: pre-implementation, which examined data before 2017; during system development, 2018-2019; and full implementation, 2019-2020, and was analyzed using descriptive statistics and statistical analysis.

The second component of the data was collected through a secondary database for the ISD that contains information related to student eligibility data, including student gender and

grade at which identification occurred. This data was collected at an aggregate district level and did not allow for identifying student-level identifiable information. This data was used to determine if there was any relationship between implementing a system of MTSS and identifying students with SLD concerning gender and grade level at identification. As an extensive literature review has been conducted, it has been identified that more data analysis was needed to examine the connection as mentioned above. Data was analyzed at the aggregate district level across all 12 regional districts and compared between participation and non-participating districts in the TZ. This data was analyzed through descriptive statistics and ANOVA models.

For this study, I sought approval for data collection from HSIRB. Full HSIRB approval was not needed to conduct this study, as this study was based on analysis of aggregate data sets that did not contain any personally identifiable student-level information or utilize any human subjects within the study. The final IRB response can be seen in Appendix A.

Data Collection Procedures

For this study, data was collected utilizing already established databases within the MiSchool Database and the regional student system that housed current IEP data. Data was pulled for each of the 56 regional Intermediate School Districts to collect data on SLD identification rates over the past ten years. ISDs were assigned a number 1-56 based upon a random number assignment. For each ISD, eligibility rates for SLD were pulled for each of the years 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023. Data also included which model the ISD identifies for use: PSW, MTSS/RTI, or a combination-based approach. Data was then placed into the SPSS software for further analysis.

Each local district was assigned a letter A-K within the Intermediate School District where the TZ occurred. Districts participating in the TZ were identified as A1, B1, and C1. Data was then pulled from the MiSchool Database from 2013-2024 through the 2022-2023 school year to analyze any change in SLD eligibility. All district-level data remained unidentifiable and were placed within the SPSS software for analysis.

To obtain SLD eligibility data based on gender and grade, district-level data was pulled from the district-level IEP database Ed Plan. This database houses all student-level data not reported at the state level. Unidentifiable district-level data was pulled from the 2022-2023 school year district database for students eligible as SLD. This data was pulled utilizing a report that omits any student-identifiable information. Whether students are male or female and the grade during the past three years in which eligibility was determined was identified. This data was pulled for all 12 districts within the Intermediate School District. Once the data was pulled, it was coded and analyzed through the SPSS system. The key was kept in a locked data set.

Data Analysis

Using data obtained by local district and ISD aggregate and local SLD eligibility rates, a quantitative analysis will determine whether the district has seen a change in the eligibility rates for students with SLD. In addition, this study will examine whether the development of a comprehensive system of MTSS/RTI through the framework of Implementation Science has aligned with a cohesive system within the intervention, identification, and instruction of children with SLD and whether there are any relationships between SLD identification, grade at identification and gender. A Between-Subject Analysis of Variance (ANOVA) was chosen to compare the means of two or more independent groups to determine whether there was statistical evidence that the means were statistically different (Mendenhall & Sincich, 2012).

My three research questions were analyzed utilizing currently available student data and district obtained by the researcher. All student and district-level data were entered into SPSS, and all analyses were conducted within the statistics software. In addition, graphs were developed to represent the researched data visually.

Research Question 1

Research question one was: Since the change in SLD eligibility guidelines in Michigan, what has occurred with the SLD eligibility rates at the regional level across the 56 ISDs between 2013 and 2023?

Aggregate data was collected and analyzed from the state-level database identifying the ISD and LEA eligibility rates from 2012-2023. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were utilized to analyze the data collection for question 1 (Creswell & Creswell, 2018). In addition, a between-subjects ANOVA analysis was conducted to compare the categorical independent variable (SLD eligibility rates) and the dependent variable (model used for identification).

A secondary analysis examined two comparison ISDs to the ISD utilized within the sample. These two ISDs were chosen based on similarity in student populations within the district, number of students within the ISD, percentage of students with disabilities, utilization of the PSW or combination-based approach for SLD identification model, and percentage of economically disadvantaged students in the ISD. Through this data analysis, I can visualize the data over time, allowing me to review the data sequentially and visually (Lomax & Hahs-Vaughn, 2012). A between subject ANOVA analysis will be utilized to determine whether there is any statistical significance between the variables. Data is presented in graphical formats to

show the results of this data point over time, with identifiers indicating the timeline for implementation for the MTSS system.

Research Question 2

Research question two was: Since the change in SLD eligibility guidelines in Michigan, what has occurred with the SLD eligibility rates at the district level within the identified ISD between 2013 and 2023?

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were utilized to analyze the data collection for question 2 in addition to a between-subjects ANOVA analysis. Through this data analysis, I could visualize the data over time, which subsequently allowed me to compare whether there are any statistically significant differences within SLD identification between the three districts that participated in the MDE TZ and the nine districts that did not. Data was presented in graphical formats to show the results of this data point over time, identifying participation or non-participation within the TZ.

Research Question 3

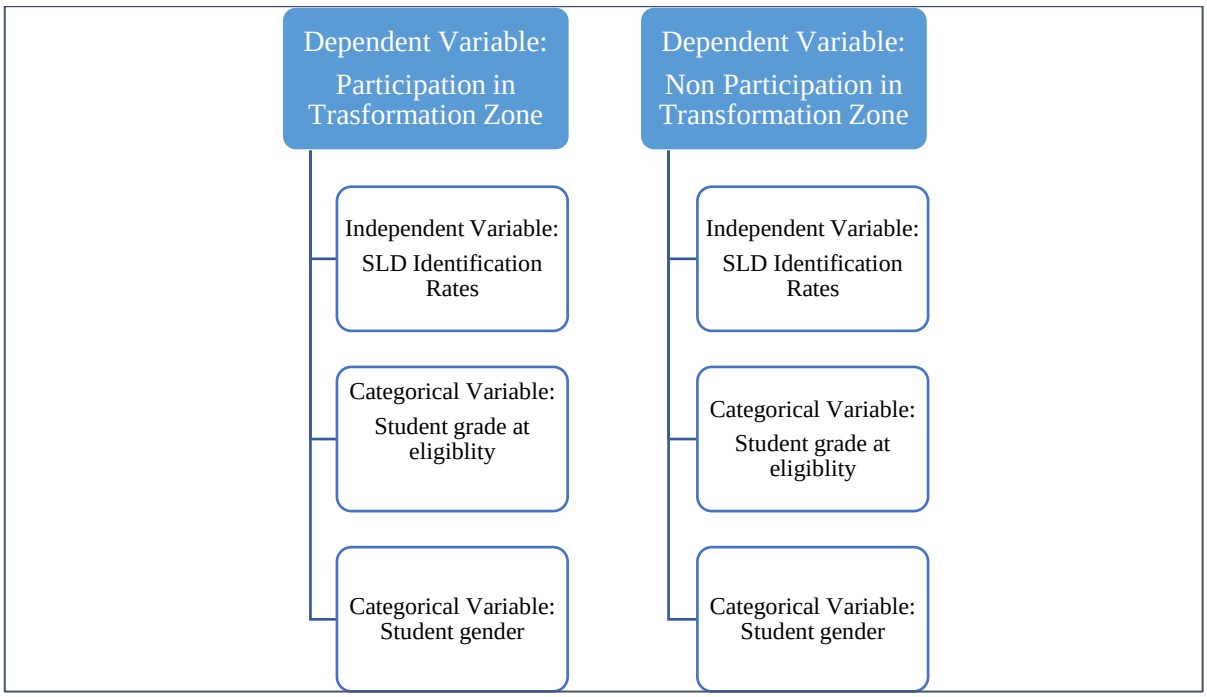
Research Question three was: During the 2022-2023 school year, was there a difference in the identification rates for students with SLD in the three districts selected for participation in the TZ compared to the other nine districts within the identified ISD when examining the variables of student gender and student grade level at identification?

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were utilized to analyze the data collection for question 3. In addition, a chi-squared test for independence was conducted to determine how the two categorical variables (gender and grade level) relate to the SLD identification rates within the two groups (participating and non-

participating districts) within the TZ. Figure 2 represents the dependent, control, and independent variables for the data analysis for the research question.

Figure 2

Dependent, Independent, and Categorical Variables



A chi-squared test for independence will determine if SLD identification rates for the district, the dependent variable, correlate with the independent variable of participation in the MDE TZ when accounting for two categorical variables, including the student grade level and gender at initial identification. According to Mendenhall and Sincich (2012), a chi-squared test was used to determine whether there was a significant association between two categorical variables. In this case, the test of independence was used to determine if there was a relationship between SLD identification, grade, and gender.

This study will have two dependent variables, one independent variable, and two categorical variables. The independent variables were SLD identification rates, and the

categorical variable was student grade level and gender at the time of eligibility. The number and percentage of students eligible as SLD within the ISD were collected from the 2022-2023 school year data. They were identified as the independent variable for the analysis.

To utilize chi-squared analysis, alphas were calculated to ensure that internal consistency was met. The equation that was used to calculate the chi-squared analysis was represented as: $(\chi^2) = \Sigma [(O - E)^2 / E]$. The null hypothesis of the model was H=0: There was no significant association between SLD identification rates, gender, and grade level at identification within participating and non-participating districts within the TZ. The alternative hypothesis H≠0: This question would contradict the null hypothesis and suggest a significant relationship between SLD identification rates, gender, and grade level at identification among participating and non-participating districts within the TZ. The alpha and p values were compared to test for significance. For this analysis, alpha = 0.05. The null hypothesis was rejected if the p-value was less than 0.05, indicating a significant relationship between the variables. If the p-value were greater than 0.05, the researcher would fail to reject the null hypothesis, thus indicating there was no significant relationship between the variables.

Crosswalk Table

A summary crosswalk table was provided to adequately demonstrate the alignment between the research questions, data collection methodology and database analysis. Table 2 identifies the crosswalk and alignment of the database analysis.

Table 2

Analysis of Data

Research Question	Data Collection Method	Anticipated Data Analysis
1. Since the change in SLD eligibility guidelines in Michigan, what has occurred with the SLD eligibility rates at the regional level across the 56 ISDs between 2013 and 2023?	MiSchool Data ISD Aggregate Special Education Database	Descriptive statistics: Frequencies, Means, Standard Deviations ANOVA analysis
2. Since the change in SLD eligibility guidelines in Michigan, what has occurred with the SLD eligibility rates at the district level within the identified ISD between 2013 and 2023?	MiSchool Data ISD Aggregate Special Education Database	Descriptive statistics: Frequencies, Means, Standard Deviations ANOVA analysis
3. During the 2022-2023 school year, was there a difference in the identification rates for students with SLD in the three districts selected for participation in the TZ compared to the other nine districts within the identified ISD when examining the variables of student gender and student grade level at identification?	EdPlan: ISD Level Database	Descriptive statistics: Frequencies, Means, Standard Deviations Chi-squared test of independence

Limitations and Delimitations

Within research, there are often limitations and delimitations. Limitations are those characteristics of design or methodology that impacted or influenced the interpretation of the findings, while delimitations are those choices made by the researcher that should be mentioned (Creswell & Creswell, 2018). Within this study, there was one primary significant limitation. This limitation was that the collected databases only identified information of the most recent eligibility date for students. As reevaluations for students reoccur on a three-year cycle, there is a likelihood that there may be some student data in the sample that received initial eligibility

before 2011. While this may have a very minimal impact on the study itself, it was essential to note that a very small group of students may have received initial identification under the previous SD model or the prior use of the PSW model. While districts must review a child's special education eligibility every three years, IEP teams can redetermine eligibility by utilizing already obtained data and student performance. This means eligibility can be redetermined without using achievement testing or additional progress in MTSS/RTI.

As a quantitative study, this research will focus on the results, not the beliefs or attitudes toward the specific model. In addition, this study seeks input from a smaller subset of districts that participated in a particular set of interventions, in this case, the MDE TZ. The results of this study were precise to the district being studied; subsequently, its results will need to be treated as such. As the state has its own set of guidelines and criteria in determining the eligibility of an SLD and each local district has its processes for MTSS/RTI, this study may produce results that cannot be generalized across settings. However, as many ISDs in the State of Michigan continue to evolve the established procedures set forth for their member districts in this area, this study can provide insight into implementing a comprehensive framework for systems development and its subsequent impact on the eligibility rates for students with SLD. This study has the potential to promote further discussion with the Michigan Department of Education Office of Special Education that could lead to deeper collaboration and state-level guidance on best practices for identifying students with an SLD to promote continuity of practices across the 56 Intermediate and over 900 local school districts.

Chapter Summary

As the field continues to develop in the understanding of the effective implementation of the most appropriate model that should be used to determine whether a student meets the

eligibility criteria as a child with an SLD, Special Education Administrators continue to struggle with finding avenues in which to support educational teams within the process. Through the implementation and design of this study, data was collected and analyzed to identify whether Michigan has seen any long-term systemic change in eligibility practices since the disallowable use of the SD method. In addition, this study will examine if participation in the MDE TZ impacts SLD identification rates within the selected ISD.

This study provides school administrators with a deeper understanding of the current state of SLD identification in Michigan. It provides critical stakeholder feedback to the Michigan Department of Education Office of Special Education on the potential for deeper collaboration, understanding, and coordination of efforts within the field to ensure that the correct students are being found, identified, and supported in their least restrictive educational environment.

CHAPTER IV

RESULTS

This study aimed to determine whether post-participation in a comprehensive system change framework focused on MTSS impacted the Specific Learning Disability (SLD) identification rates in participating districts compared to non-participating districts within the MDE Transformation Zone. This study analyzed various levels of the educational system. In addition, it sought to examine whether there was any change in the eligibility rates over the last ten years in the area of SLD across the State of Michigan.

The first set of analyses occurred at the Intermediate School District level. It examined all ISD's SLD eligibility rates between 2012-2023, including data post-change in Michigan's SLD identification practices. The analysis compared the eligibility model chosen by each ISD in alignment with the guidance from the Michigan Department of Education (Michigan Identification of SLD, 2017). As a result of the guidance, ISDs could select one of the three models for identification on behalf of their local school districts. These methods included patterns of strengths and weaknesses, response to intervention, and a combination-based approach that utilized the PSW and RTI/MTSS model.

The second analysis set occurred at a singular ISD level that implemented comprehensive systems of MTSS at three identified school districts within the region as a participant within the MDE TZ. The TZ project sought to enhance local school districts' work in Multi-Tiered Systems of Support to increase student achievement in literacy. This project developed strong ISD, state, and national partnerships and included a comprehensive systems framework through Implementation Science (IS) practices. While the TZ project was not intended to support a change in SLD identification rates for participating districts, it did focus on improving

MTSS/RTI implementation at the school district level. MTSS/RTI is one of the permissible models used for SLD identification. This researcher sought to examine whether implementing MTSS/RTI practices had any secondary impact on eligibility rates over time compared to districts that still need comprehensive training and support.

The final analysis looked deeper into whether there were any identifiable differences in the area of SLD identification related to gender and grade level at identification between districts that participated in the TZ and those that did not. These areas were chosen due to discrepancies within the field in the higher rates of SLD identification for males (Maki et al., 2020). In addition, the researcher sought to examine whether there were any potential delays in evaluation for students participating in more robust systems of MTSS/RTI through participation in the TZ versus those districts that did not participate.

To conduct this study, the following research questions were identified:

1. Since the change in SLD eligibility guidelines in Michigan, has there been a change in the SLD eligibility rates at the regional level across the 56 ISDs between 2013 and 2023?
2. Since the change in SLD eligibility guidelines in Michigan, what has occurred with the SLD eligibility rates at the district level within the identified ISD between 2013 and 2023?
3. During the 2022-2023 school year, was there a difference in the identification rates for students with SLD in the three districts selected for participation in the TZ compared to the other nine districts within the identified ISD when examining the variables of student gender and student grade level at identification?

Data sets were analyzed using various methods, including descriptive statistics, ANOVA, and Chi-squared analysis. The results were interpreted within this chapter to examine whether there was any relationship between the variables to determine any findings.

Description of the Population

The total number of ISDs analyzed within this study was 56. Within the ISDs, 886 local school districts are served. Within those 886 local school districts, 55,418 students were identified as having a SLD during the 2022-2023 school year. For this study, the population data was aggregated to the ISD level to create a SLD eligibility rate for each ISD. Statewide during the 2022-2023 school year, the 55,418 students with SLD account for approximately 25% of the student population receiving special education services. When examining the model utilized for SLD identification at the ISD level, 38 (67.9%) utilize the PSW model, 6 (10.7%) utilize the MTSS/RTI model, and 12 (21.5%) utilize the combination-based approach. Table 3 demonstrates the model chosen aggregated at the ISD level.

Table 3

Frequency of Model at ISD Level

	N	% of ISDs
PSW	38	67.8%
MTSS/RTI	6	10.7%
Combination	12	.5%

Within the one ISD being studied due to its participation in the TZ, there were 12 local school districts. Three of those 12 local school districts were identified as full participants, meaning they had completed the project and reached full implementation during the 2019-2020 school year. Within the ISD being analyzed, during the 2022-2023 school year, 1,364 students were identified as having a SLD, equating to approximately 32.8% of the student population receiving special education services under the eligibility of SLD. Of the students identified as

SLD in the ISD, 760 (55.7%) were male, and 604 (44.2%) were female. Of the students identified as SLD, 211 (15.5%) attend one of the participating districts within the TZ, whereas 1,153 (84%) of students attend non-participating districts.

When examining the grade level at eligibility for the population during the 2022-2023 school year, of the 1364 students within the population, 22 (1.6%) were in Kindergarten, 91 (6.7%) in first grade, 132 (9.7%) second grade, 120 (8.8%) third grade, 162 (11.9%) fourth grade, 134 (9.8%) fifth grade, 139 (10.2%) sixth grade, 158 (11.6%) seventh grade, 183 (13.4%) eighth grade, 127 (9.3%) ninth grade, 75 (5.5%) tenth grade, 21 (1.5%) eleventh grade and 0 (0%) in twelfth grade. Table 4 demonstrates the descriptive statistics associated with student grade level at eligibility for the total sample. Further analysis and comparison of the participant versus nonparticipant groups will occur when examining the results of the second and third research questions.

Table 4

Grade Level at Eligibility in 2022-2023

	N	***%***
Kindergarten	22	1.6%
First Grade	91	6.7%
Second Grade	132	9.7%
Third Grade	120	8.8%
Fourth Grade	162	11.9%
Fifth Grade	134	9.8%
Sixth Grade	139	10.2%
Seventh Grade	158	11.6%
Eighth Grade	183	13.4%
Ninth Grade	127	9.3%
Tenth Grade	75	5.5%
Eleventh Grade	21	1.5%

Analysis of Research Questions

Research Question 1

The first research question examined the SLD eligibility trends at the ISD level between the 2012-2013 and 2022-2023 school years across the 56 ISDs in Michigan. To address the question, the researcher used the MiSchool Database to analyze the trend data over the past ten years. In addition, the researcher obtained the model used for SLD identification from each ISD website. This information was publicly reportable and must be posted by each ISD per Michigan rule. At the ISD level, 38 (67.9%) utilize the PSW model, 6 (10.7%) utilize the MTSS/RTI model, and 12 (21.5%) utilize the combination-based approach. Table 5 demonstrates the model chosen aggregated at the ISD level.

Table 5

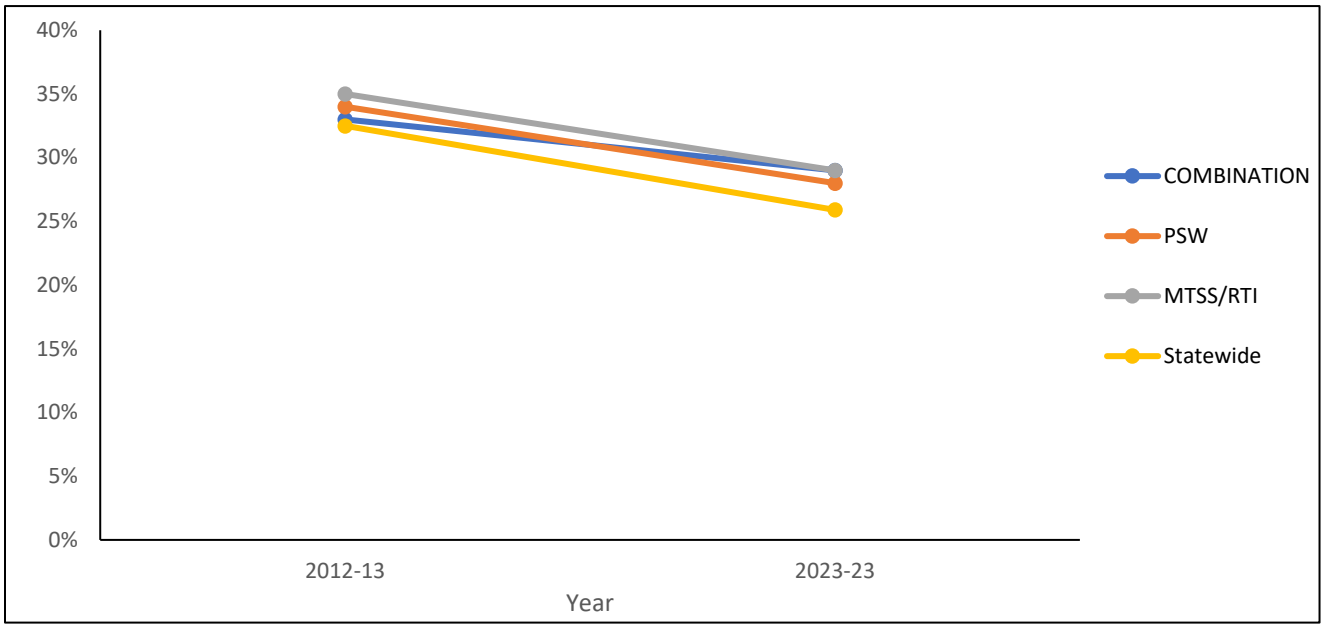
Change in Eligibility Rates Based upon Model Selected

	2012-13	2023-23	% Change
Combination	33%	29%	-4%
PSW	34%	28%	-6%
MTSS/RTI	35%	29%	-6%
Statewide	34%	28%	-6%

As demonstrated in the table, during 2012-2023, the state saw a decline of 6% of students being identified as having a SLD. The state-level data includes state-run schools that are not part of an Intermediate School District, which are not included in the aggregate data at the ISD level. When analyzed based on the type of model utilized, ISDs who utilized the PSW or MTSS/RTI saw the same percentage reduction in SLD eligibility as the state average (6%). Those ISDs who utilized a combination-based approach demonstrated a 4% change over time. Figure 3 is a graphical representation of the change in identification rates based on the model.

Figure 3

Change in SLD Eligibility 2012-2023 Statewide



An ANOVA analysis was conducted to examine whether there was any statistical significance within the data. This analysis examined whether there was any significance between the change in eligibility and the model utilized for identification at the ISD level. Table 6 demonstrates the results of the ANOVA analysis.

Table 6

ANOVA of Model

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33.429	49	.682	.910	.624
Within Groups	4.500	6	.750		
Total	37.929	55			

When examining the between-groups variance (model and eligibility), the p-value of 0.624 was higher than the alpha level of 0.05. This means no significant difference exists between the model chosen for eligibility and the rates within those groups. Therefore, in the findings of the ANOVA analysis, there was no significant difference between the model chosen for eligibility

and the student identification rates. These findings are consistent with the initial findings that there was no difference between the eligibility rate for SLD and the potential reduction of SLD identification based on the model chosen, even though the state has seen an overall decrease in SLD-identified students since the change in practices in 2011. This reduction across the various model was likely due to no longer being allowed to utilize the SD model for SLD identification.

A secondary analysis examined two comparison ISDs to the ISD utilized within the sample. These two comparison ISDs were chosen based on similarity in student populations within the district, number of students within the ISD, percentage of students with disabilities, utilization of the PSW approach for SLD identification, and percentage of economically disadvantaged students in the ISD. A comparison of the three ISDs can be seen in Table 7.

Table 7

Comparison of ISDs Based upon 2022-2023 Demographic Information

ISD	ISD Student Count	Count of IEPs	Percentage of students with IEPs	Percentage of Economically Disadvantaged	Model of SLD Identification
TZ ISD	28,758	4,561	15.9%	61.5%	PSW
Comparison 1	26,697	3,453	12.9%	60.0%	PSW
Comparison 2	26,528	4,293	16.2%	63.5%	PSW

The secondary analysis examined the change in SLD identification rates for the three ISDs from 2011-2023. During that time frame, the TZ ISD had a 4.5% decline in identifying students with SLD; in contrast, comparison 1 saw a decline of 12.5%, and comparison 2 saw a decline of 12.8% over time. As a result of this finding, a between-subject was conducted to determine any statistical significance between the three ISDs

and the change in SLD identification rates over time. Table 8 demonstrates the results of the ANOVA analysis.

Table 8

ANOVA of Comparison of Intermediate School Districts

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.000	18	1.167	6.611	<.001
Within Groups	3.000	17	.176		
Total	24.000	35			

The results of the between-subject ANOVA analysis show statistical significance between the three entities and SLD identification rates. In this case, the low p-value of <.001 indicates a high statistical significance level between the variables. Based upon this, changes in SLD identification rates between the entities are unlikely to have occurred by random chance. This indicates that implementing the PSW model within the two comparison districts, neither of which participated in the TZ systems change work, yielded better results in decreasing SLD identification rates than the TZ ISD.

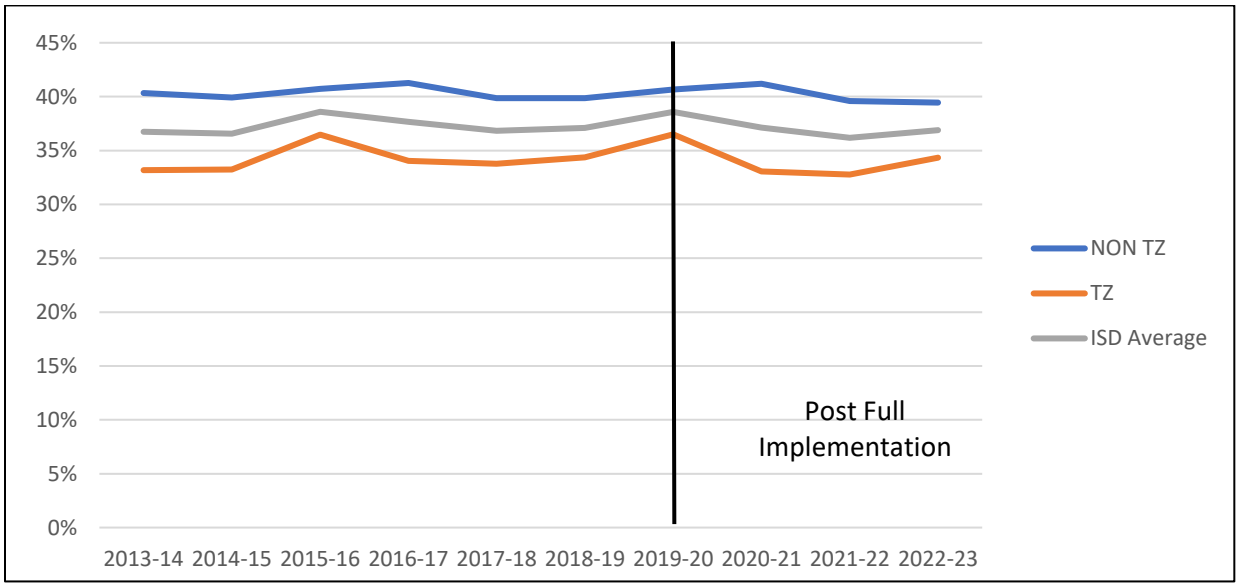
Research Question 2

Research question two examined what has occurred within the ISD that implemented the TZ regarding the SLD eligibility rates across its 12 districts throughout ten years. In addition, data was analyzed to determine what occurred to SLD identification rates post-full implementation for the three participating districts in the TZ post full implementation during the 2019-2020 school year. Various analyses, including descriptive statistics and ANOVA, were conducted to address the research question. When examining the descriptive statistics, districts that participated in the TZ saw a 1% increase in SLD eligibility over time, whereas non-participants in the TZ identified a 1% decrease. Figure 4 demonstrates a graphical representation of the change over time. It was important to note that districts identified as participants within the TZ already identified students at a rate lower than the ISD average than non-participants. While the

reasons for this are unknown and did not impact the selection process for the TZ, districts that participated in the project established a commitment to ensuring the resources were available to complete the project. This observation was necessary as part of the analysis of the presented data.

Figure 4

Comparison of SLD Eligibility Rates between TZ and Non-TZ Districts



The data line on the graph demonstrates when the full implementation of the TZ occurred. While there was no change over time in the rate, it can be seen that during the 2020-2021 school year and beyond, the district implementing the TZ practices saw a 3% decline in eligibility versus the 1% of non-participating districts. However, between the 2019-2020 and 2020-2021 school years, the districts participating in the TZ saw a 4% decrease compared to the 0% decrease seen by nonparticipants. This time frame is critical to examine as it is when full implementation occurred for the TZ districts. Table 9 demonstrates the eligibility rates for participating and non-participating districts over time.

Table 9

SLD Eligibility Rates in Selected ISD 2013-2023

Year	NON-TZ	TZ	Average
2013-14	40%	33%	36.74%
2014-15	40%	33%	36.57%
2015-16	41%	36%	38.59%
2016-17	41%	34%	37.65%
2017-18	40%	34%	36.82%
2018-19	40%	34%	37.11%
2019-20	41%	37%	38.58%
2020-21	41%	33%	37.13%
2021-22	40%	33%	36.18%
2022-23	39%	34%	36.89%
Change	-1%	1%	-0.80%

A between-subject ANOVA was conducted to determine whether there was any statistical significance between the participants in the TZ and SLD Identification of students in the district. Table 10 represents those results.

Table 10

SLD Identification Rates within Transformation and Non-TZ Districts

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.084	1	.084	24.412	<.001
Within Groups	.406	118	.003		
Total	.490	119			

When examining the between-groups variance (participation in the TZ and eligibility), the p-value of <.001 indicates statistical significance between the two variables. This supports the fact that districts that participated in the TZ had an impact on their eligibility rates in the area of SLD. Therefore, this supports the idea that participation in the TZ significantly impacted the likelihood of not being identified as SLD versus being evaluated in a district that did not participate in the

project. The findings of the ANOVA analysis demonstrate a significant difference between participation in the TZ and SLD eligibility. Thus, these findings support that implementing systems-level work in MTSS/RTI decreases the likelihood of the initial identification of students during their schooling career.

Research Question 3

Research question three aimed to determine whether there were any differences in the identification rates for students based upon gender and grade at eligibility during the 2022-2023 school year across districts that participated in the TZ compared to districts that did not participate. An analysis that included descriptive statistics and a chi-squared analysis was conducted to analyze whether there was any relationship between the variables. Table 11 demonstrates the descriptive statistics for the sample.

Table 11

Descriptive Statistics of Dependent and Independent Variable of Grade at Eligibility

		TZ /Non-TZ	Grade at Eligibility
N	Valid	1364	1364
	Missing	0	0
Mean		7.34	5.54
Median		9	6.00
Mode		9	8
Std. Deviation		3.143	2.777

The total sample size for the 2022-2023 school year was 1364 participants. Within the TZ participating districts, it accounted for 211 of the participants identified as SLD during the 2022-2023 school year. In comparison, non-participating districts accounted for 1153 students identified. Overall, 84% of the students identified as SLD came from non-participating TZ districts versus 16% of the sample from participating TZ districts. Overall, within the sample, the average grade at eligibility was 5.5. When examining the gender variable, within the total

sample, 44% of the students identified are female, whereas 56% are male. Table 12 compares the means between the dependent and independent variables.

Table 12

Comparison of Averages

		Grade at Eligibility
NON-TZ	Mean	5.52
	N	1153
	Std. Dev.	2.796
TZ	Mean	5.64
	N	211
	Std. Dev.	2.676
Total	Mean	5.54
	N	1364
	Std.Dev.	2.777

Comparison of Grade Level Variable

When analyzing the grade level of students at the eligibility of SLD, districts were broken into Non-Participants and Participants in the TZ. When examining the nonparticipants, the sample size of 1153 provided an average eligibility of 5.52 compared to the 211 participants with a 5.64 average eligibility. When examining the grade level at which eligibility occurred, TZ participating districts identified on 5% of students as SLD by the end of grade one and they only identified 13% of students as SLD in the districts by the end of grade two. In comparison, districts that did not participate in the TZ identified 9% of students as SLD by the end of grade one and 19% of students as SLD by the end of grade two. As a result, this data has the potential to demonstrate that districts who have implemented comprehensive MTSS systems may be holding off eligibility determinations for younger students until later in their elementary years, thus providing them with time to proceed through the intervention processes and determine whether students are adequately responding to interventions before moving towards a special education referral. Table 13 compares the means at various grade levels for identifying students.

Table 13

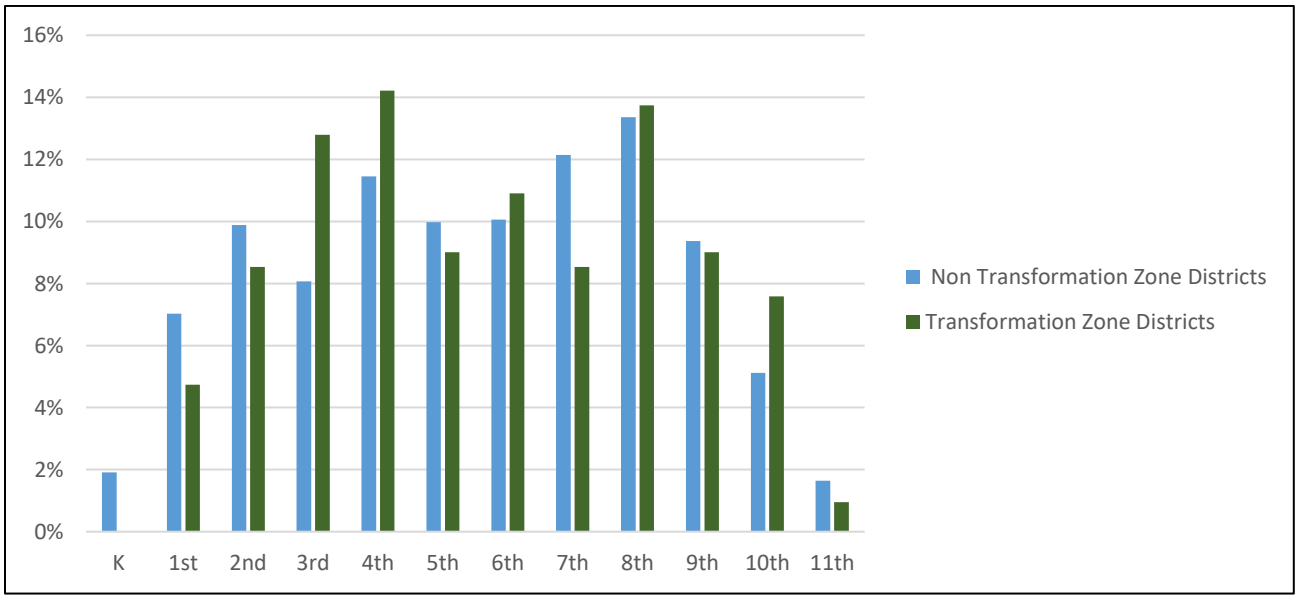
Comparison of Averages for the Grade Level at Identification for TZ And Non-TZ Districts

Grade at Eligibility	NON-TZ	Average	TZ	Average	Total
K	22	2%	0	0%	22
1	81	7%	10	5%	91
2	114	10%	18	9%	132
3	93	8%	27	13%	120
4	132	11%	30	14%	162
5	115	10%	19	9%	134
6	116	10%	23	11%	139
7	140	12%	18	9%	158
8	154	13%	29	14%	183
9	108	9%	19	9%	127
10	59	5%	16	8%	75
11	19	2%	2	1%	21
	1153	100%	211	100%	1364

Figure 5 presents a graphical representation of the percentage of students within the ISD identified at each grade level for the 2022-2023 school year based on whether they attended a district that participated in the TZ.

Figure 5

Percentage of Students Identified as SLD Based on Grade Level



Finally, a chi-squared analysis was conducted to determine whether there was any statistical significance between grade level and participation in the TZ. Table 14 shows the results of the Chi-Square Test.

Table 14

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.338[a]	11	.129
N of Valid Cases	1364		

The results demonstrate that the Pearson Chi-Square shows a p-value of .129. As this value was higher than the alpha 0.05, the variable grade level and participation in the TZ are not statistically significant. As a result, these findings do not demonstrate any relationship between the two variables. However, as the descriptive statistics have demonstrated, there are instances at the Kindergarten through second-grade levels where district participants in the TZ did not need to refer students for special education at those grade levels, likely due to more robust practices within MTSS designed to support all learners. As a result of this finding, a between subject ANOVA was conducted on eligibility rates at the K-3 level. The results and ad hoc analysis of those variables did not indicate any statistical significance between identification rates and grade level for SLD at the K-3 level. These results support that while there are fewer referrals at the K-2 level for districts participating in the TZ, there is also an increase at third grade for participating districts, which in turn shows similar patterns for eligibility post third grade across both participating and non-participating districts.

Comparison of Gender Variable

An analysis of descriptive statistics and a chi-squared analysis was conducted to examine whether there were any differences in identification rates between males and females within the districts that participated vs. non-participated in the TZ. In the total sample of 1,364 students, 760 (55%) were male and 604 (45%) were female. Of the participating districts of the TZ, 113 (54%) were male, and 98 (46%) were female. In comparison, 647 (56%) were male within the non-participating TZ districts, and 506 (44%) were female. Both groups demonstrated a similar pattern, and data distribution aligned with the greater sample, showing that males were identified at a higher rate than females. Table 15 demonstrates the descriptive statistics of the sample based on gender.

Table 15

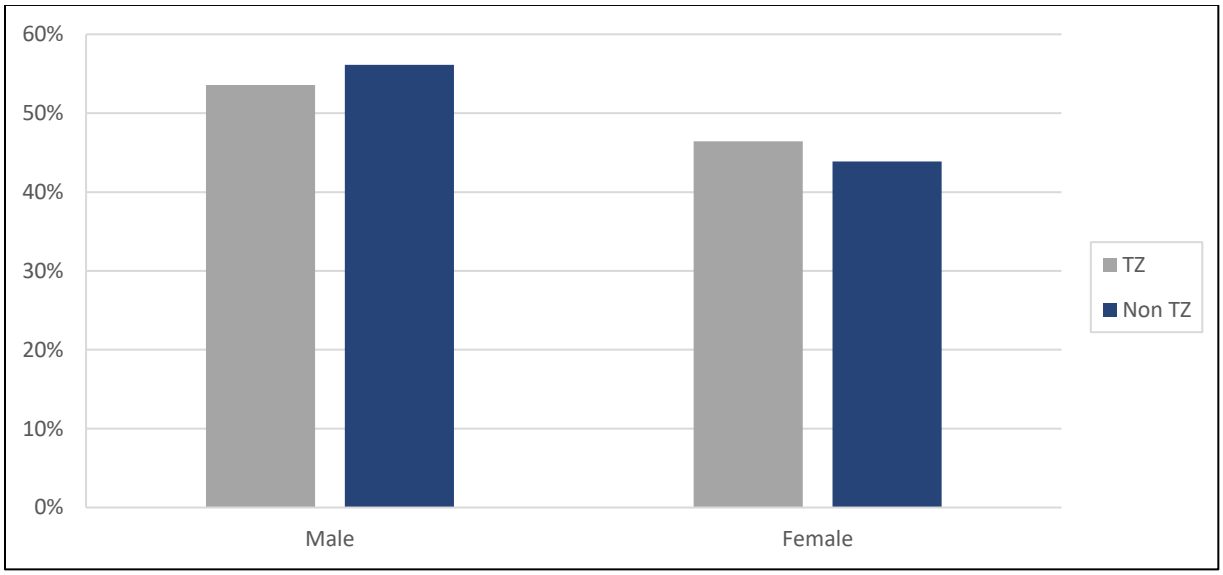
Descriptive Statistics Based upon Gender

	TZ	Average	Non-TZ	Average
Male	113	54%	647	56%
Female	98	46%	506	44%
Total	211	100%	1153	100%

Figure 6 demonstrates a graphical representation of the descriptive statistics that shows the difference between the mean of males and females between participation and non-participation in the TZ.

Figure 6

Average Number of Students Identified Based Upon Gender and TZ Participation



Upon further analysis of the data, utilizing the chi-square analysis, the p-value was .491. As this value was higher than the alpha value of 0.05, it demonstrates no statistical significance between the two variables of gender and participation. Table 16 demonstrates the chi-square tests and subsequent results.

Table 16

Chi-Square Tests Based Upon Gender

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.474[a]	1	.491
N of Valid Cases	1364		

Chapter Summary

The data analysis for the three research questions provided a range of understanding and insight into the current status of SLD identification in Michigan. Most importantly, the results of this study supported the idea that districts that participated in the TZ were less likely to identify students as SLD compared to districts that did not participate. This finding is significant as it supports that developing comprehensive support systems that address all learners' academic needs positively impacts students with SLD identification rates. This finding supports the work of the MDE in the area of MTSS/RTI and the importance of supporting all students through comprehensive systems of intervention before Special Education referral. In comparison, other study findings demonstrated no statistical significance between gender and grade level at identification between participating and non-participating districts within the ISD that participated in the TZ. While the data demonstrated no statistical significance between the variables, it did provide insight that through the review of descriptive statistics, districts that participated in the TZ demonstrated lower numbers of SLD identification at the kindergarten through second-grade levels, likely due to increased student interventions. These results were examined further in following chapter.

CHAPTER V

DISCUSSION

Throughout analyses, the study's results identify findings that can provide insight into special education and the process for determining Specific Learning Disabilities (SLD) in Michigan. These findings and a variety of research will provide a deeper understanding of the current state of SLD identification and its impact on gender and age at identification. This chapter will discuss the study's significant findings, its relationship to other research within the field, the implications of the findings for special educators across the state, and recommendations for future research.

Analysis/Discussion of Major Results

Three main research questions guided this study. Each of the questions and subsequent analysis will be addressed separately. Throughout the analysis of the presented data, various tests occurred to guide the understanding of the study. These tests and analyses included descriptive statistics, ANOVA, and chi-squared analysis to determine any possible relationship between the examined variables. Through this quantitative approach, a variety of different lenses were utilized to determine whether there was, in fact, any change or relationship between variables. This understanding has the potential to inform the field of special education surrounding the use of various models for SLD identification and the subsequent impact on SLD identification rates and best practices within the field.

Conclusions from Question 1

The study's first research question sought to determine whether there had been any change in SLD eligibility rates at the regional level since the change in eligibility guidance. The data examined SLD eligibility rates for each ISD between 2013 and 2023 to answer this

question. In addition, the eligibility rate at each ISD was examined based on the model chosen, which included PSW, MTSS/RTI, or a combination-based approach. This analysis provided a deeper understanding of what has occurred at the state and regional levels.

A total of 56 educational entities were examined. Of those ISDs, 67.9% utilized a PSW model, 10.7% utilized an MTSS/RTI model, and 21.4% utilized a Combination approach. Overall, during 2013-2023, the state found a 6% decline in SLD eligibility rates. When examined at the model level, ISDs that utilized a combination-based approach were found to have a 4% decline in eligibility. In contrast, ISDs that utilized a PSW and MTSS/RTI model were found to both have a 6% reduction. Through further analysis of an ANOVA model, it was determined that the p-value of the between-groups variance (model and eligibility) was equal to 0.624, thus demonstrating that the findings are consistent with the initial findings that there was no difference statistically between the eligibility rate for SLD and the reduction based upon a model that was chosen, even though the state overall found a decline in the overall eligibility rates of students being identified as SLD.

The secondary analysis of this research question provided a unique finding into the changes across comparison ISDs with similar demographic and student data. The comparison districts did not implement the TZ but utilized similar models for SLD identification and provided insight into the likelihood that how processes are implemented and the comprehensive nature of those processes have the potential to lead to different outcomes. These findings promote a greater understanding that the type of SLD identification model does not impact identification rates. It is, instead, likely the development and fidelity of implementation of those practices that support all learners that have a more significant impact over time.

These findings support that the state's disallowable use of the SD model substantially reduced the SLD identification rates statewide. However, the need for more examination between the model utilized and the identification rate provides a reason for further analysis regarding the consistency of practices across the field and the nuances of implementing the model practices at each district level. This goes hand in hand with the identified lack of concrete guidelines that do not allow for subjectivity in the identification process. For example, a district that utilizes a PSW model for identification was not provided a set guideline by the state regarding how the identification practice should be implemented, what must be considered during the identification process, and what factors must be examined to determine whether a student was eligible. As a result, much of the decision-making process for such determinations was left up to the ISDs interpretation and can significantly vary from ISD to ISD. Also, within each ISD the fidelity of implementation can vary across the local districts. Within the TZ ISD, all of the school psychologists follow the same eligibility protocol. However, each individual psychologist has the ability to provide subjective input into the evaluation process aligned to their professional judgement and experiences within the district as part of the eligibility processes for special education, thus potentially leading to discrepancies across districts.

Conclusions from Question 2

The second research question continued to dig deeper into the analysis of the historical data in the determination of SLD at one of the ISDs that implemented the TZ. Within this ISD, three of the 12 districts participated in the TZ work that included more profound professional development in systems work compared to the nine non-participating districts within the ISD that did not receive the same training. All the districts within the TZ ISD utilized the PSW method for identification. However, the three participating districts had broader access to the

data collected through the development of comprehensive MTSS/RTI systems post-implementation, thus potentially impacting the decision-making process for student evaluations.

Results of the descriptive statistics found that districts participating in the TZ saw a 1% increase in SLD eligibility over time, whereas non-participants identified a 1% decrease. However, overall, TZ districts had eligibility rates that were 3% lower than the ISD average and, beginning in 2013, had lower eligibility rates compared to the other non-participating districts within the ISD. The ANOVA analysis provided results demonstrating that there was a statistical likelihood that students who attended districts that participated in the TZ and implemented systemic practices in MTSS/RTI were less likely to be identified as having a SLD in comparison to their peers attending districts that did not participate in the project. This finding is supported by the p-value equal to <.001, demonstrating a highly statistical finding. This finding supports that there is a difference within districts and eligibility rates between participation and non-participation in the TZ over time. In support of this finding, Figure 4 shows that districts that participated in the TZ, overall, have a 5% lower eligibility rate versus non-participating districts, leading the researcher to believe that the practices that are implemented within the districts surrounding MTSS and Tiered interventions will continue lower eligibility rates in these districts due to comprehensive systems of support for students.

Conclusions from Question 3

The third research question examined the SLD eligibility rates for students within the identified ISD during the 2022-2023 school years and compared those rates between student gender and grade level at eligibility. These two comparisons were chosen due to current research identifying males as SLD at a higher rate than females. In addition, the researcher sought to

determine whether there would be a decline in the earlier identification of students when the district's comprehensive systems of MTSS were in place.

To analyze this data, this sample examined 1364 students with SLD eligibilities in the ISD. Of those students, 1153 were in districts that were not participants in the TZ in comparison to 211 who were attending districts that took part in the TZ. In comparison of the average grade at eligibility, non-participating TZ districts had an average grade at identification of 5.52, whereas participating TZ districts saw an average grade at identification of 5.64. One interesting area was that zero students were identified at kindergarten as SLD in participating TZ districts. In comparison, 2% of all identifications for students in non-participating TZ districts occurred at the kindergarten age. Overall, 19% of all eligibilities occurred at the K-2 level for non-participating districts versus 14% for participating TZ districts.

This data supports that districts with well-informed and comprehensively developed systems of MTSS are less likely to move to special education eligibility in the younger grades, thus providing students with opportunities and time to respond to the specifically designed interventions that meet their deficit areas. In the older grades, the districts that participated in the TZ saw higher rates of SLD eligibility when compared with non-participating districts. This also supports the conclusion that districts may be holding off on moving to the special education referral process until later in a child's schooling. This concern aligns with the OSEP guidance provided to states in 2011 that addressed using MTSS/RTI to delay special education evaluations. Therefore, it is essential that districts that have implemented such systems and, subsequently, see fewer students identified as SLD during the earlier grades should implement and ensure that these processes are not being utilized to delay evaluations and, as such, future identification. Future analysis could be completed to examine this finding, which would include

assessing whether students are being evaluated through other eligibility areas such as Speech and Language Impairment (SLI) or Otherwise Health Impairment (OHI) when they are not meeting the eligibility requirements through the MTSS/RTI process for identification.

When examined through the gender lens, there did not appear to be any relationship between participation and gender. Table 13 demonstrates the descriptive statistics of the variables. Both groups had between 54% and 56% of students identified as male, and 46% to 44% were identified as female. Districts that participated in the TZ had a higher percentage of females identified as SLD; however, this difference did not lead to any statistical significance of comparisons. When examined further, the chi-squared analysis produced a p-value of 0.129, demonstrating no statistical significance between the two variables of gender and grade level at identification. This finding supports other studies within this area.

Relationship of Results to Existing Studies

Identifying students with SLD is not only complex; it involves a deep understanding of the unique characteristics of the disability, its impact on the student as a learner, and the subsequent needs for support. SLD identification remains a moving target in the special education landscape that must continue to be examined and supported within the field. Within this study, the focus surrounded not only the eligibility practices but also the response to those practices about implementing a comprehensive system of support of MTSS/RTI through the framework of Implementation Science. The results of this study supported that SLD identification rates have continued to decline over time, and the implementation of a comprehensive support system can impact the SLD identification rates in districts, which can include a delay in the need for special education for students. This, coupled with the findings that identification rates for SLD continue to be more prevalent in males versus females, supports the

need for further research within the field to understand the long-term impact of comprehensive systems of MTSS/RTI on the school setting. Throughout this study, a variety of findings were determined. Table 17 compares the main findings of this study compared to previous research findings.

Table 17

Key Findings of the Study Compared to Previous Research Findings

Findings Senkowski (2024)	Previous Research
A state that disallowed the severe discrepancy model for SLD identification saw an overall decrease in SLD eligibility across the K-12 setting.	No studies found
There was no difference in eligibility rates when using the chosen model when determining SLD.	Maki and Adams (2020) found no difference in identification consistency across the identification methods, identifying that there was no difference between the rates for identification whether students were assessed using the PSW or MTSS/RTI method.
Participating in the Transformation Zone yielded statically significant change to SLD identification compared to non-participating districts.	No studies found
Districts that implemented comprehensive systems of MTSS through the Transformation Zone identified fewer students as SLD identifications at the K-2 level than non-participants.	No studies found
Boys continue to be identified at a higher rate than females in SLD, whether MTSS/RTI systems were implemented in the district or not.	Coutinho et al. (2002) found a solid link to the likelihood of a male child being identified as SLD when the child also came from a low socioeconomic background.

Key Finding #1

The first significant finding of the study demonstrates that a state that disallowed the use of the SD model for SLD identification saw an overall decrease in SLD eligibility across the K-12 setting. These findings align with the purpose behind the disallowable use of the SD model as a stand-alone model through the reauthorization of the IDEIA, 2004. A primary concern of the research at the time of the reauthorization identified that the use of the IQ/Achievement discrepancy model was likely over-identifying students with SLD, as there was no direct link to the discrepancy and whether a child has a learning disability (NASP, 2022). Demonstrating a decline when a state disallowed the SD identifies a potential over-identification using the previous model. These findings support the use of other models for identifying students with SLD, likely promoting more comprehensive systems of identification that support the unique learning needs of all students within the educational environment.

Key Finding #2

The second significant finding of this study was that there was no difference in eligibility rates between the use of the chosen model when determining SLD. This was one of the most critical findings of the study, as data was analyzed on a longitudinal basis across all of the educational entities within the state. While this study concluded that the most common model utilized for SLD identification was the PSW model, it did not support that one method (PSW, MTSS/RTI, or Combination) approach led to any more of a significant decline than others. This leads the researcher to conclude that various factors may lead to this finding. First, ISDs need more guidance from the state regarding what is required when utilizing the various models. This was very different from the other areas of identification, such as cognitive impairment, which includes specific cut scores in IQ and achievement and comparison of adaptive scales. This lack

of concrete guidance in SLD processes was likely due to the movement away from using achievement scores and instead towards focusing on how students respond to appropriate instruction. This subjectivity exemplifies the likelihood of inconsistency among individuals conducting educational evaluations. As Maki and Adams (2020) supported, the field does not identify one model as preferential to another when determining whether a student was identified as SLD.

It is, however, essential that the practitioners within the field supporting the learning and identification of students as SLD identify what model best meets the needs of the students and districts served to effectively implement for identification. For example, a district without well-established MTSS/RTI processes cannot utilize the model for identification as it would delay special education eligibility decisions for students. Additional understanding includes identifying the lens through which a student's ability, or lack thereof, to progress in the educational environment was going to be examined, including how factors such as a student's response to instruction were viewed. From the lens of the PSW model, this was often viewed as an exclusionary factor to identification. In contrast, the MTSS/RTI model views it as an inclusionary factor for identification. If a student had access to instruction, support, and tiered intervention, it was considered a supportive factor for identification.

Determining which focus was utilized, including the shift away from IQ and achievement scores, can promote a more comprehensive picture of the student's ability to respond to interventions that align with their deficits and needs. Practitioners in the field must continue to grow within their understanding of what qualifies a student as SLD. Once this deeper understanding occurs, then we can begin to break down the silos of SLD identification deeply

rooted in ineffective past practices and embrace a new understanding of how supports are aligned to meet the unique learning needs of all students.

Key Finding #3

The third finding of the study identified that participating in the TZ yielded significant changes to SLD identification rates compared to non-participating districts. This finding was multifaceted. This study focused on a critical variable that included districts' participation within the MDE TZ compared to districts that did not participate; this finding provides the field with a deeper understanding of what must occur to shift the eligibility models. First, as stated earlier in this study, it was essential to note that the TZ's purpose was never to address SLD identification rates. Instead, its sole purpose was to focus on developing comprehensive systems, in this case, MTSS, through the foundations of Implementation Science that would improve student literacy rates. This study sought to determine whether there was an unintended impact on the SLD identification rates in the participating districts compared to those that did not. The study's findings did demonstrate that participation in comprehensive systems work did attribute to lower identification rates and subsequently inform the field of the potential positive impact on strategic work in this area.

One key aspect of this finding was that none of the three districts participating in the TZ had yet to shift their eligibility practices to encompass the MTSS/RTI or combination-based approach. However, as these districts now have comprehensive systems of MTSS/RTI in place that are aligned to support the needs of all learners, it was necessary to reevaluate the evaluation practices at the ISD level to align the data collected through the MTSS/RTI interventions and determine its usefulness in the determination of SLD eligibility. As the districts have yet to shift their identification practices fully, it would lead the researcher to concur that continued work in

this area and focus on aligning eligibility practices to the MTSS/RTI data collected within the district would likely constitute a further decline in eligibility rates. It would be further recommended that the ISD examine the work of Fletcher et al. (2018) and utilize the findings to align the practices. It would be critical at that time to examine whether there was a difference between the methods utilized for identification that can inform future practice.

A second key aspect of this finding demonstrates the need for future state-level guidance in developing a systems-based approach for SLD identification that aligns with the foundational practices for MTSS/RTI. As the state has identified practices in this area that are now requiring districts to align such practices within their school improvement planning process, it becomes even more critical for the state to begin to develop guidance and procedures that can be utilized at the local district level to support the implementation of practices for SLD identification. These practices and guidance should be developed in consultation and collaboration with the Intermediate School Districts and support the knowledge and expertise of the school psychologists within the field. By supporting this work at a state level, it will be more likely to see more robust implementation of systems that break down the silos between general and special education, thus supporting the needs of all learners.

Key Finding #4

Key finding number four identifies that districts that implemented comprehensive systems of MTSS through the TZ saw fewer SLD identifications at the K-2 level than non-participants. This finding aligns with the purpose of MTSS/RTI in using research-based interventions that support struggling learners before a referral for special education. This finding determined that districts that participated and subsequently implemented comprehensive systems of MTSS/RTI through participation in the TZ, are more likely to keep students in their least

restrictive environment of general education until they have demonstrated enough lack of progress to move towards a special education referral. This focus on the collection of data and the instructional response led to a decline in identifying students as SLD before second grade. This allowed students access to high-quality interventions and supports before being referred for special education.

The advancement of such support was critical in developing and implementing new practices for SLD identification at the ISD level. As this finding has shown that fewer referrals and subsequent eligibilities occurred within the sample before second grade, it demonstrates the potential positive impact of comprehensive systems of MTSS/RTI for schools as they seek practices that adequately support and intervene with struggling learners early in their educational career. While it was necessary to note that post-third grade, there was no difference in the eligibility rates across participating and non-participating districts, this finding does provide insight into the importance of early intervention for students to ensure that they are being appropriately identified and being provided access to high-quality instructional supports throughout their educational career. As MTSS/RTI supports tend to be focused in the earlier grade levels, with a further expansion of MTSS/RTI supports across the K-12 setting has the potential to see shifts in the identification of students as SLD as the field continues to implement better alignment of practices and guidance to support various approaches for identification.

Key Finding #5

The final finding of this study demonstrated that males continue to be identified at a higher rate than females in the area of SLD whether or not MTSS/RTI systems were implemented in the district. This finding aligns with the deep research on SLD identification trends. Coutinho et al. (2002) found a solid link to the likelihood of a male child being identified

as SLD when the child also came from a low socioeconomic background. This finding was consistent with what the field has seen for decades within the special education identification rates. As this finding demonstrated that it does not matter which type of system was being utilized for students, it provides an additional understanding that districts must be aware of the potential discrepancy between males and females when supporting struggling learners through interventions, supports, and strategies necessary to close the learning gap.

Implications for Future Research

While the findings of this study can be synthesized into five key results, the potential for future research within the field is vast. The findings of this study support the need to continue further research surrounding the potential bias that may exist within identification practices for students when determining whether the student is a low achiever or has a learning disability. A clear understanding of the two can shift the understanding from the previously utilized IQ and achievement frameworks to a more substantial, more robust examination of how, when, and what interventions students are responding to in their areas of academic deficits.

In response to the results of the secondary analysis that occurred within the first research question, it would be highly recommended that a deeper analysis occurs to determine what unique circumstances occurred within the two comparison districts that lead to a greater decline in SLD identification rates in comparison to the TZ ISD. This analysis would be recommended to occur in a mixed methods format as it would likely require a deeper procedural review and discussion with stakeholders in in comparison ISDs to determine the cause for the decline in the SLD identification. It is important to note that the findings of this secondary analysis could potentially lead to a finding of more effective processes within the PSW model to produce a decline in SLD identification rates that would disagree with the findings of this study. However,

while there may likely be new findings that occur as a result of the further research in this area, it is important to note that the work of the TZ was effective within the ISD examined for this study.

Once full implementation within the TZ districts has been underway for a longer period of time, future analysis of the long-term impact of systems-level work and its interaction on student outcomes will need to be conducted. In addition, it is recommended that districts continue to assess the health of the system's implementation through tools such as the District Capacity Assessment (DCA) to determine whether the MTSS/RTI system is being implemented with fidelity as designed. Such examination will support the development of SLD identification procedures that align with the district's intervention supports.

In addition to examining the comprehensive systems, it will also be critical to examine the eligibility procedures, processes, and subsequent identification practices for SLD across districts from a qualitative perspective. Future research could provide a deeper understanding of the various practices within the designed approach to determine whether consistent practices within the field occur. This would include a case study of the various models utilized, operational procedures at the ISD level, and an identification of the commonalities within procedures across the ISDs that are seeing the most significant decline in identification. In addition, by using a qualitative lens, there is a potential for a better understanding of the practitioner’s voice through examining what they believe to be the practice within the field surrounding SLD identification practices. This would allow for the views of the school psychologists surrounding the effectiveness of the model they are utilizing to identify students, thus providing policymakers with a more robust understanding of the current state of SLD identification across the state.

To shift policies and practices at the state level, it is critical to provide policymakers with a deeper understanding of the decisions' impact on the field. Finally, a quantitative examination of what has occurred to SLD identification rates since the reauthorization of IDEIA in 2004 and the subsequent disallowable use of the SD model over time, based upon the model adopted by each state, would provide the field with a more comprehensive study of the current state of SLD identification from a national perspective.

Recommendations for Educational Leaders

It is essential to recognize that this study was conducted over a period that included data from the COVID-19 pandemic. While this unique time impacted all, the educational system was among the most significantly impacted. As students moved to a virtual learning platform, the implementation of best practices on the day-to-day learning of students continued to be affected. While this study did not directly address the impact of the COVID-19 pandemic, it was crucial to consider that that event could have affected some of the presented data.

The most critical component of acknowledging the impact of the COVID-19 pandemic in this area was the lasting impression it had on students during the early years of their educational experience. As kindergarten students during the 2022-2023 school year were of preschool age during the pandemic, there was the potential for more evaluations to occur with this age group due to fewer students having access to early intervention services during their preschool years. This lack of early intervention has the potential to have lasting effects on our MTSS/RTI systems for many years, as students across the board may still be catching up from long-term learning loss due to hybrid or remote instruction.

As a result, districts must continue examining their SLD identification practices to ensure that the correct students are being identified, supported, and serviced through special education.

As the various research within this study has examined, there are a variety of challenges with each of the models currently in use for identifying students as SLD. This leads to the need for each district to thoroughly examine and implement practices that meet the unique needs of the students they serve long before a referral for special education. All students are entitled to and deserve comprehensive educational experiences that meet their individual learning needs, increase their abilities, and promote growth within the classroom and beyond. By moving to a broader understanding of how all learners are supported as part of a broader educational system, a more significant change can begin to occur. For change to happen, practices must be implemented intentionally, rigorously, and with fidelity to ensure that the correct students are identified and supported across the educational system.

Conclusion

Special Education is a service. As educators, we must work together to break down the long-standing silos that support old ideals and misunderstandings as to what it means to be eligible for special education. As a longtime educator in the field, I have witnessed firsthand, time and time again, the struggle our students with disabilities face when these silos exist. Old mindsets cause undo anxiety, lack of improved outcomes, and overall negative experiences for our students. Students who are identified as SLD have the right to high-quality interventions and support prior to referral and have the ability to achieve high outcomes alongside their nondisabled peers. This comes with the proper instruction by highly skilled educators who collectively believe that all students are general education students first and have the fundamental right to be in their least restrictive environment daily. Through the development of a systems-based approach that removes the silos of special and general education and instead intersects the knowledge base and expertise of all educators, comprehensive systems of support

can be developed that promote learning, interventions, and growth that can lead to continued success long past the classroom. This research has enhanced that belief as we seek to develop systems to impact all students' learning, we can, in turn reduce the need for special education services for students who have the ability to respond to interventions first in general education.

Increasing the field's understanding of the components of a comprehensive process for determining SLDs promotes greater consistency within the evaluation process. Subsequently, it leads to a better understanding of the unique learning needs of individual students by promoting a comprehensive systems-based approach that aligns screening, interventions, and effective research-based instructional practices. Developing a framework is necessary for educators to utilize within a decision-making process that focuses first on the individual student's response to interventions before a referral for special education and lessens the inappropriate identification of students.

My research has provided the field with a deeper understanding of the benefits of implementing robust systems for student support that can lead to the collection of appropriate, relevant, and timely data to support the eligibility decisions of students. While the journey has just begun, it provides credence and support that when we know better, we do better, for all students deserve the opportunity to succeed in the general education classroom long before they are referred for special education. It is our duty as educators that all students, no matter their needs, are supported in an environment that meets their unique learning outcomes now and into the future.

APPENDIX

HSIRB APPROVAL LETTER

WESTERN MICHIGAN UNIVERSITY

Institutional Review Board (WMU IRB)

Date: September 28, 2023

To: Joseph Kretovics, Principal Investigator
Erin Senkowski, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: Approval not needed for IRB Project Number 23-09-01

This letter will serve as confirmation that your project titled "An Examination of Specific Learning Disability Identification Post Participation in the Michigan Department of Education Transformation Zone" has been reviewed by the Western Michigan University Institutional Review Board (IRB). Based on that review, the IRB has determined that approval is not required for you to conduct this project because you are analyzing secondary data, did not assist in data collection, will not have access to identifiable data, and cannot enhance the dataset to re-identify subjects/participants in this study.

If none of the investigators conducting the research study are obtaining either data through intervention or interaction with living individuals, or identifiable private information or identifiable biospecimens, then the research activity does not involve human subjects.
https://www.hhs.gov/ohrp/coded-private-information-or-biospecimens-used-research.html

Thank you for your concerns about protecting the rights and welfare of human subjects.

A copy of your protocol and a copy of this letter will be maintained in the IRB files.

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