

Teacher Perceptions of Tier 2 Reading Interventions

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Abstract

Response to Intervention (RTI) was created to support students' growth in reading while reducing the number of students requiring testing for disabilities. The aim of this study was to examine teacher perceptions of Tier 2 RTI reading interventions. Specifically, this study examined perceptions of professional development, data and progress monitoring, resources, and support surrounding reading interventions. A quantitative, descriptive research design was utilized in this study. A total of thirty-six participants completed the survey. The results of the study help to support teachers as they continue the selfless act of shaping our future leaders.

Keywords: MTSS, RTI, reading interventions, teacher perceptions

Schools in the United States are more diverse than ever (Brozo, 2010). This diverse culture we live in creates a need to ensure all students receive access to a high-quality education. Many students in schools in the United States today are deemed to be labeled at-risk. The disproportionate number of students making inadequate progress in reading places the fate of students at stake. Students must develop the necessary reading skills to comprehend in school and life. Literacy lays the foundation for students to become lifelong, successful learners. This critical education component opens doors for students to succeed in school, the workforce, and society. Many students enter grade school lacking the reading comprehension tools required to perform at or above grade level. If this issue is not addressed for students in school, it can worsen as students matriculate through the education system.

Despite numerous efforts to ensure students make sufficient reading progress at each grade level, there still lies a reading deficit in this country. The results of the National Assessment of Educational Progress (NAEP) fourth-grade reading assessment from 2019 revealed that

students' reading scores decreased compared to the scores from the 2017 reading assessment (NCES, 2021). Additionally, the National Center for Education Statistics (NCES) (2021) reports that only 35 percent of fourth-grade students performed at or above proficient in reading, and only 34 percent of eighth-grade students performed at or above proficient in reading. Similarly, students' scores in grade 12 were two points lower than those of twelfth graders in 2015 (NCES, 2021). In the state of Texas, where this study was conducted, one school district reported having 67% of their students at or approaching grade level in grades 3-8 for their state reading assessment. In the past, low reading achievement, more than any other factor, has been a cause of low-performing schools (Moats, 2020). If not addressed early on, this disparity has the potential to grow even more prominent and thus places students well below their peers academically even into adulthood. Long-term implications would mean many adults reading at a low rate and lacking literacy skills. Globally, illiteracy and low levels of reading and writing ability cost the economy over 900 billion annually (World Literacy Foundation, 2018).

Lower literacy rates have also been linked to adverse health outcomes in individuals (DeWalt et al., 2004).

The United States has continually made provisions to ensure all students have an equal opportunity to receive high-quality instruction. In 1965, the United States passed the Elementary and Secondary Education Act (ESEA) under the leadership of President Lyndon Baines Johnson. This law was enacted to provide equal learning opportunities for all students. Accountability became a point of interest in education when then-President George W. Bush created the No Child Left Behind Act (U.S. Department of Education, 2003). This legislation focused on instruction and a proven method to ensure every child receives a quality education. President Barack Obama continued the push for education by signing the Every Student Succeeds Act (ESSA) in 2015. This education law reauthorized the Elementary and Secondary Education Act and required that U.S. schools provide students with an education that included high standards and supported students to become college and career-ready (U.S. Department of Education, n.d.). According to the U.S. Department of Education (2020), Congress reauthorized the Individuals with Disabilities Education Act (IDEA) in 2004 to provide free and appropriate education to children with disabilities. Under IDEA, local education agencies were now able to use Response to Intervention (RTI) frameworks to identify students who show signs of a learning disability and who may need to be tested for special education (Restori et al., 2009). IDEA laid the foundation to introduce RTI as it permitted RTI to become an option for schools and districts to use as an alternative to the IQ-discrepancy model (Fuchs & Fuchs, 2005; Fuchs & Fuchs, 2006; Savitz et al., 2018). The discrepancy model determines if there is a discrepancy between a child's intellectual ability and academic achievement level (Restori et al., 2009). Schools and school districts utilizing an RTI model have another option in identifying at-risk students early to help reduce the number of students labeled with a disability when they simply require high-quality instruction targeting their deficit skills. Researchers (Fuchs & Fuchs, 2006; Savitz et al., 2018) argued that because the term learning disability was recognized as its own category in the Education of All Handicapped Children Act of 1975, there was a significant increase in the number of students being labeled as learning disabled. In the 2019-2020 school year, 7.3 million, or 14 percent of public-school students

aged 3-21 received special education services under the IDEA. As a result of the newly passed policies, school-wide tiering models were created with Positive Behavior Interventions and Support (PBIS) being introduced in the 1980s and RTI being introduced in the 1990s (Choi et al., 2022). For years, the two models have been viewed separately, but now the two models have merged under a Multi-Tiered System of Support (MTSS) which includes a focus on both behavior and academics (Bailey, 2019; Eagle et al., 2015). Response to Intervention (RTI) has emerged as a potential remedy for students' reading disparities. Most states in America have some form of RTI framework in place in schools (McInerney & Elledge, 2013). The National Center on Response to Intervention (NCRTI) (2010) defines RTI as:

RTI integrates assessment and intervention within a multi-level prevention system to maximize student achievement and reduce behavioral problems. With RTI, schools use data to identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions, adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities or other disabilities (National Center on Response to Intervention, 2010, p.2)

This quantitative study aimed to examine teacher perceptions of Tier 2 RTI reading interventions of students in a large urban school district in Southeast Texas. More specifically, this study was concerned with the impact of Tier 2 reading interventions by examining reading teachers' perceptions of professional development, data and progress monitoring, resources, and support for the reading interventions.

Literature Review

This review will detail research that supports RTI in improving the academic outcomes of struggling readers and provide guidance that will support teachers while implementing an RTI framework. The literature and research reviewed include literacy education, an overview of MTSS/RTI, and teacher perceptions of reading interventions.

Literacy Education

To understand the role of RTI, it is essential to comprehend the history of literacy and reading development. According to Anderson et al. (1985), “reading is the process of constructing meaning from written text. It is a complex skill requiring the coordination of a number of interrelated sources of information” (p.7). Gough and Tunmer (1986) approached reading with a formula known as the simple view of reading. According to Gough and Tunmer (1986), “reading equals the *product* of decoding and comprehension” (p. 7). There have been several developments and debates related to reading since the 1600s. These debates surrounding reading are often referred to as the reading wars and have dated back over two centuries and continue today (Castles et al., 2018; Pearson, 2004).

Throughout the years, there have been several reading theories around which policymakers, instructional programs, and classroom practice have been centered, including whole language, balanced literacy, simple view of reading, active view of reading, and structured literacy (Thomas, 2022). During the 1980s, basal readers were prominent, using analytic phonics and small group guided reading lessons (Morris, 2015). The 1990s introduced the whole language movement, which focused on whole-group guided reading and placed less emphasis on phonics (Morris, 2015). With legislation passing the No Child Left Behind Act in 2000, phonics was again a priority in kindergarten and first grade, and authentic texts were a priority. Some teachers take a “bottom-up” approach associated with behaviorism, which highlights teacher-directed instruction with phonics isolation skill development. A bottom-up approach focuses on beginning sounds and letters of language (Fisher et al., 2021). In contrast, others have taken the “top-down” approach, which is consistent with constructivism; this highlights student-centered, meaning-based instruction with texts based on students’ interests (Fisher et al., 2021; Tracey, 2017). The two approaches were blended to meet in the middle and called “balanced literacy.” Balanced literacy gained prominence during the mid-1990s, following a critique of California’s literacy framework and revealing low reading scores. This led to the state commissioner calling for a more balanced literacy approach (Fisher et al., 2021). Eventually, more states and districts adopted this model as

well. In 2014, the argument for the preferred literacy method was highlighted, with systematic phonics, balanced literacy, and individualized instruction being debated (Tracey, 2017). More recently, the active view of reading, structured literacy, and the science of teaching reading has also been at the forefront of reading education (Thomas, 2022). To date, there is still no consensus on the best approach to teaching reading.

The National Reading Panel reports five components of effective early reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension (NICHD, 2000). These components were incorporated into the No Child Left Behind Act and the Reading First initiative as essential components of reading instruction (Learning Point Associates, 2004). Learning Point Associates recommends that these components be taught systematically and explicitly so students learn these foundational skills. Because these components build off one another and are connected, it is hard to teach in isolation. However, students should gradually progress and learn the components of reading. The five components of effective early reading instruction were included in this investigation because, often, students who receive support in reading interventions under RTI are likely to have trouble with one or more of these five components. Phonemic awareness is a subset of phonological awareness and is an understanding that spoken words are made up of separate units of sound (Brown, 2014; Learning Point Associates, 2004). A significant focus of phonemic awareness is centered on oral language. Phonics instruction improves students’ ability to identify words (Anderson et al., 1985). Phonics is also beneficial in teaching children the alphabetic principle (Tunmer & Hoover, 2019). Oral reading fluency (ORF) relates to the ability to read words correctly per minute (wcpm) on measures of accuracy and rate (Washburn, 2022). Moats (2020) recognized good readers as ones who do not skim through texts but process the letters of each word rapidly and unconsciously. She also shared that they are aware of speech sounds and have fast and accurate word identification skills, which helps them to decode. Gough and Tunmer (1986) acknowledged that a skilled decoder could read words quickly, accurately, and silently and has a sound knowledge of recognition skills. Opportunities for repeated readings have also been found to improve fluency (Mathes & Torgesen, 1998). Results from a study by Rasinski et al. (2017) suggested that word

recognition and accuracy, along with word recognition automaticity, are essential factors that help determine college readiness. This shows the continued need to foster oral reading fluency development for students. According to Beck et al. (2013), an expansive vocabulary is closely related to reading proficiency and school achievement. Several researchers (Beck et al., 2013; Biemiller, 2003; Moats, 2020) suggested that vocabulary be taught explicitly to teach the structure and meaning of words. Other researchers add that vocabulary can also be learned through context clues, listening to texts read aloud, and reading independently (Moats, 2020). Research has also concluded that teaching solely from a list of 10-15 words a week does not yield the vocabulary development needed to richly improve reading comprehension (Brabham et al., 2012). Instead, the constant teaching of concept-related words and seeing the vocabulary in various contexts throughout the day resonates with students. Biemiller (2003) asserted that vocabulary instruction differs from phonics instruction in that vocabulary instruction must continue to be taught as students move up grade levels. Comprehension is making reasonable and accurate meaning by connecting what was read to what the reader already knows (Learning Point Associates, 2004). Comprehension is the final goal of reading instruction (Learning Point Associates, 2004). In fact, reading comprehension can be considered one of the most complex human activities (Kendeou et al., 2016). To improve students' comprehension skills, teachers can include activities that activate prior knowledge and generate questions (NICHD, 2000). Teachers understand the role that knowledge and background knowledge play but often fall short in relaying it to students. Wexler (2019) argues that simply providing students with a quick supply of background information before reading a text may seem like it is activating prior knowledge. However, it does little to reinforce knowledge and make it applicable to students. The more knowledge students have on a topic, the better they will comprehend it (Wexler, 2019). Hirsch (2003) claims that essential elements to improve reading comprehension include a strong focus on fluency, vocabulary, and domain knowledge.

While the debate continues on whether to teach whole-language, phonics, or balanced literacy, effective teaching and instruction should not be overlooked (Kim & Snow, 2021). Programs that effectively prevent reading failure contain quality instruction with the right intensity and

duration delivered to children at the right time (Torgesen, 1998). Allington (2002) lists six elements of effective literacy instruction as (1) time, (2) texts, (3) direct, explicit instruction, (4) student talk time, (5) time on task, and (6) testing that evaluates student work based on effort and improvement. Wexler (2019) argues that schools should move away from a skills-based approach and move toward building students' knowledge to comprehend texts better. Despite the numerous methodologies available for school districts and campuses to use, deepening educators' understanding of the reading process will better equip them to facilitate students reading development (Tracey, 2017). Although educators may opt to use varied instructional practices, student achievement should be at the forefront of decision-making.

MTSS/RTI

Although multi-tiered systems of support (MTSS) and response to intervention (RTI) are terms that are often used interchangeably to describe a framework for providing multiple levels or tiers of academic support for struggling learners (Fuchs et al., 2012), recently, there has been more of a distinction between the two, with the term MTSS being used more frequently than RTI as MTSS encompasses academics, behavior and mental health awareness interventions (Bailey, 2019). Harlacher et al. (2014) describe MTSS as a schoolwide approach that establishes a seamless connection between three components: a standards-aligned and research-based curriculum, a comprehensive system, and the use of the problem-solving model. Today, MTSS is becoming the more commonly used term (Braun et al., 2018). At present, more than 40 states have adopted versions of MTSS and RTI (National Center for Learning Disabilities NCLD, 2022).

Researchers (Fuchs & Fuchs, 2005; Fuchs & Fuchs, 2006; Harlacher et al., 2014; Savitz et al., 2018; Swanson et al., 2012) defined RTI as a tiered model of providing intervention to students who are at risk of reading failure with the aim of reducing the number of students in special education. Response to Intervention (RTI) is a model intended to increase students' learning outcomes. RTI can be viewed as a form of differentiation (Lipson & Wixson, 2012). Tomlinson (2014) shared that in a differentiated classroom, teaching is not based on what the curriculum states, but instead, the teacher meets the student where he or she is academically. As Bandura (1977) shared, the zone

of proximal development is an area in which a child can grow and mature with the help of a more capable adult or peer. The goal is that what a child can do now with the help of a more capable adult or peer will be attainable for the same child independently in the future. Students receiving support within RTI work within the zone of proximal development to master their goals. When students facing reading difficulties are provided with differentiated instruction that addresses their specific content needs, they are more likely to make improvements (Denton, 2012). When RTI is implemented with fidelity, it can improve instructional quality and increase students' chances of school success (McInerney & Elledge, 2013).

There are four essential components of RTI which include (1) universal screening, (2) progress monitoring, (3) data-based decision-making for instruction, and (4) movement within the multi-level system. (McInerney & Elledge, 2013; NCRTI, 2010). It is also necessary for these components to include evidence-based practices and be culturally responsive for maximum results.

Universal Screening

RTI serves as a two-stage assessment screening feature (NCRTI, 2010). The first stage in this process is universal screening. Universal screening is one of the first steps in identifying students at risk for learning difficulties (Hughes & Dexter, 2011; Wallace, 2018). Universal screening is typically conducted three times a year during the fall, winter, and spring semesters and administered to all students. The goal of universal screening is to improve a child's current developmental trajectory and lessen the effects of long-term disabilities. Based on screening results, administrators may consider the student's score below the 25th percentile to deem the student to be at risk (Fuchs & Fuchs, 2006). Based on their screening assessments, students who are determined to be at-risk will then be provided supplemental support in Tier 2 or Tier 3 instruction (Harlacher et al., 2014). This screening process helps access those students needing extra support through interventions or testing. In advance of RTI being implemented in schools across the United States, when students struggled in school, the primary approach was to wait and see if students began to show progress over time (Wanzek & Vaughn, 2010). RTI helps decrease this wait time by screening students often and as early as Kindergarten (Wanzek & Vaughn, 2010).

Progress Monitoring

The second stage in the two-stage assessment screening process of RTI is progress monitoring. Students who score below a specific cut point after an assessment will be continuously monitored (NCRTI, 2010). NCRTI (2010) refers to a cut point as a score used on the scale of a progress monitoring tool or a screening tool and is used to determine if students are making adequate progress or need additional intervention support. Progress monitoring allows for the consistent assessment of students to determine the degree of academic support needed. RTI allows students to be accessed frequently and informally in the classroom to identify students who are not making adequate progress to provide them with timely interventions (Wanzek & Vaughn, 2010). Through consistent progress monitoring, students can be identified as needing continued support. Progress monitoring is an integral stage as it supports the need to identify students early who may need additional assistance through RTI. Progress monitoring can be part of a formative evaluation in early intervention while providing diagnostic information to make placement decisions on various tiers (Fuchs & Fuchs, 2006). In their meta-analysis, Wanzek et al. (2018) investigated 25 reading intervention studies to determine the effects of intensive early reading interventions, relationships between interventions, and student characteristics related to outcomes. Expanding and extending upon earlier research, the researchers sought to examine research surrounding the duration of the intervention, instructional group size, grade level, individualization of the intervention, and initial reading achievement. Overall, the researchers found that effect size results suggested that intensive early interventions showed positive outcomes for early struggling readers in K-3rd grade (Wanzek et al., 2018).

Data-based Decision Making

Data-based decision-making is at the heart of sound RTI practice and is necessary for the other components to thrive (NCRTI, 2010). Understanding where students place academically is vital in determining the specific level of intervention to provide to students. Data helps determine the degree of intervention support. Students who respond well and meet expectations are referred to as responders or high responders while students not responding well and making inadequate progress are referred to as non-responders (Wanzek & Vaughn, 2010).

One question surrounding RTI is when to exit students or move them among the tiers. Van Norman et al. (2020) analyzed data from 3rd-grade students who met specific criteria to exit Tier 2 reading fluency interventions. Data was collected from 554 students in 234 schools in the Midwest, Northeast, and mountain west regions of the United States. Students participated in a Tier 2 intervention program with trained AmeriCorps members who conducted the interventions at the schools. Students qualified based on their curriculum-based measures of oral reading (CBM-R). Students who earned a median score below 100 WRCM on these passages were eligible to participate. Students had 1:1 reading sessions with the interventionist for 20 minutes in each session. The authors noted that all the students in the study met exit criteria during the first semester.

Understanding data received from interventions helped teachers and administrators make informed decisions about students' movement between tiers.

Tier 1/Primary. Tier 1 instruction occurs in the general education classroom. Most students will fall into the Tier 1 category. It is imperative that instruction in the general education classroom set the tone for high-quality learning and intervention. Tier 1 instruction aims to provide every child with practical, research-based instruction in the general education classroom. Classroom instruction is essential in preventing reading problems (Moats, 2020). Researchers contend that there should be high-quality instruction in the Tier 1 classroom to further support students experiencing failure and help target their specific needs (Brozo, 2010; Hebbeler & Spiker, 2016; Jones et al., 2016). However, researchers explain that students can sometimes be misdiagnosed due to ineffective, inconsistent instruction (Toste et al., 2014). This can cause students to receive inadequate instruction that is not needed and not beneficial to the student. A schoolwide consistent model can help reduce the misidentification of students and ensure better identification of students into their respective tiering levels. In addition, Hebbeler & Spiker (2016) acknowledge poor teaching as a factor in learning problems, thus continuing to stress the need for high-quality instruction within the general education classroom. This gives a need for high-quality teaching to avoid students being misdiagnosed and placed into Tiers when they simply need higher-quality teaching. Providing high-quality instruction to students at risk of reading failure should be supported by knowledgeable teachers in the classrooms (Brozo, 2010).

Jones et al. (2016) asserted that effective Tier 1 instruction should include systemic word study instruction, shared reading to build fluency in elementary, high-quality read-alouds provided daily, and teacher modeling. Preston et al. (2016) contended that Tier 1 instruction should be differentiated to meet the needs of all learners and that differentiation should also be based on assessment results. Allington (2002) shared that to improve students' reading proficiency, classroom teachers should have an expert, exemplary capacity for teaching reading instruction.

Tier 2/Secondary. Wanzek and Vaughn (2010) maintained that most students needing interventions make progress from Tier 2 interventions and will not require the need for Tier 3 interventions. The researchers defined extensive interventions as occurring daily for 100 sessions or more for approximately 20 weeks or more. Students receiving Tier 2 instruction are typically provided with 30 minutes of instruction, 3-5 days a week, in groups of 5-8 students (Harlacher et al., 2014). Students are also progress monitored bi-weekly (Harlacher et al., 2014). After providing Tier 2 interventions, interventionists will evaluate students' responsiveness and determine if they have responded well (adequate responders) or have not responded well (inadequate responders) to the interventions (Toste et al., 2014). There is variability and little consensus about who is considered responsive and inadequate responders to interventions (Toste et al., 2014). Milburn et al. (2017) studied 181 preschool children making inadequate progress in one or more early literacy domains. These students began receiving Tier 2 reading interventions. Students who scored above the 25th percentile at the end of intervention were classified as responsive while students who scored below this threshold were classified as nonresponsive. Results showed that there were higher numbers of students labeled as responsive after the intervention than those in the control groups.

Tier 3/Tertiary. Students who do not respond to Tier 2 reading interventions are then provided with more extensive reading interventions in Tier 3. This Tier also comes with the possibility of further testing and identification as having reading disabilities. Students who move to Tier 3 reading interventions are most likely students with a reading disability or will be identified as having a reading disability (Toste et al., 2014). Wanzek and Vaughn (2010) revealed that Tier 3 is distinct from other

interventions in that students in this tier demonstrate severe difficulties and are provided with more extensive interventions. Students receiving Tier 3 instruction are typically provided with 45-120 minutes of instruction, 5 days a week with 1-3 students in a group (Harlacher et al., 2014). Students are progress monitored weekly (Harlacher et al., 2014). Denton (2012) suggests that Tier 3 students be provided interventions in a quiet location outside of the classroom due to the academic challenges faced by these students.

In a more recent review of 12 Tier 3 intervention studies, Austin et al. (2017) revealed that 3 out of 4 studies that utilized a control group of inadequate responders showed results in which the treatment group outperformed the control group (Austin et al., 2017). The results yielded positive effects supporting the notion that non-responders in Tier 2 interventions can make reading progress if provided with an intensive Tier 3 intervention. This is consistent with results from a study by Sharp et al. (2016) which found that Tier 3 implementation significantly predicted reading test performance when controlling for specific demographic factors. The results of this study suggest that RTI implemented at high levels is associated with better reading scores.

When students do not show improvements in their high-quality interventions from Tier 3 support, the child may be referred for testing to receive special education services (Sharp et al., 2016). Vaughn et al. (2020) found that while students who are at the lowest level in their reading comprehension do make improvements, these students would still need intensive and individualized instruction to lessen their deficits. Researchers explain that while providing a combination of research-based intervention methods, prevention will still be inadequate for about 5% of students (Austin et al., 2017).

Teacher Perceptions of Reading Interventions

Several researchers (Braun et al., 2018; Greenfield et al., 2010; Reagan et al., 2015; Rinaldi et al., 2011; Swanson et al., 2012; Werts et al., 2014) have analyzed teacher perceptions of RTI over several years. Results of these studies revealed four main themes related to professional development, data/progress monitoring, resources, and support. This insight can provide a first-hand account of the effects of implementation. As Bandura (1977) noted, self-

efficacy describes one's beliefs about their proficiency toward an activity or duty. Lawrent (2022) also explained that teachers with a high self-efficacy approach work more enthusiastically because they have the confidence to reach the desired goal or outcome. The researcher also shared that when new reform efforts such as implementing MTSS and RTI, those with higher self-efficacy take on the effort more positively than those with lower self-efficacy because of the commitment and consistency required. Understanding teachers' perceptions of self-efficacy in the domains of professional development, data/progress monitoring, resources, and support can lead future researchers and stakeholders to better equip educators with pertinent information to implement MTSS/RTI.

Level of Professional Development

Effective RTI measures require the support of teachers, administrators, and stakeholders. As Bandura (1977) noted, efficacy expectation deals with a teacher's conviction that their ability to successfully execute behaviors and performance contributes to their ability to produce desired outcomes. Teachers' higher self-efficacy perceptions of their abilities positively reflect their teaching practices. Providing teachers with professional development is essential to improve teacher effectiveness in schools today. Professional development is required in almost every teacher contract in the United States, and teachers engage in professional development each contracted year (Kennedy, 2016). The need for professional development is also evident in educational policies. For example, under ESSA's guidelines, schools should enact high-quality, professional development focused on improving teaching, student learning, and achievement. Desimone (2011) revealed core features of effective professional development, including a content focus, active learning, coherence, duration, and collective participation. Kennedy (2016) reviewed several studies regarding professional development. These studies revealed the importance of imparting content knowledge as a rationale for their professional development programs. Professional development can take several forms in schools and districts, such as workshops, conferences, mentoring, group discussions, book clubs, designing a new curriculum, or assisting with the school improvement plan (Desimone, 2011). Desimone (2011) shared that it is crucial to understand what makes professional development effective

as it is vital to understanding successful school reform. Increased professional development opportunities can also increase teachers' knowledge of interventions within the RTI framework. After analyzing the study results, Reagan et al. (2015) proposed that professional development be strategic and give practical guidance for RTI teachers to continue implementation. Research on professional development is included in this study because it is a crucial component in fostering growth in teachers. Insight into professional development related to RTI can help gauge what additional training is needed to improve the field. In another study of teacher practitioner perceptions of RTI, results showed that while many teachers understood the simple concepts of RTI, several teachers in the study lacked the knowledge and or training to implement RTI and had insufficient time during the day to do so (Reagan et al., 2015). Findings from this study suggested that teachers were unclear about how to decipher among tiers, how to understand what tiers students belonged to and what constituted a tier. Recommendations from these results showed that there should be an increase in professional development that gives practical guidance and training on how to use RTI models effectively.

Knowledge/ability to Use Data to Progress Monitor

In earlier studies, Rinaldi et al. (2011) analyzed the perceptions of eight teachers on the adoption and effectiveness of an RTI model in the participants' schools. The study found that while the participants were hesitant at first, voicing concerns about adequate planning time, division of responsibility, and assessment and progress monitoring, they grew to embrace the model and eventually engaged in the development and growth of the model by the end of the study's three-year period. A key theme that emerged from the study was data and collaboration to improve practice. Participants in this study utilized planning time to collaborate on assessments used to progress monitor, which helped improve their ability to collect data. By the third year of implementation, teachers felt more confident in their ability to use data to drive their instruction. This collaboration and knowledge of data to progress monitor led to fewer inappropriate referrals to special education. An investigation of special education teachers conducted by researchers Werts et al. (2014) revealed a large percentage of positive feedback (72%) on RTI as students benefit from a higher level of instruction.

Students benefited because teachers were better able to make professional decisions regarding students due to their increased knowledge of data collection.

Resources

In a qualitative study examining teacher perceptions of an MTSS framework, Braun et al. (2018) concluded that while teachers believe tier 2 interventions effectively support students who require moderate assistance, they note frustration with limited resources and material to provide interventions to students. In contrast, Woodward and Talbert-Johnson's (2009) study of teacher perceptions listed a benefit of RTI as having ample material available to use. Participants also cited that having the reading specialist in class during interventions helped serve as an added resource.

Support

Swanson et al. (2012) gathered data on special education teachers' perceptions and instructional practices who had been implementing an RTI framework for students in grades 3-5. This two-year study included focus groups and interviews which investigated three aspects, the perceptions of special education teachers and the RTI framework, the extent to which they teach components of reading and math to students in grades 3-5, and their use of evidence-based instructional practices to teach reading and math. Swanson et al. (2012) concluded that teachers cited the benefits of RTI as being able to meet students' unique needs, collaborating with other teachers, and having access to early interventions. The participants also stressed the challenges of RTI such as scheduling changes, an increase in paperwork, the increasing number of students, and the need for additional staff support. Werts et al. (2014) collected responses from educators regarding the benefits and barriers to RTI. The highest cluster of respondents (45%) shared that time was a barrier to successfully implementing RTI (Werts et al., 2014). Teachers cited additional meetings, paperwork, and allotted time to identify at-risk students. Braun et al. (2018) claimed that many teachers were confused about the MTSS process due to frequent school-wide changes.

Understanding teachers' perceptions was the purpose of Greenfield et al. (2010) when they interviewed eight teachers after a first-year school-wide RTI reform effort.

The interviews revealed five major themes: assessment and progress monitoring, the link between intervention and instruction, the impact on teacher practice, the culture of reform, and the special education referral process for ELL students (Greenfield et al., 2010). The researchers concluded with two essential ideas when implementing RTI from the study. Greenfield et al. (2010) shared that it is essential to review the purpose and intent of RTI while adhering to federal recommendations and to consider the RTI reform effort as a change that will happen over time.

Teacher perception studies provided insight into the perceived benefits and barriers of implementing an RTI framework. Findings from several studies identified the need for continued professional development to ensure teachers are prepared to execute schoolwide RTI initiatives. These studies help add validity to the case for RTI implementation and the need to include teachers' opinions and feedback on RTI frameworks put in place.

Theoretical Framework

In the late 1900s, the Russian psychologist Lev Vygotsky created a groundbreaking theory of cognitive development. Within the theory of cognitive development, Vygotsky (1978) believed that learning is connected to development and that learning should correlate with a child's developmental level. A critical concept that emerged within Vygotsky's theory is that of the zone of proximal development (ZPD). According to Vygotsky (1978), ZPD is "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 86). This theory aims to teach students a more challenging piece or pieces of information within their mental development as a more experienced teacher or peer assists. This theory highlights how the role of RTI acts within students' zone of proximal development as teachers and interventionists provide specific, targeted interventions to help build the capacity of students reading abilities.

Albert Bandura's (1977) self-efficacy theory is also used in this investigation. Self-efficacy can be described as an individual's belief in their abilities to produce actions and produce desired outcomes (Bandura, 1977). An individual's perceived self-efficacy can predict willingness

to participate in activities and their behavior toward them. For students, self-efficacy may mean having confidence in word recognition or their comprehension abilities (Barber & Klauda, 2020). Teachers' perceptions of their self-efficacy can also affect their practices (Poulou et al., 2019). When students have a higher sense of self-efficacy, they tend to perform well in reading activities. When students and teachers have a higher awareness of self-efficacy, it helps in both their academic and professional lives.

Methodology

This study utilized a quantitative, descriptive methodology to accomplish its purpose of examining teacher perceptions of Tier 2 reading interventions. More closely, this study examined the impact of Tier 2 reading interventions by investigating reading teachers' perceptions of their school's established professional development and available resources and support. This study was directed by the following research questions: (a) How do teachers perceive the impact of their school's established professional development on their ability to provide Tier 2 reading interventions? and (b) How do teachers perceive the impact of their school's available resources and support on their ability to provide Tier 2 reading interventions?

The researcher created a five-point Likert Scale survey instrument entitled, *Perceptions of Tier 2 Reading Interventions*. The survey included 22 statements using a Likert scale with: 1. Strongly Agree (SA), 2. Agree (A), 3. No Opinion (N), 4. Disagree (D), 5. Strongly Disagree (SD), as well as demographic questions and two open-ended response questions. The survey research applied in this study was a scaled-item questionnaire Likert Survey. Prior to administering the survey instrument, the researcher tested the instrument's effectiveness by conducting a pilot study of the survey instrument.

Participants

The population in this study included reading teachers in a large urban school district in Southeast Texas. A total of thirty-six teachers were included as participants in this study. There are a total of 43 schools in this district with a population of 33,537 students. The student body in this district is multicultural, reflecting the diverse ethnic groups in the Southeast region. More specifically, the district includes an ethnic breakdown that is as follows: 49.6%

Hispanic/Latino, 38.6% Black/African American, 6% White, and 2.3% Asian (U.S. News and World Report, 2022).

Data Collection

The investigation began with the researcher sending the survey instrument to participating teachers in a school district in Southeast Texas. The researcher provided an online survey to reading intervention teachers and teachers who serve students in Tier 2 reading intervention programs. A consent form was attached to the beginning of the electronic survey instrument. When a teacher agreed to participate, they then continued with the survey.

Data Analysis

This study employed descriptive data. Frequency tables were applied to determine the scores of the demographic data set. Additionally, measures of central tendency were also used to determine specific means and standard deviations of respondents' answers to the statement items. The data were analyzed using an SPSS software package.

Findings

The participants consisted of 36 certified reading intervention teachers in grades K-12. This part is arranged into two major sections. The first section describes demographic information about the participants, including information on the current grade level of participants, years of teaching experience, and the highest level of education attained. The second section gives survey descriptive statistics from the survey results. The survey statistics section was divided into four subsections to describe participants' perceptions of their level of professional development, ability to use data to progress monitor students, availability of resources, and campus/district support.

Demographic Descriptive Statistics

The demographic data included grade level currently teaching, years of experience, and the highest level of education.

Grade level currently teaching included a range of K-12. Some teachers work in intervention classes and serve more than one grade level. Table 1 shows that most participants were represented in the elementary grades.

Table 1*Grade Level Currently Teaching*

Grade Level	Frequency	Percent
K	14	35.0
1	15	37.5
2	12	30.0
3	14	35.0
4	13	32.5
5	11	27.5
6	5	12.5
7	7	17.5
8	5	12.5
9	2	5.0
10	1	2.5
11	1	2.5
12	1	2.5

Table 2 reports the participants' years of teaching experience. Years of teaching experience consisted of data in the following categories: 0-5 years of experience, 6-10 years of experience, 11-15 years of experience, 16-20 years of experience, and 20+ years of experience. Most participants had over 20 years of teaching experience,

representing 27.5% of the sample. Participants with 6-10 years of teaching experience represented the second largest group with 25%. Participants with 16-20 years of teaching experience made up 15%. Participants with 11-15 years of teaching experience made up 12.5%. The smallest group had 0-5 years of teaching experience, representing 10%.

Table 2*Years of Teaching Experience*

Years of Experience	Frequency	Percent
0-5	4	10.0
6-10	10	25.0
11-15	5	12.5
16-20	6	15.0
20+	11	27.5

Table 3 represents the highest level of education attained. The four categories included bachelor's degree, master's degree, Educational Specialist, and doctorate degree. Participants with a master's degree represented the highest category, which consisted of 60%. Participants with

a bachelor's degree made up the second largest group consisting of 25%. The smallest group included those with an educational specialist and doctorate degree consisting of 2.5%.

Table 3

Highest Level of Education Attained

Level of Education	Frequency	Percent
Bachelor	10	25.0
Master	24	60.0
Educational Specialist	1	2.5
Doctorate	1	2.5

Survey Descriptive Statistics

In addition to the demographic information, the survey included 22 statements and two open-ended questions. The survey results were analyzed using descriptive statistics with means and standard deviation. A five-point Likert scale was utilized to quantify teacher perceptions. The five values used to quantify the results were: 1. Strongly Agree (SA); 2. Agree (A); 3. No Opinion (N); 4 Disagree (D); and 5. Strongly Disagree (SD). The two questions that guided the study were: (a) How do teachers perceive the impact of their school's established professional development on their ability to provide Tier 2 reading interventions? and (b) How do teachers perceive the impact of their school's

available resources and support on their ability to provide Tier 2 reading interventions?

Research Question 1. Survey questions 1-11 focused on participants' level of professional development and their ability to effectively take the information learned from professional development sessions and use data to progress monitor Tier 2 students. As shown in Table 4, the statements addressed teachers' perceptions of their level of professional development and ability to use data to progress monitor students. The means obtained from research question 1 ranged from 2.0556 to 2.6111. Survey statement 4 had the highest standard deviation, 1.27491, which shows the most variability among responses.

Table 4*Teachers' Perceptions of Professional Development and Data/Progress Monitoring (N=36)*

Statement Number	Survey Statement	Mean	Std. Deviation
1	I received professional development prior to my implementation of Tier 2 reading interventions.	2.0857	1.06747
2	I received sufficient professional development related to the RTI process.	2.3611	1.12511
3	I have received sufficient professional development to analyze Tier 2 student data.	2.4444	1.18187
4	RTI professional development is ongoing and consistent in my district/campus.	2.5556	1.27491
5	The available times for professional development relating to interventions correlate with my schedule.	2.6111	1.22539
6	I know how to access data relating to Tier 2 reading interventions.	2.1944	1.09073
7	I know how to analyze data relating to Tier 2 reading interventions.	2.2222	1.07201
8	Data received from Tier 2 intervention results help me determine important focus skills to teach.	2.0833	.99642
9	I have the tools needed to consistently monitor student progress.	2.1667	1.13389
10	Tier 2 reading interventions have improved my students' reading abilities.	2.0556	.984000
11	I have a plan to target students who are not making progress in Tier 2 interventions.	2.0857	1.01087

Table 5 reports the overall mean and standard deviation of research question 1. The mean was 2.2641 and the standard deviation was .90122.

Table 5*Summary of Responses from Questions 1-11 (N=36)*

Statement Number	Mean	Std. Deviation
1-11	2.2641	.90122

Research Question 2. Table 6 consists of eleven perception statements, representing survey statements 12-22. These statements addressed the available resources and support for teachers' ability to provide Tier 2 reading

interventions. The means obtained from research question 2 ranged from 1.8611 to 2.8056. Survey statement 22 had the highest standard deviation, 1.32707, which shows the most variability among responses.

Table 6*Resources and Support (N=36)*

Statement Number	Survey Statement	Mean	Std. Deviation
12	My campus has RTI resources to implement RTI interventions.	1.9444	.82616
13	I need more resources to effectively provide Tier 2 reading interventions.	2.7500	1.10518
14	The resources on my campus support student progress in Tier 2 reading interventions.	2.2222	.92924
15	I have been trained on how to implement the resources on my campus.	2.0556	.89265
16	I have in class support during my RTI time to assist with reading interventions.	2.7778	1.28976
17	My campus has a schoolwide RTI implementation plan.	2.0286	.92309
18	My administration team supports and are proponents of the RTI process.	1.8611	.68255
19	My campus holds regular PLC meetings to address RTI and student progress.	2.4444	1.27491
20	My campus holds regular PLC meetings to address RTI.	2.4722	1.31987
21	My campus/district has a specialist who is available to assist teachers with issues concerning Tier 2 reading interventions.	2.0556	1.06756
22	I have sufficient time to plan for Tier 2 small group and individual student reading interventions.	2.8056	1.32707

Table 7 shows the overall mean and standard deviation for research question 2. The mean was 2.3114, and the standard deviation was .66956.

Table 7

Summary of Responses from Questions 12-22 (N=36)

Statement Number	Mean	Std. Deviation
12-22	2.3114	.66956

Open-Ended Question

The last section of the survey included two open-ended questions. The researcher was interested in additional feedback from participants that would yield a more comprehensive view of the study. The open-ended questions specifically asked: What are the current challenges you experience with implementing Tier 2 reading interventions? What additional resources/training are needed to ensure the success of Tier 2 reading intervention implementation? Of the 34 participants that completed the survey, 31 responded to the open-ended questions. The researcher analyzed each response to determine recurring themes.

Question 1 asked, “What are the current challenges you experience with implementing Tier 2 reading interventions?” This question yielded four significant themes: time-consuming, inadequate support, large numbers of students in Tier 2, and resources.

Time-consuming. More than half of the responses related to the lack of time to provide interventions, plan for interventions, or time to incorporate interventions into daily schedules due to the vast number of other obligations. For example, one participant stated, “With all of the COVID complications and lack of substitutes, we do not have time for anything but the bare basics.” Another participant said, “I would say time management trying to successfully give each student what they individually need in a short period of time.”

Inadequate support. The second theme from question one pertained to inadequate support and assistance when providing interventions. One participant stated, “We do not have enough experienced and certified teachers to

adequately execute the interventions.” Another participant shared, “There is not enough support when grouping students.”

Large numbers of students in Tier 2. This theme highlighted the substantial number of students represented on the Tier 2 level. Participants shared, “The number of students on Tier 2 makes it hard to target them when there are so many students on tiers.” Another participant commented, “There are too many students and not enough support when grouping students.”

Resources. This theme addressed the lack of material and training around it. One participant responded, “Not enough resources.” Another participant shared, “There is a delay in receiving the curriculum.” While many said there were not enough resources, another participant commented, “New resources are added almost daily, and it’s overwhelming.”

Question 2 asked, “What additional resources/training are needed to ensure the success of Tier 2 reading intervention implementation?” This question yielded two significant themes: grouping and ongoing, strategic training.

Grouping. Many participants expressed an additional need for training to support them with grouping students who are making inadequate progress. One participant commented, “How to group students and keep track of who is/is not progressing.” Another participant said, “Training to give techniques for strategy groups.”

Ongoing, Strategic Training. The second theme stemming from question 2, addressed a need for continued training that will build teachers’ capacity around reading interventions. One participant said, “There should have

been more implementation training, especially with the program that is used. Instead of receiving professional development over the Tier 2 intervention program, new hires, and teachers new to the MTSS department simply received the same streamlined new hire training. Training was not implemented with fidelity, which left a slew of questions.”

Discussion

The first research question was, “How do teachers perceive the impact of their school’s established professional development on their ability to provide Tier 2 reading interventions?” The results of this study (Table 4) showed overall positive perceptions regarding teachers’ level of professional development of Tier 2 reading interventions ($M=2.2641$, $SD=.90122$). The means obtained from research question 1 ranged from 2.0556 to 2.6111 on a five-point Likert scale. A notable finding was that many teachers agreed or strongly agreed that they had received professional development prior to implementing Tier 2 reading interventions (82%); however, only 60% of respondents agreed or strongly agreed that RTI professional development is ongoing and consistent. This supports the review of literature that suggests that if a collaborative effort that includes ongoing professional development and shared leadership exists in schools, there is increased teacher self-efficacy and buy-in (Rinaldi et al., 2011).

The second research question was, “How do teachers perceive the impact of their school’s available resources and support on their ability to provide Tier 2 reading interventions?” The results of this question (Table 7) showed the mean, which ranged from 1.8611 to 2.8056. One notable finding from the results was that while respondents shared that they had training on resources and material, many lack the in-class support to give students. This finding was consistent with a study by Swanson et al. (2012) in which teachers expressed frustration with the lack of teachers or specialists to assist with the large numbers of students receiving reading interventions.

Another notable finding was the responses on statement number 22 which stated, I have sufficient time to plan for Tier 2 small group and individual student reading interventions. Only 58% of respondents agreed or strongly agreed with this statement. Findings were consistent with

Werts et al. (2014), which shared inadequate time as a barrier to effectively implementing reading interventions.

The open-ended questions allowed the researcher to gain insight into additional feedback and challenges teachers face when providing reading interventions. Four themes emerged from open-ended question 1: time-consuming, inadequate support, large numbers of students in Tier 2, and resources. Two themes emerged from open-ended question 2: additional support for grouping, and ongoing, strategic training. The most notable finding was that more than half of the respondents mentioned RTI as being a time-consuming process. This finding was consistent with a study by Werts et al. (2014) in which time being a problem or barrier was listed in a quarter of the statement responses.

Implications

The findings from this research study indicate that teacher perceptions surrounding Tier 2 reading interventions are essential in understanding what is working effectively for teachers and provides possible RTI reform efforts needed to better assist reading intervention teachers. The findings also reveal that teachers have the desire to see students succeed but may be overwhelmed with the time and number of students to service. This may indicate a need for ongoing, consistent professional development focused on Tier 2 reading interventions. As a result, the following implications for teachers and administrators should be considered.

Implications for Teachers. Several teachers expressed a need for additional training that goes beyond describing reading interventions but can equip teachers with the data and tools to monitor student regression and progression appropriately. As a result, the delivery of Tier 2 reading interventions can be more effective if teachers receive professional development that supports teachers not just at the beginning of the year but that is ongoing and specific to assist Tier 2 reading interventions. Several respondents expressed that they received training in the beginning of the year, but there should be training throughout the year to support reading intervention teachers with the knowledge to better analyze data and use the data results to provide lessons to support a student’s current level during interventions.

The results of the open-ended question revealed that teachers also need support with grouping their students and tracking students' growth or regression. Teachers can attend professional development sessions that allow time for the hands-on practice of using data to make informed decisions based on student's individual needs.

Implications for Administrators. Administrators should work to ensure interventions are streamlined. A consistent effort to make Tier 2 reading interventions a priority from administration can show staff and students that interventions are important. Many respondents in the study shared that there were large numbers of students in Tier 2 groups and not enough time to accommodate each student's individual needs properly. Administrators should create a yearlong professional development plan and seek to address the limited time available to adequately plan and execute interventions.

Recommendations

The insight and information gained from this study revealed teacher perceptions of Tier 2 reading interventions. Future research can expand on this study and help strengthen the fidelity of Tier 2 reading interventions.

Future studies on training and implementation of Tier 2 reading interventions can also be conducted. This study revealed that many teachers need more training on resources and how to group and monitor students. A study could be conducted to provide teachers with ongoing training to determine the impact of Tier 2 reading interventions.

Minority students represent an overwhelming number of students receiving reading interventions. As Snow et al. (1998) share, African American and Hispanic students have a greater risk of reading difficulty as compared to their White counterparts. A study can also be conducted to determine the effectiveness of Tier 2 reading interventions on students of color.

Conclusion

In conclusion, the findings in this study are substantial and suggest the need for the continued support of reading interventions within a Multi-Tiered System of Support. With insight into teacher perceptions of Tier 2 reading interventions, this study could provide researchers and school leaders with feedback to improve RTI programs. The feedback received could help administrators make decisions on resources, professional development, and instructional support needed to assist teachers. This study is significant to the literacy field as it may provide a context for understanding some of the issues reading intervention teachers face, therefore allowing administrators to make decisions about implementation in the future. Clarity of professional development opportunities, improving the reading abilities of students, and reducing the number of special education referrals can be some benefits of this study. Finally, the results of this study could provide school administrators with necessary recommendations based on survey results to improve the future of education for students receiving interventions and prevent issues from arising within the RTI school-wide framework.

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