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THE INFLUENCE OF RTI UPON SPECIAL EDUCATION ELIGIBILITY

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THE INFLUENCE OF RTI UPON SPECIAL EDUCATION ELIGIBILITY

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ABSTRACT

In 2004, the federal government gave states the option of using Response to Intervention as a prerequisite to referring children for special education eligibility for learning disabilities (Individuals with Disabilities Education Act, 2004). Research has generally supported this model although anecdotal evidence has suggested that the decrease in eligibility for learning disabilities is due to the reluctance of schools to refer children for learning disability eligibility because of the time required to implement the interventions prior to referral. The purpose of this study was to determine the influence that this model has had upon eligibility numbers in a large special education cooperative spanning 21 school districts. The study revealed that while the number of children eligible for services as a child with a learning disability dropped significantly over the past decade, the numbers of children eligible for other disability categories increased in a similar proportion.

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CHAPTER ONE: INTRODUCTION

Prior to Public Law 94-142, which was enacted in 1975, children with disabilities, including children with learning disabilities (LD), were not typically provided specially designed educational instruction. Changes in psychological and prevention research, public policy, and civil rights activism throughout the 1960s, prompted the federal government to ensure that children with disabilities were afforded a free and public education (Sadker & Zittleman, 2012). Since that time, the number of children with disabilities served in public schools has risen. Specifically, in 1980 there were about 4.1 million children served with special education and in 2014, the most recent year for which there are data, the number had risen to 6.5 million (National Center for Educational Statistics [NCES], 2016). Children eligible for special educational programming for learning disabilities had also risen significantly, from 35% in 1989 to 42% in 2004, the year that the special education law was changed. However, the number of children with learning disabilities in public schools in 2014 fell back to the 1989 level, to 35%, based on the most recent data available from the NCES (2016).

Under federal statute (Individuals with Disabilities Education Act [IDEA], 2004), learning disabilities are defined as a processing disorder involving problems understanding or using language that causes problems with listening comprehension, oral expression, reading, writing, or math. According to the IDEA, learning disabilities are not due primarily to problems with vision or hearing, motor deficits, an intellectual disability, or emotional disturbance. Cultural differences and environmental factors must be ruled

out as the primary cause of the problems as well (IDEA, 2004). Across the United States, children with learning disabilities comprise approximately 4.5% of all children in schools and about 13% of the children receiving special educational programming (NCES), 2016).

Prior to 2004, 49 states used an ability/achievement discrepancy to identify learning disabilities in schools (Sattler, 2008)—indeed, this method was consistent with the definition which required a discrepancy between a student's actual achievement and expected achievement (IDEA, 1999). However, research called into question the validity of this method of identifying children with learning disabilities (Hughes & Dexter, 2017). Specific problems with the IQ/achievement discrepancy model included over identification of students with learning disabilities, as well as a disproportionate representation of minorities in special education (Hughes & Dexter, 2017). Additionally, the IQ/achievement discrepancy method does little to provide information regarding whether or not classroom instruction meets an individual student's needs (Bradley, Danielson, & Doolittle, 2005).

Partially in response to the growing number of children identified with learning disabilities and the lack of consistency across the country regarding how to identify children with learning disabilities, the Federal government, in 2004, dramatically changed the way children with LD were identified. Under IDEA (2004), the Federal government started permitting schools to use a response to intervention (RTI) model as part of the eligibility criteria for learning disabilities. RTI, also referred to as Multi-Tiered Support Services (MTSS), is a multi-tier approach to the early identification and support of students with learning and behavior needs (National Center for Response Intervention, 2010). RTI begins with high quality, scientifically-based instruction in the

general education classroom and includes universal screening to monitor student academic progress over time. Furthermore, students who struggle to meet the goals of instruction through the regular education curriculum are provided with research-based interventions at increasing levels of intensity based on the individual needs of the student. Most RTI models consist of three tiers of intervention (Brown-Chidsey & Steege, (2010). The primary tier, or Tier 1, involves high-quality whole-group instruction using strategies that are research-based along with periodic screening to identify struggling students. Once students are targeted as performing below expectations, supplemental instruction is provided in the classroom, typically through the use of differentiated processes of new research-based interventions. If a targeted student continues to lack progress, that student is then moved into Tier 2. At the Tier 2 level, more intensive interventions are typically implemented in small group instruction, but the level of intensity and the size of the small group varies based on the needs of each student. Furthermore, students at the Tier 2 level are more frequently progress monitored using curriculum-based measurements. Tier 3 offers the most intensive interventions and is more individualized to each student's needs. Tier 3 is implemented when Tier 2 interventions do not produce an acceptable rate of progress for students. At this level, interventions are provided more frequently, in even smaller groups, and sometimes on a one-to-one basis. Tier 3 interventions target the student's specific skill deficits with a more narrow focus. Students are closely monitored in Tier 3 and those who continue to show a lack of progress are then referred for a special education evaluation. This model is different from the original refer-test-place model of eligibility determination in that children must be provided scientifically supported interventions prior to being determined eligible. Moreover, the child's inability to respond to the interventions is used as evidence that the child has a learning disability.

With the traditional model, children were referred when teachers believed the child was not keeping up with peers. Parent permission was obtained and the child was evaluated and provided special educational programming if they were eligible (Sattler, 2008).

Since the passage of IDEA (2004), the number and types of students with disabilities identified by schools has changed. After RTI implementation, there was an increase in special education referrals, but the difference was not statistically significant. However, there was a statistically significant decrease in the number of students identified with learning disabilities when comparing the pre-RTI implementation years to post-RTI implementation years (Kreider, 2010). Similarly, additional research conducted by Bollman, Silberglitt and Gibbons (2007) revealed a drop in the rate of special education placement from 4.5% to 2.5% after RTI implementation over a 10-year period. Conversely, other research has shown that the number of children identified under disability categories other than SLD has actually increased (Samuels, 2016). In particular, the number of students identified under the category of "other health impairment" has increased by about 51% over the course of 10 years. Furthermore, the percentage of students classified as having Autism over the same 10-year period rose 165% nationwide. However, students with learning disabilities remain the largest group of students covered under the IDEA, making up 45% of all students in special education in 2006 and dropping to 39% in 2015 (Samuels, 2016). Although Samuels did not provide an explanation for the cause, Grice (2002) suggested that the "OHI category often serves as a catchall to identify as eligible for special education services students who do not meet the qualifications for other, more clearly defined classifications . . ." (p.7).

The purpose of RTI under IDEA 2004, which is the reauthorization of previous federal laws (e.g. 94-142) was to give schools and states an alternative way to making

students eligible for services for learning disabilities. Rather than relying upon a discrepancy between intellectual ability and academic achievement, schools must consider the extent that the student responds to scientifically based instruction (IDEA, 2004). However, research has suggested that IDEA and the promises afforded by RTI have fallen short of its goals of reducing the number of children in special education. The purpose of this study was to explore the impact that IDEA has had upon the number of children in special education in a large rural special education cooperative in Southern Illinois.

Rational for the Study

The purpose of the current study was to investigate the impact that RTI has had upon the number of children provided special educational programming across 21 school districts in a rural special education cooperative in Southern Illinois.

Significance of the Study

If RTI is having its intended impact, then there should be fewer children eligible for special education services, which would save the district important finances that could be used in other areas, such as mental health service provision. If, on the other hand, the number of children determined eligible for services has risen, then school administrators will be in a position to either strengthen their policies vis-à-vis RTI or change the referral process.

Terms and Definitions

- Response to Intervention (RTI): RTI is an alternative method of identifying children with learning disabilities that is based upon the child's response (or failure to respond) to research-based instruction. Rather than basing eligibility on a discrepancy between the child's IQ and their achievement, a practice that was in

place in 49 out of 50 states when the law was passed (Sattler, 2008), eligibility decisions under RTI are based on the child's failure to respond to instruction.

- Specific Learning Disability (also referred to as Learning Disability: Under the Individuals with Disabilities Education Act, specific learning disabilities include a disorder of one or more of the psychological processes resulting in problems with listening, thinking, speaking, reading, writing, or doing math.

CHAPTER TWO: REVIEW OF LITERATURE

The purpose of this chapter is to describe the history of special education and the precursors to the current special education law that governs how schools identify children with specific learning disabilities. Response to intervention, which was enacted in 2002 as part of the IDEA act, will be described, followed by the benefits and limitations of this approach in current special education practice.

History of Special Education

Before federal legislation mandated special education in public schools, education for children with speech therapy needs, blindness, deafness, emotional or cognitive disabilities, and other special needs had few options. Often, parents had to pay for expensive private education or home school. Born from the civil rights movements, in which many of the advocates acquired their strategies, as well as inspiration to force the legislative movement to implement special education programs in public schools, the history of special education in the United States is relatively short compared to other education and social movements. Essentially, the history of special education in the United States starts around the middle of the 20th century when advocacy groups were formed by the efforts of parents who wanted to bring attention to the educational needs of their children with disabilities in public schools (Martin, Martin & Terman, 1996).

Prior to the 1960s, students with disabilities were either inadequately served or refused enrollment by public schools. School administrations deemed these children uneducable, and many that gained admittance were placed in regular education with no

difference in curriculum (Martin, Martin, & Terman, 1996). According to Wright and Wright (2007), administrators in most states excluded children from school if they believed that the child was unteachable or would be disruptive. Even as changes were made by the federal government in improving elementary and secondary public schools, this legislation made no provision for children with disabilities. According to Martin et al. (1996), in the 1960s, advocacy groups for children with disabilities wanted:

> (1), a single entity that would coordinate federal educational efforts for children with disabilities; (2) increased categorical funding, that is funding for the exclusive purpose of educating students with disabilities; and (3) an enforceable entitlement, which was eventually obtained through the courts (p. 27).

The President's Panel on Mental Retardation, created in 1961 by President John F. Kennedy, recommended that the United States government provide federal aid to the states in an effort to address the educational needs of students with cognitive disabilities. President Lyndon B. Johnson took the next action in 1965 when he signed *the Elementary and Secondary Education (ESEA) Act*, which gave funding for primary education, which overwhelmingly expanded access for children with disabilities in public education. The *ESEA* was one of the first federal initiatives to subsidize direct services to elementary and secondary public school populations. The intention of passing the law was to address the inequality for underprivileged children who were not provided educational opportunities. In 1968 Congress passed *Public Law 85-926* which funded research and college teachers in the field of disabilities. Four years later Congress extended *ESEA* when it enacted *Public Law 89-313, in 1965* which allowed children in state-supported or state-operated schools for the handicapped to be counted for purposes

of entitlement and benefit from special Title I funds in state schools (Martin, Martin, & Terman, 1996).

Even with the passage of the Education of the Handicapped Act or Public Law 91-230 of 1969 (Martin, Martin, & Bryan, 1970) which assisted states in establishing grant programs to develop resources and educational programs for children with disabilities, there were no specific mandates on how the funds should be utilized or how it would significantly improve the educational needs of children with disabilities. Following the cases of *Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (PARC)* (1970) *and Mills v. Board of Education of District of Columbia* (1971), which dealt with excluding children with special needs from public schools, including expulsion and suspension in schools, in 1972, Congress moved to investigate the problems that surrounded children with disabilities not receiving appropriate education in public schools (Wright & Wright, 2007). The Congressional investigation found that only a handful of the more than 8 million children with disabilities in public schools who required special education and related services were receiving an adequate education, leaving the bulk of children with disabilities receiving either no educational services or inappropriate education in public schools (Wright & Wright, 2007). Not only was this problematic for the children and their families, but also a burden on society, as Congress reasoned that taxpayers and public agencies would spend billions of dollars to minimally sustain acceptable lifestyles and dependencies for individuals throughout their lifetime. In addition, Congress concluded that with appropriate educational services, these individuals with disabilities would be able to increase their independence, contribute to society, and be productive citizens. This would ultimately affect the individuals and their families as these services would improve their

quality of life as well as their economic and social sustainability (Wright & Wright, 2007).

Finally, in 1975, the momentum of the 1960s led to major changes in the special education movement. The *Education for All Handicapped Children Act of 1975* or Public Law 94-142 was enacted into law. This law was later renamed the Individuals with Disabilities Education Act (IDEA) after the reauthorization in 1990 (Wright & Wright, 2007). With this law, the intention made by Congress was to provide all handicapped children (aka children with disabilities) the right to an education and to establish a process by which local and state educational agencies would be held accountable for providing all handicapped children with educational services. The main purposes of PL 94-142 were to ensure that all children with disabilities would be provided with a free and adequate public education that was designed to meet their needs. The law also ensured that the rights of children with disabilities and their parents were protected, assisted states by providing resources for educating children with disabilities, and provided for a means of determining the effectiveness of the efforts made in educating children with disabilities (Wright & Wright, 2007).

Currently, the number of students with disabilities in public schools has increased from less than 1% in 1977 to over 5% of the population in 2011. In the state of Illinois in 2011, of the 2 million students in public schools in metro areas, over 4% were classified as students with disabilities, while 268,000 students (or 6.4%) outside the metro areas were classified as having a disability (U.S. Department of Education, 2015).

Public Law 94-142 has been reauthorized and expanded several times since 1975 and the name of the law has changed several times as well. Currently, it is known as IDEA, or the Individuals with Disabilities Education Act. The most meaningful change

to IDEA occurred in 2004 when Congress again amended the law to increase its focus on improving research-based instruction, early intervention, and accountability by requiring highly qualified special education teachers (IDEA, 2004). The two main purposes of the newly amended act were to protect the rights of parents and children with disabilities, as well as provide appropriate educational programming to help prepare children for independent living, employment, and further education. This act required the investigation of the overrepresentation of minority students, mainly African American children in special education, which meant addressing the problems of high dropout rates and mislabeling. According to Wright and Wright (2007), schools with predominantly Caucasian students and teachers had a higher proportion of children of color receiving special educational programming. This is also supported by the Center for Public Education (CPE) that found that while African-American boys made up only 15% of the public school population in 2003, they accounted for over 20% of special education students, being twice as likely as their White counterparts to be mislabeled as students with disabilities (CPE, 2009).

Problems in Special Education

The implementation of No Child Left Behind Act (2001) encouraged states to create school accountability systems based on the annual assessments of students. This highly controversial federal legislation based on student achievement has yet to yield a difference in results prior to its implementation. For example, Dee and Jacob (2011) researched the effects of NCLB on student achievement based on the test scores from the National Assessment of Educational Progress (NAEP). They expanded past literature by examining factors such as free-lunch eligibility, gender, race, and other factors that affect student achievement. In their study, they found that NCLB produced large, statistically

significant increases in the achievement of fourth graders that were largely concentrated among Hispanic and White students, and for those who qualified for subsidized lunches. In addition, they found NCLB produced more targeted and moderate improvements in math among eighth graders. However, they found no reliable or consistent evidence that NCLB improved fourth graders' reading achievement. In general, while these results are good for advocates of NCLB, they also provide evidence that NCLB produces no significant improvements for children in special education programs. They noted:

> …furthermore, the lack of similarly large and broad effects on reading achievement, and the fact that NCLB appears to have generated only modestly larger impacts among disadvantaged subgroups in math (and thus only made minimal headway in closing achievement gaps), suggests that, to date, the impact of NCLB has fallen short of its ambitious "moonshot" rhetoric (p. 240).

As part of the Elementary and Secondary Education Act (ESEA) reauthorization, NCLB was a method to expand the historically limited scale and scope of federal involvement in K-12 education. NCLB's main requirement was for states to introduce school accountability systems that applied to all students and public schools in the state. In addition, NCLB was to finally include students with disabilities in district-wide and state assessments, even though this was a requirement of IDEA (1997). According to the Advocacy Institute (2007), "for at least 10 years IDEA has required all eligible students to be provided an individualized education program (IEP) designed to meet their instructional needs and enable them to make progress in the general education curriculum" (p. 2). However, it was not until the passage of NCLB in 2001 that states, schools, and school districts finally began to incorporate special education students into

states' accountability systems to report their performance. As indicated by multiple research studies, children entering schools have diverse needs, and teachers simultaneously must hold to higher academic standards − for special needs students, this can be daunting. According to Noltemeyer and Sansosti (2012), "Given the increased challenges of student diversity, coupled with the failure of traditional models to improve student assessment outcomes, educators have begun searching for new ways to serve students more effectively within this accountability paradigm" (p. 118). This is why a number of initiatives such as School-Wide Positive Behavior Support (SWPBS) and Response to Intervention (RTI), both of which were initiated in 2004, were aligned with these specific goals to better improve student achievements.

Alternatively, requirements from NCLB have led to the development and improvement of accommodation policies for students with disabilities to highlight what they have learned and to attain the standards based on their grade levels. Even with these requirements, NCLB has further exposed many of the challenges and problems in special education, such as highlighting the lack of highly qualified teachers. IDEA's many purposes were to ensure that students with disabilities would be provided with instruction from both special and regular educators that have the academic content knowledge in their teaching field. However, there remains a large achievement gap in students with disabilities. The passage of NCLB provided the requirement that schools implement accountability systems, in which many schools have created their own, but still fail, as they are both incoherent and fragmented. As Dee and Jacobs (2011) found, many of the schools that serve at-risk students have been inadequately focused on their core performance objectives, while neglecting accountability of school administrators and teachers that are reflected in their weak incentives (Dee & Jacobs, 2011). Prior to NCLB

in 1992, the state of Illinois had no type of accountability. However, their repercussions from 1999 to 2000 were moderate, and the accountability systems implemented in 2000 and beyond have been stronger (Dee & Jacobs, 2011).

Despite years of federal legislation, students with disabilities are still left behind. Data from "… the past five years indicates that students with disabilities were left behind or not considered in the effort to raise standards and improve instruction in our nation's public schools" (Advocacy Institute, 2007, p. 4). For example, the grades earned by students with disabilities in secondary education were not correlated with real academic functioning or how well the student was performing. In addition, during the 2001-2002 school year only 51% of students with disabilities graduated with a standard diploma, while close to 38% ages 14 and older dropped out (Advocacy Institute, 2007). Additionally, the U.S. Department of Education in 2015 found that there have been significant increases in the number of students with disabilities.

Conversely, research has shown that schools with accountability systems in place for each student, particularly students with disabilities, graduated more students − 68% in 2011 vs. 57% in 2002 (Harr-Robins, Song, Garet, & Danielson, 2015). In addition, schools that had stricter accountability provisions saw students with disabilities transferred into mainstream classrooms from special education tracks at higher rates. Lastly, the 7 million-student population of diverse students with disabilities are receiving education in regular schools at 95%, compared to only 20% in 1970. While there have been numerous criticisms of NCLB, what the legislation did provide was needed information concerning the performance of students with disabilities in schools that was not available years prior. These annual assessments have supplied educators with significant data that is used in improving and developing education programs.

Response to Intervention

With the passage of The Individuals with Disabilities Education Improvement Act (IDEA) in 2004, Congress provided a revised and seemingly improved version over its predecessor. The reauthorization has provided an alternative means of identifying students with specific learning disabilities (SLD), which is not mandated, but left up to the schools to decide ways to provide effective intervention for students with learning disabilities. According to IDEA, "In determining whether a child has a specific learning disability, a local educational agency may use a process which determines if a child responds to scientifically research-based interventions" (Daves & Walker, 2012, p. 69). Prior to IDEA, in the late 1970s, students with learning disabilities were determined eligible using achievement and student IQ. However, as indicated by Berkeley, Bender, Peaster, and Saunders (2009), "another problem is that students with SLD often go unidentified until the upper grades and are left struggling academically until the discrepancy becomes significant enough to warrant eligibility" (p. 85). This has encouraged schools to apply a "wait to fail" initiative, which provides limited information that does not help in developing plans for remediation. Since the late 1970s, the number of students who were categorized as having specific learning disabilities has increased substantially (200%). That creates an area of concern over misdiagnoses with false positives and/or negatives, and over-identification of average or below average achievements from IQs (Berkeley et al., 2009).

The core of special education for students with learning disabilities is to provide intensive instruction, regardless of the structure of services. According to Vaughn, Zumeta, Wanzek, Cook, and Klingner (2014), the majority of students who have learning disabilities are not supplied instruction that is appropriate, which consists of

individualized and intensive interventions based on evidence-based practices. The best available research evidence suggests that for special education programs, students must be provided with individualized and intensive interventions that assist in improving their areas of need, making progress toward standards, and providing successful access to general education curricula. RTI is not a new concept—it dates back to the early 1960s. However, relatively new to parents and most educators, it is considered a model for student-centered assessment which primarily uses research-based methods and problem solving to address and identify the learning difficulties in students. The implementation of the RTI model in schools differs greatly from the concept of accommodation, as noted by O'Connor and Freeman. Using the definition of continuous school improvement from Bernhardt and Herbert (2011):

> continuous school improvement is the process of improving the school organization on an ongoing basis that includes using data to define the current status of the system and establish system goals, analyzing causes for current status, planning system actions to achieve goals, and evaluating results routinely to guide system decisions (p. 298).

Much like the core components of special education, RTI's core components consist of the fidelity of instructional interventions, research-based interventions, continuous progress monitoring, universal screening, and providing high-quality classroom instruction (Berkeley et al., 2014; Brown-Chidsey & Steege, 2010). Thus, RTI presented educators with a promising framework for the early identification and prevention of behavior and learning problems for struggling students. More importantly, RTI reform for special education has the potential to provide students with learning difficulties the benefit of both intensive instruction and an accommodation component,

which yields the best approach to early prevention. RTI is neither an initiative nor a program, but rather a process that is implemented district-wide in all educational decision-making. The implementation of RTI requires significant reform in the educational instruction that consists of changes in the way educators think and act at levels of the multi-tiered system.

Unlike using IQ/achievement discrepancies through which children with learning disabilities were identified, schools were now able to use RTI as an alternative means of supplying early intervention for at-risk students from failing in school. Martinez, Nellis, and Prendergast (2006) defined RTI as, "an integrated, schoolwide method of service delivery across general and special education that promotes successful school outcomes for all students" (p. 1). A twofold system of frequent formative assessment and reliable, high-quality instruction of student progress involves evaluating the systematic cause and effect correlation between behavioral or academic intervention and the response to the intervention from the student. The process of RTI was provided in order to be a potential remedy to the original eligibility process that is based on calculating the discrepancy between achievement and ability, in addition to identifying a deficit in processing (Shinn, 2007). Adopted throughout the country in various degrees, RTI provides interventions to struggling students in the general education curriculum. Students who are successful because of the interventions then are able to continue with the general education curriculum. However, for students in which interventions fail, alternative interventions would need to be implemented, including testing for special education (Martinez & Young, 2011).

Students who are labeled as at risk are identified based on various criteria, such as the year-before academic performance information. For example, students that score

below the 20th percentile are identified as at-risk. When at-risk students are identified, they are monitored for their responsiveness to general education. Students who are unresponsive to classroom instruction are then provided with even more intensive classroom intervention at a second-tier level. Students are then assessed further, as RTI assessment provides a dynamic assessment that is based on progress monitoring, which assists educators' efforts in creating early intervention and identifying children with learning disabilities (Brown-Chidsey & Steege, 2010; Fuchs & Fuchs, 2006). In short, RTI follows a three-tier system (Tier 1, Tier 2, and Tier 3), which provides a rigorous process to help in the decision-making process while also establishing a more valid framework for effectiveness or the student responsiveness to the instructional intervention (Saeki et al. 2011). Special Education Eligibility is typically Tier 3.

Benefits of RTI

According to Fuchs and Vaughn (2012), "RTI's greatest accomplishment to date may be the dramatic increase in schools' routine reliance on screening to identify students at risk for reading and increasing math difficulties" (p. 196). Research has shown that RTI has the potential to solve numerous problems that the IQ-achievement discrepancy model could not. It provides poorly performing students with individualized instruction that differs from the inadequate instruction to which they were exposed, thus, further differentiating students who have true disabilities from students who perform poorly due to lack of proper education. RTI works better at distinguishing between poor instruction and students with learning disabilities and could potentially lead to a reduction in inappropriate special education enrollments and referrals (Orosco & Klinger, 2010). RTI consists of providing a high-quality classroom environment and school, a scientific core instruction and core curriculum, and intentional practices for beneficial instructional

approaches. Finally, in order to receive support, the student does not need to be identified as learning disabled; nor is it contingent on the student's level of intelligence.

As indicated, educators turn to the RTI framework because educators believe students should have access to opportunities to be served before being formally labeled or identified (Kashima, Schleich, & Spradlin, 2009). RTI fosters the ability to identify and label students correctly through the cultivation of collaboration; it helps to lead educators from operating within the concepts of compensatory, special, and general education to a more integrated system that meets the needs of students. As such, in "Response to Intervention, Collaboration and Co-Teaching: A Logical Combination for Successful Systemic Change," Murawski and Hughes (2009) indicated:

> The other key feature of the RTI paradigm shift is the moving away from providing specialized instruction only after a child has failed enough to qualify for services, which is reactive in nature, to using a proactive approach, which can help to prevent a problem before it happens (p. 268).

Like many interventions, RTI promotes co-teaching to be effective at classroom management. It also encourages student self-regulation, cross-curricula connections, differentiated and scaffolding instruction, and balanced teaching of skills as effective in identifying students with disabilities (Murawski & Hughes, 2009).

For the state of Indiana, Kashima, Schleich and Spradlin's research showed that with the implementation of RTI in a majority of their schools, over 80% have received their levels of competency in the areas assessed (2009). RTI's key features have been found to foster student growth by translating across all disciplines such as consistent organizational and instructional routines, explicit instructional strategies, and clearly defined statement of scientifically based research. Furthermore, RTI implementation has

been found to increase student academic performance based on differing models and frameworks. As Ehren (2013) indicated, "When stakeholders in the RTI process join forces in a variety of collaborations, the synergy created can influence a broad array of infrastructures and practices, resulting in high-quality RTI implementation system wide" (p. 452). RTI works as a framework for comprehensive improvement in schools that consists of a complex system with numerous moving factors. RTI requires high fidelity, but also integrity in the screening and monitoring process – both of which are critical components in the behavioral and academic interventions that have significantly improved the achievements of students (Keller-Margulis, 2012). As Kashima, Schleich, and Spradlin (2009) indicated, RTI fidelity in general education provides the components of decisions in regard to instruction and curriculum based on data; the monthly monitoring of student progress; data results compared against goals; assessments; systematic curriculum, direct instruction, and systematic curriculum.

In a four-year longitudinal study conducted on the outcomes of K-3 students who had access to RTI Tier Two intervention compared to those who were in general education, O'Connor et al. (2013) found a significant increase in reading achievement for those in RTI Tier Two intervention. Following the process of RTI identification, over time, their referrals dropped, and those that were referred increased in eligibility, which provided a more culturally and linguistically diverse representation of students (O'Connor et al., 2013). The authors noted that educators trained in RTI implementation would lead to better differentiation in instruction across tiers, which improves student responsiveness to the interventions, thus, decreasing the need for referrals to special education program placement. At the core of RTI is progress monitoring—the primary tool for representing student development as well as for teachers to plan for instruction

that is more effective. It also yields additional benefits, such as the capability to estimate the rates of improvement while identifying the students who are not making adequate progress, and the capability to compare the effectiveness of the different approaches to instruction in the efforts to create more individualized and effective instruction (National Center on Response to Intervention, 2010).

As indicated by Hoover (2010), several core components of the RTI approach are integral in special education eligibility. With proper implementation and response intervention, referrals to special education and eligibility decisions are appropriately made. A major benefit of RTI implementation is the value placed on providing a rigorous and systematic referral process and a reduction of placement of special education students in grades K-3 (Hoover, 2010). According to Hoover, "Tucker and Sornson (2007) found that use of instructional support teams to provide early intervening services reduced special education placements, especially for minority students, by 45%" (Hoover, 2010, p. 290). RTI implementation also provides struggling students with the opportunity to receive assistance immediately, rather than waiting until the students display a pattern of behavioral or academic difficulties. RTI places emphasis on the early and preventative intervention measures rather than taking a "wait-to-fail" initiative, which characterizes the IQ-achievement discrepancy model. The RTI model places a greater reliance on actual results for achievement, such as the progress rate, and rather than using a standardized achievement test to determine progress, RTI uses curriculum-based measurement. It provides universal screening for early identification of struggling or at-risk learners. RTI is the preferred intervention model due to many of its core components. While popularly focused on reading comprehension, RTI can be applied to other areas of education such as the vast majority of research, social studies, mathematics, and science

(Kashima, Schleich, & Spradlin, 2009). More importantly, through early detection and identification of academic difficulties, RTI can better serve a large, diverse group of underachieving children, which would otherwise experience delayed intervention that would increase debilitating problems throughout school (Hale, Kaufman, Naglieri, & Kavale, 2006).

Hoover, as well as other researchers, placed emphasis on numerous benefits that RTI provides in the field of special education because students will be able to receive immediate help based on their level of difficulty while also looking not at the intrinsic deficits, but the performance of the classroom, as well as closely monitoring the progress of the learner. Educators will only choose to make decisions on instruction based on data from progress monitoring and when making the necessary adjustments to instructions; the learner will still be able to receive assistance. All Tier 1 and 2 data for progress monitoring and ongoing intervention results provide the special education comprehensive evaluation team with valuable information, that will further provide schools with more accurate information and data about the student. This leads to a more adequate and accurate decision about referral, and an informed decision concerning eligibility. When asked why RTI was included in IDEA (2004), this significant advantage of RTI was stated directly from the U.S. Department of Education (2007), which was effectively answered, "Such as RTI, that more accurately distinguish between children who truly have SLD from those whose learning difficulties could be resolved with more specific, scientifically based, general education interventions" (p. 2).

Limitations of RTI

Although RTI strives to provide students with learning disabilities the interventions that will assist in improving student performance, there are many

limitations that still lead students with disabilities to be less than successful. According to Vaughn et al. (2014), "many students with LD do not make the academic progress needed to meet grade-level expectations and to succeed in postsecondary settings" (p. 90). In addition, a long-held criticism of RTI implementation is its effectiveness in diagnosing specific learning disabilities, which excludes unexpected learning failure as part of the identification process. This could be due to the presence of above-average or average cognitive abilities of the students who would be documented, as RTI does not take general cognitive ability into consideration in its decision-making. As a result, learners who are particularly slow to catch up are designated as students with learning disabilities. RTI limitations revolve around many factors that could be improved on, including the need for a role for special education that adequately supports prevention, a multistate assessment in determining the appropriate levels of instruction, and a need for a multistage screening to properly assess risk for referral to special education programs.

Furthermore, models of RTI consist of intervention that applies only modest empirical validation, which provides results that present non-responsiveness, rather than the absence or presence of underachievement (Berkeley et al., 2014). According to Berkeley et al., RTI cannot provide adequate differentiation of students with SLD from other disabilities such as Attention-Deficit/Hyperactivity Disorder, behavioral or emotional disorders, or mental retardation (Berkeley et al., 2014). This could be a potential failure of administrators, and congress members who passed IDEA before enough information was made available about how to implement RTI into practice properly. Even with guidance from educational agencies, professional organizations, and researchers to schools, districts, and states about how to implement RTI as an early intervention system delivery, many of the school personnel are still apprehensive about

RTI's effectiveness. A major criticism made is that RTI does not take into consideration mitigating factors that students face in school, including socioeconomically, linguistically, and culturally diverse student populations (Orosco & Klingner, 2010).

In addition to these prescribed limitations, O'Connor and Freeman (2012) expanded on the notion that RTI implementations throughout the country have been an ongoing effort made by a majority of schools, but many are not seeing significant improvement in achievement or behavior. O'Connor and Freeman (2012) stated, "the effect sizes reported for research studies of RTI are less consistent than many of its supporters profess, and those studies reporting strong results are likely to have levels of treatment fidelity that are atypical" (p. 297). Much of the psychology literature for schools provides a substantial amount of information in regard to the specific technical aspects and the framework for RTI but does not discuss the same rate as a system-level structure. A majority of districts and schools have placed effort into implementing RTI interventions in their schools over the past decade but have yet to see progress toward an improved outcome for students.

While some schools have found the expected results, many are lost when managing the components and implementation of RTI. Orosco and Klingner (2010) studied how the RTI model was implemented within an urban elementary school for a large percentage of Latino English language learners who had reading difficulties. A sample population consisting of 43 white female staff members between the ages of 30 and 60 holding advanced degrees, including a principal and 21 K through 5th-grade teachers, was observed over a five-month period. The team met with 10 RTI team members, observed how they instructed their classrooms, and assessed the process of

student functions, and those recommended for further intervention. The findings showed that there were limited resources, inadequate teacher preparation, a negative school culture, and a misalignment in instruction and assessment (Orosco & Klingner, 2010). The focus of the qualitative, in-depth study sought to highlight the perceptions of the school personnel toward RTI implementation within their school. Consisting of the teachers' training, professional development, judgments, beliefs, and understandings, the authors wanted to determine how these factors influenced the decision-making process of RTI by examining the problem-solving meetings and classroom-based literacy instruction.

While this study differs in the subject of special education and learning disabilities, the study indicated that English language learners are at a disadvantage compared to the majority. They achieve lower levels than the majority in literacy compared to their non-English learner peers in addition to dropping out of school in greater numbers (Orosco & Klingner, 2010). For those students who are also a part of special education, the core problems are reading difficulties, and speech and language impairment at 56% and 24%, respectively. Potentially, RTI should provide ways to support English language learners at the first signs of reading difficulties.

Many researchers believe that culturally and linguistically diverse students are disproportionately represented in special education and that a move toward the RTI model from a discrepancy model is a means of remediating some of the factors for disproportionate representation. However, little additional research has been conducted with English language learners, especially English language learners with specific learning difficulties concerning the effects of RTI implementation. For educators, there are also challenges with those who are not properly trained in working with English

language learners (O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013). According to the authors, "many lack the understanding of the second-language acquisition process and how to distinguish between acquisition and LD" (Orosco & Klingner, 2010, p. 270). More so, educators lack knowledge in effective assessment and instructional practices for English language learners. The findings of the study show that the RTI model was insufficient in providing a response to the literacy and learning needs of its students. The factors of weak resource support and professional development led to the improper identification of students for further interventions based on instructional deficits, and not on student qualifications.

Educators and school administrators are familiar with referring children to special education due to child deficits instead of evaluating other factors or the instructional context that could affect the students. In linguistically and culturally diverse schools there is little attention paid to the learning environment during RTI implementation, in which a "one-size-fits-all" mentality is applied without regard to the ecological validity and issues of the population. Orosco and Klinger (2010) further explained that most of the recommendations for teaching English language learners, whether intentional or not, place emphasis on the commonalities between learning to read in a student's first and second language while downplaying the differences that are significant in English language learners, and their native English language counterparts. This provides the impressions to educators that they can apply the same instructional approaches and assessments given to English-only students, as well as English language learners. In addition, this can be found to be similar for educators of special education students when evaluating their student performance and learning abilities.

Summary

While there are limitations, weaknesses, and ways to improve RTI, currently, the model remains the most fluid and appropriate in helping to identify students who might have learning disabilities. Numerous studies over the past decade or so have clearly supported this model. Conversely, it has its critics, especially when considering that while it was designed to decrease the number of children identified with learning disabilities, the number of children determined eligible for other categories has actually risen dramatically. This could be due to a reluctance on the part of schools to access, implement, or provide the interventions needed prior to referral. In Kentucky, for example, where RTI is required prior to any referral to special educational programming (not only LD as in most of the country), the special education numbers have remained stable (KDE, 2016).

CHAPTER THREE: METHODS

The purpose of this chapter is to describe the methodology used in this study. It includes a discussion of the procedures used to obtain the data as well as the hypotheses. A discussion of the analyses used to test the hypotheses is also provided.

Procedures

The school data used in this study were obtained from archives stored electronically in the superintendent's office at the Wabash Ohio Valley Special Education District. Wabash and Ohio Valley Special Education District is the special education cooperative that provides and coordinates special educational services to 21 school districts covering nine counties in Southeastern Illinois. For the 2015-2016 academic year, there were 15,128 students in these districts of which nineteen percent were receiving special educational services. For this study, each district's total school population and percentage of students receiving services from academic years 2003-2004 through 2014-2015 were obtained from electronic archives and entered into a computer-based statistics program. Additionally, the percentage of the total special education population eligible for services under the learning disabilities, other health impairment, developmental delay, intellectual disability, autism, and emotional behavioral disability categories was calculated and entered as well.

Hypotheses

First, it was hypothesized that the overall percentage of students eligible for special educational programming would decrease between academic years 2003-2004

and 2014-2015. Nationally, learning disabilities constitute about 50% of the students receiving special education services (citation needed); therefore, the overall percentage of students receiving special education services was expected to decrease following the implementation of RTI. Second, it was hypothesized that the percentage of students identified as eligible under the learning disability category in particular would decrease from years 2006-2007 and 2014-2015 since a failed RTI is required as part of the eligibility process for learning disabilities. RTI programs were implemented across all 21 WOVSED districts during the 2007-2008 academic year. Students determined eligible for services under the learning disability category prior to the 2007-2008 academic year were not required to fail RTI prior to referral; therefore, the true effect of the benefits of RTI in reducing the number of students identified under this category were expected to decrease post-RTI mandate. Lastly, it was hypothesized that percentage of students identified as eligible under Other Health Impaired, Developmental Delay, and Autism categories would increase between academic years 2006-2007 and 2014-2015. When RTI is required as a prerequisite to learning disability determination, other disability categories which do not require RTI could conceivable increase.

Analyses

To test the three hypotheses, a series of paired samples t-tests were calculated using SPSS. To control for alpha slippage, the more conservative .01 level of probability was adopted as an indication of a statistically significant difference.

CHAPTER FOUR: RESULTS AND DISCUSSION

Results

The overall student population across the 21 districts for the 2003-2004 academic was 16,248, of which 17.8 per cent were receiving special educational interventions. The mean number of students for the 21 districts for the 2003-2004 academic year was 774 (*SD* = 579). For the 2014-2015 academic year, there were 15,128 students, nineteen percent of whom were receiving services. The mean number of students for the 21 districts for the 2014-2015 academic year was 720 (*SD* = 532).

The percentage of all students with a disability identified as having a learning disability in 2006-2007, the last year that RTI was not required, was 41.9%. In 2014-2015, the last year that data were available (and seven years after RTI was implemented), the percentage of students with learning disabilities was 28.9%. Results of the paired samples t-test was statistically significant ($t = 4.33$. $df = 20$, $p = .000$) indicating that the number of students identified with learning disabilities dropped significantly from 2006-2007 to 2014-2015.

Next, comparisons in eligibility numbers across the different disability categories were made by examining the graph and raw data which describe fluctuations in percentages of the number of students served across the remaining disability categories over the past 12 years—that is, from 2006-2007 to 2014-2015 (see Tables 1 and 2). As noted in Table 1, the number of children served under learning disabilities, autism, other health impairment, and developmental disabilities appeared to change the most over time.

However, statistical comparisons were made across all five special education categories (see Table 3). Again, paired samples t-tests were calculated and the .01 level of significance was employed to control for alpha slippage. First, regarding autism, the number of children served under this category rose from 1.9% to 4.1%; this change was statistically significant (t = 3.17. df = 20, p = .005). Next, regarding other health impairment, the t-test (t = .1.79, df = 20, p = .088) revealed no statistically significant change from 2006-2007 academic year to 2014-2015 academic year (although the percentage actually increased from 13.9% to 17.7%). Regarding developmental delay, results of the t-test were statistically significant (t = 6.59, df = 20, p = .000). Here, the percentage of students receiving special educational programming for developmental delay increased from 3.1% to 13.1%. Next, students receiving services for cognitive impairment decreased from 5% to 2.9% (t = 3.03, df = 20, p = .006). Lastly, although the percentage of students receiving services for an emotional disorder decreased from 5.3% to 4.3% (t = 1.05, df = 20, p = .309), this was not statistically significant.

Discussion

The results of this study revealed a 1.2% increase in the number of students served in special education over the last 10 years, suggesting that the need for services has slightly increased over time. If RTI had been effective, then the percentage of children served in special education should have dropped, especially when considering that the actual number of children enrolled in the 21 school districts actually dropped about 1.5%. However, there was a significant drop in the number of students identified with learning disabilities among 21 school districts in rural Southern Illinois. This is consistent with Kreider's research in 2010, in which the number of students identified with learning disabilities dropped after RTI implementation in rural Pennsylvania.

However, it is unknown whether the drop in numbers is due to the effectiveness of RTI or if there are other explanations. For example, results of this study also showed an increase in the number of students eligible under the categories of other health impairment, developmental delay, and autism. In fact, the increase in these other categories was quite similar to the decrease in the LD percentage. Samuels' 2016 research yielded similar results demonstrating nationwide growth of the number of students classified as having autism or an "other health impairment" over the last decade, while the number of students in special education remained fairly consistent. This suggests the possibility that categorization for many students has only shifted from the eligibility of learning disability to other categories. One explanation for the reclassification could be policy changes that have mandated more accurate assessment of students who receive special education services. On the other hand, the shift could be attributed to the fact that special education categories other than LD typically require less intensive documentation to support eligibility. For example, in the state of Illinois, a student can qualify for services under the categories of other health impairment or autism with a medical diagnosis and documentation from the teacher that the student is struggling either academically or behaviorally in the school setting. Furthermore, a student can be classified as developmentally delayed with any standardized score that falls in the below average range for its respective domain, without any required documentation of a lack of improvement over time. Though documentation of student progress is recommended along with each intervention, it is not required for any eligibility other than Specific Learning Disability in Illinois.

In summary, it is clear that the number of children identified with learning disabilities and cognitive disabilities in this coop decreased significantly but that the

overall number children identified actually increased slightly. More importantly, the number of children identified in other categories actually increased, some significantly (e.g., developmental delay and autism).

CHAPTER FIVE: IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

Implications

Despite introduction of the Response to Intervention model in Illinois, school districts in this study have seen a slight increase in the number of students being served in special education as well as a significant shift in eligibility classifications. This raises the question of whether or not the number of students with disabilities has truly increased or if the interventions being provided are not suitably meeting the specific needs of students. Interestingly, despite the rise in numbers, the percentage of students categorized as having a specific learning disability and a cognitive disability has decreased. One could argue that an eligibility determination of LD has become a "last resort" category for many educators simply because the process of collecting the data to support it is too timely and costly. Therefore, it is possible that other categories, such as DD, OHI, and Autism are becoming favored because they require much less documentation to support eligibility from an educational standpoint. In fact, this seems to be the most defensible and rationale interpretation of the data, primarily because there were no other changes in the law governing referrals and because the proportion of children served actually increased while the entire population of children in these schools decreased. Put another way, the percentage decrease in children served with LD was quite similar to the percentage increase in children served in other categories. If RTI was effective, there should have been a drop in the LD percentage only, with no other changes in percentage in other categories. This interpretation, then, implies that either children with LD were

over-identified initially or that they are now simply being served under another, more easily documented category of special education. The problem may become fully realized when those children who actually have a learning disability, but served under another category, apply for and are denied accommodations and services at the post-secondary level.

These findings also beg the question—does it really matter what the eligibility category is as long as the student is receiving services? Perhaps this does not matter for the individual student, beyond the argument stated in the paragraph above, as long as the student is receiving services based upon their functional limitations. However, because state and federal funding is based upon eligibility categories, this funding could now be based upon misleading data which could result in the hiring of teachers to address the needs of special education students *other than LD*, resulting in the hiring of teachers who are ill-prepared to actually work with students with learning problems. Similarly, if "corners are cut" in an effort to make a student eligible for generic services, this undermines the idea of "special" education and ultimately fails all students who have specialized learning and behavioral needs. Indeed, it is easy to argue that the bureaucracy of interventions is cumbersome, confusing, and time-consuming and teachers are tasked with numerous responsibilities—for general educators, the idea of providing special educational interventions can be daunting and frustrating. However, the data requirements under RTI are there for the purpose of determining the students' needs and are not in place to necessarily facilitate easy eligibility. Decisions on who should implement the required pre-referral interventions and how, when, and where they should be implemented, should rest with administrators, for the administrators are typically held accountable for the success of their students and the functioning of their respective

schools. When considering the ideas described above, school districts should consider the use of data collection methods and intervention programs that are user friendly and easily implemented in tandem with daily classroom activities. By providing school personnel with tools to make intervention and progress monitoring easier and more convenient, the likelihood of good data collection will increase.

Another factor to consider when considering why there may be a shift in categorization is the types of educators implementing the interventions and collecting the data. Naturally, a behaviorist may take a more behavioral approach when collecting and interpreting data, while a reading specialist might look more closely at specific areas of reading deficits rather than focusing only on the fact that a student is not reading at grade level. For this reason, it would be beneficial for a school district to consider educational backgrounds of RTI coordinators and consultants when selecting RTI teachers and/or interpreting their data in regards to making eligibility determinations. Furthermore, once schools are confident that the data being collecting are accurate and measurable, it can be used to make important staffing decisions regarding the need for specialized teachers.

Limitations

This study, like all studies, has limitations that can hinder generalization—some limitations are geographic and some are procedural or policy related. First, the data for this study were obtained from a special educational cooperative in South-Eastern Illinois. This cooperative, which serves, 21 school districts across 15 counties, is largely rural, agricultural, and Caucasian. As a result, the findings may not generalize to the remainder of the state, region, or country. Second, these 21 school districts are governed by 21 different school boards and school superintendents. As such, the policies and procedures governing RTI implementation, special education referral, and special education

eligibility are not uniform but rather diverse. Third, there was no way to determine if the decrease in LD eligibility was due to a lack of referral for LD eligibility, to the effectiveness of RTI, or to some other factor. It can be reasoned, however, that because the number of children served under OHI, DD, and autism actually increased in roughly the same proportion as the number of children with LD has decreased, that the onerous prerequisite of providing interventions prior to eligibility may have inadvertently decreased the number of referrals for LD. Additionally, it is important to point out the "catchall" nature of OHI (see Grice, 2002) and the fact that students with OHI (the category typically used for children with ADHD) are required to have behavior goals and not academic goals. Essentially, eligibility for OHI, and indeed for DD and autism is easier to obtain, both from the teacher's perspective and the school's perspective. Lastly, issues of treatment fidelity have plagued RTI efforts in the past (Noell et al, 2005; Wickstrom, Jones, LaFleur, & Witt, 1998) and without data specifically addressing this issue, it is difficult to determine if interventions for SLD prior to referral for eligibility may have played a role in decreasing the numbers (or, if the requirement that interventions prior to referral must be in place may have prevented some referrals).

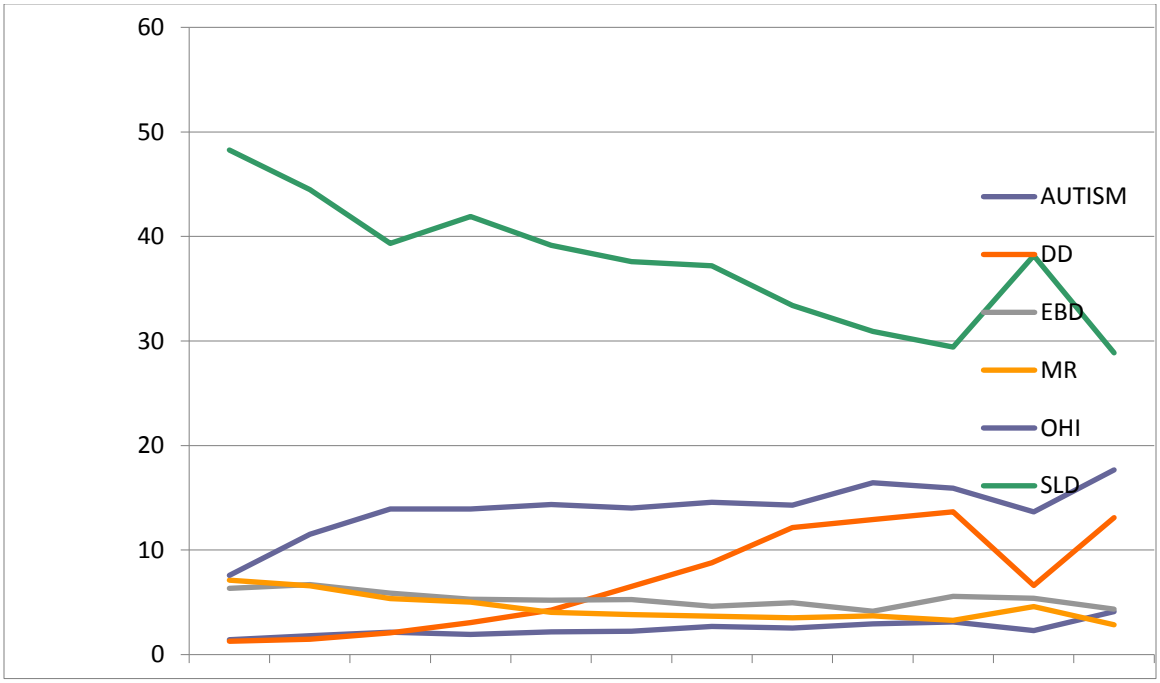
Recommendations for Future Research

Findings from this study suggest further research is needed in order to generalize the results across the entire population of students being referred for special education. Expanding this research across the state and region (or even country) would provide researchers the opportunity to explore whether or not these results are becoming a trend. Additionally, a more diverse population of students would help with generalizability. The population of students included in this study were primarily Caucasian and from rural, largely impoverished districts. A more economically diverse population would help with

understanding and generalizing the results as well. For example, it could be that lack of funding could be influencing these findings. Another consideration for future research includes assessment of each school district and its policies for RTI implementation, special education referral, and special education eligibility procedures to determine how differences among school districts in implementing RTI procedures affects the number of students eligible under specific categories. It would also be helpful to examine the difference in the number of referrals made versus the number of students found eligible across districts. Finally, to address concerns with unknown treatment fidelity, future research is recommended to look more closely at each district's RTI model with a focus on average student time spent on research-based interventions and small group size comparisons across districts.

Table 1

Line Graph Indicating Trend of eligibility Numbers Across six Categories from 2003-2—4 to 2014-2015.



Note: DD = Developmental Delay; EBD = Emotional/Behavioral Disorder; MR = Mental Retardation (aka Intellectual Disabilities and Cognitive Impairment); OHI = Other Health Impaired; SLD = Specific Learning Disabilities.

Table 2

Average Percent of Students Receiving Services by Disability (rounded)

	Academic Year											
Disability	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
LD	48	45	39	42	39	38	37	33	31	29	30	29
OHI	8	12	14	14	14	14	15	14	16	16	17	18
DD	1	2	2	3	4	7	9	12	13	14	12	13
Autism	1	2	2	2	2	2	3	3	3	3	3	4
ED	6	7	6	5	5	5	5	5	4	6	4	4
CD	7	7	5	5	4	4	4	4	4	3	3	3

Note: LD = Learning Disabilities; OHI = Other Health Impaired; DD = Developmental Disability; ED = Emotional Disability; CD = Cognitive/Intellectual Disability

Table 3

Percentage and T-test Comparisons by Disability

Disability	06/07	14/15	*t*	*df*	*p*
LD	41.9	28.9	4.33	20	.000
OHI	13.9	17.7	1.79	20	.088
DD	3.1	13.1	6.59	20	.000
Autism	1.9	4.1	3.17	20	.005
ED	5.3	4.3	1.05	20	.309
CD	5.0	2.9	3.09	20	.006

Note: LD = Learning Disabilities (aka Specific Learning Disabilities); OHI = Other Health Impaired; DD = Developmental Disability; ED = Emotional Disability; CD = Cognitive/Intellectual Disability (aka Mental Retardation).

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