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School Psychologist Leadership in RTI Implementation: Administrators' View of School Psychologists as a Resource in RTI

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SCHOOL PSYCHOLOGIST LEADERSHIP IN RTI IMPLEMENTATION:
ADMINISTRATORS' VIEW OF SCHOOL PSYCHOLOGISTS
AS A RESOURCE IN RTI

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DEDICATION

This dissertation is dedicated to my husband, Davis, for without his love and support it would not have come to fruition. He is my best friend and always encouraged me to pursue my dreams. Thank you for supporting me while I attended classes, studied, wrote papers and conducted research. Thank you for the many sacrifices you made in helping me reach this goal. Because of his unconditional love, I am truly blessed.

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ABSTRACT

The purpose of this study is to examine the leadership role of school psychologists in Response to Intervention (RTI) implementation, as well as school psychologists' usefulness to principals in successful implementation of RTI. The researcher asserts, that through the fulfillment of certain roles, school leaders recognize the benefit of involving school psychologists in RTI implementation. The study asks the following questions: 1) To what extent are the specific leadership characteristics associated with school psychologists' roles related to the level of RTI implementation being exemplified? 2) To what extent are the specified school leadership characteristics present in school psychologists in Dorchester 2 schools?

School psychologists, who have historically devoted much of their time to testing struggling learners for learning disabilities, may need to adjust their roles to provide instructional consultation in a tiered assessment and intervention model. RTI is promoting a major paradigm shift from the traditional psycho-educational evaluations. IDEA's 2004 reauthorization requires that multidisciplinary teams assess whether a child has received proper instruction and interventions within the general education classroom prior to qualifying for special education services.

One of the greatest challenges currently facing education is training personnel to effectively meet these new requirements. School psychologists can support RTI and enhance learning for all students through consultation in school-wide program design and

specific intervention programs (Barker, 2011). Their knowledge of child development, social and emotional development, and the principles of learning allow them to become effective members of school intervention teams. School psychologists' knowledge of assessment and intervention may make them ideal candidates to assume the role of instructional consultant in RTI implementation.

The hypothesis of this research assumes public school principals view school psychologists as valuable resources for school-wide RTI implementation. The researcher assumes that school psychologists manifest leadership characteristics that enhance successful implementation of RTI. This study aims to gain information pertaining to administrators' perceptions of the usefulness of school psychologists' leadership characteristics as a participant, data manager, and recruiter in school wide implementation of RTI.

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CHAPTER 1

INTRODUCTION

Topic Overview

Academic achievement is of utmost importance in today's schools for administrators, teachers, school psychologists and parents. South Carolina is considering adhering to the Common Core Standards, a national universal design of curricula, instructional materials and strategies that support access to the general education curriculum. In addition to Common Core Standards schools are charged with implementation of Response to Intervention (RTI) to support students who are struggling to succeed in the general curriculum. With the reauthorization of the Individuals with Disabilities Act (IDEA) in 2004, provisions in legislation were made to allow for implementation of a tiered system of support, such as RTI, in public schools (Dulaney, 2012).

The IDEA was reauthorized in 2004 to ensure that all children with disabilities between the ages of three and twenty-one have access to a free and appropriate public education. Free appropriate education emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living. The new law known as the Individual with Disabilities Education Improvement Act of 2004 (IDEIA 2004) requires states to provide for the education of all children with disabilities. States are required to assess and ensure the

effectiveness of efforts to educate children with disabilities. Criteria for entry into special education programs were realigned with the reauthorization of IDEA in the areas of eligibility for specific learning disabilities and developmental delays.

What is Response to Intervention?

The National Joint Committee on Learning Disabilities (NJCLD) reported that the core concepts of RTI include the use of scientific, research-based instruction and intervention, and the use of these data to inform instruction and learning (Debi, 2005). Response to Intervention integrates assessment and intervention within a school-wide, multi-level instructional system to maximize student achievement and reduce behavior problems. With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness. RTI may be used as a part of the determination process for specific learning disabilities (Bernhardt, 2011).

In its simplest definition, RTI is a process of helping struggling students become successful. The process focuses on how a specific student responds to a research validated intervention (Quinn, 2010). In RTI, the goal is to deliver evidence-based interventions and to use students' response to those interventions as a basis for determining instructional needs and intensity (NASDSE, 2006). When implementing RTI, general education teachers, with the help of other professionals such as administrators, counselors, and school psychologists, will be able to accurately identify problems that students have academically and behaviorally through tiers of intervention. The effectiveness of the RTI model has been demonstrated through research (Dulaney,

2012; Fuchs & Fuchs, 2007; and Quinn, 2010). The results of Burns, Appleton, & Stehouwer's (2005) study suggested that RTI implementation is related to a reduction in referrals to and placements in special education, increasing percentage of children who demonstrated proficiency on state accountability tests, and a reduction in the number of children retained in a grade.

In the past, failing grades and retention often led to a referral for special education services. As students' achievement fell behind their peers, they were more likely to meet eligibility requirements for special education services based on a discrepancy between the child's IQ and achievement scores (Fuchs & Fuchs, 2006b). This previous model of eligibility for a specific learning disability is known as the wait-to-fail model. A child's eligibility to receive special education services has always been based on the belief that the child received proper instruction and interventions within the general education classroom (Willis & Dumont, 2006). Unfortunately, often these interventions do not occur which set students up for being improperly instructed. Yenni and Hartman's (2009) research found that the energy that it takes to evaluate a child for special education could often be greater than the time allotted for interventions within a classroom. They explain that the evaluation process can best serve the interests of students by implementing a problem-solving model within the general education setting.

While RTI concepts date back to the 1970's, the relationship between RTI and SLD identification is a relatively new concept. There are varying descriptions of the RTI model and no universal definition has emerged. Most descriptions of RTI adhere to the same basic framework and include the same major components. The most basic description of RTI involves the following steps; 1) identify a struggling student, 2)

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implement an intervention to solve the problem, and 3) check to see if it worked (Quinn, 2010). The use of RTI has become more prevalent in school districts with the changes in federal laws that de-emphasize the discrepancy models for identification of learning disabilities. Federal law also promotes a model that takes into account research-based interventions and individual progress. The Individuals with Disabilities Education Improvement Act 2004 (IDEA 2004) states that educational agencies are no longer required to take into account whether a child has a severe discrepancy from his or her peers in terms of achievement and IQ. Instead, they can use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation process (Fuchs & Fuchs, 2006b). RTI requires four components:

1. Multiple layers or "tiers" of instruction (increasingly intense interventions with adjustments to duration, rate, and/or type of intervention—most schools use three tiers.

2. Universal screening to identify students at risk for failure at an early age.

3. Intervention and support following No Child Left Behind (NCLB) criteria for "scientifically, research-based" interventions.

4. Progress monitoring (an integrated data-collection and assessment system to inform decision making by applying a problem-solving model) (e.g., Fuchs & Fuchs, 2006; Vaughn et al., 2003; Vaughn & Fuchs, 2003).

Essentially, RTI is a problem-solving model that emphasizes a data-driven decision-making process that includes identifying the problems, planning the intervention, implementing intervention, assessing the student learning outcomes, and using these data to improve instructional design and delivery (e.g., Burns, Appleton, & Stehouwer, 2005;

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Fuchs & Fuchs, 2007; Liu, 2009). RTI is based of the public health service model that involves three tiers, a model that provides educators a logical way to allocate education resources and to improve the efficiency of the instructional delivery system (Tilly, 2003 and Gresham, 2002). The design of RTI allows for coordination of resources within the district and school building to improve effectiveness and efficiency of instructional delivery. Multidisciplinary collaboration of educators is a benefit but also an obstacle for the school system that desires to implement RTI. Successful cooperation between multiple disciplines can take significant time to achieve.

Identification models that incorporate RTI represent an opportunity to provide early intervention and/or pre-referral services to reduce inappropriate referral and identification and to establish a prevention model for students. The major shift with the implementation of RTI is recognizing that child study teams need to do more than give assessments to label a child; they need to be able to determine appropriate interventions that will improve the student's ability to be successful in an academic setting. The underlying purpose is to eliminate the wait-to-fail model in many schools. The ability-achievement discrepancy model acquired the name "wait-to-fail" due to criticisms that many children do not display a large enough discrepancy between IQ and achievement until the third grade or later (Toffalo, 2010). This means that the criterion for a learning disability is most often not met until the third grade, and therefore, special education as an option is delayed. When this occurs, learning and academic performance suffers a great deal, often to the point of being irrevocable (Toffalo, 2010). An additional complaint of the ability-achievement discrepancy model targets the injustice of intervention effectiveness within this model. For example, if the discrepancy narrows a

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considerable amount, the student will no longer be eligible for special education services. If special education services are dismissed due to a lack of a discrepancy, the student's learning and academic performance is apt to fall again. At all stages in the RTI process, the focus is on discovering how to make the student more successful rather than focusing on the student's lack of success.

Building consensus and capacity for RTI is essential for successful implementation. Many school initiatives fail because school leaders fail to understand the critical nature of building a shared vision (Delaney, 2012). School leaders must recognize the power that comes from strengthening the knowledge and dispositions of individuals responsible for facilitating RTI. Most teachers will agree with the RTI framework and that it makes sense in schools as good teaching practice. Throughout the early years of RTI implementation, teachers need to have their questions answered and their concerns addressed before they can move forward in support of needed changes. In order for RTI to become embedded in a school's vision and mission, school leaders recognize that they need the combined efforts of their staff.

The RTI process begins with high-quality instruction and screening of all children in the general education classroom. As a result of this screening process, struggling learners are provided with interventions at increasing levels of intensity to accelerate their rate of achievement. Most often regular education teachers, special education teachers, or academic specialists provide these services. Students are monitored to assess their progression of learning and level of performance. Students who do not show a response to interventions are likely, or more likely than students who respond, to have biologically based learning disabilities and to be in need of special education (Celia, 2002).

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Purpose of the Study

The purpose of this study is to examine the leadership role of school psychologists in Response to Intervention (RTI) implementation. The study also aimed to obtain data about the school principals' perceptions of the usefulness of school psychologists in RTI implementation. Although there have been many studies designed to explore leadership qualities of school professional staff, and even more focused on response to intervention implementation, the relationship between school psychologists and RTI implementation is largely unexplored. In many school districts, school psychologists' skills and training in RTI are underutilized.

Limitations/Assumptions

Because the research focused on one school district in South Carolina, the results of this study may not be generalized to all schools in South Carolina or any other state. In addition, the sample of schools consisted of urban, suburban, and rural schools. This study should be perceived as an initial study of the research questions.

To report the results of the Principal Perceptions Survey, the school principal completed the survey and submitted it via Survey Monkey. The study did not seek responses from assistant principals or other administration level employees. Therefore, the survey results do not necessarily represent the majority of administrators in the district. In addition, there is no control over the principals responding with honesty. Finally, it was assumed that all respondents in this study were actively attempting to implement a school-wide RTI model during the 2012-2013 school year. However, fidelity checks for school based RTI implementation efforts were not conducted,

therefore, it cannot be confirmed that each school principal was truly attempting RTI implementation.

The effectiveness of the RTI model in supporting the academic achievement of students is supported by researchers such as Fuchs and Fuchs (2006) and Deshler and Fuchs (2007). RTI supporters also explain that successful implementation of the model can help reduce special education referrals and prevent over-identification for special education. However, there are obstacles to overcome in successful implementation since many schools experience limited availability of time and resources needed to implement RTI correctly. Further, Mastropieri and Scruggs (2005) suggest that general education teachers do not have the background knowledge or skills to carry out a RTI model correctly. Unfortunately, there is little available in the current literature to identify school leaders to help guide the process. This study aims to garner information on the effectiveness of school psychologists' leadership skills in the implementation of school-wide RTI.

Definition of Terms

Accommodation: Accommodations are changes in instruction that enable children to demonstrate their abilities in the classroom or assessment/testing setting. Accommodations are designed to provide equity, not advantage, for children with disabilities.

Adequate Yearly Progress (AYP): is a statewide accountability system mandated by the Elementary and Secondary Education Act. It requires each state to ensure that all schools and districts make Adequate Yearly Progress as defined by states and as approved by the US Department of Education.

Core Curriculum: The core curriculum is the course of study deemed critical and usually made mandatory for all students of a school system. Core curricula are often instituted and the elementary and secondary levels by local school boards, Departments of Education, or other administrative agencies charged with overseeing education. As mandated by No Child Left Behind, core curricula must represent scientifically based practice.

Curriculum-based Assessment: A type of informational assessment in which the procedures directly assess student performance in learning-targeted content in order to make decisions to better address a student's instructional needs (www.ldonline.org/glossary).

Data-Based/Data-Driven Decision Making: A process of collecting, analyzing, and summarizing information to answer a question and to guide development, implementation, and evaluation of an action. Data-based decision making is continuous and regular, and most importantly linked to educational/socially important decisions.

Differentiated Instruction: Differentiated instruction refers to educators tailoring the curriculum, teaching environments, and practices to create appropriately different learning experiences for students in order to meet each student's needs.

Evidence-Based Practice: Evidence-based practices are educational practices and instructional strategies that are supported by scientific research studies.

Fidelity of Implementation: Fidelity refers to the accurate and consistent provision or delivery of instruction in the manner in which it was designed or prescribed according to research findings and/or developers' specifications.

Formative Assessment: Formative assessment is a form of evaluation used to plan instruction in a recursive way. Formative assessments are not necessarily used for grading purposes.

Individualized Education Program (IEP): A plan outlining special education and related services specifically designed to meet the unique needs of a student with a disability (www.ldonline.org/glossary).

Individuals with Disabilities Education Act (IDEA): The Individuals with Disabilities Education Act is the law guaranteeing all children with disabilities access to a free and appropriate public education (www.ldonline.org/glossary).

Intelligence Quotient (IQ): A measure of someone's intelligence as indicated by an intelligence test, where an average score is 100. An IQ score is the ratio of a person's mental age to his chronological age multiplied by 100 (www.ldonline.org/glossary).

IQ-Achievement Discrepancy Model: A frequently used procedure for documenting a severe discrepancy between achievement and intellectual ability in one or more areas-- oral expression, listening comprehension, written expression, basic reading skills, reading comprehension, mathematics calculation, and mathematics reasoning (Vaughn & Fuchs, 2003, p. 137).

Learning Disability (LD): The IDEA 2004 definition of a Learning Disability is: The child does not achieve adequately for the child's age or to meet state-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or state approved grade-level standards: oral expression, listening comprehension, written expression, basic reading

skill, reading fluency skills, reading comprehension, mathematics calculation, and mathematics problem solving.

Least Restrictive Environment (LRE): A learning plan that provides the most possible time in the regular classroom setting (www.ldonline.org/glossary).

Local Education Agency (LEA): A public board of education or other public authority within a state maintains administrative control of public elementary or secondary schools in a city, county, township, school district or other political subdivision of a state (www.ldonline.org/glossary).

Modifications: Modifications are alterations that change, lower, or reduce learning expectations. Modifications can increase the gap between the achievement of students with disabilities and expectations for proficiency at a particular grade level.

Multi-Tiered Model: A systemic process by which students receive support either academically or behaviorally in increased time and intensity. Tier 1 encompasses all students in a school who are not at-risk in these areas. This is where the general education core curriculum is delivered. Tier 2 provides extra support and instruction (in addition to the core curriculum) to a smaller percentage of students, typically using a standard protocol approach. At the Tier 3 level, individual students receive significant support and could be considered for special education services.

Over-Identification: Refers to the over-representation of students in special education programs/services that is above state and national averages; identification of more students for services through special education that the proportion of the population in the general population.

Over-representation: Refers to the over-representation of students in specific disability-

related categories that is above state and national averages.

Problem-Solving Approach within RTI: The overarching structure that supports the implementation of an RTI model. Within a problem-solving approach, there are several levels of support, which include: grade level teams; building problem-solving teams; and district-wide support and guidance teams.

Progress Monitoring: A set of assessment procedures used to determine the extent to which a student is benefiting from intervention or specialized instruction.

Remediation: Instruction intended to remedy a situation; to teach a student that he or she should have had previously learned or be able to demonstrate; assumes appropriate strategies matched to student learning have been used previously.

Response to Intervention (RTI): Response to Intervention is a process whereby local education agencies (LEAs) document a child's response to scientific, research-based intervention ensuing a tiered approach. In contrast to the discrepancy criterion model, RTI provides early intervention for students experiencing difficulty in academics. RTI was authorized for use in December 2004 as part of the Individuals with Disabilities Education Improvement Act (IDEIA; www.ldonline.org/glossary).

Scientific, Research-Based Instruction: Curriculum and educational interventions that have been proven to be effective for most students based on scientific study.

Screening: Universal screening is conducted, usually as a first stage within a screening process, to identify or predict students who may be at risk for poor learning outcomes. Universal screening tests are typically brief; conducted with all students at a grade level; and followed by additional testing or short-term progress monitoring to corroborate students' risk status.

Special Education: Services offered to children who possess one or more of the following disabilities: specific learning disabilities, speech or language impairments, intellectual disabilities, emotional disturbance, multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, autism, combined deafness and blindness, traumatic brain injury, and other health impairments (www.ldonline.org/glossary).

Specific Learning Disability (SLD): The official term used in federal legislation to refer to difficulty in certain areas of learning, rather than in all areas of learning. Synonymous with learning disabilities (www.ldonline.org/glossary).

Summative Assessment: Summative assessment is a form of evaluation used to describe the effectiveness of an instruction program or intervention, that is, whether the intervention had the desired effect. With summative assessment, student learning is typically assessed at the end of a course of study or annually (at the end of a grade).

Systematic Reform: Change that occurs in all aspects and levels of the educational process and that impacts all stakeholders within the process-students, teachers, parents, administrators, and community members-with implications for all components, including curriculum, assessment, professional development, instruction, and compensation.

Tiered Instruction: Levels of instructional intensity within a tiered model.

Tiered Model: Common model of three or more tiers that delineates levels of instructions interventions based on student skills need.

Universal Screening: Local assessments delivered to all students, typically three times a year, in the areas of math and reading. Students are then compared to grade-level benchmark scores to see if they are performing at, above, or below grade level.

Validated Intervention: Intervention supported by education research to be effective with

identified needs of sets of students.

Validity: An indication that as assessment instrument consistently measures what it is designed to measure, excluding extraneous features from such measurement.

Research Questions

This study is designed to examine the usefulness of school psychologists in implementation of RTI. The researcher asserts the through the fulfillment of certain roles, school leaders recognize the benefit of involving school psychologists in RTI implementation.

1. To what extent are the specific leadership characteristics-associated with school psychologists' roles and related to the level of RTI implementation-being exemplified?

2. To what extent are the specified school leadership characteristics present in school psychologists in District 2 schools?

Significance of the Study

Language included in federal law about the use of an RTI approach in serving at-risk learners and identifying students with special education needs combined with concerns present in the data on special education identification suggest that educational leaders develop a plan for implementing RTI (Spiegel, 2009). This study and its findings on the leadership characteristics of school psychologists were, therefore, timely and addressed a need present in the field of education. Glover & DiPerna (2007) and O'Donnel (2008) maintain that the usefulness for serving students with unmet instructional or behavioral needs is the greatest potential benefit of the RTI model. In consideration of what is discussed in the existing literature concerning the complexity of

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RTI and the role of the school psychologist in this initiative, it is important to remember the significance and potential of RTI to positively impact all students (Brumfield, 2011). David Tilly (2003), a school psychologist, investigated implementation of RTI in 121 Iowa schools using a four-level problem-solving model including parent-teacher consultation, within-school teacher collaboration, extended consultation-team consultation, and the application of special education services. Tilly's research found substantial growth in early reading performance areas such as phoneme segmentation and oral reading fluency. His research also showed reductions in special education referrals by 39% in kindergarten, 32% in first grade, 21% in second grade, and 19% in third grade over a 4-year period.

The significance of this study is that it addresses the usefulness of school psychologists' leadership characteristics and skills in implementation of RTI. The importance of this study is that it suggests a potentially untapped resource for schools in the process of RTI implementation and suggests the utilization of school psychologists to aid implementation. Researchers must collaborate with districts and schools to help them identify their weaknesses and address the challenges that they face in implementation of systemic change.

CHAPTER 2

LITERATURE REVIEW

This chapter presents the review of literature relevant to the traditional methods of identification and the RTI method. The review then focuses on the literature regarding factors affecting systematic change efforts, specifically leadership, and its relevance to successful RTI implementation.

History of Special Education

Education for children with disabilities has historically been difficult for educational systems. In addition, students with learning or behavioral needs have traditionally had few options for support in regular education (Canter, Klotz, & Cowan, 2008). In the past, millions of students were denied admittance to school or received inadequate instruction until the government started to provide financial support (Culot, 2011). The 1960's saw the peak of the civil rights movement, which resulted in the first major federal education act with the 1965 Elementary and Secondary Education Act. This act was a grant program that provided financial support for inner-city schools to level the educational playing field for all students. Next the Rehabilitation Act, amended in 1973, specified any institution receiving federal funds, such as public schools, could not discriminate on the basis of a disability (Perla, 1998). The act includes a variety of provisions focused on rights, advocacy, and protections for individuals with disabilities. Section 504 of the Rehabilitation Act of 1973 places an obligation on schools to provide

a "free appropriate public education" to children with disabilities, along with related services such as transportation and counseling (Perla, 1998).

The Education for All Handicapped Children Act, also known as Public Law 94-142, was passed by Congress in 1975 and was intended for improvement in educational opportunities for all handicapped children and adults through provision of "free and appropriate public education" (FAPE). It required children and adults ages 3-21 to be educated in the "least restrictive environment" to the maximum extent appropriate. Placement of children in "self-contained" classes only occurs when the severity of the disability is such that regular education classes cannot be achieved (US Department of Education, 2007).

In 1983, *A Nation at Risk* was published. It discussed the need for a standards-based reform movement in education. The book, produced results from studies of SAT scores, found that the scores had dropped dramatically between the years of 1963-1980. The publication of *A Nation at Risk* was a landmark event in modern American educational history and contributed to the sense that American schools are failing. In 1986, President Reagan commissioned the Regular Educations Initiative (REI). This initiative aimed to study the effects of special education and whether it benefits children. The study's results found that access to special education alone is not enough. The REI called for general educators take greater responsibility for the education of students with special needs in school. It advocated for mainstreaming, which is the practice of placing students with disabilities into regular education classrooms.

In 1990, Congress changed the name of Education for All Handicapped Children Act to the Individuals with Disabilities Education Act (IDEA). In addition to a change in

name, updates were made to include transition services and assistive technology services as new definitions of special education services to be included in a student's IEP. Rehabilitation and social work services were also included as related services under the law. IDEA also added two special education disability categories to include autism and traumatic brain injury.

The Elementary and Secondary Education Act (ESEA) Reauthorization of 1994 was the biggest change in standards-based reform at a state level. This propelled the introduction of the Improving America's Schools Act (IASA), which made major changes to Title I. States were required to develop state standards, benchmarks, and assessments.

In 1997, the Individual with Disabilities Education Act was reauthorized to include amendments that changed the way educational programs would be provided to students with disabilities. This reauthorization stressed the need to educate students with disabilities with non-disabled peers to the maximum extent possible within the general curriculum. The changes were based on research that showed students with disabilities experienced greater success when they had access to the general curriculum (Culot, 2011). It aimed to change the overall accountability system for schools to include special education children in accountability testing.

The Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 included several changes to IDEA 1997, including new provisions on how school determine whether a child has a specific learning disability (SLD). Specifically, it eliminated the requirement that a student must exhibit a severe discrepancy between achievement and ability in order to be found eligible for services as a child with a specific

learning disability. IDEA 2004 allows a local education agency (LEA) to use a process that determines whether a child responds to a scientific research-based intervention as part of evaluation procedures (Culot, 2011). The SLD eligibility using RTI is determined when academic performance fails to improve even when empirically supported interventions have been implemented with fidelity (Powers & Hagans, 2008). While RTI does not appear directly by name in IDEIA 2004, provisions are made for its implementation.

Due to high states test scores and the possibility of national common core standards, the current reality is that there is tremendous pressure to increase results for children. RTI aims to look at all children through one lens based on instructional need. All children have instructional needs and for approximately 80% of students the core curriculum is sufficient (Sullivan & Long, 2010). However approximately 15% of students need supplementary support in conjunction with the core. Five percent of students require intensive interventions above and beyond the core curriculum. Changes in federal policy have funneled millions of dollars into supporting RTI approaches (Sullivan and Long, 2010). School psychologists, who have historically devoted much of their time to testing struggling learners for learning disabilities, may need to adjust their roles to provide instructional consultation in a tiered assessment and intervention model. RTI is promoting a major paradigm shift from the traditional psycho-educational evaluations also known as the "refer-test-place" model.

Specific Learning Disabilities Identification

Individuals with specific learning disabilities (SLD) have always been a part of the educational system. However, official recognition and identification of individuals

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with SLD in the schools began in the mid 1970's. Controversy has surrounded the reliability and validity of identifying students with specific learning disabilities since the inception of the disability category in PL 94-142 (Liu, 2009). Criticisms have developed from dissatisfaction with the SLD identification process and the delayed delivery of academic intervention services for at-risk students. This dissatisfaction has prompted researchers and practitioners to seek alternative ways to identify specific learning disorders and to provide early interventions for low-performing students.

A specific learning disability is a disorder of one or more of the basic psychological processes involved in understanding or using language, spoken or written, which can manifest itself in the imperfect ability to listen, think, speak, write, spell, or perform mathematical calculations (IDEA 602, 30, A). Historically, an acceptable criterion for SLD eligibility has been a major problem in the field of special education. Reschly (2003) explained that any school or clinical psychologist could find a processing deficit in essentially every child regardless of school success. He concluded that processing deficits could not be the sole criterion of SLD identification if everyone has them.

In recent years identification of students with specific learning disabilities has been on the rise. There are several theories for this increase. One is the realization of the significant academic and social problems faced by individuals with SLD by state and local agencies. There has also been a greater social acceptance of individuals with SLD. Finally, an increase in the need for literacy both in the home and at work has lead to an increase in identification (Brumfield, 2011). Since the cost of providing individuals with special education services is higher than for general education services, this is of great

concern to policymakers and educators. This led to the need for more accurate identification of students with SLD.

An alternative method of identification was established in the 1970s. This method focused on student achievement in a deficit area in comparison to an estimate of aptitude or ability (e.g. oral expression, listening comprehension, written expression, basic reading skills, reading comprehension, math calculation, and math reasoning). However, researchers and educators have concerns in regards to SLD identification using this IQ-Achievement Discrepancy model. Speece, Case, and Molloy (2003) found that students whose rate and level of reading was below their classmates had more significant academic and behavior problems than those with an IQ-Achievement discrepancy. This research indicated that using the RTI approach to identify and serve children would identify the students with the greatest intervention needs.

The number of students evaluated and placed in special education has increased significantly over the last two decades (Yenni & Hartman, 2009). Increase in special education placement may cause problems such as unnecessary stigmatism and separation of children from the mainstream. IDEIA's reauthorization requires multidisciplinary teams to assess whether the child has received proper instruction and interventions within the general education classroom prior to qualification for special education services. Studies show that interventions are being implemented with fidelity at 10% (Yennie & Hartman, 2009). Often interventions do not occur at all, which sets the students up for being improperly placed. The evaluation process can best serve students' interests by implementing a problem-solving model within the general education setting.

Some schools mistakenly view RTI as a new way to qualify students for special education. They focus their efforts on a few token regular education interventions before referring struggling students for traditional special education testing (Buffman, Mattos, & Weber, 2010). For others, implementation stems from a desire to raise high-stakes test scores, which often leads to practices counterproductive to RTI such as radical systems change. Too many schools have failed to develop correct thinking about RTI, which has resulted in implementation of some of the right practices for the wrong reasons.

RTI begins in the regular education classroom, which is a shift from traditional modes of student support and special education (Culot, 2011). RTI represents a current educational initiative that challenges schools to change the traditional models of classroom instruction and educational leadership in order to support all students. RTI is not a special education process, and it is not intended to reduce the number of students eligible for special education services. However, RTI aims to aid in appropriate identification of students with learning disabilities based on progress and data monitoring.

Too often intervention occurs late, is fragmented, and is not supported by the system as a whole. Students are referred for vague and subjective reasons. Teachers may be quick to assume the reason a child is unable to read is because they are in need of special education services or a student with behavioral problems may have a chemical imbalance or some kind of conduct disorder (Harkins, 2009). However these problems may be due to problems in the child's home environment, a lack of previous instruction, or peer pressure. A teacher's decision to refer a student is one of the strongest predictors of special education placement. Using traditional intervention structures, students are unlikely to achieve long-term success. By the beginning of high school, years of struggle

and basic skill deficits set students up for failure. Few schools are set up to address the underlying reasons why students fail. Tutoring, help with homework, and instructions in study skills are the most common interventions, yet they do little to address skill deficits.

Many schools have structures that go through the motions of intervention but fail to have lasting effects. These schools identify students who are at-risk through universal screeners. However, the percentage of at-risk students remains constant. These students progress through grades and participate in a series of unrelated strategies taught in isolation for 20-30 minutes per day with little to no reinforcement or connection to the rest of the school day. Additionally, interventions fail to be adequately differentiated in order to carry out intensive and long-term interventions. In schools that implement a systematic school-wide structure of support, where that support is coordinated from grade to grade, the percentage of at-risk students decreases from grade to grade whereas the percentage of students performing on grade level increases.

To be successful and sustainable, schools must have support systems that differentiate according to student needs. Students need to be provided with what they need rather than what is prescribed for their grade level. This type of school structure is designed around student needs, from the high-achieving student to the learning-disabled student. RTI systems maintain the importance of establishing differentiated systems to carry out varying levels of instructional support to meet the needs of all students. The use of a tiered approach for addressing student needs is the first step (illustrated in Appendix A). Special education and regular education resources may benefit all students. Assessment of students for the purpose of instructional decision-making through screening, assigning differentiated intervention, and progress monitoring will help to

identify populations of students within the tiers. The interventions used are based in scientific research and have been demonstrated to show improvement in student achievement. This structure places an emphasis on evaluation and improving systems and instructional effectiveness rather than focusing on the assumption that something is wrong with the child.

RTI also aims to improve the quality of data by which educational teams make decisions on special education eligibility and to ensure that these data are defensible. After children are referred for special education evaluations, they are often tested and usually placed in special education by a multidisciplinary team (Harkins, 2009). Wagener et al (2006) identified five common causes for reading deficiency: (a) insufficient motivation; (b) insufficient practice; (c) insufficient feedback; (d) not having to perform a task in a specific manner; and (e) frustration with the material's reading level. Curriculum-based measures make it easier to identify students with reading deficiencies and to select an appropriate intervention. RTI promotes timely data-based interventions, which is essential in improving student outcomes. It is a process through which all student achievement can be enhanced.

Change Leadership

Schein (1996, 2002) explains that change cannot be managed on its own because it requires change agents. Unless psychological safety is established change will not occur. Fullan (1991, p. xi-xii) explains,

We have witnessed over the last 30 years numerous attempts at planned educational change. The benefits have not nearly equaled the costs, and all too often, the situation has seemed to worsen. We have, however, gained clearer and

clearer insights over this period about dos and don'ts of bringing about change…One of the most promising features of this new knowledge about change is that successful examples of innovation are based on what might be most accurately labels "organized common sense."

As RTI is a model rather than a specific program, districts are finding it difficult to implement. Indeed, implementing any new initiative on a large scale tends to be difficult (Cohen, Furman, & Mosher, 2007). Barker (2011) explains the literature on successful school reform has identified leadership, professional development, and the efficient use of human resources as critical for RTI-related change. In order to successfully prepare for RTI implementation schools should posses a common definition of systematic change, discuss the benefits of change, and have a cohesive plan in place for cooperative change. Principals should engage staff every step of the way. Research shows that education changes largely have negative emotional effects on teachers (Culot, 2011). Hargreaves (2004) conducted a study surveying teachers about educational change. In her research, Hargreaves (2004) found that 60% of teachers surveyed associated educational change with legislative change. The major causes of negativity were associated with lack of support, insufficient consultation, too much pressure, increased workload, time constraints, and poor leadership.

Principals should allow teachers to have an opportunity to make suggestions and ask questions. When staff have the opportunity to contribute ideas implementation is easier to set in motion. By outlining the benefits of change and providing supporting documents, the staff will know the change is well thought-out and will subsequently increase buy-in. Principals should also address the fear of moving away from comfort

zones by allowing staff to discuss inhibitions and then redirect the conversation to focus on positive aspects of change. The understanding of "change leadership" is necessary as schools implement changes that require general education teachers and support staff to work together to ensure success for all students (Barker, 2011).

School psychologist roles in implementation of a school-wide RTI model

Since the emergence of the Response to Intervention zeitgeist in 2004, one of the greatest challenges currently facing the field of education is training personnel to effectively meet these new requirements. School psychologists can support RTI and enhance learning for all students from school-wide program design to specific intervention programs (Baker, 2011). Their knowledge of child development, social and emotional development, and the principles of learning allow them to become effective members of school intervention teams.

Traditional role of school psychologists

Surveys on current roles of school psychologists indicate the traditional role of school psychologists persists (Goldwasser, Meyers, Christensen, & Graden, 1983). Historically, school psychologists have had the main responsibility of identifying students with learning disabilities for eligibility for special education services (e.g., Killagan, 2008; President's Commission on Excellence in Special Education, 2002; Reschly &Ysseldyke, 2002). Traditionally this eligibility has focused on the IQ-Achievement discrepancy method to identify students with learning disabilities. Research suggests that school psychologists see the main problem of the IQ-Achievement discrepancy model as resulting in a wait-to-fail phenomenon (Culot, 2011). The wait-to-fail phenomenon refers to the use of the IQ-Achievement Discrepancy model that leads to

a delay in identification of a child's educational need. Children not identified until third grade or later have significantly less chance of ever reading on grade level. This traditional model results in a lack of effective ongoing intervention practices, which fail to improve outcomes for children. Successful academic outcomes are not achieved by waiting for students to fail. Though traditional roles of school psychologists have remained, the reauthorization of IDEA has made role expansion for school psychologists essential.

The National Association of School Psychologists asserts that psychologists should take an active role in implementation of research-supported reading programs, preventing reading problems, and effective intervention (NASP, 2005). School psychologists will need to engage in a new type of practice by providing instructional consultation in a tiered assessment-and-intervention model. School psychologists play an important role in the implementation of RTI, primarily by being knowledgeable about RTI (Yenni & Hartman, 2009). Although RTI is a fairly new concept within federal legislation, it is not a new concept for most school psychologists. Knowledge of RTI is essential to further understand how interventions are designed, how to monitor progress, and to problem solve.

Many school districts lack the expertise required to implement RTI successfully. There is a need to assist teachers with the application of the RTI model, and school psychologists are uniquely positioned to assist in the implementation of a tiered instructional model at each tier of the RTI instructional hierarchy (Powers & Hagan, 2008). School psychologists have advocated for broadening of their job roles to include intervention consultation. They are also able to provide consultation to teachers

regarding instructional delivery, classroom management, collecting and interpreting student data, and making data-based decisions regarding student educational needs and progress due to training received in their masters programs and continuing education courses.

A study conducted by Sullivan and Long (2010) concluded that school psychologists reported, as a result of the move towards RTI in many districts, there was actually a need for additional psychologists because of their leadership role in the process. Sullivan and Long (2010) explain that school psychologists are playing central roles in the implementation of RTI in many schools and districts nationwide. School psychologists' knowledge of assessment and intervention makes them ideal candidates to assume the role of instructional consultant. In Sullivan and Long's 2010 study, fears of significant role changes and job loss in the field of school psychology as a result of RTI initiatives are unfounded. It is unlikely that psycho-educational evaluations will be rendered obsolete in the near future due to legal requirements for comprehensive evaluations in addition to progress-monitoring data (Sullivan & Long, 2010). If RTI continues to gain momentum, the education field may need to increase competence in several domains. However it seems that RTI may entail more work rather than less for school psychologists, although this work may be qualitatively different from the traditional role of school psychologists.

History and Development of RTI

The RTI process typically involves three tiers, and the students' progression through these tiers is driven by the use of scientifically and research-based interventions (See Appendix A). Tier I usually contains a universal screener for all children that aims

to identify students who are not responding adequately to the general curriculum. Universal screening is a proactive step taken early in the school year to assess all children and determine which students are at-risk for not meeting state level standards. Universal screening may also take place throughout the school year to monitor student growth. The purpose of the universal screener is to identify which student will be monitored more closely (Quinn, 2010). Students who fail to respond adequately to tier one interventions progress to Tier II interventions, which typically involve two evidence-based interventions and progress monitoring (Sailor, 2009). In Tier II, students may receive more intensive interventions that may include additional individualized attention, an increase in the frequency of intervention, or a longer duration for intervention. Students with scores that fall below a certain criterion are identified and closely monitored throughout the school year or provided with more intensive interventions. Students who do not respond adequately to Tier II interventions proceed to Tier III, where further evaluation of special education would be considered (Barker, 2011).

Individual progress monitoring involves students who have been identified as needing individualized or more intensive interventions. Progress-monitoring screenings happen more frequently than universal screening with the purpose of helping teachers to determine whether interventions are successful. Progress-monitoring data can be used to identify a learning disability based on inadequate response to scientific research-based interventions and can aid in the determination for a need for special education services.

Harkins (2009) outlined eight core principles that cover the important characteristics of what makes RTI much broader than a qualification procedure for special education.

These eight principles are: (a) we can effectively teach all children; (b) intervene early; (c) use a multi-tier service delivery; (d) use a problem-solving model to make decisions; (e) use scientific, research-validated intervention and instruction to the extent available; (f) monitor student progress to inform instruction; (g) use data to make decisions central to RTI practices; and (h) use assessment for screening, diagnostics, and progress monitoring (Harkins, 2009). There are two common versions of RTI. They are the Problem-Solving model and the Standard Treatment Protocol. Schools initiating RTI must choose one of these two RTI variations or create a hybrid of pieces of each. How an RTI approach is implemented in the school system may depend on perspective held by key decision makers.

The Problem-Solving model

RTI is one form of problem solving and is based partially on the problem-solving model. The problem-solving model is defined as a process that includes a systematic analysis of student behavior or academic difficulties and uses this analysis, and any assessment activities, to provide the foundation for a planned, systematic set of interventions (Harkins, 2009). Those who design the RTI process in favor of a problem-solving model appreciate that the intervention can be more tailored to the individual students' instructional needs. These interventions are then monitored and evaluated to determine effectiveness as a part of the problem-solving process. Utilizing RTI as part of the comprehensive system of school-wide learning allows schools to effectively address problems when they begin and may prevent the necessity of special education in the future for many children. Support for children should be provided as soon as students show the first signs of difficulty (Harkins, 2009). Dr. Bill East explains in the foreword

of Griffith, Parsons, Burns, Van Derheydan, and Tilly's *Response to Intervention: Research for Practice* document (2007, p. i),

> Response to Intervention offers the best opportunity of the past three decades to ensure that every child, no matter how gifted or challenged, will be equally valued in an education system where the progress of every child is monitored and individualized interventions with appropriate levels of intensity are provided for students as needed.

The Problem Solving Model (PSM) is a collaborative approach to student interventions. This model emphasized the role problem-solving teams and collaborative decision-making efforts play in positively affecting outcomes for struggling student learners. Various states and administrators may identify these teams as Student Intervention Teams, Student Support Teams, Pre-referral Teams, Teacher Support Teams, Instructional Consultation Teams, etc. These teams are usually constructed and led by the building-level administrators and are responsible for making evidence-based decisions about learners through development, execution, and assessment of interventions (Brumfield, 2011).

The teachers and specialists that make up these problem-solving teams focus on consulting with classroom teachers about individual students and utilizing problem solving methods. The goal is to craft instructional modifications or interventions that resolve the problem for the target student. Resolution of one child's problem may also positively impact other students in the class (Brumfield, 2011). The team focuses on early interventions, goal setting, data-based decision making and functional evaluation procedures. Fuchs and Fuchs (2006b) report that the PSM method of RTI is the most

common type used in schools. They explain that this is due to the efforts to individualize assessment and intervention for each student. However, the PSM assumes expertise in teams that may not be present. Brumfield (2011) explains teachers and other members of multidisciplinary teams must be skillful in various types of interventions and assessments.

The Standard Treatment Protocol

The standard treatment protocol (STP) of RTI utilizes standardized interventions for students. This perspective of RTI emphasizes adherence to standard administration guidelines and the provision of proven effective intervention programs. The PSM is criticized for its high level of variability of implementation. Interventions implemented in STP usually involve a small group of students identified as at-risk participating in an intensive standardized intervention outside the general education setting for a fixed time (Brumfield, 2011). If a student responds to the standardized intervention then the student is deemed remediated and returns to the regular education environment. However, if the student's response is insufficient a disability is suspected and the child is referred for special education evaluation. A criticism of the STP approach is that after a student has been deemed successful in intervention and returned to regular education, the student may still not succeed after being returned to the general education environment.

A mixed-model of RTI

The differences between the two approaches of RTI implementation have led to confusion over how schools are to implement the process of RTI (Burns et al, 2005; Liu, 2009). Therefore, Vaugh and Fuchs (2003) proposed a mixed model for RTI called a "three tier prevention model." Tiers I and II use the problem-solving approach by providing consultation to classroom teachers, with importance placed on primary

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intervention and accountability in the general education setting. Secondary interventions include characteristics of the STP approach, involving intensive interventions that utilize standard protocol trials for a fixed duration. The goal of these interventions is to remediate academic deficits rather than to enhance regular education instruction. The tertiary intervention in this model is special education.

RTI aims to provide early intervention services for students who are at-risk for school failure and also to aid in more accurate identification of students with learning disabilities (Brumfield, 2011). This approach attempts to provide short-term targeted intervention and to provide progress-monitoring data in the evaluation process for special education eligibility. Implementing effective intervention strategies has become one of the most investigated aspects of the IDEA mandates (McDaniel, 2001). At the core of RTI is the idea that learning disabilities may be external in nature (Brumfield, 2011). RTI theories consider the possibility that a lack of achievement may be due to poor or inappropriate instruction. Thus, RTI focuses on the use of research-based interventions and ongoing assessment.

One effective approach used to accomplish differentiated instruction in RTI is the Walk to Read program (Callander, 2012). There are two examples of the Walk to Read intervention. For this study students were grouped into three types: benchmark, intensive, and strategic. In the first example, three third-grade classrooms have a 90-minute block for reading instruction. For the first 30 minutes, students remain with their homeroom teachers, who read aloud and introduce key vocabulary tied to the core-reading curriculum. Even students far below grade level participate and benefit from hearing the vocabulary and stories. After 30 minutes, Walk to Read begins. Intensive students from

all three classrooms walk to one classroom. The Benchmark and Strategic students are evenly distributed into two classrooms. In the Intensive classroom, students are placed in a highly structured reading program that addresses all five of the big ideas in reading. Intensive students are placed at different levels according to their skill development. Each group is formed to promote maximum progress toward closing the achievement gap. The Intensive groups require one classroom teacher and two additional instructors. Within the two Benchmark and Strategic classrooms, the teachers utilize both whole-group and small-group instruction. The small-group instruction features centers with 15-minute rotations. The centers include vocabulary work, fluency practice, challenge activities, phonic skill development, partner reading, inquiry stations, and reader's theater. Students are assigned centers based on instructional needs; therefore not all students attend all centers. The students participate in ongoing assessments of instructional need and instructional changes are made as a result of this progress monitoring (Callender, 2012).

In the second Walk to Read example, a 2 hour and 5 minute reading block is divided differently among the Benchmark, Strategic, and Intensive classes. The Benchmark and Strategic are in separate classes during the first hour doing core reading as a class. Then they have a 15-minute recess. Afterwards, these two classes are grouped by instructional needs using a differentiation protocol. The Benchmark class spends 1 hour and 5 minutes in small groups and independent time, including opportunities for challenge for advanced students. The class then divides the remaining 1 hour and 5 minutes into three small groups for targeted instruction (one led by a teacher, one led by an assistant, and one working independently). This targeted instruction occurs for 30

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minutes, followed by 30 minutes of meeting with the teacher in small groups or working independently (Callender, 2012). The four groups in the Intensive classroom rotate between teacher-led and independent groups. After 30 minutes, the groups switch: independent groups become teacher led while teacher-led groups switch to be independent. After another 15-minute recess, the teacher, Title I teacher, and two assistants teach all four groups. Therefore, each group completes two years worth of growth in one academic year.

Relationship between leadership and RTI success

A school that seeks to successfully undertake the complex change of school-wide RTI implementation requires extraordinary leadership (Sailor, 2009). The concept of leadership, however, requires more than a single building leader. Distributed leadership is a key element in the implementation of school-wide RTI. Harkins (2009) explains, "leadership is the most important factor for implementing RTI because implementing RTI is complex and challenging." Some school staff will resist RTI not because they do not believe in RTI principals, but because RTI requires change in the classroom. Some of the changes that may be required in the classroom include how time is spent in the classroom, how instruction is delivered, and who works with which students. Change can be threatening to teachers, especially when their style of instruction is of utmost importance to them (Hall, 2008). The leader of a RTI initiative must always be ready with answers to demonstrate he or she has done the necessary background research on RTI and has given the matter a great deal of thought (Hall, 2008). Many variables affect the difficulty of RTI implementation but perhaps the most important variable is

leadership (Harkins, 2009). One of the most important aspects of leadership is the relationship between an individual and a group.

The task of implementing RTI is too important to be delegated to an assistant principal, Title I facilitator, reading coach, or school psychologist. Hall (2008) explains that if a principal designates an assistant to be the leader and spokesperson for an initiative, the message sent to staff is that the process is a low priority. However, the principal cannot accomplish school-wide implementation alone. He or she must select the right staff to be involved in the process and motivate all staff by showing how this initiative benefits all students. Cultivation of expertise begins by knowing who your experts are and recognizing the individual strengths and limitations among all (Hedrick, 2005). The principal is the driving force of the successful adoption and organization of this reform. As Culot (2011) explains, "Today's principals are charged with working closely with regular and special education teachers, parents, psychologists and students to effectively manage the process of referrals for RTI and special education." While having a background in special education is not required to implement RTI for principals, it is necessary to receive training in and have the ability to manage RTI and special education processes within their building.

Leadership Styles

McDaniel (2011) outlined three leadership styles: Transformational, Transactional, and Instructional. Transformational leadership is a collaborative effort between school and staff working together to achieve an improving level of moral direction and motivation (McDaniel, 2011). Transformational leadership could be used in RTI implementation to explain how awareness of expectations, values, and moral leadership

is used to transform the way people understand the vision and goals of a group. This is a give-and-take type of leadership aimed at motivating and inspiring workers. It begins with a charismatic leader who values coworkers and encourages others to become focused on an end goal of complete RTI implementation. Transactional leadership is characterized by a leader who primarily follows rules. Transactional leaders tend to maintain rigid control over behavior and enforce disciplinary rules (McDaniel, 2011). Instructional leaders focus on how leadership enhances educational results. Instructional leaders are concerned with overall school objectives, the curriculum, instruction, and the school environment (McDaniel, 2011).

Teacher role in RTI

Within RTI, general educators teach students who struggle with or without support from other professionals. However, special education teachers and specialists may work with the classroom teacher in supporting learners who struggle. For several decades, the response to struggling students has involved a referral for special education, a practice still embedded within school systems. RTI makes this current practice of referral to special education obsolete (Benjamin, 2011). RTI begins in the classroom. General education teachers assume primary responsibility for applying a variety of interventions and also for documenting response to intervention. Universal screening and progress monitoring will allow teachers to identify students who may need early intervention. RTI requires a change in teachers' mental models and teaching practices for at-risk learners (Benjamin, 2011). Collaboration through school-based intervention teams will help to identify student needs using data to make decisions that guide instruction. Teams will use that data for strategic intervention grouping, as well as

measuring a student's pattern of response to those interventions. The role of regular education teachers will expand to provide quality instruction and intervention for students in Tier I and Tier II.

Special education teacher role in RTI

Special education teachers have knowledge in working with students who require extra support to be successful in general education. RTI supports collaboration of special education and their general education colleagues. In the RTI process, special education teachers will use their specialized knowledge and skills to help individualize instruction (Barker, 2011). One of the first steps toward professional collaboration in RTI is to recognize that traditional perspectives of who works with whom may no longer apply. For example, many schools assume that special educators teach students who perform in a different range of academic achievement. Special educators are often viewed to have a specific skill set and underlying knowledge of student who experience difficulty in regular education. In addition, special educators are accustomed to progress monitoring with data that general educators may not understand or appreciate (Ehren, RTI Action Network).

Speech-language pathologist role in RTI

Speech-language pathologists (SLPs) can provide needed support to students in both the general education and special education setting (Barker, 2011). SLPs' knowledge of the normal development of speech and language skills may be crucial when assessing the needs of students with academic challenges, particularly in literacy development. SLPs are particularly beneficial to pre-referral intervention teams and

identification of students in need of speech-language support and collaborating with colleagues.

Reading specialist/coach roles in RTI

Reading intervention specialist/coaches possess unique skills that can support RTI and enhance learning for all students. They provide expertise in the development of school-wide program design and in specific intervention programs. In addition, they contribute to school teams as they offer direct support to students as well as indirect support through consultation (Barker, 2011). Strong interventionists may be the most valuable assets when attempting to implement RTI.

School counselors' roles in RTI

School counselors have ongoing relationships with teachers, students, support staff, and parents. Counselors facilitate the RTI process through their knowledge of child development and effective behavior strategies. They also possess skills in collaboration and problem solving which are beneficial to RTI implementation.

Principal's role in RTI implementation

Principals are the point of contact between a great idea and how the school functions (Brumfield, 2011; Putnam, 2008). The school principal is thought to be the key figure in successful school-wide implementation of RTI (Barton, 2009). It is imperative that principals build and maintain capacity for RTI and maintain procedural integrity for RTI. They must participate, manage data, recruit, and provide resources. Putnam (2008) argues that, "Without question, the leadership provided—or not provided—by building administrators can make or break an RTI initiative." For RTI to be successful, principals must operate as visible and contributing members of the RTI team. They must supervise

the fidelity of interventions, provide guidance, and allocate resources as needed. This type of principal leadership clearly expresses to faculty and staff that RTI is not a special education initiative but a regular education core initiative.

In Benjamin's study (2011), the results indicated that teachers acknowledged school leadership as an important environmental factor in RTI implementation. The teachers in this study indicated that the level of support received from building leaders was instrumental in their ability to understand and implement RTI. The teachers reported supportive conditions for RTI through the Student Support Team, which fostered an atmosphere of trust, honesty and respect, encouraged risk taking, and provided supplemental resources and materials and professional development. It was noted that the principal set the tone for RTI implementation. The study concluded teachers need sufficient time to practice RTI implementation in an environment that allows them to make mistakes and revise practices without fear of repercussions. Benjamin's (2011) results indicate that principals can create opportunities for collaboration, establish forums to promote discussions about RTI implementation, and encourage knowledge-sharing regarding RTI practices. However, establishing an environment conducive to teacher collaboration and reflection does not guarantee teacher participation or changes in teaching practices (Benjamin, 2011). Therefore, it is the principal's responsibility to articulate the goals and mission of RTI and focus on continuous growth for learning.

Factors that enhance and inhibit RTI

School systems are just beginning to understand the impact RTI will have on instruction for at-risk learners. The effectiveness of RTI depends on the quality and consistency of instruction at each tier as well as continuous progress monitoring of all

students to inform instruction (Benjamin, 2011). RTI has the potential to provide students with instruction that fits their needs and responds to their progress. RTI relies a great deal on skilled general education teachers. Research clearly shows the need for professional development to enhance the skills of regular education teachers in implementing the interventions within the tiers of the RTI framework (Brumfield, 2011). Also, training in progress monitoring and the use of curriculum-based measures in assessment to inform instructional decisions are integral.

The findings of Dulaney's (2012) study showed that in order to create a successful implementation of RTI, first school leaders need to take time to build consensus so that understanding is shared concerning the *why* and *how* of implementation in order to prepare the school. Second, leaders must identify available resources, both human and capital, to build and sustain the RTI infrastructure. Third, the school community, including parents, must participate in data-driven decision-making (Dulaney, 2012). Finally, teachers must be prepared through ongoing professional development to use best practices and differentiate instruction so that the majority of students can progress within the general education setting.

Funding RTI

Resources and funding in today's economic climate can be a sensitive topic among educators. Results of studies have shown that 78% of school administrators consider funding to be a significant challenge in implementing RTI (Wiener & Soodak, 2008). Finding resources for building RTI infrastructure and implementing interventions is a difficult task. It may be critical for principals to work with various district agencies such as special programs, Title I, and the community in order to secure adequate

resources. IDEIA 2004 legislation "permits districts to use as much as 15% of their special education monies to fund early intervention activities" (Fuchs & Fuchs, 2006). In addition, NCLB legislation permits Title funds to be used in support of intervention processes. These funds can be used to purchase assessment tools and to align human resources to better meet student needs. The results of Greene's study (2010) indicated that principals perceived financial constraints to be a barrier to expanding the role of school psychologists. District 2, the district in which the current study was based, recognized school psychologists' potential as a resource for RTI implementation and allocated funds for the hire of 8 additional school psychologists in the 2011-2012 school year. This collaboration between regular education and special education departments was a paradigm shift for District 2.

As Elliot (2008) predicted, schools generally do not have the resources to provide focused or intensive interventions to more than 20% of students. Therefore, the majority of struggling students must be provided with support within the Tier I (Core) instructional practices. Consequently, the creation of the master schedule is crucial to include scheduling time for interventions while allowing students to remain in their regular education environment. The principals in Greene's (2010) study also perceived time constraints to be a barrier to preventative practices and expansion of roles of school psychologists.

Successful implementation of RTI requires the principal to function as effective, contributing members of the RTI problem-solving team, providing guidance and resources as needed (Brumfield, 2011). The absence of the school principal on the school's problem-solving team speaks volumes about level of importance he or she

places on instructional leadership for RTI. Pat Quinn (2010) purports that it is the role of school administration to put teachers in a schedule that makes it possible for small groups of struggling students to get additional help. When teachers are locked into a rigid schedule without time to offer students extra instruction, they feel helpless and powerless. In this situation, the natural response is to give up. In addition, progress monitoring is difficult for many teachers. The purpose of progress monitoring is to monitor the progress of certain students in a specific skill over time. Intervention involves instruction of a specific skill. Interventions always involve instruction.

Questions still remain regarding the eligibility for special education services under the category of Specific Learning Disability using the RTI method. Some difficulties include confusion over why some standard intervention protocols are effective and some are not, and how to train staff to adjust instruction, assessment, and intensity of intervention. Using RTI as a means of support for all children means changing the way districts deliver instruction. The main challenge in implementing RTI will be the change process itself and how the staff responds to the change (Brumfield, 2011).

Time and Space for RTI

Time needed to assess all students through a universal screener and the time needed to implement interventions are a valid concerns. Regardless of the universal screening tool, time is needed to individually assess each student. Educators share concerns with time loss and interruptions to their classroom instruction. Universal screeners, if used correctly, are a formative assessment that informs the instruction. Therefore, universal screening and progress monitoring is a time saver to ensure that the most effective instruction and intervention is provided. Space is another constant

concern for schools with respect to the RTI process. Even if a school is able to provide a support staff for at-risk students, it can still be a challenge to implement interventions in a classroom where other students are present. Provision of adequate and consistent space to perform interventions is crucial to the success of RTI.

One of the major challenges with any reform initiative is the inherent struggle with the need for change to occur for new practices to become embedded in the culture and sustained over time. Each level of the RTI tiered process must be understood, adopted, and implemented with fidelity in order to be effective (Culot, 2009). Gerber (2003) explained that though RTI is straightforward in theory, the practicality of implementation is much more complex. Schools often experience limited availability of time and resources to carry out the RTI process correctly.

Additionally, little guidance is offered in the extant literature to help guide the implementation process (Brumfield, 2011). Often schools attempt to implement RTI but fail to do so with fidelity. Procedural integrity is a challenge for RTI implementation and consistent school leadership and assessment of progress in implementation is needed to succeed in RTI implementation. Most of the research with respect to RTI is conducted in the area of elementary reading. The inherent difference between elementary schools and middle and high schools create limitations in how an RTI model is translated into secondary practice.

District size and school size are other factors that can present challenges for RTI implementation at either end of the spectrum. Smaller school districts and schools are often limited in resources. Large districts and schools may have more resources but face a challenge in coordinating complex procedures and training programs across numerous

schools. The key to the successful RTI implementation is a well-organized and highly skilled district RTI leadership team that meets regularly to review procedures and coordinate implementation (Putnam, 2008). Consistent and sustained professional development is essential.

Importance of RTI

The Alliance for Excellent Education conducted research studies that concluded that more than 7,000 students drop out of high school each day. Research supports the idea that if we act early and in the most effective manner, we can identify and address skill deficits commonly associated with student failure during high school. Without a proactive, school-wide approach, teachers will continue to work alone to provide interventions that have a poor record of success. It is important that schools are arranged to reflect the importance of success in educating children and the difficulty in achieving that success if teachers are working alone.

Ideally, RTI is neither a general education nor special education initiative. Rather it is a total school initiative with the goal of optimizing instruction for all students (Ehren, RTI Action Network). The new IDEA mandates regarding the implementation of Response to Intervention present challenges to principals and regular education teachers. Within Response to Intervention, the law supports the application of a pyramid of intervention for students failing to make progress. These mandates require an increased role of teachers in instructional interventions for at-risk learners (Bejamin, 2011).

Response to Intervention (RTI) is best understood as a model used to guide efforts to teach (intervention) based on measures of pupil progress (response) and grounded in the idea of prevention (Sailor, 2009). The National Association of School Psychologists

(NASP) advocates that school psychologists play a pivotal role in supporting and implementing RTI. The literature of the field of school psychology suggests that the role of the school psychologist has primarily involved conducting assessments for the special education population but that school psychologists desire to be engaged in additional services, such as prevention and direct intervention (Greene, 2010).

Although the traditional role of school psychologists has remained a large portion of their current roles in schools, the reauthorization of IDEIA has promoted an expansion of the role of school psychologists. These changes directly affect the identification of children with specific learning disabilities. The federal criterion for specific learning disabilities no longer requires a discrepancy between intellectual and achievement ability (US Department of Education, 2006). The importance of RTI has become more prevalent with changes in IDEA that de-emphasize the discrepancy model for learning disabilities and promote a model that takes into account scientifically based interventions and individual progress.

The current study examines the leadership school psychologists provide to aid in successful RTI implementation. While the primary job functions of school psychologists may remain to be assessment, RTI may enhance the need for school psychologists. School psychologists are in a prime position to serve as a resource to other educators who are implementing RTI because of their knowledge of consultation, intervention, progress monitoring, problem analysis, program evaluation, data-based decision making, and facilitation of systems change. This study examines the leadership characteristics school psychologists exhibit, as perceived by school principals, which may aid in RTI implementation.

CHAPTER 3

METHODOLOGY

RTI aims to improve instruction for all students through tiers of intervention provided to all students (See Appendix A). However, school-wide implementation of RTI is a challenge for districts, administrators, and all levels of school employees. School leadership is instrumental in successful implementation of RTI. As Dulaney, (2012) explained, school leaders need to take time to build consensus so that understanding is shared concerning implementation in order to prepare their school for systemic improvement. Then school leaders need to identify available resources to build and sustain the RTI infrastructure and participate in data-driven decision making. The researcher designed this study to investigate the extent of the leadership roles provided by school psychologists related to RTI implementation in District 2 schools.

There is limited information available in the literature to guide schools in implementation, especially in secondary schools (Spiegel, 2009 and Brumfield, 2011). This study is designed to collect data that identifies the extent to which leadership characteristics related to RTI Implementation are present in school psychologists and their usefulness to principals in implementation of RTI. The researcher hypothesized that the field of school psychology is well positioned to provide school leaders with support that will facilitate RTI Implementation.

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Research Design

The climate for RTI implementation was established in District 2 prior to the decision to implement RTI. The premises behind RTI were promoted at the district level in District 2 and David Tilly, a notable leader in RTI nation-wide, conducted a presentation on RTI to all directors, coordinators, principals, assistant principals, and school psychologists in June of 2012. A culture of collaboration and shared responsibility for student achievement is promoted and supported through a district RTI task force and professional learning opportunities. Due to this support and ownership from District 2 leaders, principals are well educated on RTI practices in District 2 and the foundation for RTI from principals was established prior to initiation of this study.

This study was quantitative in nature. For the data collection method of this study, the researcher used a survey design. The researcher assumed that school psychologists manifest leadership characteristics associated with their roles that enhance successful implementation of RTI. This study aimed to gain information pertaining to administrators' perceptions of the usefulness of school psychologists' leadership characteristics as a resource in school wide implementation of RTI. The target population for this study was school principals in District 2. This survey was designed to determine the degree to which principals perceive school psychologists to fulfill roles critical to the successful implementation of RTI. The researcher developed the *Principal Perceptions of School Psychologists as a Resource for Implementation of Response to Intervention Survey* (see Appendix C). The researcher delivered the survey electronically via Survey Monkey to each principal in District 2. Respondents were asked to indicate the extent to which they

agreed or disagreed with each statement. The following is an example of formatting for the survey question 2:

Think about the degree to which your school psychologist is involved in the school's RTI efforts.

	Strongly Disagree	Disagree	Agree	Strongly Agree
My school psychologist attends problem solving team meetings.	O	O	O	O

Survey Development

This survey is designed to determine the degree to which principals perceive school psychologists to fulfill roles critical to successful implementation of RTI. The survey questions were based on the *Administrator Characteristics for Implementation of Response to Intervention* survey created by Joseph Brumfield (2011) for his dissertation *An Examination of the Specific School Leadership Characteristics Related to Implementation of a Response to Intervention Model.* The researcher developed items for this survey based upon the leadership roles described in Brumfield (2011). This survey is divided into three subscales: (1) school psychologist as a Participant, (2) school psychologist as a Data Manager, and (3) school psychologist as a Recruiter in RTI. Brumfield's survey was divided into four subscales: (1) administrator as a Participant, (2) administrator as a Data Manager, (3) administrator as a Recruiter, and (4) administrator as a Resource Provider in RTI. The researcher did not include questions related to the provision of resources because school psychologists are generally not in a position to allocate resources within a school.

Two colleagues read the revised survey. Both colleagues checked items for grammatical errors and read for content and clearness. Although minor corrections were

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made, the colleagues found the survey items clear and appropriate for the intent and purpose of the questionnaire. Also, discussion between dissertation committee members and the researcher resulted in changes to the survey intended to improve the overall readability. Demographic items were chosen to provide a description of the participants and allow for potential secondary analyses. The demographic information collected related to years experience as an administrator and school level served. Originally the survey included additional demographic information such as age, gender, highest degree earned and familiarity with problem-solving teams. One of the colleagues who reviewed the survey suggested that due to the small population size that the additional demographic characteristics would allow some respondents to be identified. In addition, the items in Brumfield's (2012) survey fluctuated from positive to negative framing of the question. For this study, the researcher chose to frame all survey items positively in this survey.

Purpose of the Study

The purpose of this study is to examine the leadership role of school psychologists in Response to Intervention (RTI) implementation, as well as school psychologists' usefulness to principals in successful implementation of RTI. The researcher asserts through the fulfillment of certain roles, school leaders recognize the benefit of involving school psychologists in RTI implementation. The objective of this quantitative research was to analyze the collected data to explore these specific research questions:

1) To what extent are the specific leadership characteristics- associated with school psychologists' roles and related to the level of RTI implementation- being exemplified?

2) To what extent are the specified school leadership characteristics present in school psychologists in District 2 schools?

Population and Sample

The target population for this study was public school principals in District 2 that received the invitation to participate in the study via email and chose to participate. District 2 has 22 schools and is a semirural school district in a Southeast region of the United States. In District 2, each school has one school psychologist and larger schools may have two. A consequence of utilizing a survey research design is that those who respond to the survey will, for all intents and purposes, define the sample. In this type of non-random sampling people who have the strongest opinions on the topic could be most likely to respond. To combat this, the Assistant Superintendent of Administration and Personnel distributed the survey to the principals. The researcher assumed that when the email comes from an authority figure the target population would be more likely to respond. After two weeks, a second email was sent to the principals from the Assistant Superintendent of Administration. Within three days, 21 out of 22 principals completed the survey. One principal did not complete the survey, however, the researcher concluded that the response rate of 95% was more than sufficient for the study.

Description of the Instrument

The researcher delivered the survey electronically via Survey Monkey. At the beginning of the survey there is an introduction that indicates the intended use of the survey and assures confidentiality of responses (see Appendix C). Respondents are asked to indicate the extent to which they agree or disagree with each statement. The survey was designed to determine the degree to which principals perceive school psychologists

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to fulfill leadership roles critical to the successful implementation of RTI. The survey items also examine the extent to which respondents perceive school psychologists' involvement in three leadership categories: Participator, Data Manager, and Recruiter for RTI Implementation. Principals used a four-point Likert scale to rate their perception of the degree to which school psychologist filled these important roles. The response choices range from St*rongly Agree* to S*trongly Disagree*. Responses 2 and 3 indicate varying levels of agreement and have the assigned label of *Disagree* and *Agree* respectively. There are 14 items total and two demographic questions

Administration

The researcher obtained consent from the School District 2 Research Review Board and the University of South Carolina's Institutional Review Board to conduct this research. The researcher delivered the survey using educators' publicly available district email addresses. The District 2 Assistant Superintendent of Administration and Personnel distributed the survey to the principals. Participation in the survey was voluntary and the researcher ensured a degree of anonymity and confidentiality. The researcher did not collect any personally identifying information with the survey.

Each of the 14 Likert-type items will be scored on a four point scale. The four point Likert scale results in a difference of three points between the highest value (4) and the lowest value (1). The researcher will use a .50 point scale for the participants extreme responses and .99 value for each of the middle responses. The researcher interprets the scale in this manner based on a sense that extreme responses among participants would be rarer than middle responses. This type of interpretation allows the researcher to

analyze the data in a way that is better suited to infer needed conclusions about RTI implementation.

Table 3.1

Score Range Interpretation for the Principal Perceptions of School Psychologists as a Resource in RTI Implementation Survey

Score Range	Subscales		
	Participant	Data Manager	Recruiter
1.00-1.50	Very rarely involved	Very rarely uses data	Very rarely recruits
1.51-2.50	Rarely involved	Rarely uses data	Rarely recruits
2.51-3.50	Frequently involved	Frequently uses data	Frequently recruits
3.51-4.00	Very frequently Involved	Very frequently uses data	Very frequently recruits

A participant will be required to respond to at least 80% of the items (14) on the total survey as well as a minimum of 80% of the items within each subscale in order for his or her responses to be scored. Computation of the subscale scores and the total scores will be based on the mean of all non-missing data.

Data Collection

The researcher used Survey Monkey, an online survey collection tool, to deliver an electronic, web-based questionnaire to potential respondents. This type of format was used because of the degree of simplicity of delivery, the anonymity it affords respondents, and the integrity of the data that is collected. The sample demographic data and research variables are described by descriptive statistics that include percentage, means, and standard deviations.

Descriptive statistics are conducted to describe the sample demographics and the research variables used in the analysis. Frequency and percentages are calculated for nominal (categorical/dichotomous) data. These consist of discrete items that belong to a common category and are identified by category name. Frequency is the count or number of participants that fall into a particular category; it is also useful to know the percentage of the sample that falls into that category. Means and standard deviations are calculated for interval/ratio data. Interval/ratio scales consist of items that have an intrinsic order that can be represented in terms of quantitative values. The arithmetic mean is defined as the sum of scores divided by the number of scores. Standard deviation measures statistical dispersion, or the spread of values in a data set. If the data points are close to the mean, then the standard deviation is close to zero.

Research Question 1

To what extent are the specific leadership characteristics- associated with school psychologists' roles and related to the level of RTI implementation- being exemplified?

Research question 1 examined whether principals perceive school psychologists to exemplify the three leadership categories associated with successful RTI implementation. The three leadership characteristics were Participant, Data Manager, and Recruiter in the RTI process. These three leadership characteristics were based on a studies completed by Spiegel (2009) and Brumfield (2011). These studies examined the leadership characteristics of principals who successfully implemented RTI. Spiegel's (2009) study was qualitative in nature. Brumfield (2011) adapted Spiegel's study to a quantitative research design utilizing a survey distributed electronically. Both studies examined leadership characteristics present in principals. For this study, the researcher

adapted the questions to examine the leadership characteristics present in school psychologists related to the implementation of RTI.

Research Question 2

To what extent are the specified school leadership characteristics present in school psychologists in District 2 schools?

Research question 2 examined leadership characteristics present in District 2 school psychologists. More specifically, research question 2 examined the presence or relative absence of the three leadership characteristics in school psychologists. The study showed principals perceive their school psychologists to possess strong leadership characteristics related to RTI implementation. Overall, survey item responses from principals were positive, however, additional information can be ascertained when considering which leadership characteristics were more or less present in school psychologists. Research question 2 further examines the three leadership characteristics subscales (Participant, Data Manager and Recruiter). The mean of each subscale was totaled and compared to each subscale.

Limitations

Despite the researcher's efforts to collect comprehensive data, this study was not without its limitations. The primary limitation of this study is the relatively small sample size. Because the research focused on 22 schools in one school district in South Carolina, the results of this study may not be generalized to all schools in South Carolina or any other state. In addition, many aspects of RTI, including early intervention, tiered instruction, universal screening, progress monitoring, and curriculum-based measurement have become every day practice in elementary schools. Current research is examining

elementary school methods and to discover how they can be generalized for use in secondary schools. Consequently, another limitation of the current study revolves around the limited resources for RTI implementation in secondary schools.

The *Principal Perceptions of School Psychologists as a Resource in RTI Implementation* is a survey tool that was created for this study. The validity and reliability of this survey have not been established. In addition, the examiner administered the survey to the district's principals and there was no control over the principals responding with honesty. The survey was administered to building principals only, not to assistant principals. Therefore, it is possible that the perceptions of principals do not necessarily represent all district administrators' perceptions.

In addition, the premises behind RTI and positive support for RTI had been established in the highest levels in District 2. Therefore, it is possible that principals may have answered the survey questions more positively in consideration of district approval. However, the measures taken to keep principal information confidential reduce the likelihood that principals may have responded more positively. Also, originally the survey included more demographic information such as gender and level of education. However, these demographic items were removed from the survey they may have allowed readers to personally identify the principals. With a higher number of participants additional demographic items may not have resulted in a breach in confidentiality. Future research should consider a larger sample of participants, which will allow for the inclusion of additional correlations. Limits in demographic information reduce correlations and subsequently additional discussion and conclusions to be ascertained from the study.

CHAPTER 4

RESULTS

The results of the study indicate that through the fulfillment of certain roles, school psychologists aid principals in service delivery for implementation of RTI. In addition, the results indicate that school psychologists exhibit certain leadership characteristics that promote RTI implementation specifically as a participant, data manager, and recruiter in the RTI process. The purpose of this study was to investigate the extent to which school psychologists in District 2 exemplify these leadership characteristics.

Description of the Research Sample

Public school principals in District 2 were the target population for this study. Elementary, middle and high school principals who received the invitation to participate in the study via email were the accessible population and those who responded constituted the research sample. The total sample consisted of 21 principals (thirteen elementary, five middle, and three high school principals); one district principal did not complete the survey. The researcher made the survey available through Survey Monkey, and it remained available for approximately four weeks. Of the 22 principals invited to participate in the study, 21 responded yielding a 95 percent response rate. The emails included the purpose of the study and instructions for completing and returning the

survey which included the link to the website "Survey Monkey." Furthermore, the email included a statement ensuring confidentiality of all responses.

Demographics

The researcher collected data on two demographic characteristics: years as an administrator and school level served. These data for these is reported in Table 4.1 and reveal that approximately 35% of the respondents had served as a principal between 1-5 years, the largest subgroup categorized by principal years of experience. Principals with 6-10 years of experience represented 15% of the sample population. Both the 11-15 and 16-20 years of experience groups represent 20% of the sample population each. Those respondents who reported 21+ years of experience and the one respondent who did not indicate years of experience represent 10% each. Further assessment revealed that half of the sample reported having less that 10 years of experience as a principal, while the other half indicated having anywhere from 11 to 21+ years of experience.

Table 4.1

Demographics of Respondents

Demographic Characteristic	N	Descriptive Statistics Years Experience	Percentage of Total
Years Experience	7	1-5	35%
	3	6-10	15%
	4	11-15	20%
	4	16-20	20%
	2	21+	10%
	1	No response	10%
School Level Served	13	Elementary	61.9%
	5	Middle	23.8%
	3	High	14.3%

Item Analyses

Data describing the principal ratings of all of the items within the survey as well as subgroup ratings is reported in Table 4.2. An examination of information in the table indicated that the item responses means were positive and ranged from 3.05 to 3.91 with a total survey item mean of 3.45.

Table 4.2

Survey Item-level Statistics: Principal Perceptions of Leadership Characteristics Exemplified by School Psychologists

Leadership Role	Item	N	M	SD	Item to Subscale Correlation	Item to Total Correlation
Participant	1	21	3.76		0.28	0.31
	2	21	3.81		0.33	0.36
	3	21	3.33		-0.15	-0.12
	4	21	3.19		-0.29	-0.26
	5	21	3.29		-0.19	-0.16
			(3.48)	0.29		
Data Manager	6	21	3.23		-0.17	-0.22
	7	21	3.57		0.17	0.12
	8	21	3.05		-0.35	-0.40
	9	21	3.43		0.3	-0.02
	10	21	3.57		0.17	0.12
	11	21	3.57		0.17	0.12
			(3.40)	0.22		
Recruiter	12	21	3.48		-0.04	0.03
	13	21	3.53		0.01	0.08
	14	20	3.55		0.03	0.1
			(3.52)	0.03		
Total	14	21	3.45	0.22		

According to the data shown in Table 4.2, respondents generally have positive perceptions of school psychologists as participants in RTI processes. Respondents perceive their school psychologists as frequently involved in their schools' RTI implementation efforts. Through the survey responses we begin to understand the

different roles of school psychologists and how school leaders view school psychologists based on three basic roles in RTI. The total survey suggests that principals believe that school psychologist frequently demonstrate specific characteristics associated with successful RTI implementation. Specifically, the respondents perceive school psychologist to demonstrate each of the three subscales of characteristics related to RTI implementation (Participant, Data Manager, and Recruiter).

Information related to performance for items in the participant subscale is shown in Table 4.2. Items related to the Participant subscale include items 1-5. Items 1-5 refer to the school psychologists participating in the RTI process and ask if the school psychologist is an active member of the Tier 3 problem solving team and regularly attends problem solving meetings. The mean item responses were positive and ranged from 3.29 to 3.91. Items related to the data manager subscale include items 6-11. Items included in the data manger subscale ask if the school psychologist gathers and is able to interpret student achievements data. In addition, the data manager subscale items ask if the respondent's school psychologist discusses student achievement data with teachers and uses data to support decisions regarding interventions. The data in Table 4.2 indicated that respondents have positive perceptions of school psychologists as data managers and mean scores ranged from 3.05 to 3.57. Items pertaining to the recruiter subscale include items 12-14. The Recruiter subscale items ask the respondents about their school psychologist's utilization of expertise available to RTI processes and support of problem solving team members. Also, the Recruiter subscale ascertains whether the principals' perceive their school psychologist's attitude to encourage staff members to commit to the RTI process. Analysis of the data pertaining to the recruiter subscale was

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positive and mean scores ranged from 3.48 to 3.55. Items considered to be rated positively fall above a 2.5 mean score rating, which indicates the principals responded either agree or strongly agree to the items.

To establish internal consistency the researcher conducted reliabilities for the total survey and each of the three subscales. Table 4.3 shows the results using Cronbach's Alpha.

Table 4.3

Reliability of Total Survey and Subscales

Subscale	Cronbach's Alpha	Number of Items
Participant	.86	5
Data Manager	.94	6
Recruiter	.89	3
Total	.96	14

Examination of the reliability scores show that they range from very good (.86) to excellent internal consistency (.94). The reliability coefficient of .96 for the total survey should be considered very acceptable for the purpose of this study. The reliability coefficients derived for the three subscales are slightly lower that the reliability score for the total scale. However, this is probably due to the smaller number of items in each subscale. Nevertheless, each subscale score was extremely good or excellent with regard to reliability.

Principal Perceptions of School Psychologists' Leadership Characteristics

This section will describe the extent to which three specific leadership characteristics associated with school psychologist roles and related to the level of RTI implementation are being exemplified. The extent to which principals perceive the specified leadership characteristics are present in District 2 school psychologists was

analyzed. The analysis examines which leadership characteristics were present or relatively absent. Statistical analysis was used to examine data for the total scales and subscales. First, respondent data are summarized using descriptive statistics (e.g. number of subjects, mean, and standard deviation). Next, inferential analyses of the research questions are used to examine the statistical significance of the results.

Descriptive Statistics

The researcher conducted descriptive analyses for the total scale and the three subscales and this information is shown in Table 4.4. The four-point Likert scale used for the survey provided response options that ranged from Strongly Disagree (1) to Strongly Agree (4). The results of the total survey (*M*=3.45, *SD*=0.22) suggest that principals believe school psychologists in District 2 to frequently demonstrate specific leadership characteristics related to RTI implementation. The value of *N* in Table 4.4 refers to the number of survey items for each of the three subscales. The number of survey items related to the Data Manager subscale was the highest at six questions, followed by the Participant subscale with five survey items. The Recruiter subscale was made up of only three survey items. The purpose of comparing is the total subscale items is to bring attention to the difference in total items between each subscale. In particular, the small number of questions related to the Recruiter subscale should be noted and may compromise the conclusions the researcher is able to make overall.

The mean of the total survey was well above the point of central tendency (2.50). This places the more negative perceptions of school psychologists within nine-tenths of the point of central tendency, while the more positive perceptions indicated that school psychologists very frequently demonstrate the characteristics being examined. No

principals reported Strongly Disagree on any survey item. Respondents' overall perceptions of their school psychologists were positive.

Table 4.4

Leadership Roles Exemplified by School Psychologists

Leadership Role	*N*	*M*	*SD*	Range
Participant	5	3.48	0.29	3.19-3.81
Data Manager	6	3.40	0.22	3.05-3.57
Recruiter	3	3.52	0.03	3.48-3.55
Total	14	3.45	0.22	3.05-3.81

A mean score above 2.5, the point of central tendency, is considered a positive response. Mean scores that fall closer to 4.0 are generally considered to be the more positive survey responses. Scores below 2.5 are considered to be a negative response. The means of all three subscales: school psychologist as participant (*M*=3.48, *SD*=0.29), school psychologist as data manager (*M*=3.40, *SD*=0.22), and school psychologist as recruiter (*M*=3.52, *SD*= 0.03) indicated that principals generally have positive perceptions of their school psychologist. These results indicate that respondents' perceive school psychologists as frequently demonstrating each of the three leadership characteristics (Participant, Data Manager, and Recruiter) related to the fulfillment of specific roles associated with the implementation of RTI. In the sections below the researcher will discuss in detail the particulars found in the broad categories of Participant, Data Manager, and Recruiter.

School Psychologists as Participants. School psychologists performing as key participants in the RTI process is a trend that emerged from the survey responses. The

principals reported their school psychologists to be involved in the RTI process and leading their staff in RTI efforts. According to the data shown in table 4.4, respondents generally have positive perceptions of school psychologists as participants in RTI processes. Respondents perceive their school psychologists to be frequently involved in their schools' efforts in RTI implementation. With no scores falling in the lowest level on the Likert response scale (Strongly Disagree=1), perception responses indicate school psychologists frequently participate in the RTI process. Mean item scores in the Participant subscale ranged from 3.19 to 3.81.

When examining individual items in the Participant leadership subscale, 76% strongly agree and 23% agree that their school psychologist is an active member of the school's Tier 3 problem solving team (Item 1). For Item 2, 81% strongly agree and 19% agree that their school psychologist attends problem solving team meetings. Items 1 and 2 were rated strongest when compared to Items 3, 4, and 5. Items 1 and 2, ask if the school psychologist is an active member of and attends the Tier 3 problem solving team. Items 3, 4, and 5 attempt to ascertain levels of involvement in problem solving teams beyond active participation and involvement in problem solving teams. Essentially, items 3, 4, 5 seek information regarding school psychologist involvement in fidelity checks for intervention, sharing information with teachers and reviews of student responses to intervention. While Items 3, 4, and 5 were rated positively, there were less 'strongly agree' responses and more 'agree' responses. Item 3 asks if the principal's school psychologist checks to ensure that interventions are being delivered to students appropriately. For this item, 38% strongly agreed, 57% agreed and 4% disagreed. This suggests that principals see their school psychologists as being involved in fidelity checks

for interventions, but not to the same degree that they see them as participating in problem solving teams. Item 4 states the school psychologist shares research or information related to interventions with teachers, 33% strongly agreed, 52% agreed, and 14% disagreed. These responses led the researcher to conclude that principals would like to see the school psychologists participating in debriefings and professional development trainings to share research and information related to interventions. Principals may see their school psychologists as having knowledge and access to research and information related to intervention, but desire their school psychologists to share information more regularly. Item 5 asks if the school psychologist regularly reviews how students are responding to instruction. On this item, 33% strongly agreed, 61% agreed, and 4% disagreed. From these responses the researcher considers that principals perceive their school psychologist as reviewing how students are responding to instruction, but not as often as they perceive them participating in problem solving teams.

School Psychologists as Data Managers. The data in Table 4.4 also indicates that respondents have positive perceptions of school psychologists as data managers. However, the responses in the Data Manager subscale are the lowest of the three leadership role subscales. This subscale seeks information about school psychologists' leadership characteristics relating to proficiency in using data to inform decision-making. Respondents recognize their school psychologists frequently use data to inform decision-making. With no scores falling in the lowest Likert scale category, perceptions ranged from school psychologists rarely to very frequently using data to assist in making decisions. Six items related to the Data Manager subscale. Item 6 states the school psychologist gathers student achievement data. Thirty-three percent of principals

responded strongly agree, 57% agreed, and 9% disagreed with item 6. Fifty-seven percent responded strongly agree and 42% agree for item 7, which ascertains principals' perceptions of school psychologists' ability to interpret student achievement data. Mean item scores in the Data Manager subscale ranged from 3.05 to 3.57.

The researcher concludes that principals perceive their school psychologist as having a relative strength in interpretation of student achievement data. Item 8 states their school psychologist regularly discusses student achievement data with teachers. Within item 8, 23% percent responded strongly agree, 57% agree, and 19% disagree. While the overall response from principals is positive, the percentage of principals who responded disagreed is the highest on this item for the entire survey. The researcher noticed principals responded in a comparatively less positive manner on items that seek information regarding school psychologists discussing or sharing information related to RTI with teachers. The researcher will examine this trend further in Chapter 5. Item 9 states; the school psychologist uses computer-based programs to manage student achievement data. On item 9, 47% strongly agreed, 47% agreed, and 4% disagreed. The responses for item 10, the school psychologist uses data to assess whether decisions made about intervention are appropriate, were 57% strongly agree and 42% agree. No principals reported they disagree with this statement. The final item for the data manager subscale, item 11, asks if the school psychologist always uses data to assist in making decisions. For this item, 57% strongly agree and 42% agree. No principals disagreed with this item.

School Psychologists as Recruiters. Another leadership characteristic identified in this study was the school psychologists' ability to identify high performers in RTI and

to rely on their expertise in the RTI efforts. Table 4.4 indicates that positive perceptions were also found in the school psychologist as a Recruiter subscale. Respondents perceived their school psychologist as very frequently involving staff members in the schools' RTI efforts. A recruiter in RTI is particularly effective in putting together a central group of individuals to serve on the schools primary problem-solving team. The school psychologists and administrators should consider staff members' predisposition for working with struggling students when developing problem solving teams. Three items, items 12, 13, and 14 makeup the school psychologist as a Recruiter subscale. Mean item scores in the Recruiter subscale ranged from 3.48 to 3.55. Item 12 states the school psychologist utilizes the expertise available among staff members for RTI processes. Of the respondents, approximately 61% strongly agreed, 23% agreed, and 14% disagreed. For item 13, which asks if the school psychologist supports members of the schools problem-solving team for the purpose of intervening individually with at-risk students, approximately 52% strongly agreed and 47% agreed. No principals disagreed with Item 13, indicating they perceive their school psychologist to support the school's problem solving team. Item 14 states, the school psychologists attitude toward RTI encourages staff members to commit to the RTI process. Of the principals surveyed, 65% percent of the principals strongly agreed, 25% agreed, and 10% disagreed with this statement. The responses to item 14 indicate that principals perceive their school psychologist's attitude about RTI to positively influence commitment to the RTI process. Good recruiting helps the principal and RTI team develop and sustain capacity for RTI. Putting the right people in the right places aids in the maintenance or procedural integrity of RTI.

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Further analysis of this item indicates that of the 10% of respondents that disagreed that their school psychologist's attitude encourages staff to commit to RTI, one was a middle school principal and the other was a high school principal. Therefore, 100% of elementary school principals strongly agree or agree their school psychologist's attitude encourages their staff in RTI. Overall, it is important for the reader to note there were no scores in the lowest range, strongly disagree, on any of the Recruiter subscale items. These data indicate that respondents perceive their school psychologists as frequently recruiting and involving staff members in the schools' RTI efforts.

Examination of Specific Items Relating to Communication with Teachers. The researcher noted a trend with survey items that include language relating to school psychologists' communication with teachers related to RTI Implementation. The following table, Table 4.5, examines survey items 4 and 8. Items 4 and 8 both include language referring to school psychologists sharing information with teachers and discussing student achievement with teachers. Item 4 is included in the School Psychologist as a Recruiter subscale. Item 8 was included in the School Psychologists as a Data Manager subscale. The common feature in items 4 and 8 was that they sought information regarding principal perceptions of school psychologists' communication information or data with teachers. The researcher sought to further examine survey items that probed for information about school psychologists sharing information and communicating regularly with teachers.

Table 4.5

Survey Items 4 & 8 Analysis: School Psychologist Share and Discuss Information With Teachers

	Item 4	Item 8	Item 4 & 8
Elementary	84.6%	78.8%	81.7%
Middle	75%	70%	72.5%
High	66.7%	75%	70.8%

Data describing items 4 and 8 on the survey are reported in Table 4.5. Principal responses on items 4 and 8 were correlated with their years of experience in Table 4.5. Item 4 states the school psychologist shares research or information related to interventions with teachers. For this item, the total response from principals was 33% strongly agree, 52.4% agree, and 14.3% disagree. Of the three principals that disagreed, two were middle school principals and one was a high school principal. Item 8 stated the school psychologist regularly discusses student achievement data with teachers. The total response from principals showed 23.8% strongly agree, 57.1% agree, and 19% disagree. Of the four principals that disagreed, two were elementary principals, one was a middle school principal, and one was a high school principal.

In table 4.5, the researcher analyzed the responses for items 4 and 8 and correlated this information with the demographic information school level served demographic data reported by principals. This correlation revealed that elementary principals rated school psychologists at 81.7% on items that relate to sharing and discussion RTI information with teachers. Middle school principals rated at 72.5% and high school rated the lowest at 70.8%. There is an observable trend of lower responses coming from middle and high

school principals compared to responses from elementary principals. Although these differences are not statistically significant they may still provide interesting conclusions to the reader. While some may surmise that principals would like their school psychologists to share research and intervention data more often with teachers, the researcher believes that middle and high school principals may be unable to rate their school psychologist higher because of the difficulty with RTI implementation at the secondary level. The literature supports the conclusion that elementary schools are more equipped and ready to implement RTI than secondary schools (Canter et al, 2008). In addition, middle and high school administrators address higher levels of discipline than elementary school principals. Elementary principals can focus on instructional leadership and interventions due to lower levels of behavior concerns. In addition, behavior issues at the elementary level are easier to manage because of parental support.

School Psychologists Encourage RTI.

Table 4.6

Item14: School Psychologists' Attitude Encourages Commitment to RTI
_____

	Total
Elementary	94.2%
Middle	80%
High	75%

_____

Table 4.6 examines item 14, which states the school psychologist's attitude toward RTI encourages staff members to commit to the RTI process. Of the 20 principals that responded to this question, 65% strongly agreed, 25% agreed, and 10% disagreed.

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One principal did not respond to this item. Item 14 is important to the study because of the importance of leaders in implementation of RTI to encourage staff members to participate and eventually commit. As noted previously, the trend of responses when correlated with principal school level served shows more negative responses the higher the school level served. These results are not statistically significant, however, the reader may notice interesting results about principal perceptions of school psychologists, particularly that school psychologists demonstrate a positive attitude toward RTI and encourage others to commit to the process. The data suggests the higher the grade level served the less positive the response from principals. This trend may be due to the difficulty or implementation of RTI at the secondary level and limited models of successful implementation nation-wide (Canter et al, 2008). Understanding the value of the school psychologist as a Recruiter for RTI is acutely important as principals seek to implement RTI.

Principal Years Experience and Rating of Three Leadership Roles.

Table 4.7

Comparisons of Principal Years Experience and Leadership Role Exemplified by School Psychologists

Years Experience	Participant	Data Manager	Recruiter	Total
1-5	85%	82.7%	83.3%	83.6%
6-10	90%	84.7%	94.4%	89.7%
11-15	92.5%	92.7%	93.8%	93%
16-20	86.3%	83.3%	91.7%	87.1%
21+	80%	83.3%	79.2%	80.8%

Table 4.7 shows the correlation of principal years of experience and perception of school psychologist roles in each of the three leadership roles. The principals with 11-15

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years experience, which includes four principals, rated school psychologists to be highest overall on all three leadership roles (Total=93%). In addition, the 11-15 years experience group rated the school psychologists highest compared to other years of experience subgroups in the leadership roles of school psychologists as a Participant (92.5%) and school psychologist as a Data Manager (92.7%) in RTI implementation. This subgroup also rated the school psychologist highly in the leadership area of school psychologist as a Recruiter in RTI implementation (93.8%).

Further analysis of Table 4.7 revealed the 21+ years of experience subgroup, which consists of two principals, rated school psychologists the lowest in overall RTI leadership exemplified by school psychologists (Total=80.8%). Furthermore, the 21+ years experience subgroup yielded the lowest scores in the leadership areas on school psychologist as Participant (80%) and school psychologist as a Recruiter (79.2%) subscales. The years experience subgroup that rated school psychologists the lowest in the leadership role of school psychologist as a Data Manager, was the 1-5 years experience subgroup (82.7%). The 1-5 years experience subgroup is the largest, with 7 principals comprising the group.

Table 4.7 yielded ranges from 80.8% by principals with 21+ years experience to 93% from principals with 11-15 years experience. Statistically significant data could not be yielded due to the outlier responses from the 21+ years experience subgroup. One respondent with 21+ years experience was determined to respond in an overly negative pattern, accumulating more disagree responded than any other respondent. Therefore, the data from the 21+ subgroup should be interpreted with caution. It is important to note that while the differing scores in Table 4.7 are not statistically significant, they provide

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interesting information for the reader to consider (1-5 years= 83.6%, 6-10 years= 89.7%. 11-15 years= 93%, 16-20 years= 87.1%, and 21+years = 80.8%). The responses across the years experience subgroups reflect positive perceptions of school psychologists exemplification of leadership characteristics related to RTI implementation.

Principal School Level Served and Rating of the Three Leadership Roles.

Table 4.8

Comparison of School Level Served and Leadership Role Exemplified by School Psychologists

School Level Served	Participant	Data Manager	Recruiter	Total
Elementary	90%	87.8%	91.7%	89.8%
Middle	86%	82.5%	80%	82.8%
High	75%	80.7%	78.1%	77.9%

Table 4.8 illustrates a comparison school level served by principals and their perception of leadership characteristics exemplified by school psychologists. The results of the total percentage of perception showed high school principals have a lower perception of school psychologists exemplifying leadership characteristics related to RTI. Closer analysis of the responses indicated that one principal responded disagree to seven items while the other high school principals did not respond disagree to any of the items. Therefore, the high school principals' results as a total subgroup should be interpreted with caution and they may be an underestimate due to one principal's responses tending to be more negative than the rest of the group. In addition, the literature notes a gap in guidelines and models for RTI implementation at the high school level. Subsequently, middle and high school principals may respond more negatively due to difficulties with

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RTI implementation at the secondary level and the results may not necessary indicate a lack of leadership exemplified in their school psychologist.

Analysis of Items Rated Negatively. The following section looks at the survey items that were rated disagree by principals. None of the survey items were rated strongly disagree by principals.

Table 4.9

Item Analysis- Survey Items Rated Disagree by Principals and Correlated by School Level Served

Survey Items	Elementary	Middle	High	Total
3			1	1
4		2	1	3
5			1	1
6	1		1	2
8	2	1	1	4
9	1			1
12	1	1	1	3
14		1	1	2

The researcher tallied the number of negative responses rated by principals. While the total results of each survey item were positive and the overall results conclude that principals perceive their school psychologists to exemplify leadership characteristics associated with RTI implementation, there is still information to be ascertained from the negative responses provided by principals. Table 4.9 lists all items on the survey that received at least one disagree response from a principal correlated with the school level served by the principal. Elementary and middle school principals each had a total of five disagree responses. The high school principals accumulated seven disagree responses on survey items, more items than elementary and middle school principals reported as disagree. However, the reader must consider that of the 21 respondents in the survey, 13

serve elementary, five serve middle, and three serve high school. Therefore, the percentage of negative responses per sub group is higher in middle than in elementary school principals though they have the same number of disagree statements. Furthermore, the percentage of negative responses reported by high school principals is significantly higher due to the small sub group size of three. However, further inspection of the responses within the high school principal subgroup exposed the fact that all seven disagree statements were reported by one high school principal creating an outlier in the high school principals subgroup. Therefore, one principal's more negative perceptions may unfairly reflect the high school principals' perceptions as a whole.

Table 4.10

Item Analysis- Survey Items Rated Disagree by Principals Correlated with Years Experience

Survey Items	1-5	6-10	11-15	16-20	21+	Total
3					1	1
4	1	1			1	3
5					1	1
6				1	1	2
8	2			1	1	4
9				1		1
12	2				1	3
14	1				1	2
Total	6	1	0	3	7	17

Note: header "Years Experience" spans columns 1-5 through 21+.

Table 4.10 shows correlated the survey items rated disagree by principals correlated with years experience. The two subgroups with the most disagree statements are the 1-5 and 21+ years experience. There are seven principals with 1-5 years experience and there are two principals with 21+ years experience. Of the 17 total disagree responses in this study's survey, 13 were reported by the 1-5 and 21+ years

experience. Further review of the responses within the 21+ years experience subgroup exposed the fact that all seven disagree statements were reported by one principal out of the two in this subgroup. Therefore, there may be an outlier in the 21+ years experience subgroup, meaning one principal's more negative perceptions may unfairly reflect the perceptions of principals with 21+ years of experience as a whole. In fact, the other principal who comprised 21+ years of experience subgroup reported strongly agree with all statements relating to school psychologists exemplifying leadership characteristics related to RTI implementation.

Within the 1-5 years experience subgroup, there were six disagree responses. Of the seven respondents that comprise the 1-5 years experience subgroup, five are elementary principals and two are middle school principals. Further analysis of the disagree statements reported in this subgroup reveal that the six disagree statements came from only two principals in this subgroup one who serves the elementary school level and one who serves the middle school level. Because the six disagree statements came from only two of the seven respondents in this group, it may negatively impact the ability to interpret results based on the 1-5 subgroup as a result. The correlation of responses of subgroups 1-5 years experience may not accurately reflect the overall 1-5 years of experience subgroups' perceptions of school psychologists as a resource in RTI implementation.

The researcher considered why the most negative responses were reported within the subgroups with the least and most experience. The RTI focus in District 2 began within in the last few years. The researcher considered perhaps newer district administrators require more initial and continual training in RTI. In addition,

conceivably administration-training curriculum do not have the same emphasis on RTI as District 2. Administrative preparation programs may not be keeping up with recent federal and state level education shifts toward RTI initiatives. In addition, principals with less administration experience may have school needs such as focusing on culture or climate issues, establishing procedures, implementing school mission and vision of their school. These issues may take priority over RTI for the present time. Principals with 6-20 years experience may have had initial RTI training in District 2, follow-up trainings or other experience with RTI. It is possible that principals with 6-20 years experience in interventions and have been a part of the school level or district level RTI paradigm shift.

Inferential Statistics

This section will describe the inferential analyses employed to answer the research questions. For the total scale, the null hypothesis is that the mean score in the population is 2.50. An alternative hypothesis would be that the mean score in the population is something other than 2.50. In order to test this hypothesis, a one-sample t-test is used because the one sample t-test determines whether the mean of a variable from a single group differs from a specified value. In this case the total mean difference is 0.952, $t = 9.413$, and $p = .000$. Therefore, the mean scores for the total scale exceeded the midpoint of 2.50 because p is less than .05. The null hypothesis is rejected, and the alternative hypothesis is accepted. Respondents positively perceive school psychologists as exemplifying characteristics related to RTI implementation.

For the school psychologist as a participant subscale, the researcher hypothesized that no difference would exist between the mean for the subscale and the neutral value of 2.50. An alternative hypothesis predicted that the mean score would be a value other

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than 2.50. The one sample t-test revealed a mean difference of 0.947, t = 10.13, and p = .000. This is a significant result. The alternative hypothesis is accepted; therefore, the null hypothesis is rejected. The mean scores for the participant subscale exceeded the midpoint of 2.50. Therefore, respondents' perceptions of school psychologist participation in RTI efforts were positive indicating principals perceive school psychologists as frequently participating in RTI implementation.

The researcher hypothesized that the mean score for the school psychologist as a data manager subscale would be 2.50, with an alternative hypothesis that it would be some other value. The one sample t-test revealed a mean difference of 0.921, t = 9.28, and p = .000. This result is statistically significant. Therefore, the mean scores for the data manager subscale exceeded the midpoint of 2.50. As a result, the null hypothesis is rejected and the alternative accepted.   The researcher concluded that principals' positively perceived their school psychologist as using data to inform decision-making.

The null hypothesis for the school psychologist as a recruiter subscale is that the mean will not differ from the central value of 2.50. The alternative hypothesis is that the mean score for the subscale would be something other than 2.50. A one-sample t-test yielded a mean difference of 1.008, t = 7.78, p = .000. These results reveal that one should reject the null hypothesis and accept the alternative, as this result is statistically significant.   The mean scores for the recruiter subscale exceeded the midpoint of 2.50. As for school psychologists influencing staff members' involvement in the RTI processes, respondents revealed a positive perception. These results indicate the principals perceive their school psychologists' attitude about RTI to encourage others to

become involved. Recruiting supporters is one of the most important aspects for successful implementation of any initiative.

CHAPTER 5

DISCUSSION

Literature supports the use of RTI, as a model for meeting the instructional and behavioral needs of students; however, there is little empirical data to show how schools engage in RTI processes (e.g., Burns, 2005; Brumfield, 2011; Kurns & Tilly, 2008; Marzano et al, 2005; and Yenni & Hartman, 2009). Because RTI implementation is still at the beginning stages, the literature on the factors necessary in systems change efforts is discussed in this chapter. Gerber (2003) acknowledged that although RTI is theoretically straightforward, implementation is not. The complexity of the RTI model makes practicality in the school system a challenge. There is limited research on the effectiveness of the model and the leadership roles required for implementation. Furthermore, there is limited research relating to instructional leadership needed for RTI implementation.

It is generally agreed that the principal is ultimately responsible for RTI, however, utilization of other school leaders, such as school psychologists, may aid in practical implementation. Leadership is cited as one of the factors necessary for any large-scale reform effort (Barker, 2011). Indeed, implementing any new initiative on a large scale tends to be difficult. An understanding of change leadership is necessary for school districts and individual school leaders as they implement changes. Burns (2005) describes transformational leadership as the development of relationships that stimulate

followers to become leaders in creating change. Burns (2005) further explains that implementation of RTI is a fundamental system change that requires significant change leadership.

The purpose of this study is to examine the leadership role of school psychologists in Response to Intervention (RTI) implementation, as well as the school psychologists' usefulness to principals in successful implementation of RTI. The researcher asserts through the fulfillment of certain roles, school leaders recognize the benefit of involving school psychologists in RTI implementation. First the researcher set out to obtain data regarding principals' perceptions of school psychologists' leadership characteristics related to RTI implementation. For this purpose, the researcher sought information regarding principals' perceptions of school psychologists' leadership characteristics in RTI implementation. Then the researcher further sought information pertaining to which leadership characteristics exemplified were present in school psychologists. Information obtained from principals' perceptions will provide valuable information on areas principals perceive school psychologists to be most effective and which areas could use further development. Because RTI was instituted in District 2 and additional school psychologists were hired for the purpose of RTI implementation, it provided an ideal case to study.

Research Design

This study examined the extent to which principals perceived school psychologists who work with them to exhibit certain leadership characteristics beneficial to RTI implementation. The response sample consisted of 21 principals in District 2 that completed an online survey consisting of 14 Likert-type items and two demographic

items. The researcher developed the *Principal Perceptions of School Psychologists as a Resource for Implementation of RTI Implementation Survey* to gather data related to the characteristics indicative of the three roles filled by school psychologists in the implementation of RTI. The survey items were chosen to answer questions about school psychologists' roles in RTI implementation. Appendix B contains a copy of the survey. The current literature has gaps in how RTI implementation is influenced and essential leadership roles in successful implementation.

Review of the Findings

The results of this study indicate that school psychologists are positively perceived with regard to the exemplification of certain leadership characteristics associated with their roles and related to the level of RTI implementation. According to the results, school psychologists frequently demonstrate the leadership characteristics of participant, data manager, and recruiter in the RTI process. The results of all three subscales were positive indicating that school psychologists frequently (a) participate in RTI processes, (b) use data to make decisions, and (c) recruit staff members to become involved in RTI processes.

Interpretation of Results

The research questions are presented in this section along with an interpretation of the results found in chapter 4. The results were interpreted with regard to the literature review found in chapter 2.

Research Question 1. The first research questions asks to what extent are the specific leadership characteristics-associated with school psychologists' roles and related to the level of RTI implementation- being exemplified?

The researcher hypothesized that through the fulfillment of certain roles school psychologists exemplify leadership characteristics that aid in implementation of school-wide RTI. School psychologists were found to frequently exhibit the specific leadership characteristics examined in the study and fulfill the roles in which these three leadership characteristics (participant, data manager, and recruiter) are associated. Therefore, the research assumes that by participating, managing data and recruiting school psychologists develop capacity for RTI in their school buildings and positively influence the implementation of RTI processes.

Research Question 2. The second research question asks to what extent are the specified school leadership characteristics present in school psychologists in District 2? The researcher also examined these specific leadership characteristics related to school psychologists' roles and the areas of RTI implementation within which they are most and least supportive.

The researcher found that the specific leadership characteristics examined in this study were present in District 2 school psychologists to a moderately strong degree. The data indicated no significant weaknesses were identified. However, based on observational data only, the principals reported the lowest area of leadership to be in data management of RTI. No statistical tests of significance indicated any area lower than others. Upon examination of the items related to the school psychologist as a data manager in RTI, the questions rated lowest by principals tended to relate to school psychologist discussing achievement data with all teachers. The principals agreed that school psychologists discuss achievement data with teachers, however, perhaps could not rate this item as strongly agree because they do not perceive school psychologists as

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being involved in regular staff development presentations or data debriefings for the entire faculty. The recruiter area of leadership was rated highest by the principals, which suggests that principals perceive school psychologists' attitudes and visible involvement in the RTI process to be of great value. The principals perceive their schools psychologist's ability to recruit staff members to support RTI processes to be the strongest area of leadership in RTI implementation. Perhaps the recruiting aspect is of most importance during the implementation of any new initiative simply because any enterprise will fail if it is unable to recruit supporters. A study conducted by Yenni & Hartman (2009) yielded results that suggest that as school psychologists' attitudes of RTI increased the usage of RTI in their schools also increased.

Methodological Concerns

This section contains a discussion of matters related to the methodology. The first methodological matter deals with sampling. District 2 is a moderately sized district with 22 schools and 22 principals. The relatively small sample size limits the interpretations of the results and the researcher is cautious to generalize these results to other districts or states. In addition, due to the small sample size the researcher reduced the number of demographic items in order to maintain confidentiality for participants. With a larger population size and more demographic items included in the survey additional correlations could yield additional results.

The second methodological matter deals with the relatively recent addition of school-based school psychologists in District 2. In the 2010-2011 school year, District 2 piloted the focus school psychologist program at four schools. Due to positive response from the focus school principals, District 2 added eight school-based school

psychologists in the 2011-2012 school year allowing each school to have at least one school psychologist. At the time of this study, the concept of school-based school psychologists was still relatively new. Therefore, the rationale and shifting job roles is still evolving in the district. In addition, District 2 reduced the number of guidance counselors in the 2010-2011 school year. This decision to reduce guidance counselors was poorly received by principals. In the 2011-2012 school year the number of guidance counselor positions reverted back to previous years. It could be concluded that the risk of losing their school based school psychologists may influence principals respond in an overly positive manner when depicting information regarding the usefulness of school psychologists. Additionally, District 2 district leaders are in the process of designing roles and responsibilities for the school-based school psychologist. Brumfield (2011) explains that school systems must establish roles and responsibilities in order to ensure successful implementation of RTI. Shapiro (2010) explains that district and school leaders must fully understand the conceptual framework of the RTI model and provide the needed support in time and resources to building-level practitioners.

Implications

The complexity of the RTI model in practical setting is a significant challenge to RTI implementation. Tilly et al (2008) recommended that one not view RTI as an "add on" to what already exists. Instead, it is a basic restructuring of resources and services to better meet the needs of the learners. Reallocation of resources is a difficult undertaking and a risk on the part of administration in a school building. They risk negative impact of teacher morale and incurring expenses not included in the original budget.

Another obstacle related to the RTI process is provision of space for pullout activities/interventions and establishing additional responsibilities among school employees. It is important for both principals and school psychologists to be involved in overseeing the management and interpretation of student intervention data and using it to make evidence-based decisions in students' education (Glover and DiPerna, 2007). Duffy (2007) and Spiegel (2009) uphold that there is little information available in the literature to guide school principals in RTI implementation.

Principal perceptions of school psychologists' leadership in RTI implementation were positive as rated by principals across Elementary, Middle and High School levels. This may suggest that RTI leadership is not related to school level. In addition, the perceptions of school psychologists were positive across school accountability level, meaning schools at-risk or not-at-risk for making adequate yearly progress. Therefore, school psychologist leadership in an at-risk school is not inferior to a higher performing school.

Shapiro (2010) recognized that leadership for RTI is critical. When leadership for RTI emerges from the instructional staff, there is far greater acceptance of the effort (Shapiro, 2010). The challenge that schools face using the RTI process is that the procedures for implementing it are neither clear nor widely accepted. Tilly et al (2008) supports a significant amount of professional development for teachers involved in a service delivery model for RTI. Teacher resistance is a significant obstacle to RTI implementation. Brumfield (2011) explains that a lack of skills, whether real or perceived, is one of several reasons teachers may resist RTI. The belief that there is insufficient instructional time available in class to implement academic and/or behavioral

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interventions is a factor that may lead to teacher resistance (Brumfield, 2011). Also, some teachers are reluctant to adopt new instructional strategies because they have concern that it will result in a loss of behavioral control in the classroom. The utilization of school psychologists as recruiters may help to combat the obstacle of teacher resistance.

Implementation

As Spiegel (2009) asserted, the greatest challenge to the RTI model's potential is the implementation itself. There is limited data to show how schools engage in RTI processes. Because RTI is relatively new approach, there is little consensus on specific approaches and practices to guide school in implementation. However, many researchers (e.g., Arnold, 1999; Barker, 2011; Brumfield, 2011; Fullan, 1991; Hargreaves, 2004; Hedrick, 2005, Kurns & Tilly, 2008, Liu, 2009; Marzano et al, 2005; Quinn, 2010; and Yenni & Hartman, 2009) acknowledge the importance of school leadership in a RTI initiative. Liu (2009) explained that schools implementing RTI most often have no clear, objective way to determine if their implementation approach aligns with components of RTI identified by experts in the field as essential for successful implementation. School psychologists are important members of any RTI implementation team because they are good consumers of research and well qualified in assessment and instructional methodology. School psychologists have leadership responsibilities throughout the tiers of RTI which include scientifically based data decision-making, being knowledgeable about various assessments, facilitating collaboration between the home, school, and community environments, maintaining intervention integrity and providing consultation services for administrators, teachers, and parents. In addition to having a strong role in

RTI, school psychologists can help influence staff members' attitudes of RTI by having a positive attitude themselves (Yenni & Hartman, 2009). The school psychologists in District 2 were rated highest by principals in the area of recruiters for RTI. In District 2 schools, the school psychologist carries a vital role in the RTI process because their knowledge and attitudes of RTI positively impact the level of RTI implemented within their school.

Significance of the Study

The findings of this study on leadership characteristics of school psychologists in RTI implementation contribute to a body of research that has focused primarily on administrators as leaders in RTI and RTI in elementary schools. While the focus on administrators and elementary schools in RTI has been appropriate in RTI research, it has accounted for a gap in the literature. There is a gap in the literature between additional sources of leadership for RTI. Also the literature is limited in implementation of RTI at a secondary level. The current research has begun to fill these gaps in the literature.

Furthermore, this study yielded significant results for RTI research in that it may direct future studies on RTI leadership characteristics, particularly in leadership other than that demonstrated by administrators in RTI, and RTI implementation at the secondary level. Because the study focused on the role of leadership in RTI implementation, it had the potential to inform and guide school leaders responsible for implementing RTI. The study results and implications may serve to guide educators responsible for implementing RTI.

Conclusion

This quantitative study was an identification and examination of the leadership characteristics present in school psychologists related to RTI implementation. Due to increased accountability and harsh consequences for continued poor academic performance, school districts have been exploring ways to provide early interventions to struggling students. With the push from IDEIA in 2004, some states began adopting a school-wide Response to Intervention model as a framework to provide these early interventions to struggling students. The purpose of a RTI model is to meet students' needs at an individual level. There is not one way to engage in RTI, however, the single largest obstacle to RTI is the lack of guidelines for implementation. RTI requires considerable knowledge, skill, and changes in roles and behavior on the part of teachers, school psychologists, school staff, administrators, district leaders, and state-level leaders (e.g., Arnold, 1999; Barker, 2011; Brumfield, 2011; Covey, 1992; Fullan, 2001; Hargreaves, 2004; Hedrick, 2005; Kurns & Tilly, 2008; and Marzano et al, 2005).

This study examined the extent to which leadership characteristics-associated with school psychologists' roles and related to the level of RTI implementation- were being exemplified in District 2 school psychologists. The researcher found that school psychologists were frequently perceived to display these specific leadership characteristics. Principals perceived their school psychologists to participate in their schools problem-solving team. A proficiency in working with data to inform decision-making was reported as a characteristic exemplified by schools psychologists in District 2. The principals reported school psychologists to use data to measure student achievement, to understand the source of a problem, and to help staff members understand the need for

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change. However, principals indicated a desire for growth in the area of sharing research and information related to intervention with teachers. School psychologists' support of staff members and recruitment of others to commit to the RTI process were rated positively by principals. School psychologists were rated the highest in the recruiter subscale, indicating principals perceive their school psychologists to recruit staff members to support RTI. The results also indicate principals perceive school psychologists' attitude about RTI to encourage others to commit to the process. Therefore, the researcher concludes the leadership school psychologists provide relative to RTI implementation is useful to principals.

Furthermore, the researcher examined the specific leadership characteristics related to school psychologists' roles and the areas of RTI implementation where leadership is present or noticed by principals. The researcher found that the specific leadership characteristics examined in this study were present in school psychologists in District 2 to a moderately strong degree. No significant weaknesses were identified. The researcher hypothesized that of the three specific leadership characteristics exemplified by school psychologists' principals would perceive the strongest area to be data manager and participator in the RTI process. However, the results indicated that the principals' perceive school psychologists to exhibit leadership in the area of recruiter for RTI implementation the most. Principals' perceive school psychologists as positively utilizing expertise available among staff members and supporting members of the school problem solving team. In fact, 80% of principals responded that their school psychologist's attitude toward RTI encourages other staff members to commit to the RTI process. This leadership characteristic is most beneficial in the beginning stages of RTI

implementation while the foundation and architecture for the RTI process is developing in the school. As Shapiro (2010) explains, "when leadership for RTI emerges from the instructional staff, there is far greater acceptance of the effort."

At an observational level, not statistically significant results, the lowest rated leadership characteristic exemplified by school psychologists in RTI implementation was the area of the school psychologist as data manager for RTI implementation. While the leadership characteristic rated lowest observationally was the data manager subscale this subscale still yielded an overall positive perception by principals. This result indicates a possible area for growth in data management in RTI implementation for school psychologists. Further intricate examination of the items associated with data management revealed that principals see opportunity for school psychologists to more regularly discuss student achievement data with teachers and to utilize computer-based programs to manage student data for the purpose of making data based decisions.

The principals' positively rated their school psychologists as participating in the RTI process. Therefore, principals are aware that their school psychologist is an active member in their schools' problem solving team, attends problem solving meetings, checks to ensure that interventions are being delivered appropriately, shares research or information related to interventions with teachers, and regularly reviews how students are responding to instruction. The study suggests school psychologists participate as active members in their buildings' problem-solving teams.

This study examined the extent to which leadership characteristics-associated with school psychologists' roles and related to the level of RTI implementation-were being exemplified. The researcher found that school psychologists were frequently

perceived to display these leadership characteristics. Therefore, the leadership the school psychologists provide relative to RTI implementation is useful. This implies that school psychologist leadership is sufficiently exemplified and is utilized with regard to RTI implementation.

Recommendations for Future Research

The findings of this research can only begin to fill a gap present in the literature concerning school psychologists' role in RTI. Indeed, much research can and should still be done on the use of school psychologists in RTI implementation. In considering future research within the realm of school psychologists as a resource for RTI implementation, the researcher recommends using a larger sample to ascertain correlations and significant differences among questionnaire items and demographic items. This study demonstrated that it is possible to examine school psychologists' leadership characteristics related to specific roles related to RTI implementation. This study provided information about school psychologist leadership in one district. A potential for future research exists in the replication of this study in multiple districts and multiple states.

The current study was conducted in District 2, a moderate sized district in the southern region of South Carolina. District 2 schools population includes both rural and urban schools and the student socioeconomic statuses vary significantly. While the researcher wouldn't claim an exact representation of the state, District 2 does include an approximate state student population when considering demographic information. Therefore, the study does have contributions to make beyond District 2 and its methods could be considered in future research studies across districts and states.

In addition, future studies may consider the working relationship between the principals and school psychologists. In many districts, school psychologists are split between several schools and involvement in each school's culture is a significant obstacle. Although sample convenience played a role in the selection of District 2 for the current study, the main reason District 2 was selected for the current study was the unique level of support for RTI and school psychologists displayed in the highest levels of administration in the district. In District 2, each school has one or two school psychologists allocated to their school, therefore, the obstacle of becoming embedded in school culture was not a concern for the current study. The majority of districts in South Carolina employ require school psychologists to serve two to three schools. A comparison of school districts with varying allocations of school psychologists and numbers is an area of future research.

Factors preventing school psychologists from becoming leaders in the planning of RTI implementation in their school districts is one important variable that has been overlooked in current research and literature. Little is known as to what factors other than limited knowledge, attitudes, and district opportunities for growth limit school psychologists' ability to implement RTI. Future studies should investigate more specific factors within the area of district opportunities provided to school psychologists that aid in developing solid problem-solving teams and RTI implementation models in order to gain a more comprehensive understanding of RTI implementation. Regular education teachers' readiness for RTI implementation is another area for potential future research. The effects of the RTI paradigm shift on teachers and training on how to deliver interventions and to progress monitor individual students should be considered in RTI

implementation. Future study might examine how ready regular education teachers are to implement RTI and what pre-service and professional development needs exist.

An additional topic for future studies would be to investigate the roles and responsibilities that school district administrators should expect and require of school psychologists in the RTI process. Recent tragic events in schools and host of literature prior to these events suggest a need for the roles of school psychologists to expand to meet the mental health needs of students. This shift in roles could compete with school psychologist's ability to embody a leadership role in the implementation of RTI. According to the United States Public Health Service (2000), the nation is facing a public crisis in mental health care for children and adolescents. The report contends that the majority of student mental health needs are not being met. When these needs are left unmet they may lead to a number of negative outcomes for the individual, families and communities. Schools may serve as the logical and ideal settings to provide mental health services to students. The need for mental health support in schools may compete with school psychologists' ability to lead RTI implementation in the schools.

Appropriate planning in the designation of a school psychologist's role shift is necessary among school district administrators in order for school psychologists to be influential in leading the implementation of RTI. The benefit of this future research for superintendents and special education directors includes a clear representation of expectations and perceptions of the systems change and role shifts for school psychologists. School districts need to be involved with RTI, as it is a general education initiative, and needs to be supported by a collaborative team of administrators from both special and general education departments (Yenni & Hartman, 2009). The current study

was conducted in a school district that has shown remarkable support for RTI through district professional development and financial investment in the hire of additional school psychologists. Futures studies should be careful to tend to the differing level of support for RTI across districts and states. Future research should continue to investigate the feasibility of school psychologists' involvement and leadership in RTI implementation.

Future studies should also consider school psychology training programs preparation of students for expanding roles of school psychologists. Greene (2010) suggests training programs could place greater emphasis on preparing school psychologists for the role of providing training in psycho-education, as well as preparing them for collaboration with administrators and other stakeholders in the school. In particular, with the updates in IDEIA 2004 school psychology training programs should continue to prepare students to facilitate school-wide implementation of RTI.

The literature is limited in the area of guidelines for RTI implementation. RTI has potentially great outcomes in providing supports in a more efficient manner for at-risk students. However, without a process by which schools can evaluate their implementation efforts, it is impossible to examine the relationship between implementation level and leadership characteristics described in this study. Further research could utilize Liu's (2009) *RTI Assessment Rubric* compared to leadership characteristics of school psychologists or administrators to examine the relationship between these variables. Liu's (2009) rubric is intended to be a tool that practitioners and researchers can use to evaluate the implementation of RTI at the elementary school level. Schools need a tool to help guide and evaluate their practices to ensure quality implementation. Teachers and administrators wish to implement the advocated federal

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policy, however, have no clear guidelines for how to determine if they are implementing it appropriately (Liu, 2009). Further research should consider development of RTI assessment instruments for the elementary level as well as the middle and high school levels.

RTI has the ability to bridge the gap and develop a more cohesive community of educators. Future studies should investigate the ways in which school districts can achieve RTI implementation through identifying appropriate goals. When considering consensus building and capacity for RTI schools should consider utilizing shared leadership and collaboration. Fullan (2009) explained that many school system leaders fail to understand the critical nature of building a shared vision. School leaders often underestimate the power that comes from strengthening the knowledge and dispositions of individuals responsible for facilitating the initiative. Time must be allotted for exploration of possibilities within RTI and their concerns validated. RTI must become part of the school's vision and mission, not an administrative mandate (Dulaney, 2012).

Shared leadership is another area that warrants further research. It is critical for school administrators to enlist student support teams support as they move forward with RTI. Student Support Team's can facilitate RTI and their input should be heavily considered in RTI development and implementation. When building the capacity for leadership in RTI, administrators consider many sources of leadership within the school and shared ownership in its development. Establishment of professional learning communities creates a structure for collaborative teams to work together monitoring school progress and making decisions to increase learning for both students and teachers. Building on existing collaboration practices will aid in the implementation process

(Dulaney, 2012). Further research should examine the roles and recruitment of other leaders, beyond administrators and school psychologists, in school-wide RTI implementation efforts.

Resource allocation presents as a considerable obstacle in RTI implementation. Further research could study the most effective use of resources such as money, people and time. Resources and funding in today's economy can be a sensitive topic. A study by Wiener and Soodak (2008) found that 78% of the state, district and school site administrators surveyed considered funding to be substantial obstacle in building an infrastructure for RTI. It is critical for school administrators to work with district administrators and the community to find supplemental funds to support RTI. Many schools districts have discovered that IDEIA (2004) legislation permits districts to use as much as 15% of their special education monies to fund early intervention activities (Fuchs & Fuchs, 2006). In addition, NCLB legislation permits Title I program funds to be used in support of intervention processes. The practice of sharing resources and materials between programs is a paradigm shift for many school districts. However, this shift may give school administrators the freedom to use personnel funded through specific programs in unconventional ways in RTI development.

Allocation of time necessary to assess an entire school population through universal screening, provide intervention, and progress monitor students receiving intervention are notable concerns. Teachers often express concerns with time loss and interruptions to classroom instruction. Systematic screening and assessment of student performance is critical to implementing RTI, however, these methods of assessments require the allocation of time and sacrifice of instructional time. However, the intent of

universal screening and progress monitoring assessments is to inform instruction so that instructional time can more efficiently target academic areas of need.

To meet the needs of students within the general education classroom (Tier 1) school leadership should focus on after-school staff development if funding can be managed. In addition, the master schedule should to be adapted to include time during the regular school day to provide needed interventions (Dulaney, 2012). Future research should examine the ways schools and districts have found to adapt the master schedule to accommodate needed intervention time. The leadership team also must be prepared with intervention curriculum recommendations when the master schedule includes an intervention block.

Student placement in tiers of intervention is a challenge in RTI. Administrators and student support team members recognize the difficulty with the logistics of student placement in intervention. This is especially difficult in grades, typically third through fifth grades. Students in grades three through five, levels take year-end assessments that reflect school progress and student yearly progress. Many of these assessments come with severe implications for schools and teachers if yearly progress standards are not met. Therefore, it is understandable for the inclination of teachers and administrators to be apprehensive towards an intervention time in the schedule as this time could take away from an important subject areas measured by a high stakes assessment. When considering the importance of interventions in the master schedule, Dulaney's (2012) study showed most middle school teachers indicated they would be doing the child a disservice to send them on to high school without addressing their needs in basic reading skills. Therefore, some schools and districts may recognize that intervention and

remediation in these skill deficit areas may take precedence over high stakes testing standards.

Concluding Remarks

Designed to identify leadership characteristics exemplified by District 2 school psychologists, this study was developed in an attempt to inform and guide educational practitioners who endeavor to implement RTI models. This study began out of desire to understand leadership characteristics needed to implement successful RTI and to gain a better understanding of the supports school principal's need within the implementation process. There is no road map or specific template for schools to follow to implement RTI, only theories and research supporting its implementation. The review of literature exposed the issues related to implementation of RTI in practical settings. The majority of research has been conducted as the elementary level and tends to focus on literacy (Dulaney, 2012).

As the researcher became more familiar with the literature related to RTI implementation, it became apparent that a critically important component of RTI implementation is leadership. To inform RTI implementation, the researcher attempted to adapt Brumfield's (2011) *Administrator Characteristics for Implementation of Response to Intervention survey* and create an instrument that schools could use to assess leadership capacity for RTI implementation by assessing the presence of certain leadership characteristics associated with school psychologists' roles as leaders in RTI implementation. The researcher considers the *Principal Perceptions of School Psychologists as a Resource for Implementation of Response to Intervention survey* as a valid and reliable instrument that schools can use to support their RTI implementation

efforts. The collected data pointed to three critical roles in leading an RTI initiative: the school psychologist as a participant, the school psychologist as a data manager, and the school psychologist as a recruiter. While the scope of this study focused on the role of the building-level school psychologist, all educators who assume responsibility for creating an RTI approach to educating students should consider these three leadership roles. Educators involved in RTI must establish their participation in the problem-solving process, hone their use of data to inform decision-making about instruction and the application of interventions, and work to collaborate with their colleagues subsequently making use of expertise within their organizations (Spiegel, 2009). The findings of this study demonstrated that school psychologists may carry a vital role in the RTI process and principals recognize their importance in RTI.

While the current study narrowly focused on leadership and change theories that support RTI implementation, it applies to all change initiatives. One of the major challenges in the inherent struggle with any reform initiative, even those supported by legislation, is that change must occur for new practices to become embedded in the school culture and sustained over time. As stated by Machiavelli in The Prince, "states that rise unexpectedly cannot have foundation. The first storm will overturn them." The foundation for organizational change for RTI must be built before change can occur.

Sergiovanni (2004) maintains when the competencies of members of an organization are harnessed, value is added to the organization's leadership. Cultivation of expertise begins by knowing who your experts are and recognizing the individual strengths and limitations among all (Hedrick, 2005). Leaders within the school recognize that the level of experience and skill within any one school is a spectrum of abilities. All

teachers begin as novices and should be considered "experts-in-the-making" (Hedrick, 2005). The most effective principals recognize expertise in their employees and develop leadership potential in those individuals. Transformational leadership develops relationships that stimulate followers to become leaders in creating change (Marzano et al, 2005). Strong, focused school site leadership plays a major role in setting direction, developing people, and redesigning the organization. RTI is a framework that has great promise. New and expanding roles and responsibilities for all staff members will continue to grow and redefine over the course of RTI implementation. The success of reform efforts such as RTI depends in large part on leadership.

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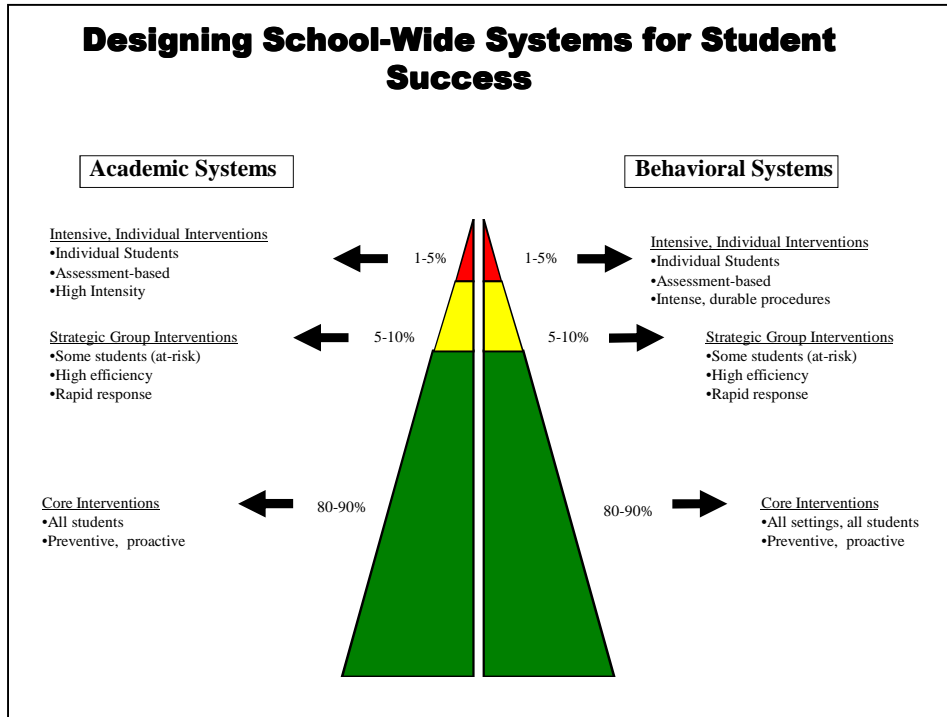
APPENDIX A

Figure A.1 Three-Tier RTI Model of Instruction (Brumfield, 2011)

APPENDIX B

Principal Perceptions of School Psychologists as a Resource for Implementation of Response to Intervention Survey

The purpose of this survey is to collect information regarding your perception of school psychologists as a resource in RTI implementation. There are no right or wrong responses to any statement. The best answer is the one that most appropriately reflects your perception of your school psychologist. Some general demographic information is being collected to be able to describe the respondents as a group. No information is being collected to identify you personally and all responses will be held in the strictest confidence by the researcher. The survey can be completed in less than 10 minutes. Thank you in advance for completing this survey. Your cooperation is greatly appreciated.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1	My school psychologist is an active member of the school's Tier 3 problem-solving team (Intensive Interventions)	O	O	O	O
2	My school psychologist attends problem solving team meetings.	O	O	O	O
3	My school psychologist checks to ensure that interventions are being delivered to students appropriately.	O	O	O	O
4	My school psychologist shares research or information related to interventions with teachers.	O	O	O	O
5	My school psychologist regularly reviews how students are responding to instruction.	O	O	O	O
6	My school psychologist gathers student achievement data.	O	O	O	O
7	My school psychologist is able to interpret student achievement data.	O	O	O	O
8	My school psychologist regularly discusses student achievement data with teachers.	O	O	O	O
9	My school psychologist uses computer-based programs to manage student achievement data.	O	O	O	O

10	My school psychologist uses data to assess whether decisions made about intervention outcomes are appropriate.	O	O	O	O
11	My school psychologist always uses data to assist in making decisions.	O	O	O	O
12	My school psychologist utilizes the expertise available among staff members for RTI processes.	O	O	O	O
13	My school psychologist supports members of our school's problem-solving team for intervening individually with at-risk students.	O	O	O	O
14	My school psychologist's attitude toward RTI encourages staff members to commit to the process.	O	O	O	O
16	What school level do you serve?	Elementary	Middle	High School	
17	What is the total number of years you have been an administrator?	<1	5-Jan	10-Jun	15-Nov
				16-20	21+