ATTITUDES AND PERCEPTIONS TOWARD RESPONSE TO INTERVENTION IN A MIDDLE SCHOOL SETTING

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Abstract

This quantitative study analyzed how teachers perceive the implementation of Response to Intervention in a middle school setting. In addition, the study analyzed teachers' attitudes toward Response to Intervention and the affect the attitudes have on their students' academic growth within the intervention program at the educators' current school. This study included two different, yet equally important, aspects of Response to Intervention in a middle school setting. The data collected during this study provided a contextualized view of how educators perceive Response to Intervention and how their attitudes toward RTI affect students' growth within the intervention program at the current school. A goal of this study was to gain insights that could be useful for others during the implementation process of Response to Intervention. A second goal was to determine if teachers' attitude toward Response to Intervention affected their students' academic growth using Spearman's Rank Order Correlation. This study revealed that while the Response to Intervention program at Lee Middle School has successfully moved students closer to their academic grade level, the teachers' opinions about Response to Intervention remain neutral. The educators' perceptions suggested that the Response to Intervention program does not impact their daily practices in either a negative or positive way. This study further showed that there is not a relationship between teachers' attitudes toward Response to Intervention and their students' academic growth.

Keywords: Response to Intervention
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Dedication

This study is dedicated to my Lord and Savior Jesus Christ. Although many sacrifices have been made throughout this process, none compare to the sacrifice Christ made when He laid down his life for my sins. He provides guidance, hope, and most of all, saving grace and mercy to those who put their trust in Him. Romans 10:13 says, “For everyone who calls on the name of the Lord will be saved”.

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Chapter 1: Introduction

Since the reauthorization of the Individuals with Disabilities Improvement Act of 2004 (Individuals with Disabilities Education Improvement Act [IDEIA], 2004), Response to Intervention, (RTI), has primarily served as an intervention in the elementary school setting (Reagan, Berkeley, Hughes, & Brady, 2015). However, legislative changes, including the Race to the Top grant and the introduction of Common Core State Standards, have forced middle schools to begin adopting RTI frameworks (Howell, 2015; Prewett et al., 2012). With the empirical foundations of RTI rooted in the elementary school context, potential challenges exist when the model is applied to the middle school setting (Faggella-Luby & Wardwell, 2011). In Tennessee, these interventions are referred to as Response to Instruction and Intervention (RTI²) and became mandatory during the 2015-16 school year.

According to Rinaldi, Averill, and Stuart (2011), Response to Intervention is a scientific, research-based practice that provides high-quality instruction and intervention that is matched to students' needs. Response to Intervention frequently monitors students’ progress in order to make data-driven instructional decisions based on students' academic and behavioral needs. As noted by Frey and Douglas (2011), Response to Intervention is a means for supporting students before they fall hopelessly behind.

While the core components of academic interventions have been a part of recommended classroom practice for some time (Reagan, Berkeley, Hughes, & Brady, 2015), very few studies investigated teachers' perceptions of Response to Intervention (Rinaldi, Averill, & Stuart, 2011). As new ideas and reform efforts make their way into public education, educators’ perspectives and opinions are scarcely considered. According to Shirley and Hargreaves (2006), educators "are no longer the drivers of reform, but the driven" (as cited in Rinaldi, Averill, & Stuart, 2011,
p. 44). The unique elements of Response to Intervention offer educators the opportunity to make assessment decisions that will ultimately determine the sustainability of RTI within a school system (Rinaldi, Averill, & Stuart, 2011). Teacher opinions and perceptions are a source of data that facilitates successful implementation of Response to Intervention initiatives (Werts, Carpenter, & Fewell, 2014).

**Statement of the Problem**

Research conducted by Fishbein and Ajzen (1975) provides valuable information regarding a person’s attitude toward a subject and their response to the subject. Experienced teachers are crucial to an intervention team and the teachers’ knowledge of the intervention process is pivotal for effective RTI implementation (Brendle, 2015). According to Tschannen-Moran, Woolfolk-Hoy and Hoy (1998), it is important to examine how teacher efficacy is associated with the correlates in the educational environment due to the important implications for both teacher and student success. Educators who are largely satisfied with their current teaching situations are less likely to embrace RTI principals and implement appropriate RTI procedures.

Attitudes toward student capabilities to learn and beliefs about the efficacy of teachers in implementing instruction that produces improved achievement for all students are fundamental to successful teacher participation in RTI (Reschly & Wood-Garnett, 2009). With Response to Intervention being relatively new to the middle school setting, little research exists to establish the efficacy of RTI in middle school settings (Prewett et al., 2012).

**Purpose of the Study**

Previous research on teacher perspectives and the contextual influences of Response to Intervention have predominately been case studies of individual schools in the elementary setting
The purpose of this study is to examine the perceptions and beliefs of middle school educators regarding the implementation and outcomes of Response to Intervention. Nunn, Jantz, and Butikofer (2009) points out the need to clearly define and systematically examine the correlations associated with RTI implementation and teacher beliefs and perceptions and the outcomes of such interventions. Faggella-Luby and Wardwell (2011) state, “empirical study of RTI in middle schools is warranted to validate the efficacy of implementation efforts” (p. 35). Failure to address teacher concerns may result in problems related to implementation, including resistance to the initiative (Werts, Carpenter, & Fewell, 2014).

**Theoretical Foundation**

In response to Martin Fishbein’s theory of attitude, Ajzen (2012) states, “people’s evaluations of, or attitudes toward an object, are determined by their readily accessible beliefs about the object” (p. 12). It is these readily accessible beliefs that are considered to be the prevailing determinants of a person’s attitude. Fishbein’s Theory of Planned Behavior suggests that a desired behavior is predicted by a person’s assessment of what she/he expects the outcome of the behavior to be (Townsend et al., 2003). According to Fishbein and Ajzen (1972), the bare essentials of this model can be stated as follows:

A person learns or forms beliefs about an object. These beliefs influence his attitude toward the object. Consistent with Thurstone’s position, attitude is viewed as a compound in which the elements are beliefs and the affective value of the compound (i.e. attitude) is some function of the affective value of the constituent beliefs. This attitude constitutes a predisposition to respond in a generally favorable or unfavorable manner with respect to, or in the presence of, the object. It follows that an attitude is related to the totality of
the person’s intentions or behaviors with respect to the object, just as it is related to the totality of his beliefs about the object. (p. 488)

Regan et al. (2015), proposed that implementing change in the field of education is sometimes considered a wicked problem. Intervention experts suggest that the “wickedness” referenced by Regan et al. (2015) is a direct result of the procedural implementation of RTI. School initiatives often fail to take into account the feelings and opinions of those teachers who are responsible for implementing the educational changes, which can in turn, negatively impact the program’s implementation. “In the case of the RTI initiative, this means that identifying perceptions of school-based educators is an important part of successful implementation” (Regan et al., 2015, p. 235).

Research Questions

The study was be guided by the following research questions.
Research Question 1: How do teachers perceive the implementation of Response to Intervention? Research Question 2: Do teachers' attitudes toward Response to Intervention affect their students' academic growth within the intervention program?

Limitation and Delimitations

This study was limited to teachers at one middle school, representing three grade levels including sixth through eighth grade. Teacher attitudes towards RTI vary based on their previous experience with academic interventions. This study was limited to one middle school. The setting for was chosen using convenience sampling, in part, due to the accessibility of important pieces of data used in this study.
Definition of Terms

**Common Core State Standards.** Common Core State Standards is an educational initiative designed by the National Governors Association Center for Best Practices and Council of Chief State School Officers to focus on real world leaning goals that will prepare students for college, career, and beyond (Burks et al, 2015).

**Curriculum-Based Measurement (CBM).** Curriculum-based measurement serves as the assessment approach for implementing an RTI model (O'Reilly, Sabatini, Bruce, Pillarisetti, and McCormick, 2012).

**Individuals with Disabilities Improvement Act of 2004 (IDEIA).** The Individuals with Disabilities Improvement Act of 2004 is a legislative act that requires research-based interventions to be implemented prior to referral, evaluation, and placement in special education (Brendle, 2015).

**Race to the Top.** Race to the Top is a competitive grant program that was designed to encourage states to support education innovation (Howell, 2015).

**Response to Intervention (RTI).** Response to Intervention is a school-wide prevention framework that allows school staff to make data-driven decisions based on students’ academic and behavioral needs (Canter, Klotz, & Cowan, 2008).

**Response to Instruction and Intervention² (RTI²).** Response to Intervention² is an intervention framework that relies on high-quality instruction and interventions tailored to student need where core instruction and intervention decisions are guided by student outcome data (Tennessee Department of Education, 2013).

**Universal Screener.** Universal screening is a type of measurement that is characterized by the administration of a quick, low-cost, repeatable assessment of age-appropriate skills, which
are used to establish the effectiveness of a specific curriculum, as well as classroom instruction. Universal screening is also used to determine a pupil's level of proficiency in essential academic areas (Ridgeway, Price, Simpson, & Rose (2012).

**Organization of the Document**

The research in this study is organized into five chapters. The first chapter introduces the study by providing background information for the study. Additionally, chapter one explains the problem and provides the purpose for the study. The conceptual framework of the study, research questions, limitations and delimitations of the study, and definition of terms are also provided in chapter one. Chapter two of this study contains the literature review. The literature review examines the historical significance of both Response to Intervention and Fishbein and Ajzen’s research surrounding a person’s beliefs and attitudes toward an object. Chapter three provides an overview of the methodology for this study. This chapter explains how the study was conducted, who was involved, which instruments were used, and how the data was analyzed to assess the research questions. Chapter four provides the results of the study. Chapter five discusses the results of the study, the implications of the study, and recommendations for future studies.
Chapter Two: Review of Literature

Throughout the years, various academic intervention programs played major roles in the field of education. According to Campbell and Ramey (1994), well known evidence concerning the efficacy of early intervention comes from studies formed by the leaders of 11 programs collectively serving economically disadvantaged children during the 1960s and 1970s. Lazar, Darlington, Murray, Royce, and Snipper (1982) found that the children receiving interventions between 1962 and 1973 had significantly fewer placements in special education and a 12.3% increase in high school graduation. With federal mandates regarding the performance of teachers based on student academic achievement, academic interventions, specifically Response to Intervention programs, are as critical to education as they have ever been.

The available literature and research surrounding Response to Intervention shows substantiating evidence that when administered properly, Response to Intervention is an effective method of addressing students' educational deficits (Ridgeway, Price, Simpson, & Rose, 2012). A study conducted by Hughes and Dexter (2011) described the major components of the Response to Intervention model, as well as the best practices for implementation of interventions based on current research. The components described in their study included: scientifically-based core curriculum; universal screening; progress monitoring; and decisions about adequate progress throughout the intervention tiers. Additionally, Hughes and Dexter examined research on the implementation of full Response to Intervention models, which are models that include all or most of the major RTI components. Their evaluation of the studies reported levels of improvement in both academic performance and student achievement after the implementation of Response to Intervention programs.

Research included in this literature review discusses Response to Intervention, provides a
brief history of RTI, and explains the importance of RTI, as well as shows the importance of implementing interventions at an early age. Research will examine both positive and negative results of Response to Intervention programs in language arts, mathematics and special education. Finally, results from both elementary and secondary intervention programs will be examined to better understand the different techniques used with different aged students, along with the correlation between interventions and standardized testing and the limitations of academic interventions.

History

The main ideas surrounding Response to Intervention are not new. According to Ellis (2005), characteristics of Response to Intervention date back to the early 1900's when teachers altered assignments to help meet individual student's needs. While these strategies can be traced back to educators in the early 1900's, it is unclear where the Response to Intervention framework originated. Gresham (2007) believes Response to Intervention is based in the areas of medical research. The multi-tiered framework used with Response to Intervention was first used in 1957 in the health and medical field. According to Walker et al. (1996), researchers borrowed the multi-tiered framework of primary, secondary, and tertiary levels of treatment to generate a preventative model for students with academic deficits and behavioral challenges. A triangle was developed by Sugai and Horner (2002) to illustrate the three levels of intervention. The students in the tertiary level receiving the most intensive interventions represented 1-5% of the student population. The students in the secondary level of intervention represented 5-15% of the student population, while students in the primary level of the intervention triangle represented 80-90% of the student population. This intervention triangle is now used to represent the majority of intervention programs used in schools today (Crawford, 2014).
According to O'Reilly, Sabatini, Bruce, Pillarisetti, and McCormick (2012), and Faggella-Luby, and Wardwell (2011), the core and origin of Response to Intervention lies within early reading development. Other research traces the roots of Response to Intervention to the field of special education where the intervention was used to identify students with specific learning disabilities (Hughes & Dexter, 2011; Swindlehurst, Shepherd, Salembier, & Hurley, 2015; Stockslager, 2011; Reschly & Wood-Garnett, 2009). According to Crawford (2014), the central tenets of Response to Intervention reflect a compilation of more than 50 years of research undertaken by various fields of social science.

**The Importance of Response to Intervention**

While many theories surrounding the origin of Response to Intervention exist, it is commonly agreed upon that the foundation of RTI in education can traced to the 1982 National Research Council report by Heller, Holtzman, and Messick (Bineham, Shelby, Paxey, & Yates, 2014). The report discussed the quality of both general education and special education programs, as well as the assessment practices used for identifying a disability. Response to Intervention was proposed as an alternative to the IQ-achievement discrepancy model that was being used to identify disabilities at that time. "In essence, similar to a medical model, RTI was to determine a child’s response to treatment, and the treatment was the be intensified or altered if the child showed no initial response to the intervention" (Bineham et al., 2014, p. 232).

The uses of Response to Intervention were expanded and the interventions are being used as a preventative tool that benefits all students within the many facets of education (Clarke et al, 2014; McDaniel, Albritton, & Roach, 2013). Response to Intervention has become a common framework in today's schools (Ockerman, Patrikakou, Feiker Hollenbeck, 2015). There are many ways to describe and define Response to Intervention. Faggella-Luby and Wardwell
(2011) define Response to Intervention as a school wide model for improving student outcomes by addressing the academic needs of a diverse group of students. Martinez and Young (2011) see RTI as formal process implemented by schools to provide direct instruction and intervention for all students experiencing academic difficulties. Response to Intervention has also been called an approach to prevention and intervention that uses data-based decision-making and evidenced-based instruction to address the needs of at-risk students in order to continue to make academic progress (Lam & McMaster, 2014; Ohl et al., 2013) Hall and Mahoney (2013) describe RTI as a service model that is designed to provide intervening academic skills and remediation to prevent the over representation and mislabeling of students with disabilities. O'Reilly, Sabatini, Bruce, Pillarisetti, and McCormick (2012) provide a unique description of Response to Intervention by labeling it a logic model that links the process of collecting sound evidence with implementing appropriate instruction and interventions. RTI may also be described as a change in behavior as a function of an intervention (Saeki et al., 2011). According to Cowan and Maxwell (2015), students who are not adequately progressing undergo a series of intense instructional modifications implemented by a qualified individual, while being monitored on a continuous basis. The most common RTI models are, as defined by IDEA or the Individuals With Disabilities Act, a tiered approach to instructions (Cowan & Maxwell, 2015). The National Center on Response to Intervention (2010) offers a definition that reflects what is known from research and evidence-based practice.

Response to Intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavioral problems. With RTI, schools use data to 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, and identify students with learning disabilities or other disabilities. (p. 2)

According to Turse and Albrecht (2015), RTI has two main goals. The first goal is to deliver evidence-based interventions to all students. The second goal of RTI is to use students' Response to Intervention as a basis for determining instructional needs and intensity. Feiker Hollenbeck and Patriakou (2014) acknowledge a goal of RTI is to strengthen the general education curriculum. According to Hunley and McNamara (2010), the goal of any RTI model used should always be to attain skills at the levels appropriate to a student's current grade level. The National Center of Response to Intervention (2010) states a goal of RTI is to minimize the risk for long-term learning outcomes by responding quickly to documented academic problems and deficits. Successful Response to Intervention programs that work to meet these goals have core features, foundations, and characteristics that make up the intervention, regardless of which program is being used.

Miller (2008) suggests the key to the RTI model is the requirement for teachers and stakeholders to provide reliable intervention while collecting data at each level of the RTI framework. There are many key components that make up a successful Response to Intervention program. These components include a universal screener for every student, primary prevention (Tier One), secondary intervention (Tier Two), tertiary intervention (Tier Three), data-based decision making based on progress monitoring, and fidelity checks (National Center on Response to Intervention, 2010; McDaniel, Albritton, & Roach, 2013; Stuart, Rinaldi, & Higgins-Averill, 2011; Prewett et al., 2012; Crawford, 2014; Rinaldi, Higgins-Averill, & Stuart, 2011; Prewett et al., 2012, Swindlehurst, Shepherd, Salembier, & Hurley, 2015). During the process of implementing a Response to Intervention framework in its school districts, the state of
Colorado identified six components of RTI that support the intervention framework: leadership, problem solving, curriculum and instruction, assessment and progress monitoring, positive school climate and culture, and family and community engagement (Duffy & Scala, 2012). Martinez and Young (2011) believe that defining a student's problem, planning an intervention for the student, implementing the intervention, and evaluating the student's progress are inherent to the process of Response to Intervention. While there is not a universal model of Response to Intervention (Bean & Lillenstein, 2012; Bineham et al., 2014; Feiker Hollenbeck & Patrikakou, 2014), many programs share these key features and characteristics.

Findings from research conducted by Prewett et al. (2012) showed the overall purpose of Response to Intervention was to close achievement gaps by providing remediation for students struggling with basic reading and mathematics skills. The RTI Coordination Council of Texas (RICC) maintains that RTI holds the promise of ensuring that all children have access to high quality instructions, while those students who struggle will be identified early and be provided adequate academic interventions. The most recent research conducted by organizations such as the National Assessment of Educational Progress (NAEP) and The National Center for Educational Statistics show that students are falling farther and farther behind academically. In 2013, 58% of fourth-grade students failed to reach proficiency in mathematics, while 33% of fourth-grade students failed to reach proficiency in reading. Additionally, nearly 70% of fourth-grade students with disabilities failed to reach proficiency in reading (Clarke et al., 2014; Lam & McMaster, 2014; Solis, Miciak, Vaughn, & Fletcher, 2014). There is a clear need to improve the reading ability of students in the United States. Taking small steps toward the problem may seem like a daunting task, but this strategy is a viable path for achieving success (O'Reilly, Sabatini, Bruce, Pillarisetti, & McCormick, 2012). According to Hall and Mahoney (2013), the RTI
model merges the educational accountability practices of both general education and special education to ensure students do not continue to struggle and are making academic progress.

Based on a study conducted by Ridgeway, Price, Simpson, and Rose (2012) the impact of RTI on academic achievement and student performance resulted in some level of notable improvement, thereby suggesting that a multi-tiered intervention approach can improve the academic outcomes for students who risk academic failure. A study by Al Otaiba et al. (2014) shows that when students who are the weakest in fundamental academic skills receive intense intervention their reading performance at the end of the year was significantly strong than those who did not receive interventions. Additionally, Al Otaiba et al. (2014) also found that students who received Tier Two and/or Tier Three interventions became stronger readers by the end of first grade when compared to those students who only received Tier One instruction. A pilot study conducted by Clarke et al. (2014) examined the efficacy of a Tier 2 mathematics intervention program that targeted whole-number understanding for students who were at risk in mathematics. Eighty-nine students participated in the study, with data collected using a pretest and a posttest in both a treatment and a control group of students. The results of the study showed significantly greater gains in whole number concepts and understanding than those students who did not receive intervention from the academic program ProFusion.

An Early Start to Intervention

A key element of Response to Intervention is the early identification of struggling learners and the provision of early intervention when students first experience academic difficulties (Bineham et al., 2014). Meyer and Behar-Horenstein (2015) suggest the Response to Intervention is based on the premise that all educators can and will collaborate to ensure that students' educational needs are met with early intervention. According to Yell, Shriner, and
Katsiyannis (2006), "a Response to Intervention model is designed to identify students who are having academic problems when the problems first become apparent" (p. 13). Saeki et al. (2011) offers early identification of students at risk as a remedy for the wait to fail approach that many schools take. According to McDaniel, Albritton, and Roach (2013), early intervention is the foundation of effective implementation of Response to Intervention. Turse and Albrecht (2015) state that for students to be successful, they must have early instruction and intervention. Research conducted by Blackwell, Trzesniewski, and Dweck (2007) shows that the early adolescent years is a critical point in the development of key academic skills. Hall and Mahoney (2013) state that early identification is key to facilitating interventions and remediation. Additionally, research conducted by Regan, Berkeley, Hughes, and Brady (2015) indicated a heavy focus on preventing academic difficulties with students in elementary school. It is crucial that academic deficits are identified and addressed during the early years of a child's education. Findings by Al Otaiba et al. (2014) suggested that it is possible to identify which children need the most intensive interventions at the beginning of first grade. According to Morgan, Farkas, and Wu (2009), students who entered kindergarten below the 10th percentile and remained there throughout the year were still below the 10th percentile in fifth grade. In contrast, of the students who exited kindergarten above the 10th percentile, only 30% were below the 10th percentile in fifth grade.

Likewise, Al Otaiba et al. (2014) found that intensive interventions must begin immediately because of the ability to predict poor outcomes by students based on pre-intervention coursework. Solis, Miciak, Vaughn, & Fletcher (2014) suggest there are beneficial outcomes for early identification and interventions for students in early elementary school grades.
**Universal Screener**

Universal screening is the first step in identifying at risk students who might be eligible to receive intervention services (Hughes & Dexter, 2011). It is designed to target and identify students who struggle to learn at the primary level of prevention. The National Center of Response to Intervention (2010) defines universal screening as assessments that are brief, valid, reliable, and demonstrate accuracy for predicting which students will develop learning problems. Every student in every class is screened using a universal screener (McInerney & Elledge, 2013). When students' scores fall below a pre-established score for the assessment being used, more in-depth testing is required to more accurately predict a student's true academic level (Prewett et al., 2012). A universal screener is recommended for use as a tool to identify at risk students early to allow those students to participate in intervention services prior to the onset of substantial academic deficits (Fuchs et al., 2007). According to Donovan and Cross (2002), there is substantial evidence that early identification and intervention is more effective than later identification and intervention. Universal screenings are typically given at the beginning, middle, and end of each academic school year using curriculum-based measurements (CBMs).

**Curriculum-based measurements (CBMs)**

Turse and Albrecht (2015) define curriculum-based measures (CBMs) as "a formative evaluation method designed to evaluate performance in the curriculum to which students are instructed" (p. 83). According to O'Reilly, Sabatini, Bruce, Pillarisetti, and McCormick (2012), CBMs originated as a simple, efficient, easily understood, and inexpensive tool for monitoring progress the basic skill of students with disabilities. However, research on CBMs since the early 1990s expanded the goals, purpose, audience, and setting of CBM use. Wayman et al. (2007) found that the use of CBM measures has shifted from progress monitoring students receiving
special education services to high-stakes decisions that carry important weight for students who may need the services Response to Intervention provides. Curriculum-based measures have established a record of reliability and validity, and provide features that align well with the Response to Intervention framework (Deno, Fuchs, Marston, & Shinn, 2001). CBM assessments assess the skills that are aligned with both state and local standards while remaining sensitive enough to detect small amounts of growth, making them ideal for use with Response to Intervention programs (Stockslager, 2011; O'Reilly, Sabatini, Bruce, Pillarisetti, and McCormick, 2012). A meta-analysis conducted by Fuchs and Fuchs (2006) of more than 200 empirical studies published in peer-review journals provide evidence of CBM's reliability and validity for assessing the development of competence in reading, spelling, and mathematics, and document CBM's capacity to help teachers improve outcomes at the elementary grades. It is crucial for Response to Intervention programs to use measures that are easy to administer and provide teachers with understandable, usable data within a small timeframe. Curriculum-based measures have the ability to meet both of these important requirements, making them the most often used measure within the RTI framework (Crawford, 2014).

Schools and school districts use CBMs that best fit the needs of their students. In Tier 1 of the Response to Intervention framework, secondary schools may choose to focus more on comprehensive measures, while primary schools focus on basic skills in reading, writing, and mathematics. Tier 2 CBMs in elementary school often include foundational skills that support higher level skills such as reading comprehension or math problem solving (Fuchs & Deno, 1991). At the secondary level, Tier 2 measures may target basic skills deficits within specific content areas. At Tier 3 of the Response to Intervention framework, CBMs will focus less on the grade level of the students receiving intervention services and more on providing measures at the
students’ instructional levels. The information provided by curriculum-based measurements is informative, reliable, and valid. Schools and school districts frequently use CBMs when collecting data for the evaluation and progress monitoring of their students (Crawford, 2014).

**Tier One - Primary Level Prevention**

Tier One intervention, a cornerstone of the Response to Intervention process (Hughes & Dexter, 2011), represents the core curriculum and differentiated instruction that includes school wide or whole-classroom instruction and universal screening (Stockslager, 2011) that benefits, in most cases, all students. In some educational models, Tier One only contains at-risk children identified after an academic screening (Gustafson, Svensson, & Fälth, 2014). Tier One intervention is the least intensive level of the RTI framework (National Center for Response to Intervention, 2010).

Tier One instruction serves as one of the most important components of an effective Response to Intervention framework. Tier One intervention is considered the primary prevention level, where all students receive high-quality, research based instruction that is differentiated on the basis of the data that is collected for each student three to four times per year (Blazer, 2010; Ridgeway, National Response to Intervention, 2010; Price, Simpson, & Rose, 2012; Turse & Albrecht, 2015). Prewett et al. (2012) conducted an exploratory, multi-phased case study, interviewing school administrators in 40 moderately diverse schools across the United States. The results of the study indicated that one of the most important jobs by school administrators was to solidify their general education instruction in Tier One. According to a school administrator involved in the study, "Our big bucks go into tier one" (Prewett et al., 2012, p. 141).
There are several reasons as to why high-quality, research-based instruction should be provided in the primary level of Response to Intervention instruction. First, high-quality instruction within a school district’s core curriculum is a requirement of NCLB (2002) and IDEIA (2004) (Stockslager, 2011). Second, according to Hughes and Dexter (2011), providing appropriate, high-quality evidenced-based instruction "eliminates inappropriate instruction as a reason for inadequate progress" (p. 5). Ridgeway, Price, Simpson, and Rose (2012) agree that high-quality instruction must ensure that every student is given an adequate opportunity to learn through the core curriculum provided in Tier One instruction. Tier One instruction should be effective for approximately 80-85% of students (Blazer, 2010; Kearny & Graczyk, 2013; National Center on Response to Intervention, 2010). If a significant number of students are unsuccessful in the Tier One curriculum, the instructional program may be inadequate and the instruction, curriculum, and structural variables should be modified (Blazer, 2010). Third, a high quality core curriculum provided within first tier of the RTI framework allows both teachers and parents to be confident that the students' needs are being met, and any special education referral or Response to Intervention placement is not due to ineffective instruction (National Center for Response to Intervention, 2010). Finally, a high quality core curriculum underscores the idea of waiting for students to fail. An effective core curriculum allows schools to be proactive with students who require assistance earlier rather than later (Kearney & Graczyk, 2014; Turse & Albrecht, 2015; University of California L.S., 2011).

**Tier Two - Secondary Level Intervention**

When research based, high-quality core instruction is found to be unsuccessful, a supplemental instruction model is used to focus on specific skill areas that are matched to student needs (Mundschenk & Fuchs, 2016). This supplemental instruction is the second tier of the
Response to Intervention framework. The purpose of Tier Two interventions is to provide a more targeted, more focused, instruction that is aligned with the core instruction received in Tier One with a goal of accelerating students' progress toward important learning goals (Baker, Smolkowski, Chaparro, Smith, & Fien, 2015). Tier Two interventions typically include small-group instruction taught by a regular education teacher or other qualified personnel that generally take place during a designated time built into the school schedule or during elective class time (Prewett et al., 2012). A report released by The Institute of Education Sciences showed that small group intervention in Tier Two is highly effective and was rated as having the strongest level of evidence to support Response to Intervention practices (Gersten et al., 2009). Likewise, a study conducted by Baker et al. (2015) found that students who received Tier Two interventions made greater gains than students who received only Tier One instruction. In practical terms, receiving Tier Two instruction in addition to Tier One interventions boosted performance by approximately eight percentile points. Ideally, students are paired with other students who are performing on a similar level and have similar skill areas that need strengthened. Tier Two intervention typically meets three to five days per week for 20-40 minute sessions (Blazer, 2010). The intensity of intervention in Tier Two is due, in large part, to the additional time that is made available at the secondary level to focus on the students' academic deficits. Methods used within Tier Two intervention can include small group instruction, scripted and structured lessons, and individual instruction based on the student's specific instructional needs (Stockslager, 2011).

Much like the first level of the Response to Intervention model, there are keys to the effectiveness at the secondary level. First, regardless of their backgrounds, the instructors at the secondary level of intervention must be fully prepared in the intensive instructional methods of the intervention curriculum (Prewett et al., 2012). Second, regardless of which method is used
during Tier Two intervention, students should receive instruction based on specific needs with progress monitoring throughout their time in the Response to Intervention process (Stockslager, 2011).

According to the National Center on Response to Intervention (2010), Tier Two interventions have at least three distinguishing characteristics. First, Tier Two interventions are evidence-based rather than research-based. Second, Tier Two instruction relies entirely on small-group instruction. Last, educators providing services for Tier Two instruction must present clearly articulated, validated intervention that must be implemented and sustained with fidelity.

Students receiving Response to Intervention services at the Tier Two level are progress monitored at regular intervals to determine if the student will return to Tier One instruction, continue with Tier Two interventions, or be referred for more intensive services. If a student does not demonstrate measureable gains while in the secondary level of intervention, alternate measures should be considered. It might be beneficial for a student to continue at the Tier Two level using a different type of intervention or instructional approach. As evidenced by progress monitoring, if measurable gains are still not achieved after making an educational change to intervention, a most intensive level of intervention may be recommended (Ridgeway, Price, Simpson, & Rose, 2012; Johnsen, Parker, & Farah, 2015).

**Tier Three - Tertiary Level Intervention**

Tier Three interventions are the most intensive, most individualized instruction for what is considered the most needy students. Approximately 5% of students require these more intensive, targeted academic intervention (Blazer, 2010). Instruction in the third tier of the Response to Intervention framework takes place more frequently than Tier Two interventions. Educators delivering Tier Three should not assume the more intense instruction is meeting the
students' needs. Instead, the educator should conduct weekly progress monitoring with each student. The data produced by the progress monitoring can be used to examine a student's rate of progress over a certain period of time. The curriculum used in Tier Three interventions can be modified or even changed to fit the students' needs (Turse & Albrecht, 2015). Tier Three intervention can include a combination of small group instruction and one-on-one interventions (Baker et al., 2015). In older RTI models, Tier Three included students who were receiving special education services (Al Otaiba et al., 2014; Kruse, Spencer, Olszewski, & Goldstein, 2014; Lam & McMaster, 2014; Ohl et al., 2013).

With only approximately 5% of the student population requiring Tier Three interventions, educators struggle to define and implement this level of intense intervention (Prewett et al., 2012). Schools struggle to find resources, instructional programs, and qualified staff members to provide the most individualized instruction of the Response to Intervention model. There are also questions surrounding when to serve the students receiving Tier Three intervention. In most RTI models, students in Tier Three receive intervention every day. Some schools report pulling students from special classes such as art, music, and library, while other schools pull students from core curriculum classes. While this does not appear to be an appropriate way of serving students in Tier Three interventions, they justify their decisions based on the severe academic deficits of the students (Prewett et al., 2012).

When the progress monitoring data that is produced in the third tier of intervention indicates no rate of progress, or no response to the intervention being provided, a student would be considered for a referral for special education services, but only after a broad-range of student and learning supports prove inadequate in enabling learning (University of California L.S., 2011).
Response to Intervention and Special Education

Special education is an important component of a comprehensive RTI framework that incorporates primary, secondary, and tertiary levels of prevention, but that has not always been the case. The passing of the Education for All Handicapped Children Act of 1975 (renamed the Individuals with Disabilities Education Act in 1990), required states to use the IQ achievement discrepancy model to identify students with learning disabilities (Binehan et al., 2014; Blazer, 2010; University of California L.S., 2011). This model required students to exhibit a severe discrepancy between achievement and intellectual ability (Hallahan, Kauffman, & Pullen, 2012). This method of identification not only identified students too late, but also led to far too many students being inappropriately diagnosed with a learning disability.

Response to Intervention and a commitment to early intervention were both included in the reauthorization of IDEA in 2004 as ways to reduce the number of students who were being inappropriately diagnosed with learning disabilities under the IQ achievement discrepancy model. According to Bean and Lillenstein (2012), the Response to Intervention framework was developed because of the concern regarding the large number of students being identified for special education services. After the reauthorization of IDEA, public schools began using direct instruction and intervention when students demonstrated academic deficits prior to making a special education referral. This revealed that it was very possible for students to make adequate progress with the interventions and therefore did not require a special education referral (Martinez & Young, 2011). According to Fuchs and Deshler (2007), Response to Intervention has the potential to provide both strong early interventions and a more valid means of disability identification.
Researchers (Bineham et al., 2014; Fuchs & Fuchs, 2008; Samuels, 2010) have reported that Response to Intervention has reduced referrals to special education. According to the National Joint Committee of Learning Disabilities (2005), the reductions in referrals to special education can be credited to well-designed instruction and intensified intervention in the general education setting, including all three tiers of the Response to Intervention framework.

Another component to Response to Intervention and special education is the use of the RTI framework with students with gifts and talents. A 2015 report by Johnsen, Parker, and Farah indicates ten states (Alabama, Arizona, Colorado, Delaware, Georgia, Illinois, Kentucky, Minnesota, Tennessee, Wisconsin) specifically permit students with gifts and talents to be served within the Response to Intervention framework. Including students with gifts and talents in the RTI framework can assist in the identification of needs, planning for instruction, and monitoring progress to ensure success within the core curriculum and beyond the core curriculum (Johnsen, Sulak, & Rollins, 2012).

Progress Monitoring

One of the most important components of Response to Intervention is progress monitoring (Ridgeway, Price, Simpson, & Rose, 2012). According to McInerney and Ellege (2013), the more frequent the progress monitoring, the more quickly students can receive appropriate instruction. Progress monitoring is used to assess the progress and performance of students who have been identified as at-risk by the universal screener. Both teachers and school personnel use progress monitoring to determine if the students who are receiving Responses to Intervention services are benefiting from the interventions (Hughes & Dexter, 2011). Progress monitoring should be monitored at a minimum of once a month, using a research-based assessment tool that is used repeatedly. According to Reschly and Wood-Garnett (2009),
frequent progress monitoring is essential in order to accurately monitor the students' results. Hughes and Dexter (2011) list the following benefits to frequent, correctly implemented progress monitoring:

(a) faster student learning because students are receiving more appropriate instruction;
(b) more informed instructional decisions; (c) documentation of student progress for accountability purposes; (d) more efficient communication with families and professionals about student progress; (e) higher expectations for students by teachers; and possibly, (f) fewer special education referrals. (p. 7)

Although progress monitoring is a critical aspect of tier two interventions, ideally it should take place at all levels of RTI (Gustafson, Svensson, & Fälth, 2014).

**Fidelity Checks**

To make effective data-driven decisions, teachers use research-based strategies for intervention and implement these strategies with fidelity. As it relates to RTI, fidelity implies that interventions are implemented as intended and that a data system is being used to measure student outcomes (Reschly & Wood-Garnett, 2009; Robins & Antrim, 2012). In order to properly conduct fidelity checks, a designated intervention team must always be able to verify that students in each tier of intervention are receiving appropriate and adequate instruction. Failure to implement interventions with fidelity contributes to the failure of many intervention programs within education.

**Changing the School Climate with Response to Intervention**

For Response to Intervention to be highly effective, significant changes are needed with respect to how administrators, teachers, students, and school staff engage in intervention practices (University of California L.S., 2011). According to McInerney and Elledge (2013),
these changes can be made using the Response to Intervention framework as a school turnaround strategy. The primary level of the school turnaround strategy is strong leadership by both district and school leaders. Strong leaders must have a vision for the Response to Intervention program and articulate that vision to local educators. The secondary level of the school turnaround strategy involves a constant focus on improving instruction and curriculum. Evidence of this focus can be found in the data produced by student screenings and progress monitoring. The tertiary level of the school turnaround model is a committed staff. In order for RTI to be successful, school staff members must be committed to the intervention process. The changing of the school climate can have a positive effect on how administrators, educators, and students teach learn and interact (Bean & Lillenstein, 2012).

**Response to Intervention at the Secondary Level**

Although traditionally used in the elementary school setting, RTI is becoming a staple in secondary schools as well. According to Sansosti, Goss, & Noltemeyer (2011), there is a growing interest among educational professionals and researchers about the degree to which RTI can be used in secondary settings. Batsche, Kavale, and Kovaleski (2006) believe RTI can be applied to all grade levels. A study conducted by Solis, Miciak, Vaughn, & Fletcher (2014) reveals that middle school students who participated in interventions for low reading comprehension outperformed students in the treatment group, as well as typical readers over time. With findings indicating that students in middle school continue to demonstrate reading difficulties, it is imperative that academic interventions continue beyond the elementary school years. Research by Swindlehurst, Shepherd, Salembier, and Hurley (2015) show that both middle schools and high schools are beginning to move toward RTI implementation more frequently than in years past.
**Additional Uses of Response to Intervention**

Although academic interventions are traditionally associated with language arts and mathematics, there are other avenues where a positive impacts can occur. Students who receive occupational therapy for fine motor and visual motor skills have also showed positive gains through fine motor intervention programs. After participating in a 12-week intervention program that targeted fine motor performance skills such as handwriting skills, students in the intervention group made significantly greater gains in hand-eye coordination, copying, and fine motor skills than the control group (Ohl et al., 2013).

Another popular use for the Response to Intervention framework is the model that addresses chronic absenteeism. According to Kearney and Graczyk (2014), whole school interventions that enhance a positive school climate can be relevant for Tier One strategies to promote school attendance and prevent absenteeism, especially in secondary schools.

Educational professionals continue to struggle to address the needs of students who have social, emotional, or behavioral difficulties. For this reason, positive behavioral interventions and support models are utilizing the Response to Intervention framework to promote clear behavioral expectations for students who need behavior interventions. Like the traditional Response to Intervention framework, behavior interventions uses a three tier model that includes primary prevention, secondary prevention, and the tertiary prevention. Primary prevention seeks to prevent harm, secondary prevention seeks to reverse harm for at-risk students, and tertiary prevention is aimed at students with the most severe difficulties (Saeki et al., 2011).

A particular advantage of using the same, or a similar, RTI framework approach for different intervention strategies is that it may resonate better with educational professionals and others who are familiar with the multi-tiered framework (Kearney & Graczyk, 2014).
Challenges of Response to Intervention

Although Response to Intervention is extensively being adopted at the middle school level, questions regarding the function and most efficient means to deliver interventions at the middle school level still exist (Ciullo et al., 2016). According to Regan, Berkeley, Hughes, and Brady (2015), challenges include confusion regarding roles and responsibilities of staff members, the collection and analyzing of data in the decision making process, and the lack of professional development and training for teachers involved with Response to Intervention. Research conducted by Brendle (2015) showed that both general education and special education teachers were unfamiliar with the practice of providing interventions for their students.

Another challenge facing the implementation of Response to Intervention is the lack of support from either school administrators, teachers, or both. As with any change or new initiative, problems occur with the implementation and acceptance of the program and teacher buy in (Werts, Carpenter, & Fewell, 2014). Reschly and Wood-Garnett (2009) state that when teachers consider the amount of instructional time that is potentially lost due to Response to Intervention, they will develop an obvious dislike toward the program.

According to Cowen and Maxwell (2015), a common theme among participants in studies regarding RTI is the belief that the intervention process is overwhelming to those teachers implementing RTI. Hall and Mahoney (2013) share similar concerns by stating that teachers believe RTI is too time consuming, and therefore give students passing grades to avoid the associated paperwork. According to Swindlehurst, Shepherd, Salembier, and Hurley (2015), "Considerably fewer principals of middle schools view RTI as a high priority, and only about one-quarter of high school principals considered RTI to be a high priority" (p. 13), and therefore, is implemented with far less consistency at the middle and high school levels. Additionally,
research conducted by Faggella-Luby and Wardwell (2011) question whether or not RTI is relevant to middle and high schools.

According to Lam and McMaster (2014), although a large number of research-based interventions have been developed to address student needs, some students do not make the gains they are expected to make regardless of the intervention techniques that are used. Students with disabilities participating in certain occupational therapy services showed little to no progress when compared to students without disabilities (Ohl et al., 2013). Treatments performed by Kruse et al. (2015) concluded that most children receiving sound identification intervention showed little to no treatment effects.

Shinn (2007) suggested there are multiple negative impacts of RTI. First, Shinn (2007) believes that schools are not capable of accurately measuring the true Response to Intervention techniques and strategies. Shinn (2007) also questions the quality of intervention techniques used by school systems.

According to Kruse et al. (2015), there are several major limitations that exist in most intervention programs. First, Tier One and Tier Three instruction seems to be the primary focus of intervention programs, leaving the students receiving Tier Two instruction less served. Second, many intervention programs require time that most schools do not have built into their daily schedule. The only time available to use for intervention is that set aside for physical education classes and related arts. Students are getting tested to death as it is, therefore the last thing they want to do is give their only non-academic time for more academic interventions.

**Perceptions of Response to Intervention**

As Response to Intervention continues to be implemented in schools, it is important to consider how this initiative is perceived by the educational professionals involved and affected
by the implementation of the process (Little, 2013; Patrikakou, Ockerman, & Hollenbeck, 2016). The strength of any initiative lies in the hands of the school professionals who are ultimately responsible for the implementation (Spillane, Reiser, & Reimer, 2002). Every school professional holds unique beliefs, attitudes, and emotions that influence how he or she interacts with new ideas and impacts the success of any new educational policy or reform (Hoekstra & Korthagen, 2011). A study by Zahedi (2010) found that teachers are more positive about change when involved in the process of implementation. Teachers' satisfaction with reform efforts and the process of implementation are important factors in the change process.

Prewett et al. (2012) designed an exploratory case study to document and better understand middle school administrators’ and staffs’ perceptions of Response to Intervention, the implementation, and the current status of RTI in their schools. Their study consisted of five phases of research that started with scouting potential schools to conduct both structured and semi-structured interviews, and ended with researchers conducting site visits to 12 selected schools. The findings of their research indicated that Response to Intervention has the potential to be practical and effective school-wide framework for ensuring academic and behavioral success for students. Likewise, Stockslager (2011) states that Response to Intervention has demonstrated a positive impact on both student and school-wide outcomes. According to Ockerman, Patrikakou, and Hollenbeck (2015), school based professionals perceive RTI as a positive change when they have support from the school administration.

Feiker Hollenbach and Patrikakou (2014) surveyed 145 school professionals regarding their perceptions, beliefs, and attitudes in relation to the mandated implementation of Response to Intervention across the state of Illinois. The researchers found that 65% of respondents strongly agreed that the RTI framework had the potential to benefit all students by improving
academic outcomes, but only 19% felt that their colleagues were in favor of the implementation of Response to Intervention. Additionally, the study found that school leadership had the biggest impact on the school professionals' attitudes toward RTI. School professionals who had confidence in their leaders had more favorable attitudes toward RTI and its benefits.

A theme that emerged in a study conducted by Sansosti, Goss, and Noltemeyer (2011) was the need for change in the roles and attitudes of educational professionals, parents, and community members. The attitudes of the educational professionals surveyed were viewed as barriers to the success of RTI implementation. Participants indicated that, in order to implement RTI effectively, their own attitudes would have to change. In a similar study, Werts, Carpenter, and Fewell (2014) surveyed special education teachers to determine their perceptions of the barriers and benefits to the implementation of Response to Intervention. A barrier listed by the special education teachers was the attitudes of school faculty members. Lack of teacher buy-in appeared to inhibit successful implementation of RTI.

Reagan, Berkeley, Hughes, and Brady (2015) surveyed full-time teachers and administrators who worked with students in academic areas relevant to RTI in order to gain insight into their perceptions of the school district's RTI initiative. Survey participants stated that the limited understanding of RTI, due to the lack of training and professional development, played a role in their negative attitudes toward the Response to Intervention initiative.

Jackson (2016) conducted a case study to examine teachers' perceptions regarding the effectiveness of educational practices within the RTI framework. The study took place in a traditional middle school setting in the southeastern part of the United States. The results of the study revealed that the participants' perceived Response to Intervention as an effective way to improve instructional strategies. Participants also believed that their outlook on teaching has
changed since the implementation of the Response to Intervention practices.

Rogers (2016) used a qualitative case study to seek a better understanding of the perceptions of middle school administrators and educators regarding the status of Response to Intervention at their school. The results revealed that overall, teachers perceive RTI as a program that is not meeting the needs of their students. While the initial feelings toward RTI were positive, both administrators and educators blamed the added responsibility and the lack of clarity as reasons for their negative feelings toward RTI.

While research does exist regarding teachers' perceptions of Response to Intervention, the number of studies are minimal. Future research should incorporate the perspective of all stakeholders involved in the Response to Intervention process. Policy is never simply implemented. Instead, it is interpreted, negotiated, and implemented by multiple actors in the educational environment (King Thorius, Maxcy, Macey, & Cox, 2014; Martinez & Young, 2011).

**Analysis of Related Theories**

Martin Fishbein's reasoned action approach research on the theory of planned behavior has emerged as the dominant conceptual framework for predicting, explaining, and changing human social behavior surrounding attitudes and the subsequent behaviors that follow (Ajzen, 2012) and has been used to investigate many important behaviors (Warshaw, Calantone, and Joyce, 1986). Fishbein's theory of attitude states that people's attitudes toward an object are determined by their readily accessible beliefs about the object (Ajzen, 2012).

According to Hankins, French, and Horne (2000), Fishbein's theory was designed and developed to model how a specific behavior is produced by beliefs, attitudes, and intentions toward that behavior. These attitudes and intentions are both produced by a person's attitude
toward performing that behavior, as well as the individual’s perception of that behavior.

According to Fishbein's theory, the more strongly a person believes that a certain response will lead to a certain outcome, the stronger their intention is to produce the outcome (Ajzen, 2012).

Simply stated, if people believe they will get their desired results, then they will perform the requirements to obtain those outcomes. Fishbein's theory stipulated that the intention to perform a behavior is a joint function of a favorable or unfavorable attitude toward the behavior (Ajzen, 2000). Fishbein's theory can be very beneficial when it comes to the field of education, especially when new concepts such as Response to Intervention are introduced. According to Stockslager (2011):

> Previous research on large-scale systems change efforts in education has suggested that educator attitudes and beliefs about the innovation and perceptions of self-efficacy play an important role in predicting implementation. More recent research has suggested a positive relationship between teachers' self-efficacy and perceptions of RTI outcomes. (p. 11)

**Conclusion**

As a result of the recent educational legislation, states are increasingly moving toward the implementation of Response to Intervention. According to Hughes and Dexter (2011), 47 of 50 states have either adopted RTI programs, or are in the process of adopting an RTI program. The potential for positive results from academic intervention are seemingly endless; however, teachers' attitudes and perceptions of Response to Intervention could negatively impact these potential results. Research shows that there is a pressing need for a study of Response to Intervention at the middle school level (Faggella-Luby & Wardwell, 2011; Regan, Berkeley, Hughes, & Brady, 2015; Hughes & Dexter, 2011; Stockslager, 2011). According to Rinaldi,
Higgins-Averill, and Stuart (2011), "it seems prudent and critical, then, to understand how
teachers perceive RTI, and how they adopt, enact, and sustain the model" (p. 44).
Chapter 3: Research Methodology

In 2010, Race to the Top brought drastic changes to the landscape of Tennessee’s educational system. Common Core State Standards were introduced, prompting both middle schools and high schools across the state to start preparing to provide intense intervention services to every student in the school, regardless of their academic level. These interventions are known as RTI² and become mandatory in middle school during the 2015-16 school year.

Middle school teachers have the opportunity to reap the same benefits that Response to Intervention has provided for elementary school teachers for many years. In order to fully implement RTI, teachers may be required to take on uncomfortable roles to help successfully implement the intervention services. According to Marston, Muyskens, Lau, and Canter (2003), the successful implementation of RTI in the middle school setting may require educators to take on new, unfamiliar roles in the school. For example, physical education teachers may find themselves being asked to provide academic interventions and support to students who qualify for tiered interventions. These teachers may also be asked to provide enrichment opportunities to students who do not qualify for academic interventions. Successful implementation of RTI requires schools work collectively to provide intervention services. Although academic interventions are proven to be effective (Burns, Appleton, & Stehouwer, 2005), the additional workload added to teachers could potentially cause teachers to have a negative attitude or a negative perception toward Response to Intervention. The purpose of this study was to use Fishbein and Ajzen’s (1975) theoretical framework of attitudes to examine teachers’ perceptions and attitudes toward RTI interventions.
Research Participants and Setting for the Study

Population. Participants were teachers at Lee Middle School (pseudonym). Lee Middle School has 24 classroom teachers, seven related arts teachers, four special education teachers, two intervention specialists, and two guidance counselors. Although every staff member at Lee Middle School is associated with the implementation of RTI, only those working at the school during the 2015-16 school year who taught an intervention class participated in the study. A survey was administered to 27 teachers. These teachers included six 6th grade teachers (1 language arts, 2 science, 2 social studies, 1 math), nine 7th grade teachers (2 language arts, 2 science, 1 social studies, 3 math, 1 related arts), seven 8th grade teachers (2 language arts, 1 science, 2 social studies, 2 math), and five teachers who teach multiple grade levels (art, band, music, physical education, language arts). Participants were chosen using convenience sampling. According to the Handbook of Mixed Methods Research in Social & Behavioral Research (2003), convenience sampling is a sampling technique used to obtain samples that are easily accessible by the researcher. For this study, convenience sampling was used in order to maximize the number of participants while minimizing the variability in RTI practices that other schools and school districts may have.

Setting. A middle school in a rural eastern Tennessee school district was purposefully selected for this research study due to the accessibility of participants and the school’s recent implementation of RTI. Lee Middle School is made up of approximately 600 students. The school is 95% Caucasian. In addition, 70% of the students qualifying for free and reduced lunch. Approximately 6% of the students in the school receive special education services. Approximately 1% of the students receive Tier three intervention services, while approximately
7.5% receive Tier two intervention services. The setting was chosen using convenience sampling, in part, due to the accessibility of important pieces of data used in this study.

Description of Instruments

Following an extensive review of the literature of both Response to Intervention and Fishbein and Ajzen’s theory of attitude (1975), the researcher developed survey questions that were designed specifically for this study. The survey was quantitative in nature and used Likert-scale to rate the questions. A Likert-scale was chosen for this study because it provides a range of responses to assess and measure one’s attitude (Croasmun & Ostrom, 2011).

Prior to participating in the survey, participants were provided informed consent (Appendix A), which was displayed on the introductory page of the online survey. The participants in the study answered six questions in the first section of the survey in order to obtain demographic information. The completion questions contained demographic items related to their current position, number of years as an educator, highest degree earned, and training in RTI. The second section of the survey contained six Likert-type items that asked participants to rate different aspects of the RTI program at Lee Middle School. Items were rated as follows: very poor, poor, acceptable, good, very good and no basis for opinion. The third section of the survey included six Likert-type items that addressed the teachers’ agreement or disagreement with RTI practices at Lee Middle School. Items were rated as follows: strongly disagree, disagree, neutral, agree, strongly agree, and no basis for opinion as choices.

Pilot Survey

A pilot survey was distributed to teachers at Lee Middle School who either did not teach at the school during the 2015-16 school year, or who did not teach a Response to Intervention class. These participants included seven regular education teaches, four special education
teachers, and two guidance counselors. Pilot survey participants provided feedback regarding the layout of the survey, readability of the survey items, and usefulness of the survey questions. Feedback from the pilot survey was used to improve the survey administered for this study.

**Data Collection Procedures**

The survey was developed using Survey Monkey (http://www.surveymonkey.com). An email containing a link to the survey was disseminated to the teachers at Lee Middle School. Prior to participating in the survey, the survey participants were presented a consent form where informed consent was obtained by the researcher. In addition to the survey, the research participants received an explanation of the purpose of the study. Data from the Survey Monkey survey were then collected and exported to an Excel file for analysis.

Additional data were collected for this study by using the information produced through the required progress monitoring process of RTI. This data was collected weekly for students in bi-weekly for students in Tier Two interventions.

**Time Period for the Study**

Intervention data were collected during the 2015-16 school year. The data represents student grade level growth within Lee Middle School's Response to Intervention program. Analyzing student growth data with the results of the teacher survey was chosen to determine what kind of correlation exists between teachers' attitudes toward Response to Intervention and student grade level growth. The teachers who participated in the survey were all on staff during the 2015-16 school year and taught an intervention class at Lee Middle School.

**Data Analysis**

In addition to using descriptive statistics to analyze the data, the Spearman rank-order correlation coefficient was used to analyze the data collected from the survey containing the
Likert-type questions. The Spearman rank-order correlation coefficient, commonly referred to as the Spearman's correlation, was chosen for this study because it is able to identify the strength and direction of association that exists between two variables. The value 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, while a value less than 0 indicates a negative association (Ary, Jacobs, Sorensen, & Walker, 2014). The data collected were from a Likert-type scale that used the following intervals: (1) very poor, (2) poor, (3) acceptable, (4) good, (5) very good and (0) no basis for opinion, as well as, (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree, and (0) no basis for opinion.

Summary

This study analyzed data from the 2015-16 school year. It used a Likert-type survey to gain insight into teachers' attitudes and perceptions of Response to Intervention at Lee Middle School. Additionally, intervention data were collected to see if a correlation existed between student grade level growth within the RTI program at Lee Middle School and teachers' perceptions and attitudes of the intervention program.
Chapter 4: Results of the Data Analysis

As Response to Intervention was increasingly implemented in schools across the nation, attention has turned to the process of implementation and the impact it may have on teachers and support professionals that find themselves on the front lines (Nunn & Jantz, 2009; Patrikakou, Ockerman, & Hollenbeck, 2016). Mandates in the field of education, such as Response to Intervention, brought added pressure to educators as they work through the intervention process to meet the needs and deficits of the students. Although Response to Intervention was extensively being adopted at the middle school level, questions regarding the function and most efficient means to deliver interventions at the middle school level still exist (Ciullo et al., 2016). Previous research on teacher perspectives and the contextual influences of Response to Intervention were predominately case studies of individual schools in the elementary setting (Regan et al., 2015). The purpose of this quantitative study was to examine the perceptions and beliefs of middle school educators regarding the implementation and outcomes of Response to Intervention. Additionally, the study utilized the Spearman rank-order correlation coefficient to determine if there was a correlation between teachers’ attitude towards RTI and the outcomes of their students who directly receive intervention services. This information was collected using a survey designed by the researcher, and administered using Survey Monkey (http://www.surveymonkey.com). Twenty-seven teachers at Lee Middle School responded to a survey that contained six demographic questions and 10 Likert-type questions regarding the RTI program at their school. Data collected from the survey were then exported to an Excel file and analyzed using the software program SPSS statistics (IBM Corp., 2016). Additional data were collected for this study by using the information produced through the required progress monitoring process of the Response to Intervention program. Data were collected bi-weekly for
students in Tier Two interventions. Nunn, Jantz, and Butikofer (2009) point out the need to clearly define and systematically examine the correlations associated with RTI implementation and teacher beliefs and perceptions and the outcomes of such interventions. Faggella-Luby and Wardwell (2011) state, “empirical study of RTI in middle schools is warranted to validate the efficacy of implementation efforts” (p. 35). The quantitative study was primarily guided by two research questions.

Research Question 1: How do teachers perceive the implementation of Response to Intervention? 
Research Question 2: Do teachers' attitudes toward Response to Intervention affect their students' academic growth within the intervention program?

Data Collection

Demographics. Data for this study were collected from 27 educators at Lee Middle School. These educators were selected because of their involvement with the Tier Two, Tier Three, and enrichment portions of the Response to Intervention program during the 2015-16 school year. In all, a total of 27 surveys were distributed to the teachers at for a return rate of 100%. Of the survey participants, 21 were female and six were male. Seventeen survey participants held a master's degree, while eight held a bachelor's degree and two held an Educational Specialist degree. Ten of the participants in the survey had 21 or more years of teaching experience, seven had 16-20 years of experience, five had 0-5 years of experience, three had 11-15 years of experience, and two had 6-10 years of experience. Table 1 outlines the demographic information.
Table 1

Demographic Information of Survey Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Subject Taught</th>
<th>Education</th>
<th>Teaching Experience</th>
<th>RTI Position</th>
<th>Grade Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>21 or more</td>
<td>Direct Instruction w/ Tier 2</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participant 2</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Direct Instruction w/ Tier 2</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 3</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>16 to 20</td>
<td>Direct Instruction w/ Tier 2</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participant 4</td>
<td>Master's</td>
<td>Master's</td>
<td>0 to 5</td>
<td>Direct Instruction w/ Tier 2</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Participant 5</td>
<td>Master's</td>
<td>Master's</td>
<td>16 to 20</td>
<td>Direct Instruction w/ Tier 2</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 6</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>11 to 15</td>
<td>Direct Instruction w/ Tier 2</td>
<td>Multiple</td>
</tr>
<tr>
<td>Participant 7</td>
<td>Ed.S.</td>
<td>Ed.S.</td>
<td>16 to 20</td>
<td>Direct Instruction w/ Tier 2</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Participant 8</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>16 to 20</td>
<td>Direct Instruction w/ Tier 2</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participant 9</td>
<td>Master's</td>
<td>Master's</td>
<td>16 to 20</td>
<td>Direct Instruction w/ Tier 2</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 10</td>
<td>Ed.S.</td>
<td>Ed.S.</td>
<td>0 to 5</td>
<td>Direct Instruction w/ Tier 2</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 11</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>0 to 5</td>
<td>Direct Instruction w/ Tier 2</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 12</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Direct Instruction w/ Tier 2</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participant 13</td>
<td>Master's</td>
<td>Master's</td>
<td>11 to 15</td>
<td>Enrichment</td>
<td>Multiple</td>
</tr>
<tr>
<td>Participant 14</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>21 or more</td>
<td>Enrichment</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 15</td>
<td>Master's</td>
<td>Master's</td>
<td>16 to 20</td>
<td>Enrichment</td>
<td>Multiple</td>
</tr>
<tr>
<td>Participant 16</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Enrichment</td>
<td>Multiple</td>
</tr>
<tr>
<td>Participant 17</td>
<td>Master's</td>
<td>Master's</td>
<td>0 to 5</td>
<td>Enrichment</td>
<td>Multiple</td>
</tr>
<tr>
<td>Participant 18</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>6 to 10</td>
<td>Enrichment</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participant 19</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Enrichment</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Participant 20</td>
<td>Master's</td>
<td>Master's</td>
<td>6 to 10</td>
<td>Enrichment</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Participant 21</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Enrichment</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 22</td>
<td>Master's</td>
<td>Master's</td>
<td>0 to 5</td>
<td>Enrichment</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 23</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Did Not Answer</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participant 24</td>
<td>Master's</td>
<td>Master's</td>
<td>16 to 20</td>
<td>Enrichment</td>
<td>7th Grade</td>
</tr>
<tr>
<td>Participant 25</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Enrichment</td>
<td>8th Grade</td>
</tr>
<tr>
<td>Participant 26</td>
<td>Master's</td>
<td>Master's</td>
<td>21 or more</td>
<td>Enrichment</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Participant 27</td>
<td>Bachelor's</td>
<td>Bachelor's</td>
<td>11 to 15</td>
<td>Enrichment</td>
<td>6th Grade</td>
</tr>
</tbody>
</table>
**Quantitative items.** Section two of the survey consisted of four Likert-type items that addressed the current Response to Intervention practices at the school, including the educators' understanding of the RTI program, the effectiveness of the RTI program, the effectiveness of the progress monitoring program being used for the RTI program, and the educators' attitude toward the RTI program. Items were rated on a 6-point Likert-type scale with *no basis for opinion, very poor, poor, acceptable, good, and very good* as choices. Analysis of items using Chronbach's alpha showed internal consistency of .76 (see table 2), which falls in the mid to high portion of the *fair* range for items related to the current intervention practices. A reliability coefficient of .70 or higher is considered acceptable in most social science research situations (What Does Chronbach's Alpha Mean? 2016).

Table 2

*Section Two Reliability Statistics*

<table>
<thead>
<tr>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.759</td>
<td>.768</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Section three of the survey consisted of six Likert-type items that related to the educators' agreement or disagreement of the Response to Intervention practices at Lee Middle School. The items were rated on a 6-point Likert-type scale with *no basis for opinion, strongly disagree, disagree, neutral, agree, and strongly agree* as choices. Analysis of items using Chronbach's alpha showed internal consistency of .83 (see table 3), which falls in the low portion of the *good* range.
Table 3

*Section Three Reliability Statistics*

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.828</td>
<td>.819</td>
<td>6</td>
</tr>
</tbody>
</table>

Section two of the survey gave respondents an opportunity to rate different aspects of the RTI program at their school. Table 4 outlines the percentage of responses for each Likert-type item in section two of the survey.

Table 4

*Responses by Survey Participants for Likert-type Items in Section Two*

<table>
<thead>
<tr>
<th>No Basis for Opinion</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Acceptable</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. How would you rate your understanding of the RTI program at your current school?</td>
<td>11%</td>
<td>56%</td>
<td>33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. How would you rate the effectiveness of the RTI program at your current school?</td>
<td>18%</td>
<td>56%</td>
<td>26%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. How would you rate the effectiveness of the program being used for intervention?</td>
<td>15%</td>
<td>7%</td>
<td>37%</td>
<td>26%</td>
<td>15%</td>
</tr>
<tr>
<td>10. How would you rate your overall attitude toward the RTI program at your current school?</td>
<td>4%</td>
<td>30%</td>
<td>44%</td>
<td>22%</td>
<td></td>
</tr>
</tbody>
</table>

The third and final section of the survey administered provided the educators an opportunity to agree or disagree with the current RTI practices at Lee Middle School. Table 5 outlines the percentage of responses for each Likert-type item in section three.
Table 5

*Responses by Survey Participants for Likert-type Items in Section Three*

<table>
<thead>
<tr>
<th></th>
<th>No Basis for Opinion</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Did Not Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. The RTI program at your current school has changed the methods of teaching in your classroom.</td>
<td>4%</td>
<td>11%</td>
<td>7%</td>
<td>30%</td>
<td>48%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. The RTI program at your current school helps students in the general education classroom.</td>
<td>4%</td>
<td>4%</td>
<td>7%</td>
<td>7%</td>
<td>52%</td>
<td>22%</td>
<td>4%</td>
</tr>
<tr>
<td>13. The RTI program at your current school helps students with the year-end assessments.</td>
<td>15%</td>
<td>4%</td>
<td>4%</td>
<td>11%</td>
<td>51%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>14. The RTI screening process correctly identifies student deficits.</td>
<td>4%</td>
<td>7%</td>
<td>19%</td>
<td>59%</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. The RTI program at your current school provides you with the student information needed to successfully implement RTI.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4%</td>
<td>66%</td>
</tr>
<tr>
<td>16. If give the option, you would continue the RTI program at your current school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7%</td>
<td>22%</td>
</tr>
</tbody>
</table>
Results

In order to address the first research question regarding the perception of Response to Intervention by the participants, the researcher chose to examine the measures of central tendency of each survey question.

The measures of central tendency for the questions in section two of the Response to Intervention survey show that 89% of the educators at Lee Middle School feel that their understanding of the RTI program (question 7) is either good, or very good. Eighty-two percent of the survey respondents rated the RTI program (question 8) as being good or very good. When asked to rate the effectiveness of the program, EasyCBM, being used for intervention (question 9), 15% responded the program was very good, 26% responded that the program was good, 37% responded the program was acceptable, and 7% responded the program was poor. When asked to rate their overall attitude toward the RTI program at Lee Middle School (question 10), 22% of survey participants responded that their attitude was very good, 44% responded that their attitude was good, 30% responded that their attitude was acceptable, and 4% responded that their attitude was poor. Table 6 outlines the measures of central tendency for section two of the survey taken by the educators at Lee Middle School.

Table 6

Measures of Central Tendency-Survey Section Two

<table>
<thead>
<tr>
<th></th>
<th>Question 7</th>
<th>Question 8</th>
<th>Question 9</th>
<th>Question 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.2222</td>
<td>4.0741</td>
<td>3.0370</td>
<td>3.8519</td>
</tr>
<tr>
<td>N</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.64051</td>
<td>.67516</td>
<td>1.53125</td>
<td>.81824</td>
</tr>
<tr>
<td>Range</td>
<td>2.00</td>
<td>2.00</td>
<td>5.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Variance</td>
<td>.410</td>
<td>.456</td>
<td>2.345</td>
<td>.670</td>
</tr>
</tbody>
</table>
Section three of the survey asked participants to rate their level of agreement with the RTI practices in place at Lee Middle School. Forty-eight percent of survey respondents agreed that the RTI program had changed their methods of teaching in the classroom (question 11). Thirty percent were neutral, while 18% either disagreed or strongly disagreed. Four percent of educators had no basis for opinion. Seventy-four percent of educators agreed or strongly agreed that the RTI program helps students in the general education classroom (question 12), while 66% agreed or strongly agreed that the RTI program helped students on year-end assessments (question 13). Seventy percent of educators agreed or strongly agreed that the RTI screening process correctly identified student deficits (question 14). Nineteen percent were neutral. Ninety-two percent of the educators agreed or strongly agreed that they were given the proper amount of information to successfully implement RTI (question 15). Finally, 71% of the educators agreed or strongly agreed that they would continue RTI if given the option. Table 7 outlines the measures of central tendency for section three of the survey.

Table 7

<table>
<thead>
<tr>
<th>Question 11</th>
<th>Question 12</th>
<th>Question 13</th>
<th>Question 14</th>
<th>Question 15</th>
<th>Question 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.0741</td>
<td>3.7308</td>
<td>3.2593</td>
<td>3.6296</td>
<td>4.2308</td>
</tr>
<tr>
<td>N</td>
<td>27</td>
<td>26</td>
<td>27</td>
<td>27</td>
<td>26</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.17427</td>
<td>1.25085</td>
<td>1.63125</td>
<td>1.04323</td>
<td>.51441</td>
</tr>
<tr>
<td>Range</td>
<td>4.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Variance</td>
<td>1.379</td>
<td>1.565</td>
<td>2.661</td>
<td>1.088</td>
<td>.265</td>
</tr>
</tbody>
</table>

Based on the responses by the educators, it appears that the overall perceptions of the Response to Intervention program fall between the acceptable and good category for questions surrounding the current intervention practices at the school. When considering how the Response to Intervention program at Lee Middle School affects things like classroom teaching methods...
and general education and year-end assessment success, the survey participants were neutral about the program. The survey participants did agree that the Response to Intervention team at Lee Middle School provide the teachers with the information needed to successfully implement Response to Intervention at their school, which proved to be the only positive response in section three of the survey.

A Spearman's correlation was conducted to address the second research question of this study: Do teacher attitudes toward Response to Intervention affect their students' academic growth? This test was chosen because it is a measure of strength and direction of association that exists between two variables measured on at least an ordinal scale (Spearman's Rank-Order Correlation using SPSS Statistics, 2016). Prior analyzing the data, the researcher had to ensure that the Spearman's correlation coefficient was the appropriate test to use by ensuring the data passed the two assumptions required for Spearman's correlation. The first assumption required the two variables to be measured on an ordinal, interval, or ratio scale. Because of the Likert-type scale used to code the data, assumption number one was satisfied. The second assumption required a monotonic relationship between the two variables. A scatter plot was created in order to examine the relationship of the two variables. See the scatter plot in figure 1.
Figure 1. Monotonic Data Scatter Plot. The scatter plot shows the relationship between student growth through Response to Intervention at Lee Middle School and the educators’ responses regarding their attitude toward RTI. The scatter plot was created through SPSS Version 24.

The data pertaining to teacher attitude toward Response to Intervention were collected from question 10 of the Response to Intervention survey: *How would you rate your overall attitude toward the RTI program at your current school?* The end-of-year Response to Intervention summary for the 2015-16 school year at Lee Middle School provided the data for student academic growth, which is represented by the average grade level moved by students in each of the survey participants' Response to Intervention class. Students participating in the Response to Intervention program had the opportunity to move to the next grade level of
progress monitoring once they scored at the 50th percentile a minimum of three times on the nationally normed EasyCBM progress monitoring tool used. Once students successfully scored at the 50th percentile on grade level, they were then moved to a different tier of intervention within the program, which required less intervention time. The data were analyzed using a two-tailed bivariate Spearman's correlation coefficient is SPSS Version 24. The Spearman's correlation coefficient was .384. The Spearman's correlation coefficient indicated that there no correlation between teachers' attitudes toward Response to Intervention and their students' academic growth. See table 8.

Table 8

Educators' Attitudes and Student Growth Correlations

<table>
<thead>
<tr>
<th></th>
<th>Educators' Attitude toward RTI</th>
<th>Student Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>1.000</td>
<td>.384</td>
</tr>
<tr>
<td>Educators' Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>toward RTI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Student Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td>.384</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.195</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Summary

The study analyzed teachers' perceptions of Response to Intervention at Lee Middle School by administering a survey with Likert-type scale items. After conducting a Cronbach's alpha to test the internal validity of the survey, the data was analyzed using measures of central tendency. The measures of central tendency for the questions in section two of the Response to Intervention survey show that the educators at Lee Middle School feel that their understanding of
the RTI program (question 7) and the effectiveness of the RTI program (question 9) fall within the *good* category of the Likert-type scale. Regarding question 10, educator's at Lee Middle School felt that their overall attitude toward the intervention program was in the high range of the *acceptable* category on the Likert-type scale. Falling on the low end of the *acceptable* category was the educators' rating of the program used for progress monitoring for the intervention program at Lee Middle School. The measures of central tendency for questions 11-16 in section three of the Response to Intervention survey taken by the educators at Lee Middle School show that the survey participants fall within the *neutral* category on the Likert-type scale. The survey participants did agree that the Response to Intervention team at Lee Middle School provide the teachers with the information needed to successfully implement Response to Intervention at their school.

The second part of the study analyzed teacher attitudes toward Response to Intervention and student academic growth measures using a two-tailed bivariate Spearman's correlation coefficient. The study compared the educators' responses to question 10 of the survey, which asked *How would you rate your overall attitude toward the RTI program at your current school*, with their students' academic growth measure that was reported on the 2015-16 end-of-year Response to Intervention summary. The Spearman's correlation coefficient was .384. Therefore, the Spearman's correlation coefficient indicates there is no relationship between teachers' attitudes toward Response to Intervention and their students' academic growth.
Chapter 5: Conclusion

The Response to Intervention framework is a multi-tiered approach through which schools provide intervention for students experiencing academic difficulties. As a result of legislative acts such as the reauthorization of the Individuals with Disabilities Improvement Act of 2004 (Individuals with Disabilities Education Improvement Act [IDEIA], 2004), states are increasingly moving toward the implementation of Response to Intervention. A survey conducted by Berkeley, Bender, Peaster, and Saunders (2009) found that 47 of 50 states have either developed an RTI model, or are in the process of developing and RTI model. According to Faggella-Luby and Wardwell (2011), Response to Intervention has, in recent years, received considerable attention as a school wide model for improving service delivery for all students. With Response to Intervention programs increasing at a rapid rate, especially at the middle school setting, a study on the effectiveness of the entire RTI model is warranted due to the questions that remain regarding the validity of applying Response to Intervention beyond elementary school (Faggella-Luby & Wardwell, 2011; Hughes & Dexter, 2011). According to Sansosti, Noltemeyer, and Goss (2010), there appears to be a general lack of field-based applications of Response to Intervention at the secondary level.

The purpose of this study was to examine Response to Intervention at the middle school setting. It was designed to gain insight into teachers' perceptions of Response to Intervention, as well as determine if there was a correlation between a teachers' attitude toward RTI and students' academic growth within the intervention program. The study had two primary research questions that guided the statistical analysis.

1. How do teachers perceive the implementation of Response to Intervention?
2. Do teachers' attitudes toward Response to Intervention affect their students' academic growth within the intervention program?

The objective of the study and literature review was to determine the perceptions of educators' at a middle school location where Response to Intervention was implemented, as well as to determine if there is a statistical correlation between teachers' attitudes and their students' academic growth. According to Rinaldi, Averill, and Stuart (2011), since Response to Intervention has the potential to impact numerous academic practices, it seems prudent to understand how teachers perceive RTI, and how it is successfully implemented and sustained. Martin Fishbein's research on the theory of planned behavior has emerged as the dominant conceptual framework for predicting, explaining, and changing human social behavior surrounding attitudes and the subsequent behaviors that follow (Ajzen, 2012). Fishbein's theory of attitude states that people's attitudes toward an object are determined by their readily accessible beliefs about the object (Ajzen, 2012). Fishbein's theory was designed and developed to model how a specific behavior is produced by beliefs, attitudes, and intentions toward that behavior. These attitudes and intentions are both produced by a person's attitude toward performing that behavior, as well as the individual’s perception of that behavior (Hankins, French, & Horne, 2000). According to Fishbein's theory, the more strongly a person believes that a certain response will lead to a certain outcome, the stronger their intention is to produce the outcome (Ajzen, 2012). There is a need to define and examine the correlates associated with the implementation of Response to Intervention, such as teacher beliefs and perceptions and attitudes toward the results and outcomes (Nunn, Jantz, & Butikofer, 2009).
Results

Research question one. The first question is: How do teachers perceive the implementation of Response to Intervention? The data were collected by administering a survey with Likert-type scale items. After conducting a Cronbach's alpha to test the internal validity of the survey, the data were analyzed using measures of central tendency in SPSS Version 24. The measures of central tendency for the questions in section two of the Response to Intervention survey show that the educators at Lee Middle School report that their understanding of the RTI program (question 7) and the effectiveness of the RTI program (question 9) fall within the good category of the Likert-type scale. When asked to rate their overall attitude toward the RTI program at Lee Middle School, 22% of survey participants responded that their attitude was very good, 44% responded that their attitude was good, 30% responded that their attitude was acceptable, and 4% responded that their attitude was poor. When asked to rate the effectiveness of the program being used for intervention, 15% responded the program was very good, 26% responded that the program was good, 37% responded the program was acceptable, and 7% responded the program was poor. The measures of central tendency for questions 11-16 in section three of the Response to Intervention survey shows that the survey participants fall within the neutral category on the Likert-type scale. The survey participants did agree that the Response to Intervention team at Lee Middle School provide the teachers with the information needed to successfully implement Response to Intervention at their school.

Research question two. The second question is: Do teachers' attitudes toward Response to Intervention affect their students' academic growth within the intervention program? The data were analyzed using a two-tailed bivariate Spearman's correlation coefficient in SPSS Version 24. The study compared the educators' responses to question 10 of the survey, which asked How
would you rate your overall attitude toward the RTI program at your current school, with their students' academic growth measure that was reported on the 2015-16 end-of-year Response to Intervention summary. The Spearman's correlation coefficient was .384, and therefore indicates no relationship between teachers' attitudes toward Response to Intervention and their students' academic growth.

**Discussion**

According to Stockslager (2011), there are many factors that can influence the extent to which a particular model of service delivery is implemented in a school or school district. A Likert-type scale containing three sections was used to determine teachers' perceptions of the implementation of Response to Intervention at a middle school setting. After collecting demographic information in section one, a Cronbach's alpha was conducted to test the internal validity of the survey. Section two of the survey gave educators an opportunity to rate the different aspects of the intervention program at their current school. SPSS Version 24 was used to examine the measures of central tendency of the data found in section two of the survey. The results showed that the educators at Lee Middle School feel that, for the most part, the intervention program falls within the acceptable range. Section three of the educator survey gave participants an opportunity to agree or disagree with the current Response to Intervention practices taking place at Lee Middle School. SPSS Version 24 was used to examine the measures of central tendency of the data found in section three of the survey. The results showed that the educators at Lee Middle School were neutral on five out of six questions. The educators participating in the survey were in agreement that the Response to Intervention team at their school adequately provided enough student information to successfully implement the intervention program.
As a general rule, the more favorable the attitude, the stronger is a person's intention to perform the behavior in question (Ajzen, 2012). A two-tailed bivariate Spearman's correlation coefficient was used to determine the correlation between teachers' attitudes and their students' academic growth within the Response to Intervention program. The Spearman's correlation coefficient for this study was .384. There is no correlation between teachers' attitudes and their students' academic growth, which does not agree with Fishbein and Ajzen's action approach research on the theory of planned behavior.

**Implications**

This study contained an examination of two different, yet equally important, aspects of Response to Intervention in a middle school setting. The data collected during this study provided a contextualized view of how educators perceive Response to Intervention and how their attitudes toward RTI affect their students' growth within the intervention program at their current school. A goal of this study was to gain insights that could be useful for others during the implementation process of Response to Intervention. A second goal was to determine if teachers' attitude toward Response to Intervention affected their students' academic growth. This study revealed that while the Response to Intervention program at Lee Middle School has successfully moved students closer to their academic grade level, the teachers' opinions about Response to Intervention remains neutral. The educators' perceptions suggested that the Response to Intervention program does not impact their daily practices in either a negative or positive way. This study further revealed that the educators' attitude toward the Response to Intervention program at Lee Middle School does not have an impact on their students’ academic success within the RTI program.
**Recommendations for Further Study**

There are three primary recommendations for future study. The first recommendation is to expand the number of schools and educators involved in the study. The purpose of the study was to target educators at one school because of the interest in gaining a more in-depth understanding of individual perceptions. While the participating educators' opinions are meaningful, their perceptions regarding RTI may differ from other educators. Additionally, the lack of schools involved in the study limited the ability to compare schools who have also implemented Response to Intervention.

The second recommendation is to extend the research to include the perceptions of other stakeholders in the RTI process. Although educators were targeted for this study, managing school-wide change is likely to be unsuccessful without the support of others within the school, particularly the school administration. According to King Thorius, Maxcy, Macey, and Cox (2014), policy is never simply implemented. Instead, it is interpreted, negotiated, and implemented by multiple actors in the educational environment.

The third recommendation is to examine the fidelity of implementation within the Response to Intervention program. According to Robins and Antrim (2012), a well-implemented Response to Intervention program includes evaluation for fidelity and sustainability, which could require time to develop. Even with high-quality instruction, intervention design, progress monitoring, and data evaluation, the Response to Intervention program must guarantee implementation of the interventions as intended.

**Summary**

The educators at Lee Middle School have an overall positive attitude regarding the Response to Intervention program at their current school, as the majority of the responses fell
within the *good* or *very good* categories in section two of the survey. Additionally, the majority of the educators *agreed or strongly agreed* with the RTI practices at Lee Middle School. Finally, the statistical analysis found no correlation between teachers' attitude toward Response to Intervention and their students' academic growth. Although Fishbein and Ajzen, have published over 1000 studies in the behavioral domain (Pryor, Pryor, & Kang, 2015), this study revealed that teachers' attitudes did not make a significant impact on student growth.
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Appendices
Appendix A

Informed Consent
Teacher Perceptions of Response to Intervention Survey

Consent

This survey is designed to examine your attitude and perception of Response to Intervention at Lee Middle School (pseudonym). Please answer the questions honestly and to the best of your ability. Think about your personal experiences with Response to Intervention, as well as Response to Intervention as a whole.

There is no risk to this survey that will affect participants. The potential benefits of this study include improving the implementation and sustainability of the Response to Intervention program at Lee Middle School, as well as any future intervention programs that may be implemented.

It is important to note that all identifying information will be removed from the data and there will be no source indicated for specific responses. The researcher will store the data for the study and will be the only person with access to the data.

If you have questions regarding the study you may contact the researcher, Adam Evans, at anevans@cn.edu.

Your participation in this study is voluntary, and you may decline to participate without penalty. Providing answers to the survey constitutes your consent to participate. If you wish to participate, please proceed with the survey.

Thank you. Your participation is very appreciated!
Appendix B

Survey Questions
### Survey questions for study participants

#### Section One

1.) What is your teaching position?
2.) What is your gender?
3.) What is the highest level of school you have completed or the highest degree you have received?
4.) How many years of teaching experience do you have?
5.) What is your teaching position within the Response to Intervention program at your current school?
6.) What grade level(s) do you teach?

#### Section Two

(0) No Basis for Opinion, (1) Very Poor, (2) Poor, (3) Acceptable, (4) Good, (5) Very Good

7.) How would you rate your understanding of the RTI program at your current school?
8.) How would you rate the effectiveness of the RTI program at your current school?
9.) How would you rate the effectiveness of the program (EasyCBM) being used for intervention at your current school?
10.) How would you rate your overall attitude toward the RTI program at your current school?

#### Section Three

(0) No Basis for Opinion, (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree

11.) The RTI program at your current school has changed the methods of teaching in your classroom.
12.) The RTI program at your current school helps students in the general education classroom.
13.) The RTI program at your current school helps students with the year-end-assessments.
14.) The RTI screening process correctly identifies student deficits.
15.) The RTI team at your current school provides you with the student information needed to successfully implement RTI.
16.) If give the option, you would continue the RTI program at your current school.