A QUALITATIVE STUDY ON THE IMPLEMENTATION CHALLENGES OF RTI²B
AND THE EFFECT ON STUDENT ACHIEVEMENT IN THE ELEMENTARY GRADES

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-Cindy L. Widner, April 2019
Abstract

Student behavior has increasingly become a challenge and concern for educators over the past few years. As a result, legislation has been passed to try to help educators in this battle. One of the constructs for this dilemma is behavior intervention which has been intertwined with academic intervention. Behavior intervention is not an easy endeavor for schools, administrators, and teachers to implement. This qualitative study examined the implementation process used in a rural East Tennessee K-8 school and the challenges this school faced in the implementation process. Also, instructional time and student achievement were also examined through this qualitative research study. Findings indicated that after two years of implementation the perceptions of administrators and teachers about the RTI²B initiative and its implementation have changed. There were both positive and negative perceptions about the factors associated with the program, such as fidelity, student achievement, student behavior, and instructional time. These perceptions of teachers and administrators were found to have an impact on the implementation process and the impact of RTI²B at the research school.

Key Terms: Positive Behavioral Interventions and Supports (PBIS), RTI²B, learning gains, intervention, behavior modification, TNReady achievement assessment
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Chapter 1: Purpose and Organization

Background Information

Behavior is defined by dictionary.com (2017) as an observable, aggregate set of responses to external and internal stimuli. These actions can be either appropriate or inappropriate for the situation during which they are exhibited. Jim Wright, school psychologist and administrator (as cited in National Professional Resources, 2009) described behavior as a continuous stream because a person is always doing something. Behavior, whether positive or negative, serves a specific purpose and can stem from various sources. Some behaviors are learned. Some may be due to a medical condition. Others, still, may be related to the context of the situation, such as setting events, antecedent events, and/or consequent events (Ogonosky & Mintsisoulis, 2014). Inappropriate behaviors are defined as being either externalized or internalized. External behaviors include physical or verbal aggression, self-injury, or disruption. Internal behaviors involve anxiety, depression, withdrawal, or isolation (Hodack & Gauld, n.d.).

There is a multitude of functions of behavior. Those specific to education consist of vision, hearing, or motor deficits, intellectual disabilities, cultural factors, limited English proficiency, economic disadvantages, or environmental factors (Hodack & Gauld, 2014). In addition to these functions, schools are complex environments where a compilation of knowledge, interests, cultures, personalities, and skills are meshed together creating a unique community. Sometimes, this meshing can result in behavioral issues. Teachers are, therefore, challenged to form and sculpt students academically and socially through effective and explicit instructional opportunities to promote and enhance student success. Reaching these goals is complex because of the diversity in history, strengths, limitations, and cultural influences among learners (Sugai, 2017).
Fifteen to twenty-five percent of all students have some type of behavior problem (Vaughn & Bos, 2009). Most of these misbehaviors stem from poor academic achievement, attention problems, hyperactivity, aggressive behavior, withdrawn behavior, and bizarre behavior (National Professional Resources, 2009; PBIS World, 2012; Vaughn & Bos, 2009). Some students use negative behavior as a means of avoidance or escaping a task or to obtain a tangible item (Martens & Andreen, 2013). Since there are multiple reasons for student behavior, teachers need to know when and how to intervene and when just to observe. Teachers also benefit from knowing the student because at times, surface behaviors are the same, but the underlying reasons will vary (National Professional Resources, 2009). Historically, behavioral problems, regardless of their function, were disciplined using punitive and reactive measures where rules were defined, and violators were punished with negative consequences (Colvin, 2007). Initially, however, the best way to improve these behaviors is to begin with effective classroom instruction and management. Students need an environment where they feel accepted and respected. To further improve behavior, the teacher needs to make data-driven decisions, provide the necessary resources to students, increase instructional accountability, enhance quality instruction and classroom management through participation in professional development, and enhance the fidelity of implementation (National Professional Resources, 2009).

Most often misbehavior occurs due to class interruptions, poor classroom management, transitions, or miscommunication (National Professional Resources, 2009). These issues are to be avoided, as described by Harry Wong (1991) who stated that the first days of school could make or break a teacher. What a teacher does the first two to three weeks of school is critical in establishing performance expectations of the students. A well-ordered classroom and positive expectations equal an effective classroom. The most successful classroom has well-defined and
consistent discipline, procedure, and routines. Sayeski and Brown (2011) agree with Wong by stating the preparation for effective classroom management comes from “developing a set of class rules, specifying procedures for daily tasks, or developing a consequence hierarchy” (p. 119).

Teachers should operate from a positive point of view. They can often stop disruptive behaviors by being proactive, rather than reactive, with classroom management. For example, deal with low key misbehaviors in a low key way, such as silent cues or quietly tell the student to stop (National Professional Resources, 2009). Other ways to be proactive is to maximize structure and predictability; posting, teaching, monitoring, and reviewing expectations; actively engaging students; using a continuum of strategies to acknowledge appropriate behavior; and use a continuum of strategies to respond to inappropriate behavior (TN Dept. of Education, 2015).

When the negative behaviors disrupt instruction and hinder the social and academic success of self and others, behavior modification is an option. Behavior modification, as defined by the Encyclopedia of Mental Disorders (2017), is an approach to replace undesirable behaviors with more desirable ones through reinforcement. This treatment approach is implemented through Positive Behavioral Interventions and Supports (PBIS). PBIS is a proactive, multi-tiered problem-solving framework whose purpose is to improve the behavior of the student that is impacting success. This framework helps align clear expectations with behavioral interventions in a multi-tiered system where behavior is treated as a skill deficit (Colvin, 2007; Ogonosky & Mintszioulis, 2014; Sugai, 2017; TN Dept. of Education, 2015; TN Dept. of Education, 2016; Vaughn & Bos, 2009; “What is RTI?”, 2017).

Response to Intervention (RTI) is defined as “the practice of providing high-quality instruction and interventions matched to student needs, monitoring progress frequently, making
decisions about changes in instruction or goals, and applying child response data to important educational decisions” (as cited in TN Dept. of Education, 2015, pg. 1). RTI initially made its debut as a policy in IDEA of 2004 with foundations in improving academic achievement. This initiative also embraced behavior analysis, curriculum-based measurement, precision teaching, pre-referral intervention, teacher assistance teaming, diagnostic prescriptive teaching, data-based decision making, universal screening and intervention, behavioral and instructional consultation, and team-based problem solving (Sugai, 2017). Although RTI was initially designed for academics, it can also be used for behavior modification (National Professional Resources, 2009).

RTI²B is Tennessee’s version of PBIS. This version can be used cohesively with other multi-tiered systems of support and programs. It emphasizes positive reinforcement and correction options rather than punitive and negative consequences (Tennessee Behavior Supports Project, 2018).

**Research Problem**

Student behavior often interferes with teaching and learning. It can result in a loss of instructional time, less learning, strained relationships, and student disengagement. Because of these issues, the behavior is a major concern for educators (Korinek, 2015; Martens & Andreen, 2013). Concern for classroom behavior has increased because more attention is being drawn toward this issue resulting in states taking a more active role in addressing behavioral concerns through behavior intervention initiatives. The magnitude of behavioral and social issues have shown that interpersonal and personal domains of students’ lives cannot be ignored; especially since traditional social services models can no longer meet the needs of these students and their families. Because traditional methods are not effective in addressing the issues faced by parents,
students, and school, schools are beginning to realize a need for refinement of the school’s role in the lives of students (Muller, 2002). This approach can be made through behavior intervention.

In general, RTI is four essential components that must be implemented with fidelity and rigor; high-quality, scientifically based classroom instruction; on-going student assessment; tiered instruction; and parent involvement (Ogonosky & Mintsioulis, 2014; Vaughn & Bos, 2009; “What is RTI?”, 2017). Within these four components, RTI is defined by six characteristics: universal screening, data-based decision making and problem-solving, continuous progress monitoring, student performance, a continuum of evidence-based interventions, and implementation fidelity (Ogonosky & Mintsioulis, 2014; Sugai, 2017). All of these are incorporated into three distinct tiers: Tier 1, Tier 2, and Tier 3.

Behavior RTI is comprised and supported by the research model called Positive Behavioral Intervention and Supports (PBIS) which aims at preventing inappropriate behavior by teaching and reinforcing appropriate behaviors (PBIS World, 2012; TN Dept. of Education, 2015). It is a proactive approach to establish a “positive school climate, and create a supportive environment for personal, social, and academic growth for students and staff” (Colvin, 2007, pg. 10).

Before implementation can begin, however, a support team must be organized. The team needs to have a strong growth mindset, collaboration, and knowledge in order to challenge the existing mindset to shift problem-solving from administration to teacher. The necessary resources to create the team include consultation, planning, training, defining roles, and developing a visible plan. The expertise of the team members should include curriculum and instruction, school psychology and counseling, safe, drug-free schools, Section 504
Rehabilitation Act, student health, school-wide discipline, drop-out prevention, character education, alternative programming, and data/information management (Ogonosky & Mintsioulis, 2014). The team needs a chair/internal coach, as well as, representatives from each of the following groups: administrator, general education teacher, English language learners teacher, special education teacher, school psychologist, school social worker, school counselor, behavior specialist, mental health specialist, data coordinator, support staff, parent, and student. These members are expected to assist in the day to day activities of the school with a strong commitment, as well as, be responsible for funding, visibility, political support, policy, training, coaching, evaluation, and behavioral expertise. The main roles and responsibilities of the team, however, are to make agreements, create a data-based action plan, implement the plan, and evaluate implementation, fidelity, and outcomes (Colvin, 2007; TN Dept. of Education, 2015). The team is to meet monthly to examine the efficiency, relevancy, and consistency in the everyday operation of the school (Ogonosky & Mintsioulis, 2014).

RTI and RTI²-B initiatives provide supports to improve not only academic outcomes but also behavioral outcomes. These supports can be implemented together through the use of “teaming, accessing universal data components, progress monitoring, utilizing interventions, and relying on data decision rules” (Bohanon, McIntosh, & Goodman, 2017a, pg. 4). Through the appropriate placement, intervention, and interventionist, fewer students will be referred for special education, student success will increase, and school performance levels will increase (Bohanon, McIntosh, Goodman, 2017b). Other positive outcomes that may result are a decrease in disruptions, absenteeism, office referrals, and suspensions and an increase in instructional time, leadership opportunities, and academic achievement. Educators also hope to increase positive interactions within the school environment and implement a proactive approach to the
crisis (TN Dept. of Education, 2015). As RTI, whether for academics or behavior, is implemented, it must be emphasized that the “impact of even the most effective interventions will not be realized if those implementing those interventions are not fluent with the practice and are not supported in its use” (Colvin, 2007, pg. ix).

Various studies conducted have examined how the fidelity of a PBIS platform can impact the success of the program. In 2016, Childs and colleagues (as cited in Kim, McIntosh, Mercer, & Nese, 2018) found that schools with high fidelity of implementation had fewer disciplinary exclusions than those with low fidelity. In 2012, Simonsen and colleagues (as cited in Kim, et al., 2018) used SET (Schoolwide Evaluation Tool) scores to measure fidelity in an eight-year study. In this study, those schools who SET scores were ≥80% decreased ODRs (office discipline referrals) and stabilized OSSs (out-of-school suspensions). Another study using SET scores was done in 2016 by Freeman and his colleagues (as cited in Kim, et al., 2018). This seven-year study also indicated a decrease in ODRs when SET scores were 40-80% and a significant decrease when SET scores were ≥80%.

Other studies concluded that academic outcomes would improve because if the fidelity of implementation reduces problem behaviors, then a more positive learning environment would be created. Pas and Bradshaw (as cited in Kim, et al., 2018) did a study in 2012 using multiple fidelity measures. Although the IPI (Implementation Phases Inventory) predicted increased scores in both reading and math, the BoQ (Benchmarks of Quality) and SET (Schoolwide Evaluation Tool) found no significant associations. In the 2012 Simonsen study (as cited in Kim, et al., 2018) cited previously and in a 2017 study conducted by Gage and his colleagues, schools with SET scores ≥80% showed a significantly higher proportion of students meeting or exceeding benchmark levels on statewide testing. A study was done in 2016 by Kerpershock,
Harms, de Boer, van Kuijk, and Doolard (as cited in Gage, Scott, Hirn, & MacSuga-Gage, 2018) discovered that effective classroom management decreases problem behavior by 24% and increases academic achievement by 17%.

Studies concerning implementation quality and fidelity have shown that effects can be known, but it takes at least one to two years for the shift to transpire (Anyon, Nicotera, & Veeh, 2016; Stuart, Rinaldi, & Higgins-Averill, 2011). For example, Kim, et al. (2018) cited that multiple randomized controlled trials had documented positive effects, but the trials included two years of on-site training and coaching with adequate implementation with fidelity. These same studies went on to divulge that success could be attributed to multiple factors, such as compatibility, adaptability, a shared vision, buy-in, training, and assurance of self-efficacy and technical support (Anyon, Nicotera, & Veeh, 2016).

Barriers to implementation continue to remain within the schools. Some of these barriers are a result of policy and administration leadership. Factors affecting the implementation process can be conflicting expectations and demands, pressure from policy-making or other outside leaders, or differing levels of commitment to the implementation process. Other barriers include creating a new culture and climate for the school that is based on meeting the holistic needs of the students. Effective implementation of behavior intervention includes a restructuring of the institutional culture within the school and the elaborate systems surrounding the school (Muller, 2002).

**Purpose of the Study**

The purpose of this qualitative study is to examine a few of the numerous factors of Tennessee’s RTI²B implementation and the challenges meeting the requirements throughout the implementation at a rural East Tennessee K-8 school. With the use of teacher survey, the study
will provide some insight into how teacher perceptions and attitudes impact the success of implementation and how instructional time and student behavior and achievement are affected by behavior RTI implementation. With the use of principal and assistant principal interviews, the study will provide insight into how leadership skills impact the success for buy-in by the faculty and staff throughout the school and how their leadership roles impact the implementation process. The counselor involved with this study faces a challenge in that her time is split between two schools. The counselor’s interview will provide insight as to how she addressed this challenge, her leadership role on the RTI²B team, and her impact on the success, or lack thereof, of the program. This study will show how the criteria of behavior RTI and the fidelity of implementation encompass what Bandura and other cognitive theorist believe. People learn through observation and mental processes which are influenced by extrinsic and intrinsic factors that impact individual learning.

**Research Questions**

1. What are teachers' perceptions about the effect of RTI²B on instructional time?
2. What are administrators' perceptions about the effect of RTI²B on instructional time?
3. What are teachers' perceptions about student achievement since implementing RTI²B?
4. What are administrators' perceptions about student achievement since implementing RTI²B?
5. Do teacher attitudes have an impact on RTI²B's implementation?
6. Do the leadership skills of administrators affect teacher perceptions of RTI²B and its implementation process?
**Limitations and Delimitations**

Data for this study will be gathered from a rural elementary school in East Tennessee where RTI²B has been implemented since December of the 2016 school year. This limits the data to this region, district, and the socio-economic and cultural climate of the Appalachian region and to the specific rural school. These limitations also affect the perceptions and attitudes of teachers, administrators, and the counselor, therefore, influencing answers on the surveys and in the interviews. The answers received through the surveys and interviews will need to be open and honest to increase reliability in the study.

**Definitions of Terms**

- *Positive Behavioral Interventions and Supports (PBIS):* Implementation framework for maximizing the selection and use of evidence-based prevention and intervention practices along a multi-tiered continuum that supports the academic, social, emotional, and behavioral competence of all students (PBIS, 2018)
- *RTI²B:* The practice of providing high-quality instruction and interventions matched to student needs, monitoring progress frequently, making decisions about changes in instruction or goals, and applying child response data to important educational decisions (TN Dept. of Education, 2015)
- *Learning gains:* The academic growth over the period between two points in time, but does not tell us where the student ended up in terms of academic status (National Academic and Character Team, 2016)
• **Intervention**: A multi-tiered system where behavior is treated as a skill deficit (Colvin, 2007; Ogonosky & Mintsouli, 2014; Sugai, 2017; TN Dept. of Education, 2015; TN Dept. of Education, 2016; Vaughn & Bos, 2009; “What is RTI?”, 2017)

• **Behavior modification**: An approach to replace undesirable behaviors with more desirable ones through reinforcement (Encyclopedia of Mental Disorders, 2017)

• **TNReady achievement assessment**: A portion of the Tennessee Comprehensive Assessment Program (TCAP) and is designed to assess true student understanding not just basic memorization and test-taking skills (TNReady, n.d.)
Chapter 2 Literature Review

Social Cognitive Theory

Positive Behavior Interventions and Supports (PBIS), Multi-Tiered System of Supports (MTSS), and School-wide Positive Behavior Intervention Support (SWPBIS) all work toward behavior modification. They create interventions to change undesirable behaviors into more acceptable behaviors. These multi-tiered programs achieve this by teaching appropriate behaviors and social skills. These initiatives are policy-based strategies that expand the school’s role in delivery and support for social skills and behavior (Muller, 2002). Bailey (2010) contemplated that Gagne’s learning theory and collaborative problem-solving were the theoretical basis for behavior modification. She used Gardner’s multiple intelligences, Bruner’s constructivist view, Van Lehn’s Repair Theory, and Skinner’s operant conditioning to substantiate her beliefs on this conceptualization.

In contrast, Bandura believed in social learning theory where people learn from one another through observation of behavior, attitudes, outcomes, imitation, and modeling (David, 2015). Bandura (as cited in Roberts-Clawson, 2017) stated that “new patterns of behavior can be acquired through direct experience or by observing the behavior of others” (p. 23). These concepts are the basis for intervention strategies used in behavior modification programs.

Bandura (as cited in Biehler & Snowman, 1993) substantiated his beliefs about social learning through three distinct studies. The first was done in 1961. This study showed that children would imitate the behavior that is modeled for them. The second was done in 1963. Once again this study provided more evidence that children will imitate behavior that is modeled for them. In the third study, also conducted in 1963, children were exposed to modeled aggression. Some children were rewarded for aggressive behavior while others were not. The children who were rewarded showed more aggression than those who were not rewarded.
Other research that supported Bandura’s belief in the social learning theory included studies by Zimmerman and Blotner and Schunk. Zimmerman and Blotner (as cited in Biehler & Snowman, 1993) found through their research that when students are modeled persistence, self-confidence, and related academic behaviors, these students imitate these behaviors when completing a task. Schunk (as cited in Biehler & Snowman, 1993) found that positive modeling conditions can produce greater behavioral change than non-modeling conditions.

Social learning theory is considered a bridge between the behaviorists and the constructivists by encompassing the concepts of attention, memory, and motivation (David, 2015; Essa, 1992). David (2015) described the social learning theory in terms of human behavior. He saw it as a “continuous reciprocal interaction between cognitive, behavioral, and environmental influences” (section 3, paragraph 1). Bandura (2005) believed the social learning theory was connected to social applications because it “specifies modifiable determinants and how they should be structured based on verified mechanisms through which they operate” (p. 12). This structuring is based on the level of cognition of the person, or in this case, the student.

Cognitive modeling is powerful. It enhances self-efficacy and builds innovative and complex cognitive skills (Bandura, 2005). Cognition determines which factors can be observed, what meanings can be derived, the effects, the emotional impacts, the motivating power, and how information is conveyed for future use (Bandura, 1989). Social and cognitive aspects relate by people making sound judgments about capabilities, anticipating consequences of actions, ascertaining opportunities and constraints, and regulating behavior in response (Bandura, 1999; Essa, 1992).

Piaget’s Pre-Operational and Concrete Operational stages link cognition to social learning. Piaget concluded that students are “capable of understanding their actions and make
behavior decisions based on their understanding” (as cited in Roberts-Clawson, 2017, p. 24-25).

In the Pre-Operational stage, students use symbolic functioning. They are more flexible in their reasoning ability but cannot yet think or reason abstractly. In the Concrete Operational stage, students can understand behavior and know who their sources are to help make appropriate decisions. With the help of these sources, students can make adjustments to stop the unwanted behavior from reoccurring (as cited in Roberts-Clawson, 2017).

The social cognitive theory considers three variables: behavioral factors, environmental factors (extrinsic), and personal factors (intrinsic). All three variables are interrelated and cause learning to occur (“Cognitive Learning Theory” 2018).

![Figure 1: The three variables of the Social Cognitive Theory. (“Cognitive Learning Theory”, 2015)](image)

The personal-environment interrelation includes human beliefs and ideas; cognitive competencies are modified by external factors (support, parents, stress). The personal-behavior interrelation consists of cognitive processes that affect behavior; performance of the behavior can modify thinking. Environment-behavior interrelations happen when external factors alter behavior; behavior can modify a person’s environment (“Cognitive Learning Theory”, 2018).
The social cognitive theory also combines other components and environmental concepts. The theoretical model specifies the determinants of psychosocial change. The translational and implementation model converts the theoretical to operational by specifying content and strategies for implementation. Social diffusion is the adoption of psychosocial factors or program to cultural milieus (Bandura, 2005). These are achieved through observational learning, reproduction, self-efficacy, emotional coping, and self-regulatory capability (“Cognitive Learning Theory”, 2018) and deal with being self-organized, proactive, self-reflecting, and self-regulating (Bandura, 1999).

Environmental structures of the social cognitive theory (imposed, selected, and constructed) are all affected by reciprocal causation. Reciprocal causations are internal factors, such as affective cognition, biological behavioral patterns, or environmental situations, that interact and influence directionality (Bandura, 1999). Reciprocal causation is only one of four parts of the triadic reciprocal determinism which also influences directionality. The other three parts are behavior, personal characteristics, and environment (Bandura, 1989).

A tenet of social skills instruction is that behavior is a learned trait; therefore, appropriate behaviors can be taught and learned by all students (Sayeski & Brown, 2014). Current research of Bosworth and Judkins (as cited in Roberts-Clawson, 2017) link the social learning theory to PBIS. They concluded that practicing appropriate behaviors was just like practicing academics. They concluded that appropriate and required behaviors should be taught in the first two weeks of school and revisited throughout the year. The conclusion coincides with Harry Wong’s beliefs and practices of rules and procedures.

Pas, Waasdrop, and Bradshaw (as cited in Roberts-Clawson, 2017) discovered a very small percentage of upper grades use PBIS due to developmental expectations. As early as age
two, evidence of social and emotional problems can begin presenting itself. These problem behaviors intensify and become entrenched in the student’s repertoire; therefore, early intervention is imperative (Tillery, Varjas, Meyers, & Collins, 2010). A child’s theory of mind begins about the age of 5 years old. This theory of mind includes the understanding of not only their emotions and desires but also those around them. This early understanding enables them to develop a more in-depth understanding of others’ perceptions. By learning emotional regulation at an early age, students become more adept at managing the demands and conflicts they will face in the future as teenagers and adults (Santrock, 2017). In addition, teachers of primary grades are in the ideal position to serve as the “frontline defense for intervening with behavioral difficulties” since there is a tendency for behaviors to escalate and become more resistant to interventions over time (Tillery, et al., 2010, p. 86).

History of RTI

In the late 1990s, Lee Canter (as cited in Jones & Jones, 1998) began to understand the change in discipline even before the reauthorization of IDEA and other legislation were passed. Canter’s model included starting at the beginning of the school year working with students and parents. He stated that effectiveness came from being grounded in respect, support, and teacher-student relations. These actions, if done correctly and with a good attitude, create a positive learning environment.

Also, in the 1990s, the escalation of alcohol use, drug abuse, and bullying brought attention to behaviors in schools (Ogumus & Vyran, 2016). The University of Oregon surveyed to evaluate the current behavior programs being used to address behavior problems in schools and their effectiveness. After this study, the National Center on Positive Behavioral Supports was established. They used research findings from the University of Oregon study to help schools with behavioral issues. Before the National Center of Positive Behavioral Supports being
developed, special education was used to address many behavioral issues within the schools (Roberts-Clawson, 2017).

The most common consequences for behavior, as Skiba (as cited in Ogumus & Vyran, 2016) found in 2000, were zero tolerance, expulsion, strict rules, and negative consequences. These punitive practices, he found through his study, did not work. His research found that these consequences often escalated problem behaviors. Some consequences like exclusion and suspension, as found by Costenbader and Markson in their 1998 study (as cited in Ogumus & Vyran, 2016), were viewed as rewards by students. Therefore, these consequences increased the frequency of behavior problems by positively reinforcing them. Ironically, rather than restructuring the school environment with positive reinforcement, many schools continued to rely on punitive consequences for fear of change and complexity (Feuerborn & Chinn, 2012; Tillery, et al., 2010).

Even before RTI came into being, in 1997, Stage and Quiroz (as cited in Wills, Kamps, Fleming, & Hansen, 2016) conducted a study concluding those differential reinforcements, group contingencies, self-management, and functional assessment were highly effective for students at-risk for disruptive behaviors. Support at the national level came with such policies as the No Child Left Behind Act of 2001 (NCLB) and the Individuals with Disabilities Act of 2004 (IDEA) (Kim, 2012). In 2001, NCLB stipulated the use of scientifically-based research to inform instruction in the classroom to help close the achievement gaps (Abou-Rjaily & Stoddard, 2017; Donohue, 2014). In 2004, IDEA changed identification procedures for specific learning disabilities from the discrepancy model to RTI intervention with Congress passing Section 614.b.6 reauthorizing the use of RTI to determine eligibility. The thought behind this movement was to create an identification process that was just a part of the much larger and more
comprehensive general education assessment process, rather than just a one-time diagnostic assessment. This process had not changed in over 30 years and was considered by most researchers to be outdated and ineffective (Abou-Rjaily & Stoddard, 2017; Boucher, 2011; Donohue, 2014; Henderson, 2017; Maier, Pate, Gibson, Hilgert, Hull, & Campbell, 2016; Patrikakou, Ockerman, Hollenbeck, 2016; Wilber, 2016).

RTI approaches are also included in the language of IDEA in Section 300.307 (Henderson, 2017; Stuart, Rinaldi, & Higgins-Averill, 2011; Sugai, Guardino, & Lathrop, 2007). The premise for the reauthorization of IDEA and NCLB is that “all educators can and will collaborate to ensure that students’ educational needs are met through prevention and early intervention” (Meyer & Behar-Horenstein, 2015, p. 383). The National Research Center on Learning Disabilities and 14 other organizations then developed the core features of RTI. These features included: high quality, research-based instruction and behavioral support; universal screenings to determine which students need additional interventions; multi-tiered interventions that match the student’s needs; collaborative approach through development, implementation, and monitoring; continuous progress monitoring; follow-up measures to ensure fidelity; documentation of parent involvement; and documentation that special education evaluations meet IDEA and state guidelines (as cited in Kim, 2012; Stuart, Rinaldi, & Higgins-Averill, 2011).

The National Association of State Directors for Special Education (NASDSE) created a set of “blueprints” that could be used by the state, district, and building teams as a guide to help lead them through the implementation process (Freeman, Miller, Newcomer, 2015). NASDSE also took an active role in promoting RTI through two critical publications. The first was *Response to Intervention* providing a definition of RTI, general guidance for implementing RTI
and facilitating leadership of RTI at the state and local levels. NASDSE described RTI as “a practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals and applying child response data to important educational decisions” (as cited in Henderson, 2017, p. 20). In the report, RTI was more conceptualized as a school improvement process rather than a method for simply identifying students with disabilities. “RTI should be applied to decisions in general, remedial, and special education, creating a well-integrated system of instruction/intervention guided by child outcome data” (as cited in Henderson, 2017, p. 20).

A second critical NASDSE publication was an annotated review of the literature base for RTI, *Response to Intervention: Research for Practice*. It was comprised of 18 chapters summarizing the research on various critical issues related to RTI and its implementation. Its purpose was to facilitate understanding and application of the components of RTI. Other topics included problems with the prevailing identification model (IQ achievement discrepancy), the overrepresentation of racial and ethnic minority students in special education, student outcomes, tiers of instruction, treatment integrity, scaling up, and cautions. Key issues of service delivery, implementation, and assessment were also emphasized in the chapters (as cited Henderson, 2017).

Behavior intervention goes by many names (PBIS, MTSS, SWPBIS, RTI²B, PBS, and SW-PBS) all related in a common goal aimed at teaching behaviors, reducing inappropriate behaviors, and creating a safe and conducive learning environment to increase academic achievement. Whether it is called PBS, SWPBIS, SW-PBS, or RTI²B, it is an applied behavior analysis theory that relies on behavioral, cognitive, biophysical, social, developmental, and environmental psychology theory (as cited in Headen, 2013; Tillery, et al., 2010). PBIS is
grounded in applied behavioral analysis highlighting four key elements: outcomes, practices, systems, and data-based decision-making. Outcomes are the foundation for both behavior and academic achievement (Betters-Bubon, Brunner, & Kansteiner, 2016).

PBIS’s foundation is based on a collaborative, data-driven effort to address behavioral and social issues both school-wide and individually (Muller, 2002). Practices consist of the use of evidence-based curricula, instructional practices, rewards, and contingencies impacting instruction and behavior. Systems are directed toward sustained school improvement. Data-based decision-making is the use of school data to monitor the programs being implemented and adjusted as needed (Betters-Bubon, Brunner, & Kansteiner, 2016). Carr and colleagues (as cited in Headen, 2013) defined PBIS as an applied science using educational methods to expand students’ behavior repertoires to redesign their living environments. This will enhance their quality of life by minimizing behavioral issues.

SWPBIS, PBIS, and MTSS are scientific applications because they utilize educational methods to help students model and learn behaviors that are socially acceptable to create a more positive and safe learning environment (as cited in Boucher, 2011). This applied science is believed to enhance the quality of life for both teachers and students by reducing problem behaviors (Martin, 2013). Students learn and develop social, emotional, and behavioral competence which supports their academic engagement. Educators can develop positive, predictable, and safe environments that promote strong interpersonal relationships (PBIS, 2018). Therefore, both students and teachers can benefit from PBIS.

Sugai and Horner (as cited in Chitiyo & May, 2018) defined SWPBIS as a framework that implements empirically validated practices into a school setting to reduce and prevent problem behavior. SWPBIS is considered an educational practice because it is a procedure
designed for use in a specific context by a specific set of users to achieve defined goals for a specific population (Horner, Sugai, Anderson, 2010). SWPBIS promises to be an extension and new application of the already substantial research base regarding positive behavioral interventions, functional behavior assessment (FBA), and early intervention (as cited in Sugai, Guardino, and Lathrop, 2007).

Based on an applied behavioral analysis theory, SWPBIS’s first implementation was with students with significant behavior disorders in special education classrooms, or restricted settings (as cited in Donohue, 2014). Now SWPBIS is expanding to public schools since emotional and behavioral disruptions are becoming more common. Greulich, Al Otaiba, Schatschneider, Wanzek, Ortiz, and Wagner (2014) believed that behavior modification had become an integral part of FAPE (Free Appropriate Public Education) because of its being guaranteed to all students.

To exemplify this expansion into public schools, statistics over the past few years have shown an increase in SWPBIS’s implementation. Results of a study by Berkeley, Bender, Peaster, and Sauders in 2009 (as cited in Riley-Tillman, 2015) found at least 47 states were implementing, developing, or planning some type of PBIS system. As of August 2009, at least 10,000 schools were implementing some type of SWPBIS (Horner, Sugai, Anderson, 2010). By 2010, Zirkel and Thomas (as cited in Patrikakou, Ockerman, & Hollenbeck, 2016) determined that eight states required universal screenings for both academic and behavioral deficits while only 23 states recommended the screenings. In 2014, at least 18,000 (19.2%) schools in the United States had implemented PBIS (Donohue, 2014; McCurdy, et al., 2016; Martens & Andreen, 2013). Currently, there are at least 20,000 schools across the 50 states that are implementing some type of SWPBIS (Chitiyo & May, 2018).
Tennessee is one of the states implementing a PBIS program. That program is called RTI²B. To assess its implementation process, the Tennessee Department of Education (2013) conducted a study in 2012. Although surveys were sent to 876 schools, only 365 (42%) of the administrators chose to participate. The survey examined twenty-five components of the model CI3T being used in the schools. At least 49% of the schools that participated had implemented a SWPBIS program. At least 68% of the adults in the schools were providing behavior specific praise to students. Ninety percent of the schools had established a discipline plan for responding to infractions. Eighty-five percent of the schools had classroom management systems in place. Teachers conducted instruction on behavioral expectations at least once monthly in 48% of the schools. Tier 1 screenings for behavior were done three times annually in only 20% of the schools with 51% having no implementation at all. However, monthly team meetings were held to examine student data in 67% of the schools. Implementation of Tier 2 (32%) and Tier 3 (29%) supports were low in the schools with the majority having little to some implementation. A reason for this low implementation was that only 32% of the schools had a method of implementation and analyzing the data at these tiers.

**RTI Multi-tiered process**

At least 20% of all school-age children demonstrate some type of behavioral difficulty, but only 1% of these students receive special education services for these behavioral issues (Pierce, Lambert, Alamer, 2016). Chitiyo and May (2018) estimate that the percentage of students with some behavioral challenge has grown higher—22% and predict that the percentage will continue to grow. Teachers attribute the increase in these negative behaviors to NCLB, the reauthorization of IDEA, the increased complexity of curricula, and testing changes (as cited in Roberts-Clawson, 2017).
To address these numerous and growing numbers of behavioral issues, the majority of schools often use some type of behavior modification. Behavior modification is a type of operant conditioning, developed by B.F. Skinner, which replaces undesirable behaviors with more desirable ones. This behavioral treatment uses negative reinforcement, negative consequences, or positive reinforcement (reward system) (“Behavior Modification,” 2017). Research has shown that punitive practices are not effective (Chitiyo & May, 2018; Ogumus & Vyran, 2016; as cited in Roberts-Clawson, 2017; Tillery, et al., 2010). However, B.F. Skinner’s reinforcement concept of operant conditioning is linked to PBIS through its use of positive reinforcement. Members work collaboratively to define a problem, identify the functions of the behavior, find interventions to address the behavior, and the train the staff on how to use the reinforcements (as cited in Roberts-Clawson, 2017).

PBIS, or MTSS, is considered an alternative to the punitive practices. This alternative is not an easy transformation for schools or stakeholders. It is a long, complicated journey. Horner, Sugai, Anderson (2010) proposed the use of six criteria in the implementation of SWPBIS: operationally defined behavior, settings/context defined, identification of target population, qualification of practitioners defined, expected outcomes defined, and conceptual theory and basic mechanisms defined. Three basic components of SWPBIS/MTSS are a framework for systems change, steps available at the building level, and utilizing varying levels of interventions (as cited in Boucher, 2011). Common goals of school administrators and the primary objectives of PBIS are to reduce behavior infractions, reduced the number of office discipline referrals (ODR), increase instructional time, and increase academic achievement for students (Headen, 2013).
School-wide positive behavioral intervention and support (SWPBIS) is a multi-tiered preventive framework aiming at reducing problem behaviors and improve learning environments (Cressey, et al., 2014/2015; Donohue, 2014; Horner, Sugai, & Anderson, 2010; Hunter, Jenkins, & Moore, Fallon, 2017; Kim, et al., 2018; as cited in McDaniel, Kim, & Guyotte, 2017; Martens & Andreen, 2013; O’Keefe, Gage, & Sugai, 2015). SWPBIS is a conceptual model for linking the following concepts: principles of applied behavior analysis, multi-tiered prevention logic, rigorous use of universal screening and progress monitoring, integration of behavioral and educational practices to improve both academics and behavior, and implementation technology (as cited in Feuerborn & Chinn, 2012; as cited in Horner, Sugai, & Anderson, 2010;).

PBIS is a multi-tiered, data-based system of support incorporating ongoing assessments and data-based decision-making, professional development, and provisions for students with emotional and behavioral needs (Gruman & Hoelzen, 2011; Patrikakou, Ockerman, & Hollenbeck, 2016). Behavioral RTI is a multi-tiered process to help all students beginning with early intervention in the general education setting (Abou-Rjaily & Stoddard, 2017). Data gathered through progress monitoring, and other sources are the basis for determining when and if a student moves from tier to tier and whether or not to change their microecology for their daily instruction (Kim, 2012).

Tennessee’s RTI²B is a type of PBIS used to teach all students social and behavior skills. These skills will enhance positive relationships within the school setting. This PBIS program uses what is called a CI3T (Comprehensive Integrated 3-Tiered) model. This model is a proactive approach to meet not only academic needs but also social and behavioral needs of students. It targets effective response and prevention toward developmental learning and behavioral changes in students through tiered support (TN Dept. of Education, 2013). RTI²B is a
shared mission, beliefs, and values of families, students, and other school personnel (Hunter, Jenkins, & Moore, 2017; Tennessee Behavior Support Project, 2018). This preventative framework seeks to create a positive culture of collaboration to work toward improving the school climate (Tennessee Behavior Support Project, 2018). RTI is represented graphically as an inverted pyramid. The levels of the pyramid are universal, secondary, and tertiary. Often the pyramid is split in half to indicate the academic and behavioral aspects of RTI (Gruman & Hoelzen, 2011). The figure below shows the tiered model for Tennessee’s behavioral program. The following figures show the multi-tiered components of Tennessee’s RTI²B as well as the core principles of the program. The second figure captures the core principles of Tennessee’s RTI²B program.
Figure 2: Tennessee RTI²-B Model presented through the Tennessee Department of Education, Partners in Education (Hodack & Gauld, n.d.)
Cressey and colleagues’ (2014/2015) research found that PBIS is not a packaged curriculum but rather a compilation of intensive interventions, assessment methods, and organizational systems supporting the implementation of practices and use of data. Thus, RTI²B can be integrated with other academic, behavioral, and social-emotional initiatives (Hunter, Jenkins, & Moore, 2017). Although PBIS is non-curricular, it can be taught as a curriculum. The goal of such a program is to improve student behavior to create the environment most conducive to learning (as cited in Boucher, 2011).
The primary goals of PBIS are to “improve student adjustment, social behavior, and academic success through methods that increase positive behavior and make problem behavior irrelevant” (as cited in Donohue, 2014, p. 12). There are four essential components of PBIS: 1) defining and teaching expected behaviors; 2) encouraging pro-social behaviors; 3) discouraging problem behaviors, and 4) data-driven decision-making through a team leadership process (Boucher, 2011; Cressey, et al., 2014/2015; Kim, et al., 2018). Sayeski and Brown (2014) added to this list with six effective behavior supports. Their supports include high teacher expectations; stimulating instruction with high levels of student engagement; communicating rules and norms; established routines and procedures; positive teacher-student rapport; and efficient use of classroom time. The core features of PBIS are not new. They draw from decades of research, educational practices, mental health methods, and behavior analysis (Horner, Sugai, & Anderson, 2010). Horner, Sugai, and Anderson (2010) described SWPBIS as a “large constellation of systems and practices implemented at three tiers of intensity” (p. 4) resulting in a complex behavioral change.

Tier 1

Tier 1, also known as the primary intervention or preventative classroom management, is considered the universal support system. It should create a positive, safe, and supportive environment that focuses on student/teacher interactions. These interactions should begin with the teacher’s actions and words in order to achieve mutual respect. This tier is the foundational core instruction and includes all students and should be able to meet the needs of at least 80% of the student body (Horner, Sugai, Anderson, 2010; Hunter, Jenkins, & Moore, 2017; Kim, 2012; Martens & Andreens, 2013; Ogonosky & Mintsouilis, 2014; National Professional Resources, 2009; Sayeski & Brown, 2014; Tillery, et al., 2010; TN Dept. of Education, 2013; TN Dept. of
Tier 1 can produce the broadest impact because it focuses on *all* students (McDaniel, Kim, Guyotte, 2017) by concentrating on the essential characteristics of the school climate, social-emotional learning of students, school-wide behavior expectations, classroom management, and leadership at the state, district, school and student levels (Hodack & Gauld, n.d; Martens & Andreens, 2013).

The purpose of Tier 1 is to reduce the number of problem behaviors resulting in office discipline referrals (ODR), disruption, and reduced academic engagement (as cited by Horner, Sugai, & Anderson, 2010). Within this tier, programs and strategies are provided to *all* students. Effective supports at this level should be sufficient to meet the needs of at least 80% of the students. Goals and expectations should already be outlined by departments of education, districts, and schools (Goodman, McIntosh, & Bohanon, 2017; Horner, Sugai, Anderson, 2010; Hunter, Jenkins, & Moore, 2017).

As stated prior, the implementation of any program grounded in PBIS is not one to be taken lightly. Nor is it a program that can be done quickly. The implementation takes much planning starting at the administrative level and working its way down to the students. Bradshaw, Debnam, Koth, and Leaf (as cited in Headen, 2013) described 7 imperative features of the begin stages of PBIS: 1) the formation of a functional PBIS team; 2) technical assistance; 3) clearly defined expectations; 4) expectations are taught to students; 5) the development of a schoolwide rewards system; 6) the creation of a behavioral violation system; and 7) the development of a formal system of collecting, analyzing, and using data.

Within Tier 1, there is a universal screener completed after the beginning of the school year which is an analysis of behavior. The data should incorporate an examination of repeat offenses of behavior, not the individual. Data should also examine areas within the school that
are trouble locations for students; this can be unstructured or structured settings. The school procedures should also be a part of the screening by examining expectations, reinforcement behaviors, and teacher buy-in (Hodack & Gauld, 2014). Screening procedures should be accurate, sensitive, and specific to identify at-risk students. One such screener is the Systematic Screening for Behavior Disorders (SSBD) (Pavri, 2010). Through the implementation of universal screening, teachers should be able to gain more social and emotional awareness of their students (National Professional Resources, 2009). Interventions, however, are not based on specific behaviors, but rather on the function, or cause, of these behaviors (Scott & Kamps, 2007).

Tier 1 focuses on the correction of errors. Interestingly enough, a correction in learning is viewed as inadequate learning, whereas correction in behavior is not necessarily perceived as a skill deficit. Also, when multiple students are engaging in similar errors, this can mean a problem within the system, such as classroom management, rather than the student (Goodman, McIntosh, & Bohanon, 2017).

Universal interventions used in Tier 1 include schoolwide expectations, rules, procedures, discipline plans, character building, and violence prevention (Pavri, 2010). Tier 1 also includes developing strategies within the classroom. These can include class rules, procedures for completing assignments and tasks or developing a consequence hierarchy (Sayeski & Brown, 2014). One type of intervention used in Tier 1 or Tier 2 is “check-in, check-out” (CICO). The CICO intervention is designed to provide additional structure, prompts, instruction, feedback, and acknowledgment for students engaging in similar low-level social behavior errors (as cited in Sugai, Guardino, & Lathrop, 2007).
The Tier 1 system encompasses the school as a whole rather than each set as an individual entity. It includes well-defined rules in the cafeteria, hallways, playground, bathroom, buses and loading zones, libraries, classrooms, assembly areas, sporting events, and even dances (Ogonosky & Mintsioulis, 2014). All adults within the building are responsible for the Tier 1 implementation through modeling and teaching (TN Dept. of Ed. 2015; TN Dept. of Ed., 2016). The adults are to teach and model expectations and routines, use active supervision, pre-correct, use positive reinforcement, and display more positive affirmations than negative remarks. They are to provide structure and consistency with classroom rules, physical arrangements of rooms, and academic engagement (Ogonosky & Mintsioulis, 2014).

Tier 1 is the starting point for intervention strategies. The majority of students should be responsive through this tier. Some ways of ensuring positive behavior and academic success is to ensure instructional matches through differentiated instruction, promote full class participation, select activities that require active student responding with limited wait times, instruct at a brisk pace through the use of timers, break larger assignments into smaller chunks, give frequent opportunity of choice to make it more personal for the student, and give praise that is specific and does not embarrass the student. Also, the teacher can use brief reminders of appropriate behaviors at a time when they will be most beneficial. Most importantly, build a relationship with students. A way to get to know a student is by using the 2-by-10 Approach. Teachers take 2 minutes for ten straight school days conversing with the student about positive things, such as interests (National Professional Resources, 2009).

Specific behaviors call for specific interventions. Wright (as cited in National Professional Resources, 2009) provided multiple interventions to use with noncompliant students, impulsive/overactive students, and inattentive students. For the noncompliant student,
do not get hooked into a confrontation. Talk to the student privately using simple, clear

directives along with positive body language that implies respect and acceptance. Be consistent
and fair without letting emotions rule. Interventions for these students include:

- Allow for a cool down period in a cozy corner of the classroom which is
  allowable for everyone. Once the student is cooled down, then discuss the
  situation.

- Emphasize the positive in the request, so it does not trigger a power struggle.

- State the teacher request as a two-part choice statement.

- Ask open-ended questions such as who, what, where, when. Avoid asking why as
  it can lay blame.

- Use a buddy teacher for breaks, but do not use as a reward or for avoidance.

- Processing essay or talk-through focuses on the role the student played, the part
  others played, the solution, and a pledge for the future.

For the impulsive students, research shows that these students are often unaware of the
disruption they are causing or that they are being annoying to other students. For these students,
it is best practice to ignore the minor disruptions. It is better to adopt a silent signal to get the
student back on track. Other interventions for these students include:

- Take brief movement breaks.

- Encourage acceptable outlets for motor behaviors, such as a stress ball or fidgets.

- Students monitor their behavior and call-outs.

- Remove unnecessary items from the student work area.

- Schedule group stretch breaks.

- Seat the fidgety students next to peers who are not easily distracted.
Set up activities that allow for movement (National Professional Resources, 2009)

Those with inattention problems will also need interventions that help them stay more focused. For these students, the teacher needs to be an attention getter, especially when directives are being given. The teacher also needs to employ proximity control by circulating the room rather than sitting behind a desk. When it is time for more important work to be done, allow the student to sit in a quiet work area. This area can be a desk or study carol in the corner of the room. However, this space should never be used as a time out area. Also, the teacher can provide attention breaks after part of an assignment has been completed. This can include an allowance to read a favorite comic book or a quick game on the iPad. For more challenging classes, schedule these at peak attention times. For example, if the student’s attention is greater in the mornings, then schedule the reading and math classes during this time. Lastly, preferential seating allows a student his/her own space that benefits him/her. This seating does need to be in the teacher action zone and in space where the student is not distracted by other stimuli (National Professional Resources, 2009).

The use of these proactive approaches, in conjunction with traditional practices of correction and discipline, offers a powerful tool for schoolwide discipline (Colvin, 2007). Universal screening, as described by Ogonosky & Mintsoulis (2014), can be accomplished within a timely manner through a three-stage plan. Stage 1 is asking teachers to nominate students who might be at risk because they exhibit externalizing behaviors. They also nominate students who might be at risk for internalizing behaviors. Teachers also examine those students who have five or more office referrals for serious offenses. Stage 2 incorporates giving the nominated students a behavior screener. For elementary age students, the following screeners can be utilized: Systematic Screening for Behavior Disorders; BESS: Behavioral/Emotional
Screening System; and Behavioral/Emotional Rating Scale (BERS-2). For the middle and high school age students, the following can be used: BESS: Behavioral/Emotional Screening System and BERS-2. Stage 3 involves a school record review, multiple observations, and interviews with staff and parents. Throughout the entire process, documentation is critical.

Behavior intervention teams meet monthly to monitor, plan, and make data-based decisions (Hunter, Jenkins, & Moore, 2017). Documentation comes from assessment and observation. In order to assess student success and failure, we must first consider all social and academic behaviors as measurable and meaningful outcomes (Scott & Kamps, 2007; Gable, Park, & Scott, 2014). Documentation can be used as progress monitoring data if done correctly. Documentation can be formal or informal. It can be as simple as basic daily notetaking or as a strategic as logs and notebooks. Either way, the notes taken should be specific and measurable so a third party could read them, then enter the classroom and be able to identify the student. They should also include frequency counts. These should include the behavior, a method for keeping a record, and a computed average of frequency. Another way to monitor is by completing a daily behavior report card, or DBRC (Ogonosky & Mintsouli, 2014). This type of data collection and analysis is now considered the “new cornerstone of effective school counseling practice” (as cited in Gruman & Hoelzen, 2011, p. 183).

Most students, about 80%, will show positive results to core instruction in Tier 1 (Riley-Tillman, 2015). These responses, however, must be consistent and appropriate (Hunter, Jenkins, & Moore, 2017). Students whose data does not show progress after eight weeks move to Tier 2 (Ogonosky & Mintsouli, 2014; TN Dept. of Education, 2015; TN Dept. of Education, 2016; Vaughn & Bos, 2009; “What is RTI?”, 2017).
Tier 2

Tier 2, secondary intervention or first-line interventions, focus on a target group with intensified instruction, frequency, and duration. This tier is done within a smaller group of students who did not respond to intervention through Tier 1. These smaller groups work outside the classroom on skills related to social skills, managing emotions, problem-solving, impulse control, and making and keeping friends. This group is typically only about 10-15% of the student population (Hodack & Gauld, n.d.; Hodack & Gauld, 2014; Horner, Sugai, Anderson, 2010; Kim, 2012; Martens & Andreen, 2013; Tillery, et al., 2010; TN Dept. of Education, 2016; Ogonosky & Mintsoulis, 2014; Pavri, 2010; Sayeski & Brown, 2014). The students who have more intense behavior problems “require an on-going, data-driven, problem-solving process that is individualized based on their needs, rather than a single intervention program or package” (Riley-Tillerman, 2008, p. 151). The goal of this level of intervention is to reverse the emerging challenges by addressing “students’ acquisition (can’t do), fluency (trouble doing), and/or performance (won’t do) deficits” (as cited in Martens & Andreen, 2013; TN Dept. of Education, 2013, section 2, para. 2).

Interventions for Tier 2 should be evidence-based targeting students’ identified behavior deficits (Hunter, Jenkins, & Moore, 2017). This is done using systematic, evidence-based, and explicit interventions (Hodack & Gauld, n.d.; 2014). Interventions in this tier include behavior contracts, group counseling, mentoring, and self-management strategies (Pavri, 2010). Other interventions include token economies, social skills clubs, peer-based support and tutoring, adult role model, informal behavior plan, mentoring, and self-monitoring (as cited in Hodack & Gauld, n.d.). Mitchell, Stormont, and Gage (as cited in Martens & Andreen, 2013) reviewed 13 studies examining the outcomes of three Tier 2 interventions for behavior. The interventions examined
were Check-In/Check-out (CICO), social skill instructional groups, and academic instructional groups. Of these interventions, CICO was found to be most beneficial and proven to show the most improvement with student behavior.

Supports in Tier 2 are often overseen by a team along with a pre-referral consultation, screening, assessment, and progress monitoring along with the intervention. Tier 2 becomes more individualized and tailored to the students who have more serious discipline issues. These are the issues which lead to removal to a disciplinary placement or detention facility. Intervention at this level includes an increase in behavioral, social, and psychological engagement time. It is geared toward teaching behavior strategies that are delivered by staff trained in positive behavior support systems and have access to and knowledge of how to interpret the data. They are also knowledgeable in all aspects of developing a strong behavior support team (McIntosh, Bohanon, & Goodman, 2017; Ogonosky & Mintsoulis, 2014; TN Dept. of Education, 2015; TN Dept. of Education, 2016; Vaughn & Bos, 2009; “What is RTI?”, 2017).

Supports and interventions for Tier 2 carry over from Tier 1. Other supports are implemented along with these. Anger management training, behavior contracting, behavior rehearsal, parent training, peer initiated modeling, precision command request, social skills training, and token economy system of reinforcement are all types of interventions used at this level. In addition to these, a behavior action plan (BAP) is developed. This helps with the explicit teaching of skills, provides avenues for interaction with the skills, and generalizing across settings. Also within this tier is social-emotional learning or SEL. This is the development of skills that blend over into attitudes which increase commitment, motivation, and academic performance. The five core areas of SEL are self-awareness, self-management, social awareness,

Again, as with Tier 1, documentation is essential. Data collection and analysis is the key component used to guide the decision-making process for intervention (Martens & Andeen, 2013). This tier is based on data-based problem-solving. For documentation, the problematic behavior needs to be identified and described in a concrete, measurable fashion along with the setting and time in which it occurred. Batche and colleagues (as cited in Ogonosky & Mintsioulis, 2014) defined a good description as one that entails a specific description of the problem behavior, conditions under which it occurred, and contextual information about the behavior. One can also gather data through teacher interview to understand that perspective. A direct assessment can also be conducted using Antecedent-behavior-consequence (ABC) which provides data concerning the frequency, duration, and interval for the problematic behavior. This assessment examines the whole, partial, and momentary time expression of the behavior. Other data, described by Hodack and Gauld (n.d.), used in the decision-making process is screening data, progress monitoring, attendance, academic performance, student discipline/behavioral data, and teacher/family/student requests for assistance. Those students who do not make progress through Tier 2 and its interventions after eight week duration then move to Tier 3.

**Tier 3**

Students in Tier 3, the tertiary intervention or intensive individualized intervention, are those students who have not responded to Tier 2 intervention and should be only about 3-5% of the population (Horner, Sugai, & Anderson, 2010; Kim, 2012; Ogonosky & Mintsioulis, 2014; Pavri, 2010; Sayeski & Brown, 2014; TN Dept. of Education, 2013; TN Dept. of Education, 2016;
Tillery, et al., 2010). In addition to Tier 1 and Tier 2 interventions, students in Tier 3 receive an even more intense intervention than Tier 2. Students at this level receive individualized interventions working on discrete skills within the realms of social skills, managing emotions, problem-solving, impulse control, and making and keeping friends. At this level, it will take the work of all adults with which the student comes in contact with daily (Hodack & Guald, 2014). These students are in danger of school failure. These students are those who are internalizing or externalizing significant or chronic behaviors impacting the success of the student in such a way that previous interventions were unsuccessful. These interventions are often done as an individual intervention rather than a small group (Ogonosky & Mintsouli, 2014; TN Dept. of Education, 2013; TN Dept. of Education, 2015; TN Dept. of Education, 2016; “What is RTI?”, 2017).

Students who are moved to Tier 2 are evaluated using specific and time-intensive assessments to determine individual skill deficits and to assist in the design of an individual intervention (Sugai, Guardino, & Lathrop, 2007). Data used for decision-making at this level includes universal screening data, progress monitoring for Tiers 1, 2, and 3, attendance, academic performance, student discipline, and behavioral data, and requests for assistance (Hodack & Gauld, n.d.). Since these students require some of the most intensive of the interventions, the person delivering the intervention must have the most highly specialized skill sets (Bohanon, McIntosh, & Goodman, 2017; Hunter, Jenkins, & Moore, 2017). Students who enter Tier 3 should already have informal evaluation data, such as a BAP, data describing the behavior, intensity, frequency, and topography of the behavior (Ogonosky & Mintsouli, 2014).

Within Tier 3, a formal assessment is required since these are the students with the most serious behavior challenges (Korinek, 2015). A functional behavior assessment (FBA) needs to
be completed. This helps to move from the reactive-consequence-laden approach to teaching the appropriate replacement behaviors. Information included within the FBA includes: how often the behavior occurs, where it occurs, who is present, a description of the environment, when does it occur, what maintains the behavior, how do the student and peers react to the consequences, what are strengths of the student, how will data be collected, and what has been used in the past that worked and why it worked. (Alvarez & Filter, 2012; Gable, Park, & Scott, 2014; Hodack & Gauld, 2014; as cited in Korinek, 2015; Ogonosky & Mintsioulis, 2014; Pavri, 2010; Scott & Kamps, 2007; Sugai, Guardino, & Lathrop, 2007; Zirkel, 2011). Neither IDEA nor state special education law requires an FBA or BIP; however, 17 state laws define them. Office of Special Education Programs does, however, specifically explain the guidelines of the purpose and components of FBAs and who can conduct the assessment. OSEP also explained the linkage of an FBA to a BIP (Zirkel, 2011).

“The FBA is of little value by itself, unless it is used to inform an intervention plan” (Sugai, Guardino, & Lathrop, 2007, p. 290). The FBA is a cornerstone to a proactive, preventative, and evidence-based approach to severe behavior problems (Alvarez & Filter, 2012). The FBA must also be defined in how it meets the contextual realities of the school in addition to the specific needs of the student (Scott & Kamps, 2007). Other information to include should be a family history report, medical records, psychological/psychiatric evaluation, educational assessments, previous behavior interventions and strategies and their effectiveness, disciplinary actions, and attendance records (Onogosky & Mintsioulis, 2014). Once an FBA is completed, a BIP (Behavior Improvement Plan) should be developed. This plan should be grounded from the data collected from the FBA. If it is not, success will be unlikely. The BIP should include a list of possible reinforcers and negative reactionary consequences for undesired
behaviors (Bohanon, McIntosh, & Goodman, 2017; Sugai, Gaurdino, & Lathrop, 2007; Zirkel, 2011). Also incorporated in this tier is individual counseling services. The behavior intervention team should continue to progress monitor with data at the individual student level with all team members, including family, having input in the BIP (Bohanon, McIntosh, & Goodman, 2017; Ogonosky & Mintsioulis, 2014, TN Dept. of Education, 2016).

Tier 3 is designed to increase behavioral, social, and psychological well-being and academic engagement time by focusing, teaching, and strengthening pro-social behaviors that will have long-term benefits for the student (Ogonosky & Mintsioulis, 2014; TN Dept. of Education, 2016). Students at this stage are now differentiated between those who “cannot” and “will not” use acceptable social behaviors. Those who “cannot” perform due to a deficit should receive remediation or teaching of replacement behaviors. Moreover, those who “will not” due to a specific antecedent or consequence factors require an investigation to determine the reason for the deficit. This investigation should include an examination of the student and his/her quality of life. Development of the intervention plan involves knowing and understanding the difference between the “cannot” and “will not” deficits (Bohanon, McIntosh, & Goodman, 2017).

Strategies to use in the intervention plan might be the use of a non-contingent reinforcer to decrease negative adult attention toward negative behaviors. Should the behaviors stem from the student’s quality of life, a focus on that domain may be more appropriate. Students at this level can still be taught appropriate behaviors. Remedies for these could be a request for assistance, a solicitation of attention appropriately, self-monitoring, and choice-making (Bohanon, McIntosh, & Goodman, 2017).

After four to six weeks in Tier 3, students should be making progress. If these students are not making progress by this time, then they should be referred for a comprehensive
evaluation to determine eligibility for special education (Ogonosky & Mintsioulis, 2014; “What is RTI?”, 2017). The data used for this evaluation includes all documentation from Tiers 1, 2, and 3 (Alvarez & Filter, 2012; “What is RTI?”, 2017). Miller and colleagues (as cited in Ogonosky & Mintsioulis, 2014) found that functions of behavior at this point will be found to vary between emotional behavior disorders and chronic misbehavior without underlying physiological or emotional conditions. Groupings for these disorders are comprised of aggression, task noncompliance-active/passive, noncompliance with the teacher, and directive behaviors. Interventions at this level include instructional, behavioral, and environmental. Thus far, the tiered intervention has been provided through general education through a multi-disciplinary team meeting; a student will then receive a legally structured IEP.

**Implementation Impacts**

OSEP National Technical Assistance Center is the origin of PBIS. According to the organization, both students and educators can have positive experiences with implementation if it is done with fidelity. There are often reductions in major disciplinary infractions, antisocial behavior, and substance abuse. There are also reductions in aggressive behavior. Bullying and victimization can also see reductions. Emotions are better regulated with interventions that teach students how to calm themselves. Other improvements include academic engagement and achievement, perceptions of organizational health, school safety, and climate resulting in a decrease for teacher turnover (PBIS, 2018).

As cited in Fallon and colleagues (2015), randomized control trials and quasi-experimental studies have documented the positive outcomes from using PBIS. These outcomes include a reduction in office referrals, reduction in suspensions, academic growth on state testing, improved school climate, and organization, and a reduction in bullying behavior. RTI
and PBIS provide supports to improve not only academic outcomes but also behavioral outcomes. These supports can be implemented together through the use of “teaming, accessing universal data components, progress monitoring, utilizing interventions, and relying on data decision rules” (Bohanon, McIntosh, & Goodman, 2017, p. 4). Tennessee displayed the benefits of the RTI²B program within the state’s manual.

**Benefits of RTI²-B in Schools**

(Horner et. al., 2014)

Figure 4: Tennessee Behavioral Support Project included this within their manual for RTI²B (as cited in Hunter, Jenkins, & Moore, 2017).

Bradley, Danielson, and Doolittle (as cited in Algozzine, et al., 2012) found that RTI is grounded in the promise that teachers no longer must wait for a student to fail before receiving extra services. Implementation of PBIS has been found to improve the health of the school by building strong structures through collaboration (Cressey, et al., 2014/2015). Hunter, Jenkins, and Moore (2017) stated one of the most influential aspects of behavior intervention is creating a
positive school climate where students feel safe, valued, supported, connected to their school, meaningfully engaged, and academically challenged. Bradshaw, Koth, Thornton, and Leaf (as cited in Horner, Sugai, & Anderson, 2010) found that implementation fidelity is correlated with improved clarity of purpose, predictable coordination, and impact on student outcomes.

In order for any type of behavior support to be effective, it must meet and reach certain goals and objectives. Jan Hasbrouck (as cited in Abou-Rjaily & Stoddard, 2017) stated that successful RTI is based on four criteria: effective instruction, frequent assessments, immediate response, and collaboration. David (2015) found four conditions for the effectiveness of intervention through Bandura’s studies. Bandura (2005) concluded that observational learning did not require response or reinforcement. It involved the following four conditions. The first is attention. Attention includes distinctiveness, affective valence, prevalence, complexity, and functional value, as well as personal characteristics. Personal characteristics include sensory capacities, arousal levels, perceptions, and past reinforcement. The second is retention. Retention is based on symbolic coding and rehearsal. Practices for retention contain mental imagining, cognitive organization, and motor rehearsals. The third is reproduction which envelops physical capacities and self-observation. The last condition is motivation. Motivation is comprised of traditional behaviorism, incentives, and reinforcement.

There are also two approaches to implementing behavior RTI. One approach is problem-solving. Interventions are selected by a team to target each student’s needs. In a problem-solving approach, the intervention is more individualized to the student, much like an individual educational plan (IEP). The other approach is the standard protocol. In this approach, one consistent intervention is selected by the school to address the multiple needs of students. The
majority of schools use this method due to its convenience and budgetary issues (Stuart, Rinaldi, & Higgins-Averill, 2011).

Multiple studies have been conducted to determine the impact implementation of PBIS has had on schools and districts. A pilot program using SWPBIS was conducted at Oak Grove Elementary in 2000-2001. This school experienced a quick reduction in suspensions. The number decreased from 109 to 51 in just one school year. There was also a decrease of 30% in office referrals (Headen, 2013). Pavri’s (2010) research of three urban districts in the Western United States who service between 26,000 and 88,000 students found there was a relation between the intervention and social behavior. More research, however, is needed about the specifics of such a large scale implementation and adoption. A study conducted by Chitiyo and Wheeler in 2009 (as cited in Chitiyo & May, 2018) stipulated that implementation time can at times compete with instructional time within the classroom. The implementation can also be derailed if monetary and resources become scarce.

Fallon and colleagues (as cited in Chitiyo & May, 2018) examined other difficulties found by personnel in 2014. This study concluded that if classroom and school-wide practices are not aligned, then the implementation will become a challenge in itself. Other barriers to successful implementation include environmental and the individual (Chitiyo & May, 2018).

Bandura (2005) believed that once the guiding principle is learned, it can be adapted to new situations and that various features of modeling can be combined to react to new situations. Therefore, successful implementation will require fundamental and systematic change across all system levels with administrators being the change agents (Meyer & Behar-Horenstein, 2015).
Fidelity

As RTI, whether for academics or behavior, is implemented, it must be highlighted that the “impact of even the most effective interventions will not be realized if those implementing those interventions are not fluent with the practice and are not supported in its use” (Colvin, 2007, p. ix). Fidelity relates to the extent to which components are implemented as was intended by the developers of the program. Implementation fidelity requires an understanding of the program’s operational features, the competence of intervention providers, and expected participant outcomes (Kim, et al., 2018).

Fidelity can be measured using multiple tools. One tool is the School-wide Evaluation Tool (SET). This instrument is used to evaluate the success or fidelity of PBIS and other programs like it. In order to assess the fidelity, a list of questions are compiled and scored. Eleven of these 28 questions are connected to administrative roles. Schools with scores ≥80% are considered to have high fidelity (Headen, 2013). The SET focuses on seven constructs: behavioral expectations being defined, behavioral expectations being taught, consistent reward system, consistent violation system, continuous monitoring and evaluation, management, and district support. A second tool is the ISSET (Individual Student System Evaluation Tool). This tool targets three scales.

1. Foundations: Staff attitudes and interests in trying to use positive rather than punitive and exclusionary methods
2. Targeted: Focus is on Secondary prevention within Tier 2
3. Intensive: Focus is on Tertiary prevention of Tier 3 where interventions are individualized (Tobin, 2012)
Another measurement includes the BoQ (Benchmarks of Quality). This fidelity assessment is geared toward Tier 1 and the BoQ groups 53 items into ten subscales. These subscales examine the PBIS team, faculty commitment, effective discipline procedures, data entry, expectations and rules, reward system, lesson plans for teaching behavioral expectations, implementation plans, crisis plans, and evaluation procedures (Tobin, 2012).

The Implementation Phases Inventory (IPI) is yet another assessment. This assessment focuses on the fidelity implementation of each tier which is correlated with scores from SET. It uses 44 items clustered into four stages of implementation: Preparation (10 items), Initiation (13 items), Implementation (11 items), and Maintenance (10 items) (Tobin, 2012).

Horner, Sugai, and Anderson (2010) cited research proclaiming that SWPBIS can be implemented in typical school settings with high fidelity. Algozzine and colleagues (2012) found positive results both with office referrals and student achievement. These results were determined to be from the fidelity of effective interventions and instruction. School interventions are the most effective approach to improve behavior and academics. However, implementation of the interventions will face consistent challenges affecting fidelity (Anyon, Nicotera, & Veeh, 2016).

Balu, et al.’s (as cited in Maier, et al., 2016) research in 2015 determined that although some schools had fully implemented RTI, there was a lack of clarity and consistency affecting the fidelity of the program. Maier, et al.’s (2016) study found that although all of the 114 schools in their study proclaimed to be fully implemented, approximately two-thirds of the schools were below full implementation level. There have been multiple randomized control trials documenting positive effects. These trials did, however, include a two-year training and coaching on-site with adequate implementation fidelity (as cited in Kim, et al., 2018).
Fidelity should be checked. This provides ways to find problems and solutions. It is also a way to find out if people understand their roles in the implementation process. Evaluation of the program determines fidelity and identifies areas of weaknesses and strengths (Robbins & Antrim, 2013). These areas can also be determined without the use of standardized measurements. Three dimensions that can help with checking with fidelity is student responsiveness, opinions of stakeholders (social validity), and level of implementation (treatment integrity) (TN Dept. of Education, 2013).

**Teachers and Principals**

Goldring (as cited in Headen, 2013) stated, “The principal is the prime catalyst in bringing about meaningful change” (p. 7). They must be active participants who take on new roles and revise their leadership styles to empower faculty, staff, and students. Principals are leaders who give purpose through vision and influence staff to work collaboratively to achieve the mission in an environment of respect and trust. Principals must have self-efficacy, deep knowledge and skills to communicate the shared vision, and skills and attributes to achieve the vision. In addition, these leaders must be able to develop, advocate, facilitate, articulate, collaborate, respond, support, collect and analyze data, and design, implement, and manage programs like PBIS (Green, 2017). By demonstrating cooperation, flexibility, and creativity, administrators can set the tone for the necessary changes needed within the school to support PBIS (Muller, 2002).

These skills initiated by the principal and other administrators will greatly impact the buy-in of any program, including PBIS. A few studies have been done that exemplifies this idea. Lane and colleagues (as cited in Feuerborn & Chinn, 2012) showed in their study in 2009 that teacher perceptions influence buy-in and that the administration perceptions do influence teacher
perceptions. Martin (2013) agreed by stating that without teacher buy-in, a key component, the effectiveness of the program can be compromised.

Not only do the principals and other administrators have an impact on implementation but teachers do as well. As research by Levine, Skiba and Knesting (as cited in Tillery, et al., 2010) found, teachers, are in the position to be the key facilitators for prevention initiatives. Teachers may have a more substantial impact than administrators as indicated by the following studies. Johnson (as cited in Roberts-Clawson, 2017) proclaimed that teacher’s behavior management style is also predictive of the ability to implement PBIS with fidelity. Roberts-Clawson (2017) agreed by stating that teachers are the strongest factors in education because of their direct contact and connection with students for the majority of the day. Tillery and colleagues (2010) conducted a study using a rural school system in the Southeastern United States with approximately 10,000 students. This study provided evidence that teacher perceptions had an impact on how they reacted to and dealt with behavior problems and how these perceptions affected their involvement with behavior intervention implementation.

Teachers’ actions, as well as, their classroom management have a direct impact on behavior. Sailor and colleagues (as cited in Algozzine, et al. 2012, p. 46) stated that “quality instruction must be in place for all before it can be said that some have [special problems].” Classroom management has a direct impact on student success. Studies about classroom characteristics include teacher enthusiasm and caring, clearly stated expectations, consistent routines, and efficient use of time. Disruptive behaviors draw teachers’ and students’ focus away from instruction and result in students being sent to the office or to more restrictive settings (Gage, et al., 2018). Ironically, it is this classroom management the frequently leads to teacher turnover (Sayeski & Brown, 2014). Tennessee’s RTI²B components allow teachers to create a
positive classroom environment. With an emphasis on classroom management along with effective instruction and preventive discipline, student success can be maximized (Tennessee Behavior Support Project, 2018).

Other studies indicate that both classroom management and teacher quality which impacts instruction has a strong correlation to behavior. Sayeski and Brown (2014) proclaimed that it is poor classroom management that results in a loss of instructional time, feelings of inadequacy, and stress for both teachers and students. Korpershock, Harms, de Boer, van Kuijk, and Doolard (as cited in Gage, et al., 2018) completed a study in 2016 that helps support Sayeski and Brown’s claim. This study conveyed that effective classroom management decreases problem behavior by 24% resulting in an increase in academic achievement by 17%. A study conducted by Rockoff in 2004 (as cited in Gage, et al., 2018) found that an increase in teacher quality can raise test scores by as much as 20%. Marzano and Marzano’s meta-analysis of 100 studies found that teachers who formed positive relationships and rapport with students had at least 31% fewer discipline problems and rule violations (Sayeski & Brown, 2014). Chetty, Freedman, and Rockoff (as cited in Gage, et al., 2018) completed a study in 2011 discovering that by raising the quality of teaching based on value-added scores from the bottom 5% to average was a prediction in a raising of student income as adults to $250,000.

Teacher perceptions are influenced by knowledge, resources, administration, and the school climate. These perceptions affect the implementation process (Wilber, 2016). Teachers’ views on behavior vary. Some view behavior from a developmental perspective. Others believe it to be due to pathologies, such as a syndrome or disorder. Teachers also believe that a student’s environment plays a significant role in behavior. In any case, research has indicated that teacher interaction toward problem behavior is negative and management strategies are often punitive.
Teachers often apply the “one-size-fits-all” approach resulting in a lack of fidelity with behavior intervention fidelity (Tillery, et al., 2010, p. 87). In a study conducted by Pavri, (2010), teachers felt that although PBIS was implemented, it was not done so with fidelity. Teachers reported that although resources and supports were available, they felt more could be done in helping the students with social-emotional-behavioral needs. These teachers also felt less empowered than special education teachers because they felt more confined in what they could do.

**Counselors**

One resource that should be included in the behavior intervention team and also be considered as one of the most vital members of the program is the counselor. This person should be made part of the program to improve fidelity because counselors are the ones often called in to help with students who are at greater risk for disruption and off-task behavior (Anyon, Nicotera, & Veeh, 2016). Counselors are also professionals who are trained to recognize and respond to situations that impede students’ academic learning. Counselors are also the ideal candidates for aiding the implementation of behavioral intervention since they have the training and capability to work with students who have behavioral or mental health challenges. Knowledge and expertise about student issues, mental health, learning, and being able to provide feedback to parents, caregivers, teachers, and mental health professionals make counselors one of the ideal members of the positive behavioral intervention support team (Martens & Andeen, 2013). Counselors’ roles have evolved over the years. Some of the job descriptions for counselors include vocational guidance, psychometrics, evaluation, pupil-personnel guidance, mental health counseling, consultation, education, collaboration, and school-related academic,
career, and social-emotional needs through counseling programs (Goodman-Scott & Grathaus, 2017-2018).

One role of the counselor is to complete an FBA. Since no untrained people can complete an FBA, this task will fall upon the counselor (Scott & Kamps, 2007). As cited by Cressey, et al., (2014/2015), counselors can be effective leaders in the implementation of PBIS. They have frequent contact with teachers, students, administrators, and families. Donohue (2014) researched the evolution of a counselor in schools. No longer are counselors viewed as “guidance,” and they now are viewed as a resource for actually counseling students. They are now considered part of the professional team working with students.

Behavior RTI is a new concept for counselors, however. Several studies have been conducted on their perceptions of this program since most have never had any formal training in their pre-service programs. Patrikakou, Ockerman, & Hollenbeck (2016) conducted a study with counselors to examine their perceptions on their training and knowledge of RTI and their confidence in implementation. The results found that although counselors reported positive beliefs in the RTI and its implementation, they felt a lack of preparedness to perform the required duties of their leadership position on the team. The counselors went on to express their concern about deficits in the American School Counselor Association National Model’s components and themes taught to them through formal educational programs. The American School Counselor Association has now revised its position statement to include RTI and MTSS and outlined components of a comprehensive developmental school counseling program aligning the counselor’s role on the RTI leadership team (Patrikakou, Ockerman, & Hollenbeck, 2016).

McGannon, Carey, & Dimmit (as cited by Donohue, 2014) found studies of comprehensive school counseling programs demonstrating increased student achievement,
improved student to teacher relationship, greater student satisfaction in school, a sense of safety at school, and increased access to college and career information. Cressey, Whitcomb, McGilvray-Rivet, Morrison, & Shander-Reynolds (2014/2015) conducted a 5-year study describing the leadership of a school counselor in the implementation of SWPBIS. This study showed the evolving role of the counselor which proved to be crucial to the program’s success. The conclusion of this study presented a shift in how the school personnel approach student behavior using the collaborative efforts of various stakeholders. When SWPBIS is implemented successfully, there can be a reduction of requests for school counseling services (as cited in Horner, Sugai, & Anderson, 2010).

Training

Often teachers find it difficult to discern the difference in spending more time in discipline-related interactions or academic content difficulty. The belief is that problem behaviors make it difficult to provide effective instruction (Algozzine, et al., 2012). Roberts-Clawson (2017) along with other researchers (Muller, 2002) determined that this lack of knowledge stems from a lack of training in teacher programs while other research (as cited by Tillery and colleagues, 2010) indicated that teachers lack the background to interact with students educationally in a preventive manner. Teachers, therefore, need training on how to improve academic performance and social behavior since there is a link between the two (Algozzine, et al., 2012).

Training opportunities are designed to promote knowledge and skills (Freeman, Miller, & Newcomer, 2015); therefore, training is needed from the start, especially in the area of using the assessment system (Robbins & Antrim, 2013). Feuerborn and Chinn (2012) found that influencing factors (misunderstanding, philosophical beliefs, and limited knowledge) for
implementation come from a lack of training. One of the first steps in training should be an evaluation of classroom structures. This helps determine where and what kind of supports are needed. Specific guiding questions to help teachers evaluate this are:

- What behavioral curriculum is provided? How are expectations communicated to students?
- What behavioral supports are already in place? What are your responses to disruptive behaviors?
- What behavior supports do you use for the most challenging behaviors? What consistent strategies are used? (Sayeski & Brown, 2014)

McDaniel, Kim, and Gutotte (2017) found that in 2014 at least 20,000 schools reported receiving training and assistance from the Technical Assistance Center on PBIS for implementation. Horner, Sugai, and Anderson (2010) found that training for SWPBIS is typically done by state personnel using available state resources. For example, Tennessee trainers come from two of the state’s elite colleges, University of Tennessee and Vanderbilt University (personal communication, Cindy Stephenson, January 20, 2018). Two studies found that elementary school teams that received 4-6 days of training were successful in implementation. This success was measured by SET (scores were ≥80%).

The theory that teaching good behaviors are verbal and interactive came from the 1984 study by Brophy and Good (as cited in Gage, et al., 2018). Evans (2012) supported their theory with his study. He believed that select strategies should be based on student characteristics, not management and intervention programs. Evans supported this belief in his study where he found general education teachers to be more focused on academics than behavior. Strategies used by these teachers were verbal reinforcements and teacher proximity. Through Anyon, Nicotera, and
Veeh’s (2016) study, the use of a universal professional development intervention, teachers were able to strengthen their abilities to manage behaviors by using student-centered and developmentally appropriate strategies. In a qualitative study conducted by Tillery, Varjas, Meyers, and Collins (2010; as cited in Feuerborn & Chinn, 2012), it was found that teachers are strong influences on student behavior. Because of a lack of training and were, therefore, unfamiliar with RTI or PBIS, teachers focused on individual student behavior rather than group and did not realize the importance of early intervention.

Attitudes and perceptions of teachers are negative toward RTI due to a lack of understanding. They feel unprepared and ill-equipped which impacts the implementation of behavior RTI (Wilber, 2016). Pavri (2010) found that teachers felt they needed more professional development to improve expertise and technical knowledge. In Meyer and Behar-Horenstein’s (2015) study, participants believed they lacked professional development opportunities, leadership support, and resources to implement SWPBIS successfully. Teachers were uncertain of their roles, how to manage the process and interventions, and how to record and use the data collected. Training should include, therefore, how to use data as part of an “ongoing cycle of improvement” and to develop intense levels of support (Freeman, Miller, & Newcomer, 2015, p. 66).

**Reduction of Student Behaviors**

Various factors influence student behaviors. Influences on student behavior can be low socioeconomic status and diverse racial or cultural backgrounds (Fallon, O’Keefe, Gage, & Sugai, 2015). Economically disadvantaged students pose a higher risk of failure related to consistent behavior issues and poor academic achievement. High poverty areas struggle with sufficient supports to deal with both academic and behavior deficits (McDaniel, Kim, & Guyotte,
The study completed in 2013 by Reyes, Elias, Parker, and Rosenbalm (as cited in Anyon, Nicotera, & Veeh, 2016) documented that low-income students of color are more likely to be identified with behavior problems. Implementation of a positive behavioral support system will make an impact on all students regardless of the function of the behavior.

Poor classroom management results in a loss of instructional time, disruptive behaviors, and stress for both students and teachers (Sayeski & Brown, 2014). Six effective behavior supports teachers can use to help reduce unwanted student behaviors include:

- High teacher expectations
- Stimulating instruction with high levels of student engagement
- Clearly communicated rules and procedures
- Established routines and procedures
- Positive teacher/student rapport
- Efficient use of class time (Sayeski & Brown, 2014)

Other positive outcomes hoping to be attained a decrease in disruptions, absenteeism, office referrals, and suspensions. Educators also hope to increase positive interactions within the school environment and a proactive approach to crisis. Also taken into account are an increase in instructional time, leadership opportunities, and academic achievement (TN Dept. of Ed., 2015; Tennessee Behavior Support Project, 2018). In order to achieve this improvement, the intervention plan should continue throughout the year and be designed through mini-lessons to remind the students of the behavioral, social, and academic expectations (TN Dept. of Education, 2013).

Other studies with positive outcomes after using a program of PBIS where improvements were documented for whole class on-task behavior include Kamps, et al. in 2011, Wills and
colleagues in 2010, Will, Iwaszuk, Kamps, Shumate in 2014, and Hirsch, Humbolt, Judge, and Lloyd in 2016 (as cited in Wills, et al., 2016). Algozzine, Wang, White, Cooke, and Marr (2012) found in a study of students in seven urban elementary schools grades K-3 there were significant decreases in office referrals across the schools. Goodman-Scott and Grothaus (2017-2018) cited a 4-year case study on rural elementary schools. This study showed fewer lost instructional days, fewer behavior referrals and suspensions, and greater collaboration and consultation after using a program of PBIS.

Donohue (2014) found research indicating that discipline rates for negative behavior increase in grades first through fifth. These discipline behaviors significantly increase in fifth and sixth grades. In ninth grade discipline rates finally peak; therefore, in grades 10-12, discipline begins to decline. Donohue (2014) also found through her study, using the Delphi methodology, that school using SWPBIS report fewer suspensions and an increase in the sense of school safety among both teachers and students.

A study conducted in 2012 by Simonsen, et al. (as cited in Kim, et al., 2018) revealed that schools with SET scores $\geq 80\%$ decreased the number of ODRs and stabilized the number of OSS over 8 years. In Freeman, et al.’s seven-year study completed in 2016 (as cited in Kim, et al., 2018), the results showed that with SET scores ranging from 40%-80% ODR rates decreased somewhat. When the SET scores were $\geq 80\%$, the ODR rates were significantly lower. In 2016, Childs, et al. (as cited in Kim, et al., 2018) conducted a study which indicated the schools with high fidelity had less disciplinary exclusion than those schools with low fidelity.

Another study in 2016 was conducted by Wills, Kamps, Fleming, and Hansen. They used randomized control comprised of 17 elementary schools, 159 general education teachers, and 313 students. The study found that with the use of CW-FIT program, on-task behaviors can
increase, disruptive behaviors decrease, and verbal reprimands decreased as positive praise increased. In contrast, McCurdy, Thomas, Truckenmiller, Rich, Hillis-Clark, and Lopez (2016) conducted a study in a self-contained school. The school implemented SWPBIS with students who had emotional and behavioral disorders. After Tier 1 implementation, there was a reduction in the frequency of referrals and with the number of emergency safety interventions. The program was implemented over 3 years with significant positive results.

Kim, et al.’s (2018) study indicated that the higher the fidelity of implementation the fewer ODRs and OSS. The high rate of fidelity, however, must be ≥80% as measured by the SET. Abou-Rjaily and Stoddard (2017) found studies where referral rates diminished with the implementation of RTI with this rating of fidelity.

Sugai, Guardino, and Lathrop (2007) were called in by a school’s principal and the second-grade teachers to help with ten students whom behavior had become disruptive. These students ranged in ages seven and eight. In Tier 1 with the use of “check-in, check-out” strategy, some of the students responded to the school-wide procedure. Four of the students required a more intense form of intervention. Research shows that younger children are more susceptible to programs. Correction of behaviors at a younger age contributes to lifelong effects (Headen, 2013).

Bailey (2010) used Dr. Lee Tarver’s original study as a basis for her own. Using the t-test and ANOVA on 342 teachers in five geographical areas in Georgia, she concluded that RTI could increase achievement and help to identify those students who need additional behavioral support. According to McDaniel, Kim, and Guyotte (2017) and Feuerborn and Chinn (2012), there has been an extensive number of studies that have indicated high effectiveness with reducing office discipline referrals and the number of suspensions.
**Student Achievement**

Various studies of descriptive reports and randomized control trials identified by Horner, Sugai, and Anderson (2010) indicated that good teaching, increased instructional time, and greater participation during instructional time can stem from behavior support. Behavioral difficulties can impair academic achievement and can result in lower rates of post-secondary enrollment in young adults. These difficulties can even result in high school dropouts. Research has even found that at least 35% of students with low performance can result in delinquency (as cited in Riley-Tillerman, 2015). However, through the appropriate placement, intervention, and interventionist, fewer students will be referred for special education, student success will increase, and school performance levels will increase (Bohanon, McIntosh, Goodman, 2017).

There are several reports justifying accountability for student achievement and the use of RTI. These reports are the 1994 reauthorization of ESEA, 2001 reauthorization of NCLB, 2004 reauthorization of IDEA, Bright Futures for Exceptional Learners (2000), For Each and Every Child: A Strategy for Educational Equity and Excellence (2013), and NASDSE report on RTI in 2005 (Henderson, 2017). Accountability can be affected by diminishing resources, a lack of training, and stricter legislation (Sugai, Guardino, & Lathrop, 2007).

Research has shown that a decrease in behavior problems, such as ODRs, increases the amount of instructional time helping to support academics (Roberts-Clawson, 2017). Miles and Stipeck (as cited in Mier, 2017) conducted a study in 2006 finding a relationship between social skills and literacy. This study concluded that low literacy skills predict higher rates of aggression. Later in 2015, Darney, Reinke, Herman, Stormont, and Ialongo (as cited in Mier, 2017) found that students who had future difficulties also had co-occurring academic and behavioral deficits at a younger age. It has often been said that students would rather act out with negative behaviors than to let their peers see them struggle academically.
It is believed that academic outcomes improve because fidelity reduces problem behaviors creating a more positive learning environment (Kim, et al., 2018). As cited in Henderson (2017), question has arisen regarding the effects on student achievement which are influenced by implementation fidelity, consistent application of instructional interventions, lack of actual data-based decision making, and an overly simplistic sense of what constitutes learning and progress. Lassen and colleagues (as cited in McDaniel, Kim, & Guyotte, 2017) determined that academic performance on standardized testing increased because of instructional time increase due to fewer disruptive behaviors.

Other studies concluded that transformational leadership is a key component to implementation and increasing student achievement (Maier, et al., 2016). Very few studies, however, have been conducted on the effects of RTI/MTSS on the academic performance of all students in a school or district (as cited in Henderson, 2017). Although there is no causally link between academic achievement and behavior, there is support for the relationship between behavior interventions, such as PBIS, academic achievement, and behavioral outcomes that were included in some of the following studies. Luiselli, Putman, Handle and Feinburg concluded, in 2005, that a reduction in office discipline referrals improved both reading and math scores. Lassen, Steel, and Sailor, in 2006, determined that a decrease in office discipline referrals and suspension rates in middle school increased math scores. In 2011, McIntosh, Bennet, and Price conducted a district study. In this study, there was an overall decrease in ODRs. The schools implementing PBIS with high fidelity had increased reading and math scores (as cited in Mier, 2017). Sugai, Guardino, and Lathrop (2007) cited, however, that numerous studies indicate that teaching expectations across settings and providing incentives for appropriate behavior using the SWPBIS framework can effectively reduce student problem behavior.
In 2012, Pas and Bradshaw (as cited in Kim, et al., 2018) conducted a study using multiple fidelity measures, such as SET, BoQ, and the IPI. The IPI results predicted increased scores in both reading and mathematics whereas the SET and BoQ scores found no significant association between implementation and academic achievement. Another study conducted in 2012 was by Simonsen, et al. (as cited in Kim, et al., 2018). This study concluded that schools with SET scores ≥80% showed a significantly higher proportion of students meeting benchmarks on statewide tests. Algozzine, et al.’s (2012) study found that significantly higher achievement was demonstrated by the students on statewide end-of-grade assessments in seven urban elementary schools in grades K-3. Gage and colleagues (as cited in Kim, et al., 2018) conducted a 10-year study that was completed in 2017. This study found that implementation was related to higher proportions of students meeting or exceeding benchmark levels.

In retrospect, Henderson (2017) conducted a study over two years using over 15,000 students in grades first through sixth in a large Midwestern urban school district. The study found various predictors, such as teacher education and gender, had more positive effect on academics than did RTI/MTSS in both reading and mathematics where students showed academic growth. Another study stating negative findings was Boucher (2011). After studying multiple facets of behavior plans across Mississippi, he compared the principal’s responses to US History test scores. There was very little difference in student achievement between the schools implementing RTI and those who were not. He did find, however, a correlation to implementation on student achievement. Those schools implementing RTI had not been doing so with true fidelity. Hamre and Pianta (as cited in Mier, 2017) found in their 2005 study that when high-risk students are put in the same class as low-risk behavior students with high levels of
emotional support, these students obtained the same level of academic scores as those with low-risk behaviors.

**Conclusion**

In 2000, Sprague and Hill (as cited in Anyon, Nicotera, & Veeh, 2016) found that behavior problems in elementary are the strongest predictors for underachievement, delinquency, and violence. However, the underlying assumption of behavioral intervention is when teachers apply effective instructional practices the majority of the student will make gains regardless of the type of student displaying inappropriate or disruptive behavior (Sayeski & Brown, 2014). Limited knowledge, training, and ineffective school discipline policies lead to misconceptions about behavior and practices, which can be unsuccessful or even harmful when reinforcement maintains a cycle of negative interactions (Tillery, et al., 2010).

RTI and SWPBS are programs based on a public health model of prevention (Freeman, Miller, & Newcomer, 2015). The goal of PBIS is prevention by employing problem-solving efforts to the causes of the problem and providing protection against the onset of the problem. Also, it investigates the origin of the problem and ways to prevent it from worsening. Prevention also looks at the accelerating progress learning of skills. The overall goal of PBIS is “to maximize positive outcomes at all levels, including those experienced by the individual, the organization, the system, and society” (Kim, 2012, p. 81).

As studies, such as Kim, et al., (2018), Wilber (2016), and Stuart, Rinaldi, & Higgins-Averill (2011), have shown, implementation results are not immediate. It takes at least two or more years of implementation to witness positive results. Factors that influence the program’s success are intervention characteristics (compatibility and adaptability), organizational capacity (shared vision and buy-in), intervention support system (training), and ensuring self-efficacy and technological support (Anyon, Nicotera, & Veeh, 2016). Teacher involvement and perceptions,
along with the principal leadership, also impact the effectiveness of implementation and results of RTI (Bailey, 2010). David (2015) concluded that environment, behavior, and psychosocial processes are all connected.

Bandura (2005) stated that “human functioning is rooted in social systems” (p. 10). Students and people must learn to adapt, improve, synthesize, and tailor to particular circumstances. Behavioral psychology, if applied with fidelity, can have a powerful impact on modifying problematic behaviors and encouraging more appropriate ones (Cherry, 2018).

As cited in Betters-Bubon, Brunner, and Kansteiner (2016), research has shown links between SWPBIS, student achievement, and engagement outcomes. Dealing with disruptive behaviors within the classroom takes away from instructional time, increases stress, and increases the chance of teacher burnout (Roberts-Clawson, 2017). Horner, Sugai, and Anderson (2010) determined that “establishing a predictable, consistent, positive, and safe social culture will improve the behavioral engagement of students in learning” (p. 8). This concept combined with functional curriculums and effective teaching can produce more positive student outcomes.
Chapter 3 Methodology

Introduction

The purpose of this study is to determine the impact of Tennessee’s RTI²B implementation in a rural elementary school grades K-8 on behavior and academic achievement. This study will also provide feedback on the strengths and weaknesses in the school to prepare for full district implementation. Within this qualitative study, surveys and interviews will be conducted to better understand administrators’ and teachers’ perceptions about RTI²B implementation and its overall impact on instructional time, student behavior, and student achievement. A focus group will also be formed of volunteers from the school’s RTI²B data team. These volunteers will participate in group discussions regarding the implementation process, results of implementation, and the strengths and weaknesses of the RTI²B program. There will also be a comparison done with student data using end-of-year testing. Student gains before implementation will be compared to current student gains using TNReady data. This chapter will focus on methods used to gather, analyze, and use the data found through this study.

Research Questions

Through this study, data will be gathered and analyzed to answer the following research questions:

1. What are teachers’ perceptions about the effect of RTI²B on instructional time?
2. What are administrators’ perceptions about the effect of RTI²B on instructional time?
3. What are teachers’ perceptions about student achievement since implementing RTI²B?
4. What are administrators’ perceptions about student achievement since implementing RTI²B?
5. Do teacher attitudes have an impact on RTI²B's implementation?
6. Do the leadership skills of administrators affect teacher perceptions of RTI\(^2\)B and its implementation process?

**Description of the specific research approach**

A purposeful qualitative research design will be used to evaluate the perceptions of participants at the elementary school. This school was chosen for its information-rich and useful manifestations of RTI\(^2\)B and convenience sampling. This study is aimed at insight into the socially constructed nature of reality and situational constraints that shape the inquiry (Berg, 2012; Denzin & Lincoln, 2005; Marshall & Rossman, 1995; Merriam, 2009). This qualitative process of natural inquiry is being used to seek an in-depth understanding of social phenomena of student behaviors within their natural setting (Ary, Jacobs, Sorensen, & Walker, 2014; “What is qualitative research?”, n.d.).

This qualitative research study is phenomenologically based in that it is designed to describe and interpret the experiences and perceptions of teachers, principals, and counselor directly involved in the implementation of Tennessee’s RTI\(^2\)B. The behavior intervention program participants were chosen due to direct experience with RTI\(^2\)B in the past year and a half. The use of multiple systems of inquiry and triangulation of survey, interview, and artifact results will be used to validate the subjective assumptions (“What is qualitative research?”, n.d.). The primary sources of data will be individual and focus group interviews. Triangulation will be achieved with the use of surveys from participants and artifacts of student gains taken from end-of-year testing, TNReady.

The process for the study will begin with permission for participation from the principal and permission to use TNReady data from the testing coordinator. Permission from the superintendent will also be obtained to use the research school in this project. Once permission is granted from the principal, testing coordinator, and the superintendent, the IRB application will
be submitted. After permission has been granted from the IRB Committee, the study procedures will begin with a survey sent electronically to all participants. Semi-constructed interviews with school’s principal, assistant principal, and the counselor will be conducted individually to capture direct quotations about their perceptions and experiences while implementing RTI²B over the past year and a half. Volunteers from the school’s RTI²B data team will be used to create a focus group. The volunteers for the focus group will be comprised of the school’s principal, assistant principal, counselor, grade level team leaders (teachers), reading and math interventionists, and county behavior specialist. This focus group will participate in group discussions and interviews regarding the implementation process, results of implementation, and the strengths and weaknesses of the RTI²B program. While the researcher maintains empathetic neutrality, she will encourage a vicarious discussion without judgment with participants being open, sensitive, respectful, aware, and responsive to one another and opinions (Berg, 2012; Denzin & Lincoln, 2005; Marshall & Rossman, 1995; Merriam, 2009).

**Description of the study participants and setting**

Participants involved in this study come from a rural elementary school in East Tennessee. The school encompasses grades K-8 with approximately 320 students attending the school. Of this number, 48 (15%) are identified as students with disabilities. The school has 25 teachers and 12 teaching assistants working with students. There are usually two teachers per grade level. Most teachers are assigned to two grade levels by being content oriented.

Kindergarten is the exception to this procedure. Teachers in kindergarten teach only kindergarten students but remain content oriented. Administration for this rural school consists of a principal and vice principal both of whom are female. During the first year of implementation, this school shared a counselor with another school within the county. Currently, for the 2018-2019 school year, the school has a full-time counselor.
Grades second through eighth participated in the end-of-year state assessment. The number of students tested in 2017 was 288. Of this number, 2% of students were identified as Black/Hispanic/Native American. Twelve percent of the students tested were categorized as students with disability. Forty percent of the tested population qualified as economically disadvantaged. In 2018, the number of students tested was 223. Of these, 22 were identified as students with a disability (10%).

**Data collection and procedures**

Once permission is obtained from the Carson-Newman University Institutional Review Board to begin the study and process of data collection, the researcher will obtain necessary approval forms from the district’s superintendent, testing coordinator, and the principal being used in the research. The researcher will also obtain teacher approval forms from all teachers selected to participate in the study. These approval forms will also include one from each counselor.

All participants will receive an electronic survey via Survey Monkey. This survey will be anonymously completed. The survey will contain 20 questions or statements focusing on the perceptions about the implementation process, administration involvement, counselor involvement, instructional time, and student achievement. Scoring for the survey will be using a 5-point Likert rating scale ranging from “strongly agree” to “strongly disagree”. Using the Likert scale will provide specific measurement for participants overall perceptions of RTI^2B (see Appendix).

Interviews will be conducted with the principal and vice-principal to obtain specific perceptions from the school’s administration. Teachers will also be interviewed to obtain teacher/staff perceptions. Both past and current counselors will also be individually interviewed. Last year’s counselor and current counselor have a unique situation of being split between two
schools. Interview questions will be semi-constructed focusing on the same factors imposed within the survey questions. All interviews will be conducted voluntarily.

A focus group will be comprised of volunteers taken from the members of the RTI²B data team for the school. This focus group will meet at least twice to complete a group interview about the study and RTI²B implementation within the school. This will be accomplished when the behavior team meets for their monthly meeting when everyone is together, and group discussion can be conducted.

Students’ testing data will be collected from the testing coordinator. No individual student scores will be used. Individual grade level gains and growth percentages will be collected for both 2017 and 2018 for grades 3-8. These percentages will be compared to determine either progress or regression. The overall value-added scores for 2017 and 2018 for grades 3-8 will also be compared. Other percentages to be compared will be the total number of ODRs recorded using the Aspen system. Administrators input the ODR information into the system to record by the State as a record for school improvement planning. This information is also used with the tiers as documentation for behavior.

**Ethical considerations**

Once permission to conduct the study has been granted from Carson Newman University Institutional Review Board, the researcher will request permission to conduct the study at the school and to acquire student data from the testing coordinator. After permission has been obtained from the administration and principals, individual participants will then be contacted for voluntary participation.

No individual student data will be used in this study. The researcher will only be comparing individual grade level gains and overall school gains for the 2017 and 2018 school
years. These measurements will be examining the gains or losses of overall student achievement prior and post-implementation of RTI²B for the school and grade levels. Teacher surveys will be conducted anonymously through an electronic survey system. These surveys will provide an understanding of teacher perceptions of the overall impact of RTI²B initiative in the K-8 school, the impact of the initiative on instructional time and student achievement, and the role of administrators in the implementation process. Pseudonyms will be used for the participants who contribute to the study through an interview or focus group to maintain confidentiality and to protect the participants’ identities.

To ensure validity, there will be a peer debriefing and members check. The peer debriefing will provide a secondary viewpoint of the data analysis obtained from the coding of the interviews and student data collected from TNReady. The peer debriefing will also determine if there is a consensus in the interpretation of the data. A member of the RTI²B team, who is also one of the county’s special education behavior teachers, will be part of the peer debriefing team. Another member will be one of the county’s school psychologists, who are not affiliated with the school. Member checks will allow those who volunteered for interviews to review the transcriptions and analysis of their answers for clarity, accuracy, and meaning. Member checks will be done by those who participated in direct, one-on-one interviews. This will allow participants to verify agreement with what has been said about them by making sure the description and interpretation of the participants’ experience are accurate.

**Data analysis procedures**

As the data is being gathered, open, axial, and selective coding will be a very important part of the organization and analysis processes (Davidson & Lofgren, 2018). Responses gathered through the questionnaire will be used in axial scale coding where the Likert scale and specific phrases embedded within the questions and statements will be utilized to identify specific areas
participants have in common in regards to their perceptions about the implementation. Once interviews from administrators, teachers, counselors, and focus group are conducted and transcribed, open coding will be used to identify common aspects (major or core categories) within the interviews. Through open coding, interview data will be broken down using a comparative method of labeling and categorizing the data. Axial coding will then be used to find relationships between the focus group participants, teacher surveys, and administrative and counselor interviews. Axial coding is the connecting of concepts taken from the open coding. It develops connections within the categories. The final data analysis will be comprised of comparing teachers’ perception about classroom instructional time to students’ academic achievement by content area and grade level as measured by the TVAAS artifact data of student and school gains. This will be done using selective coding. Selective coding identifies the more discrete connections found through axial coding. These discrete connections then form the theoretical framework.

**Summary**

The purpose of this qualitative research study is to describe the implementation process and how implementation fidelity plays one of the most influential impacts on program success. This research student will also display Tennessee’s RTI²B’s impact within a rural East Tennessee school and community. By conducting a qualitative research study, detailed data from participant interviews, surveys, and student artifacts can provide an in-depth context for understanding the implementation process and the impact it can impede when done with fidelity. Not only will this study provide a holistic view of a K-8 school, but also a more focused view on individual grades.
Chapter 4 Results of Data Analysis

Introduction

This qualitative study focused on the implementation challenges faced by an East Tennessee rural K-8 school in correlation with administrator and teacher perceptions about the program, its implementation, and its impact on the school. The methods used in the research were teacher survey, teacher and administrator interviews, focus group discussion, ODR records, and TVAAS Growth Measurement data. Semi-constructed interviews were conducted with the principal, assistant principal, and two teachers; all were conducted individually. A focus group interview was conducted with RTI²B team affiliated with the school. Also, a teacher survey was sent to all teachers in the school; however, only a portion of the teachers participated in the survey. The counselors assigned to the school declined to participate stipulating they were not part of the RTI²B team nor did they work at the school full time. Other data incorporated into the study to determine the impact of the program thus far in regards to implementation phases were TVAAS Growth Measurement for the school, and each grade level three through eight and the number of ODRs recorded on Aspen. This data helped to answer the research questions:

1. What are teachers' perceptions about the effect of RTI²B on instructional time?
2. What are administrators' perceptions about the effect of RTI²B on instructional time?
3. What are teachers' perceptions about student achievement since implementing RTI²B?
4. What are administrators' perceptions about student achievement since implementing RTI²B?
5. Do teacher attitudes have an impact on RTI²B's implementation?
6. Do the leadership skills of administrators affect teacher perceptions of RTI²B and its implementation process?
Semi-constructed interviews were conducted with the principal, assistant principal, focus group, and two teachers. The questions posed to the participants focused on their perceptions of the program, perceptions of the implementation process, and the program’s impact on various concepts associated with the implementation. For a list of the semi-constructed questions for each interview see Appendix B, Appendix C, and Appendix D. Coding enabled the researcher to categorize these aspects into student achievement, fidelity, student behavior, administrative leadership, and instructional time. Through coding, the researcher determined that data could then be themed as an improvement or needs improvement/challenge.

The 20 question teacher survey was emailed to 43 participants. These participants included administrators, special education teachers, service providers, counselors, and teaching assistants. There were 13 responses to the survey. Questions centralizing on the program, implementation, and impact of RTI²B were isolated for coding purposes.

Students in Tennessee participate in the end of year testing called TNReady. Scores from this assessment are evaluated using the Tennessee Value-Added Assessment System (TVAAS). TVAAS measures student growth year over year. Student performance is compared relative to the performance of his/her peers who have performed similarly on past tests. TVAAS measures student growth from year to year; it does not measure the proficiency of a student (Tennessee Department of Education, n.d.a).

This chapter will discuss the findings of the semi-constructed interviews, teacher survey, TVAAS data, and ODR report. Examples of the data analysis from the coding done for the interviews are provided. Charts comparing the Growth Measures of grades and the school for reading and mathematics and the ODR reports are provided. The findings from these data samples are discussed and summarized in this chapter.
Teacher Perceptions on Instructional Time

Table 4.1 Interview and Focus Group Data Sorted in Levels of Coding for Research Question One: What are teachers’ perceptions about the effect of RTI B on instructional time?

<table>
<thead>
<tr>
<th>Raw Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“One challenge is keeping up with all the documentation. It’s quicker to verbally remind them and move on. It pauses the lesson.”</td>
<td>Documentation, Communication, Scheduling, Behavior expectations, Stopping lessons, Discipline, Loss of instructional time, Procedures, Relationship building</td>
<td>Working relationships between teachers and students, Time management, Learning rules and procedure, Understanding expectations</td>
<td>Classroom management significantly affects instructional time.</td>
</tr>
<tr>
<td>“Depending on the severity of it [behavior], I’m still losing instructional time. I may have to stop for a moment and take them in the hallway.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I don’t lose instructional time with documentation. I stand at the door with my iPad and do it while I change classes.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“It [RTI B] has helped me a lot with my classroom management.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Kids are on task. They know what to expect. I like the stability. I like the uniformity.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Inconsistency in any form is not a good approach. I think we become inconsistent because we are not seeing results. Then it becomes just another task to do rather than something that is working.”</td>
<td>Student learning, Student and teacher expectations, Consistency, Procedures, Teacher responsibilities</td>
<td>Fidelity, Behavioral standards, Classroom rules and procedures, Understanding expectations</td>
<td></td>
</tr>
</tbody>
</table>
**Summary:** The gain or loss of instructional time in this study seems to vary according to the grade level taught by the teacher. The upper-grade level teacher indicated that instructional time was now being interrupted by not only student behavior but also by documentation for the program. The lower grade level teacher can balance the documentation with changing classes, therefore, not losing instructional time to do so. The loss or gain of instructional time is based, as the data has indicated, on the classroom management of the teacher.

Table 4.2 Teacher Survey Data for Research Question One: What are teachers' perceptions about the effect of RTI^2^B on instructional time?

<table>
<thead>
<tr>
<th>Statement from teacher survey</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction time has increased in my classroom because I am not dealing with disruptive behaviors since beginning RTI^2^B.</td>
<td>6-Agree, 5-Neutral, 2-Disagree</td>
</tr>
<tr>
<td>Overall, I feel the RTI^2^B initiative has had a positive impact on instructional time.</td>
<td>1-Strongly Agree, 6-Agree, 5-Neutral</td>
</tr>
<tr>
<td>My students are more engaged in classroom discussion and projects.</td>
<td>1-Strongly Agree, 3-Agree, 9-Neutral</td>
</tr>
<tr>
<td>Overall, I feel the RTI^2^B initiative have had a positive impact on student behavior.</td>
<td>1-Strongly Agree, 6-Agree, 6-Neutral</td>
</tr>
<tr>
<td>Student behaviors have improved since implementing RTI^2^B.</td>
<td>1-Strongly Agree, 7-Agree, 4-Neutral, 1-Disagree</td>
</tr>
</tbody>
</table>

**Summary:** The data from the teacher survey indicates a diverse opinion on RTI^2^B’s impact on instruction time. Teachers indicate that within their classroom they are not seeing a
real difference in instructional time. Not even half (46.15%) of the respondents believe that instructional time has improved because they are not dealing with disruptive behaviors. Nor do the teachers agree that student engagement has increased (30.77%). Although most teachers have a neutral opinion (69.23%) as to whether or not student engagement has improved, the majority (61.54%) have indicated that student behavior has improved in their classrooms. When examining the overall impact of RTI$^2$B, teachers indicate somewhat of a positive increase in instructional time with 58.33% of respondents either agreeing or strongly agreeing.

**Administrator Perceptions of Instructional Time**

Table 4.3 Interview and Focus Group Data Sorted in Levels of Coding for Research Question Three: What are administrators’ perceptions about the effect of RTI$^2$B on instructional time?

<table>
<thead>
<tr>
<th>Raw Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“In the classroom, I would definitely say it [student behavior] has [improved].”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Overall, I think it has been a positive improvement. I can think of one child it has made a huge difference with her.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“CICO is a good thing for our students who are acting out because they are seeking attention.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Although it’s not perfect, it is working with her.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Overall, I feel like there is more student engagement and less discipline issues.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Referrals have gone way down.”</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CICO

- Student needs
- Antecedents to student behavior
- Student engagement
- Decline in referrals

Program results
Interventions
Student behavior
Discipline

Program initiatives and implementation are driven by student behaviors, interventions, and program results.
Summary: Administrators are experiencing a reduction in referrals and inappropriate student behaviors during evaluations. There are some teachers, however, that for some reason continue to rebel against the use of the program initiatives of RTI²B within their classrooms. Teacher beliefs, morals, and leadership skills are a factor in classroom management which affects the implementation of RTI²B. The classroom management and other characteristics of the teachers impact the fidelity of the program through documentation, rewards, discipline, language, and day-to-day routines.

Table 4.4 Teacher Survey Data for Research Question Three: What are administrators’ perceptions about the effect of RTI²B on instructional time?

<table>
<thead>
<tr>
<th>Statement from the teacher survey</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, I feel the RTI²B initiative has had a positive impact on instructional time.</td>
<td>1-Strongly Agree 6-Agree 5-Neutral</td>
</tr>
</tbody>
</table>
Overall, I feel the RTI²B initiative have had a positive impact on student behavior.

<table>
<thead>
<tr>
<th>1-Strongly Agree</th>
<th>6-Agree</th>
<th>6-Neutral</th>
</tr>
</thead>
</table>

Student behaviors have improved since implementing RTI²B.

<table>
<thead>
<tr>
<th>1-Strongly Agree</th>
<th>7-Agree</th>
<th>4-Neutral</th>
<th>1-Disagree</th>
</tr>
</thead>
</table>

**Summary:** According to the data collected from the teacher survey, administrators are seeing evidence that instructional time is increasing because student behaviors are improving. They stipulate that RTI²B is making a difference with student behavior and instructional time, and the majority of responses are positive toward the improvement in both areas. At least 61.54% of those who responded agree that student behavior has improved, and 58.33% of respondents believe that RTI²B has made a positive impact on instructional time.

**Office Discipline Referrals**

Table 4.5 Office Discipline Referral Comparison

![Chart showing office discipline referrals comparison between 2017-18 and 2018-19](image)

**Student behavior.** Before the implementation of RTI²B, the number of referrals was extremely high numbering 373 for the 2017-2018 school year. In this same year, three students were sent to the alternative school. The largest number for this year was In-School Suspension where students were removed from their class to a restricted environment. After the
implementation of RTI²B began, the number of office referrals has decreased. For the 2018-2019 school year, thus far, only 79 students have received office referrals. None have been sent to the Alternative school, and only 53 students have been placed in an isolated environments, such as detention. The number of student suspensions has also decreased. In 2017-2018, there were 34 suspensions. So far in the 2018-2019 school year, there are only 21 students who have been suspended for behavior issues.

**Teacher Perceptions of Student Achievement**

Table 4.6 Interview and Focus Group Data Sorted in Levels of Coding for Research Question Two: What are teachers' perceptions about the effect of RTI²B on student achievement?

<table>
<thead>
<tr>
<th>Raw Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Students who struggle [academically] try to hide that with side conversations and the “I don’t care”. It’s easier for them to seem like they don’t care than they don’t understand.”</td>
<td>Academic struggles</td>
<td>Student avoidance</td>
<td>Student attitudes can affect behavior, achievement, and program implementation.</td>
</tr>
<tr>
<td>“I told you our kids refused!”</td>
<td>Student refusal</td>
<td>Student actions/reactions</td>
<td>Student behavior</td>
</tr>
<tr>
<td>“The program restricted him [student] from saying and doing the things he wanted to do.”</td>
<td>Program restrictions</td>
<td>Student perceptions</td>
<td>Student achievement</td>
</tr>
</tbody>
</table>

**Summary:** According to the interview responses, the same students who are struggling academically are the ones who are also struggling with behavior. The elementary age students are showing more progress and willingness to follow the program and are responding more effectively than the middle age students. In fact, according to the teacher’s statement, the middle
age students are refusing to participate in Tier 2 interventions, such as CICO. The conclusion based on these responses is that student attitudes are affecting the implementation of the program. This, in turn, affects their achievement.

Table 4.7 Teacher Survey Data Research Question Two: What are teachers’ perceptions about the effect of RTI\(^2\)B on student achievement?

<table>
<thead>
<tr>
<th>Statement from the teacher survey</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>My students’ grades and academic achievement have improved since beginning RTI(^2)B.</td>
<td>3-Agree</td>
</tr>
<tr>
<td></td>
<td>9-Neutral</td>
</tr>
<tr>
<td></td>
<td>1-Disagree</td>
</tr>
<tr>
<td>Overall, I feel the RTI(^2)B initiative has had a positive impact on student achievement.</td>
<td>1-Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>5-Agree</td>
</tr>
<tr>
<td></td>
<td>7-Neutral</td>
</tr>
<tr>
<td>My students are more engaged in class discussion and projects.</td>
<td>1-Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>3-Agree</td>
</tr>
<tr>
<td></td>
<td>9-Neutral</td>
</tr>
</tbody>
</table>

**Summary:** According to the teacher survey responses, the majority of teachers and staff are undecided as to whether student achievement has been effected by RTI\(^2\)B. Only 23.08% of respondents implied that students within their classrooms had seen an improvement with grades and achievement. Also, only 30.77% suggest that their students are more engaged within the classroom. However, when examining the overall school, almost half (46.15%) of the respondents agreed that RTI\(^2\)B had made a positive impact on student achievement.
**Administrator Perceptions of Student Achievement**

Table 4.8 Interview and Focus Group Data Sorted in Levels of Coding for Research Question Four: What are administrators’ perceptions about the effect of RTI\(^2\)B on student achievement?

<table>
<thead>
<tr>
<th>Raw Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;I don’t feel like we have been doing it long enough to have data to say it has or has not affected state scores.”</td>
<td>TVAAS</td>
<td>Program results</td>
<td></td>
</tr>
<tr>
<td>“We’ll have to look at this year’s data. You couldn’t just base it on the first year.”</td>
<td>Length of implementation</td>
<td>Student data</td>
<td></td>
</tr>
<tr>
<td>“It almost reflects back to those same students that are at the other levels [RTI], are the one that are not doing well.”</td>
<td>RTI connection to RTI(^2)B</td>
<td>Student behavior</td>
<td></td>
</tr>
<tr>
<td>“Anyway, 1-4 I think there has been some growth there. The teachers are beginning to get more out of them in the classroom because they are more focused.”</td>
<td>Comparing data to behavior</td>
<td>Student engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students more focused</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic growth in 1-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavior improvement 1-4</td>
<td>Not enough time to determine RTI(^2)B impact on student achievement and behavior.</td>
<td></td>
</tr>
</tbody>
</table>

**Summary:** Administrators believe RTI\(^2\)B has not been implemented long enough nor has the program been fully implemented to justify an increase in student achievement completely. Both administrators believe there can be no justification for improvement since the school still needs to implement Tier 3 of the program which will be next school year. Both administrators do, however, admit seeing a small and limited improvement after just one year of full implementation of Tier 1 and Tier 2. Administrators indicate students are more engaged and
focused within the classrooms. In comparison with the teachers, administrators agree that those students who are struggling academically are also the ones who are struggling with behavior.

Table 4.9 Teacher Survey Data for Research Question Four: What are administrators’ perceptions about the effect of RTI²B on student achievement?

<table>
<thead>
<tr>
<th>Statement from the teacher survey</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, I feel the RTI²B initiative has had a positive impact on student achievement.</td>
<td>1-Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>5-Agree</td>
</tr>
<tr>
<td></td>
<td>7-Neutral</td>
</tr>
</tbody>
</table>

**Summary:** Coinciding with what the teachers perceived, administrators also believe RTI²B is beginning to make an impact on academic achievement. Almost half (46.15%) of the respondents to the teacher survey agreed that RTI²B has already had a positive impact on student achievement.

**Student Achievement Data from TVAAS**

Table 4.10 Student Achievement measured by TVAAS Growth Measurement for ELA

**Student achievement ELA.** Student achievement was examined using TVAAS Growth
Measures for 2016-2017 and 2017-2018 school years for English Language Arts (ELA). According to the data, some grades made growth while others did not. In the 2016-17 school year when RTI²B had not been implemented, only one grade made gains: sixth grade. In the 2017-18 school year which was the Tier 1 of RTI²B implementation, third, fourth, fifth, seventh, and eighth grades all made gains. Even though some of these grades’ gains were negatives, they were still considered as making progress when compared to the Growth Standard because of the standard error of measurement. Because of the standard error of measurement which will vary based on the number of students, a grade level can be in the negative range and still be considered making progress.

Table 4.11 Student Achievement measured by TVAAS Growth Measurement for Mathematics

Student achievement in mathematics. Student achievement was examined using TVAAS Growth Measures for 2016-2017 and 2017-2018 school years for Mathematics. According to the data, some grades made growth while others did not. In the 2016-17 school year before RTI²B implementation, the only grade to make gains was sixth grade. All other
scores in the negatives and labeled as LR on the TVAAS report. LR is the label given for moderate evidence students made less progress that the Growth Standard. In the 2017-18 school year after Tier 1 of RTI\textsuperscript{2}B implementation, fifth, sixth, and eighth grades were considered as making moderate to significant gains in student growth. Although third grade was in the negative, it was also considered as making growth because of the standard error of measurement. Even though some of these grades’ gains were negatives, they were still considered as making progress when compared to the growth standard because of the standard error of measure. Because of the standard error of measurement which will vary based on the number of students, a grade level can be in the negative range and still be considered making progress.

Table 4.12 Student Achievement measured by TVAAS Growth Measurement for overall school

![Bar chart](image)

**Student achievement is school-wide.** This table reflects the growth measure for the overall school grades 3-8 in English Language Arts (ELA) and Mathematics for the 2016-17 and 2017-18 school years. In ELA, both years growth was in the negatives. However, the range between the points decreased indicating a gain for that subject area. In Mathematics, there was a
5 point gain. This subject area moved from a negative score (-5.7) in 2016-17 to a positive score (0.7) in 2017-18 after the first year of RTI²B initiative was implemented.

**Teacher Attitudes Impact on Implementation**

Table 4.13 Interview and Focus Group Data Sorted in Levels of Coding for Research Question Five: Do teacher attitudes have an impact on RTI²B’s implementation?

<table>
<thead>
<tr>
<th>Raw Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Everybody’s pretty receptive with new ideas and willing to try it. We really didn’t have anybody, as far as on my team, who wasn’t willing and ready to try.”</td>
<td>DOJO point system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I was kind of standoffish about that [DOJO] because we didn’t have anything schoolwide before. I didn’t feel like I knew enough about it.”</td>
<td>Positive teacher reception and opinion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I didn’t have any background about it. I wasn’t sure.”</td>
<td>Majority willing to try new program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I tried to be optimistic about it. I had concerns because we were a K-8 school.”</td>
<td>Lack of teacher knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Everyone kind of responds differently. Some people were a little more positive and open-minded toward it. Other people were a little skeptical.”</td>
<td>Lack of teacher training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I like it better. It took some adjustment.”</td>
<td>Initial perception is skepticism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I was interested. We didn’t really have anything school wide. It was mostly behavior management for your own classroom. So everybody’s was different.”</td>
<td>Concern</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Varied teacher response and reaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjustment to change</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal beliefs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavior management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher buy-in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Programs used in Tier 2 of RTI²B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prior knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teachers’ preconceptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher response</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher training</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavior management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>School-wide implementation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PBIS and RTI²B tier training and professional development are essential for teacher buy-in.
“After Christmas, you sort of start slacking a little bit. It’s more challenging and I think it’s because of the pressures of testing.”

“It’s probably around Christmas time where we started becoming inconsistent.”

“We started off consistently. As the year’s gone on, it’s become more and more inconsistent.”

“Consistency with rewards was one of the challenges we had during the first year during the second semester.”

“We did better the first semester versus the second semester. We need to improve on being consistent with it the second half of the school year.”

“The ones who have behaved well in the past are still behaving well. Those that typically misbehave are still misbehaving.”

“The program restricted him [student] from saying and doing the thing he wanted to do.”

“I told you our kids refused.”

“We’re like on the struggle
“We want to do better about giving DOJO points recognizing the good and the positive instead of always being taken away.”

“Our programs are working great for K-5. They’re a little more challenging in the 6th, 7th, and 8th.”

“I feel like it works better with K-4 students than it does with 5-8.”

“One of the challenges was the reward system. It is easier to find things for K-4. There’s not that much money you can spend. It’s harder to find something for 5-8.”

“It works better with K-4 than it does with 5-8.”

“Just because we are a K-8 school, it’s so hard to find something that fits the whole. That’s a big gap. It’s working better for K-4.”

“There’s a split. There’s a K-4 split and a 5-8 split. We are still trying on our end to find something that works.”

“We [5-8] need different rewards. They [K-4] do different things that we do.”

“We [5-8] need different rewards. They [K-4] do different things that we do.”

“Behavior tactics, or a disciplinary tactic, that might work for the little ones doesn’t necessarily work on my end with the middle schoolers.”

Working better in K-4
More challenging for 5-8
Easier to find rewards for K-4
Limited funding
Difficult to find rewards for 5-8
Student motivation
Different rewards needed for elementary age and middle school age
Different types of discipline for different age groups

Positive results in the elementary grades
Negative results in the middle school grades
Reward system more difficult in 5-8
Limited funding
Large grade and age level gaps
Different discipline tactics

Challenges make it difficult to implement RTI and see a positive impact in the school as a whole.
Summary: Before implementation, teachers had no knowledge or training for RTI²B. Their perceptions were limited to the unknown. Teachers did not seem fearful only curious and concerned about the program, its implementation, and its possible impact on the school and their classrooms. Teachers tried to be open-minded. Once they had received training for Tier 1 and Tier 2, confidence became more apparent. However, as implementation began, teachers in grades K-4 were more optimistic because they saw more positive results with the students. The middle school teachers were exhibiting more frustration with the program because students were refusing to participate, mocking the rewards, and no real improvement was being seen by the teachers. Teachers explained a challenge for the school as a whole was the fact of being a K-8 school. The age gap posed a huge challenge in finding the right rewards for the students for motivation, especially in the upper grades.

Table 4.14 Teacher Survey Data for Research Question Five: Do teacher attitudes have an impact on RTI²B’s implementation?

<table>
<thead>
<tr>
<th>Statement from the teacher survey</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff and students show respect for each other.</td>
<td>9-Agree 3-Neutral 1-Disagree</td>
</tr>
<tr>
<td>Overall, I feel the RTI²B initiative has had a positive impact on teacher and staff behavior.</td>
<td>1-Strongly Agree 7-Agree 5-Neutral</td>
</tr>
</tbody>
</table>

Summary: RTI²B involves the mindset of all faculty and staff. It involves modeling and expectations of all participants. This modeling is directly related to teacher attitudes and behavior. Embedded in the teacher survey were questions about the behavior of faculty and staff members. Over half the respondents (69.23%) to the survey agreed that both staff and students
respect one another. Only one (7.69%) disagreed with this statement. Compared to student and teachers respecting one another is the state of teachers and staff respecting one another as a result of RTI^2. Just over half (53.74%) of participants either agreed or strongly agreed that faculty and staff showed respect to one another. Forty-six percent were undecided/neutral.

**Administrative Leadership’s Impact on Implementation and Teacher Perceptions**

Table 4.15 Interview and Focus Group Data Sorted in Levels of Coding for Research Question Six: Do leadership skills of administrators affect teacher perceptions of RTI^2B and its implementation?

<table>
<thead>
<tr>
<th>Raw Data</th>
<th>Open Coding</th>
<th>Axil Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“[Administrators] care about us. I feel like I’m valued. I really respect that and I want to do.”</td>
<td>Administrative relations with teacher</td>
<td>Teachers’ perceptions of administrators</td>
<td>Leadership styles and skills affect how teachers react to new ideas and concepts impacting teacher buy-in easier.</td>
</tr>
<tr>
<td>“They’ll [administrators] both listen to you. They both, in their own ways, make sure everyone is heard.”</td>
<td>Teachers feel valued</td>
<td>Positive reinforcement</td>
<td></td>
</tr>
<tr>
<td>“They complement each other very well. [Principal] is more of the strict. Both are positive. [Assistant principal] is super positive.”</td>
<td>Teachers feel respected</td>
<td>Leadership skills</td>
<td></td>
</tr>
<tr>
<td>“They [administrators] really care about our opinions on things. That helped me be a lot more open-minded about trying this out.”</td>
<td>Teachers want to please administration</td>
<td>Active listening</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administrators listen</td>
<td>Complimentary leadership styles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teachers’ voices and opinions are heard</td>
<td>Teacher empowerment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sharing opinions encouraged</td>
<td>Leadership styles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Open-mindedness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“[Administration] is an excellent pairing.”

“[Administrators] will sit back. That way it is inclusive to everybody. They [administrators] are great. They are wonderful and they help.”

“[Administrator] was authoritative because she was more, ‘This is what we’re going to do,’ and ‘I need you to do third and fourth grade.’”

“I don’t want anybody to feel left out.”

“I love that [upper grade students reading to lower grade students].”

“Someone you think may really be hesitant and not be positive about it, put them on the team. Hook them in the beginning. If you can get them hooking into it, then you’ll probably get others.”

“Some have bought into it more than others.”

“I don’t have a lot of people that just stand up and say, ‘I’m not doing something.’ I knew those were ring leaders within their grade span and I utilized that.”
“This is the step in the right direction of bringing our school together. It was looking at school wide expectations.”

“Unified behavior system is nice in theory. In reality, it’s really hard to find a system that works for kindergarten through eighth grade.”

“PreK-4 teachers do have better positive feedback and they do seem to buy-in a little better.”

“You just have that split there. Some exited. Some a little hesitant. Some just going with the flow. You have a little bit of all that.”

“There’s always room for improvement. I think we need to change some things for 5-8 because I don’t think it’s working as well as it should.”

“What’s involved with this? I had a lot of questions. It wasn’t’ that I was negative or positive in the beginning. I just had a lot of questions.”

“I believe in positive reinforcement. It was another way to approach it from the
positive side, making sure we are recognizing those who were on track and doing what they needed to be doing and then try to influence those who were not. That intrigued by interest.”

“It was one of those we thought would come and go because it was relatively new, had a lot of discrepancy as to direction. It would be another one of those programs underfunded, forced on you, with not a lot of direction.”

“The positive thing is they [teachers] feel like, especially in the lower grades, CICO has made a wonderful difference with several students.”

“Providing behavior supports tends to make them [teachers] a little more upset. They are more on the discipline side and that goes back to your personal philosophy.”

“The biggest negative is it’s a slow process and there’s not anything very harsh with this program.”

Administrator training, knowledge, and preconceptions affect their presentation of initiatives/visions/goal determining teacher buy-in.

CICO-making a difference
Positive results in K-4
Teachers discipline rather than support
Slow process
Slow results
Program includes no harsh discipline

Administrators’ relations with faculty
Personal philosophy
Educational philosophy
Pace of implementation

Questioning
Neutral opinions
Positive reinforcement
Recognition of good behavior
Change bad behavior
New programs come and go
Discrepancy for directives
Underfunded

Administrator initial perception
Lack of knowledge and training
Prior knowledge or experience creates negative first impression

Administrator

Administrator

Administrator

Administrator
Summary: Administrator leadership style affects the reactions and perceptions of teachers when a new initiative is implemented. The leaders of the study school portray two different leadership styles. Although similar in some aspects, they differ in others. Both leaders had a similar perception of RTI\textsuperscript{2}B; both were skeptical, but they tried to be open-minded. Their skepticism changed through training and professional development. The principal used her knowledge of and the relationship with the faculty to guide her autocratic/democratic leadership while the assistant principal used her democratic style. Both leaders used positive reinforcement with teachers while turning the responsibility for the program over to the teachers. This empowered the teachers and promoted more teacher buy-in for RTI\textsuperscript{2}B.

Table 4.16 Teacher Survey Data for Research Question Six: Do leadership skills of administrators affect teacher perceptions of RTI\textsuperscript{2}B and its implementation?

<table>
<thead>
<tr>
<th>Statement from the teacher survey</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with the process that is in place to discuss student behavior concerns in my school.</td>
<td>8-Agree  4-Neutral  1-Disagree</td>
</tr>
<tr>
<td>The hierarchy of consequences for inappropriate behavior is used consistently.</td>
<td>7-Agree  3-Neutral  3-Disagree</td>
</tr>
<tr>
<td>Student compliance to rules and expectations are reinforced consistently.</td>
<td>8-Agree  5-Neutral</td>
</tr>
<tr>
<td>Staff and students show respect for each other.</td>
<td>9-Agree  3-Neutral  1-Disagree</td>
</tr>
<tr>
<td>Overall, I feel the RTI\textsuperscript{2}B initiative has had a positive impact on teacher and staff behavior.</td>
<td>1-Strongly Agree  7-Agree  5-Neutral</td>
</tr>
</tbody>
</table>

Summary: Administrative perception was addressed through the teacher survey by at least five statements. The first focused on teachers feeling comfortable enough to approach the
administrators with questions or concerns and being given a solution or assistance following the protocols for the initiative. Eight of the respondents (61.54%) agreed they were comfortable approaching the principals with concerns. At least 30.77% were undecided, and only one person felt unsatisfied and uncomfortable with the process set into place. The administration is part of the hierarchy encompassed with the flow chart for consequences for disciplinary infractions for students. Barely half of the respondents (53.85%) felt the hierarchy was appropriate and used consistently. Three participants disagreed indicating inconsistency with the fidelity of consequences.

In response to faculty and staff respect, results were identical to those presented previously. Over half the respondents (69.23%) to the survey agreed that both staff and students respect one another. Only one (7.69%) disagreed with this statement. Compared to student and teachers respecting one another is the statement of teachers and staff respecting one another as a result of RTI²B. Just over half (53.74%) of participants either agreed or strongly agreed that faculty and staff respected one another. Forty-six percent were undecided/neutral.

Chapter Summary

The purpose of this study was to examine the perceptions of teachers and administrators about RTI²B's program, implementation, and the impact on student achievement, student behavior, and instructional time. Chapter four provided the results of semi-constructed interviews with two administrators and two teachers, a teacher survey, a focus group discussion, ODR data, and Growth Measure data from the TVAAS. In using coding and categorization, the researcher was able to identify the administrators’ and teachers’ perceptions and attributes associated with the program, its implementation, and its impact on the school. Included in the results were data from TVAAS Growth Measures for mathematics and ELA for individual grade
level 3-8 and the overall school for the past two school years. Also, ODR data was also gathered from the past two years and compared.

From the data gathered and analyzed, teacher buy-in to RTI²B has been somewhat positive. It has, however, been more positive and has seen more positive results in the lower grade levels with both instructional times and with academic achievement. Administrative leadership has been key to teacher buy-in. By empowering the teachers and turning responsibility for implementing the programs over to them, teachers have been open-minded toward RTI²B. A conclusion and interpretation of the findings will be discussed in chapter five. The researcher will also present recommendations for further research along with a researcher reflection.
Chapter 5 Conclusions, Implications and Recommendations

Introduction
The purpose of this qualitative study was to determine how teacher and administrator perceptions about RTI²B’s program impacted the implementation and effect of the program on the rural K-8 elementary school in East Tennessee. Multiple methods of qualitative investigation were used. Individual interviews using semi-constructed questions were conducted with the principal, assistant principal, and two teachers. A teacher survey was conducted electronically with all teachers and teaching assistants. A focus group discussion including members of the RTI²B team was also conducted. Transcriptions from interviews and focus group discussion and survey results were analyzed, coded, categorized, and merged. The research for this qualitative study was guided by the following questions:

1. What are teachers' perceptions about the effect of RTI²B on instructional time?
2. What are administrators' perceptions about the effect of RTI²B on instructional time?
3. What are teachers' perceptions about student achievement since implementing RTI²B?
4. What are administrators' perceptions about student achievement since implementing RTI²B?
5. Do teacher attitudes have an impact on RTI²B’s implementation?
6. Do the leadership skills of administrators affect teacher perceptions of RTI²B and its implementation process?

Chapter five summarizes the findings more in-depth. Interpretations of the findings are discussed in greater detail. Implications and recommendations for the elementary school and other district leaders are also provided. The conclusion of the chapter is a reflection of the researcher’s experience and the findings of the qualitative study.
Summary of Findings

The research questions posed in this project focused on perceptions of the administration and the teachers with regards to instructional time and student achievement. Teacher attitudes about the implementation and program were also assessed to determine if teacher attitudes had an effect on the process and outcomes. The leadership of administrators has an impact on how teachers react to situations. As part of this project, the leadership skills of the principal and assistant principal were included in the data collection. The following sections discuss the conclusions based on the findings from the various types of data gathered in the process in regards to each of the stated areas.

Teachers’ and administrators’ perceptions of instructional time. There are contrasting opinions on the effects of RTI²B on instructional time. The administrators seem to found through teacher evaluation that students seemed more engaged. Teachers were not stopping the lessons in order to deal with inappropriate behaviors. However, administrators did possible stress reasons for an increase in instructional time could not solely be based on RTI²B. It could also be due to the presence of the administrator. The principal also stated that instructional time is directly related to classroom management. She went on to explain that teachers who were struggling before RTI²B implementation have seen an improvement with classroom management.

Teachers’ perceptions regarding instructional time were split. The elementary teacher indicated that she had no issues with losing instructional time dealing with behaviors. She maintained student engagement by staying busy with the curriculum. She also indicated that the lesson was not stopped to deal with documenting citations for inappropriate behavior. She completed documentation during class change.
In contrast, the middle school teacher admitted to losing instructional time trying to keep up with documentation for the program. This teacher felt a need to be more in-depth with documentation providing explanations for the infractions. This teacher also stated that she wanted to take time to talk to the students to develop a rapport. This, she felt, was more effective because she was making a lasting impression and impact with the students. Based on results from the teacher survey, teachers are seeing an overall improvement in instructional time within the school, but teachers do not see it within their classrooms. This, in the researcher’s opinion, is contrary to itself.

The overall view is that instructional time remains a challenge for the school. It has improved in some grades, but not all. Inconsistent perceptions about the loss of instructional time due to behavior or documentation create a gap leading to a lack of fidelity. The loss or gain of instructional time is based, as the data has indicated, on the classroom management of the teacher. Classroom management is an integral part of instructional time. It is the researcher’s opinion; therefore, that RTI²B and its implementation are driven by the teachers’ and administrators’ morals, ethics, and leadership within the classroom and the school as a whole.

**Teachers’ and administrators’ perceptions of student achievement.** There was a consensus among the participants with regards to student achievement. Participants felt there had been no significant gains made on the TNReady assessment as a result of RTI²B, and more time was needed to determine if student achievement had improved. Participants indicated that the results of the upcoming 2019 testing would provide more accurate data for the determination of student improvement.

According to the TVAAS data on growth measure, since implementing the program, students have made some limited gains. Before RTI²B implementation very little if any gains
were made academically according to the TVAAS report. After the first year of implementation, the school made gains in both reading and math, especially in grades five and six. However, the most significant growth for the school was in mathematics with a five-point increase in growth.

Participants agreed that student achievement had not yet seen a visible or significant increase. Data from the TVAAS Growth Measure indicated minimal growth for the school in ELA and Mathematics after the first year of RTI²B implementation. Study participants concurred more data was needed to form a definitive conclusion about whether or not RTI²B had made an impact on student achievement. Participants want more data to compare, such as the 2018-2019 TVAAS results. These results, they said, would come after Tier 2, or the second year, of implementation. Others measures of testing are used throughout the year to assess student progress. However, teachers did not consider the use of these measures (AIMSweb+ screenings or Study Island benchmark testing) as sufficient and valid data to base the determination of the impact of RTI²B on student achievement.

**Teacher attitudes.** Teachers’ attitudes varied with regards to the program, implementation, and impact of RTI²B. Teachers who were interviewed admitted to being apprehensive about the program due to no or limited knowledge of the initiative. They admitted that through the provided training, initial perceptions changed. Trepidation eventually turned to open-mindedness. Still, concerns lingered. Teacher surveys and administrator interviews indicated that initial perceptions were mixed. Some bought into the idea of the program faster than others. Even after two summers of training for Tier 1 and Tier 2, some have still not accepted the program. After almost two years of implementation, some teachers find the program effective while others seem to find it ineffective. Teachers concluded it was much easier to implement the program in the lower grades than the upper. Students in the lower grades had been
more receptive to the DOJO points system. Older students felt the system was “too babyish”. The impact has not been successful for the teachers or students in the upper grades of the school resulting in high frustration levels for teachers.

The views of the middle and elementary teachers contrast with implementation and impact for the students. Teachers agree that the program is more effective with the younger students than the older ones. Students in the younger grades find the program meeting their needs in Tier 1 with the rewards systems and in Tier 2 with Check-In-Check-Out (CICO). The older students, however, are not complying with the rewards systems because it is not meeting their needs and wants. They are not receptive to CICO or counselors. This frustrates the teachers and affects their perception of the effectiveness of RTI²B.

Consistency is an issue teacher perceive as a major challenge. Teachers struggle with accurate and consistent documentation of infractions and positive reinforcement using the DOJO point system. More focus continues to be on negative behaviors than the positive. DOJO points are being taken away from students for negative behavior, but points are not being awarded for positive behavior. This inconsistency is causing some students to remain in a low percentage for behavior when in actuality, their percentage should have gained points increasing to their percentage target. This inconsistency with point assignment is affecting some students’ behavior. According to teachers, students realize they are not being rewarded for good behavior, their DOJO percentage is not getting better, and give up at trying to earn points for the three weeks, four and a half week, or the nine-week rewards.

Teachers also stipulated consistency decreases in the second semester. The first of the year brings a fresh start for students and teachers. As the year transpires, the vigor lessens. Focus changes to testing which they feel is more important than that of implementation of RTI²B.
Students and teachers begin to tire. At the study school, teachers become more focused on the end of year testing often forgetting to do the three-week DOJO reward, the four and half week High Five reward, and the nine-week summative reward. It becomes harder to find rewards the students are willing to work toward, especially in the upper grades. Students lose interest in the program and incentives. A negative spiral begins after Christmas making the implementation less effective and lessens the impact when needed most.

**Administrator leadership.** Teachers’ perceptions of administrative leadership in the school were positive. Teachers agreed that the administrative leaders complement one another with their styles. Although both are democratic, the principal’s somewhat authoritative approach did not allow the teachers the option of not participating in the implementation. Both have been supportive throughout the process giving suggestions and encouragement when needed. The teachers feel now that both administrators have allowed the teachers to take control of the program and its implementation.

The compilation of democratic and autocratic leadership styles, skills, and strategies made it easier for teacher buy-in. Also, the school-wide implementation of RTI^2^B in a K-8 school required the school to be a learning organization and an open system. By being a learning organization, this allowed for flexibility in dealing with various types of situations, problems, and concerns that arose. Green (2017) states that an open system allowed for the versatility of working as individuals or as groups to motivate and empower the teachers to meet the needs of the organization. The various leadership skills and own personal perceptions of the principals affected the presentation and reception of RTI^2^B’s implementation, goals, and vision while also determining teacher buy-in (Green 2017).

**Interpretations of Findings**
**Administrative leadership.** The human resource development theory is a non-bureaucratic approach focusing on involving members in the decision-making process. It focuses on collaboration and control through the socialization of its participants who have common goals, values, and beliefs about the organization (Owens & Valesky, 2015). Theories of human resource development look for connections and development in the areas of behaviorism, cognitivism, constructivism, and connective. Combining these ideologies, participants actively engage in their learning, motivation, and development (Duggan, 2016). Individual factors also play a part in the application of human resource development: motivation, self-efficiency, personal qualities, technological affinity, and cultural differences (AIYahya, Binti Mat, & Awadh, 2013). Douglas McGregor split the human resource development theory into two types of application: Theory X and Theory Y (as cited in Owens & Valesky, 2015). Rensis Likert then divided these two theories into parts. Under Theory X, there are 3 Systems. In all three systems, management lacks trust and confidence in the subordinate participants. Theory X assumes that people do not like to work and will avoid it when possible. Members need constant supervision and direction because the only motivation the workers have is job security. Theory Y assumes that people want to work because they want to. They are self-motivated, self-directed, and self-controlled. Members seek responsibility and ways to incorporate creativity into their work (Owens & Valesky, 2015).

The administrative leaders at the research school displayed the human resource leadership style. By using this style, they were able to utilize the talents of the teachers and other staff in various ways. First, the principal used a version of Theory X during the initial presentation to the staff of the program. She knew her staff well enough to know how to present the initiative and means necessary to ensure teacher buy-in. The assistant principal then used a
version of Theory Y. She appealed to the staff with encouragement and empowerment. A sense of team play created a viable environment for teacher buy-in within the school as a whole.

Leadership is doing the right things by focusing on not only the being a leader but also focusing on participants, such as workers, work setting, and culture of the organization. Leadership should focus on encouraging openness through discussion and listening to others’ opinions and thoughts stimulating positive self-regulation for all involved (Zydziunaite, Butautaite, Rutkiene, & Tandzegolskiene, 2015). True leadership focuses on the interactions between people and situations. To accomplish this mission, the administrators at the research school incorporated the team-based approach since their perception of RTI²B encompassed the school working as a whole unit rather than individual entities within the school.

Through a team-based approach, everyone is equal in the decision-making process. Still, a leader is necessary for making the final decisions. Administrators are those key people. How do leaders set themselves apart yet maintain as equals? Fulan (2011) answers this question by identifying key insights into an effective leader. Key Insight 1 instructs the leader to participate as a learner actively. With RTI²B, there are so many details to know and understand; the principal is right there with the others of the group learning the process and making mistakes.

Key Insight 2 teaches the leader to combine absolute moral purpose with impressive empathy. This is when the principal needs to stay focused on the vision and mission of the group while being able to understand and help the group with frustration. By explaining “the real world” to teachers and asking them to consider all options, the principal at the research school invoked Insight 2. Key Insight 3 focuses on motivation. The motivation of the masses, or the “buy-in”, should be the initial step in any system change. Although this can be difficult, it can be achieved by empowering the teachers and allowing them to be a part of the process and decision
making (as cited in Mundschenk & Fuchs, 2016). The assistant principal motivates the teachers with consistently positive feedback and encouragement.

Collaboration is Key Insight 4. Clarity is an essential component of collaboration. Teachers need to know where the student would want them to go. Given a goal, along with understanding the goal, can establish collaboration. Key Insight 5 coaches a leader that confidence needs to coincide with humbleness. A leader should consider himself/herself a learner. Both administrators attend the summer training and are part of the RTI²B team along with teachers. While there to provide guidance, the administrators are also considered learners.

**Program perceptions.** The basis for perceptions is often leadership. The leadership of the administrators at the research school set the tone and foundation of the perceptions of RTI²B. With the many diverse roles included in RTI²B, it is a team effort to devise a plan to provide the needed interventions for students. Each member of the team brings a profound amount of knowledge in specific areas. The primary focus of a school-wide behavioral plan is to create a positive, supportive climate for personal, social, and academic growth. This can be achieved using a systemic approach where all features are necessary, and all features interact creating a dynamic and organic system (Sugai, 2007). The accomplishment of these goals can be achieved by constantly working toward them as well as reflecting upon both the negatives and positives of the program implementation. Sugai (2007) indicates that the best process to attain positive outcomes is through a team-based approach. Initial planning is done by ensuring that all members of the team understand his/her role and responsibilities and by ensuring a systematic structure is in place for adequate and timely communication about the many and complex details of the program.
One way to reach each member and reveal each one’s talent is to build a professional learning community or PLC. Integration of the RTI team and the PLC team can offer valuable resources to both groups. As cited in Mundshenk and Fuchs (2016) the use of PLC offers teachers, staff, and administrators the opportunity to become more productive and highly motivated through collaboration. Collaboration extends the occasion to share knowledge and instructional procedures to serve all students better. PLCs help in closing the research-to-practice gap by refocusing teachers on student learning, utilizing data to drive instruction, and helping teachers see themselves as valuable resources. PLCs changes educators’ thoughts from “my student” to “our student”. This hopefully will alleviate the “my” student perception and change it to “our” student thinking. No longer are teachers struggling to make gains on their own. It is now a joint effort through a team approach to put the student and student needs in the forefront.

Data from the study indicate that teachers’ perceptions about RTI²B are split. Although the teachers envision the program as something bringing the school together as a whole, they continue to work as individual grade spans. The teachers’ mindset remains on the disciplinary aspect of behavior rather than behavior modification which is the focal point of RTI²B. Teacher frustration is stemming from a lack of evidence the program is working, especially in the upper grades. Teachers do not see an immediate positive change with students. Therefore, they want to abandon the project.

While the survey data also concluded lessons about expectations are being taught and revisited periodically throughout the year, these expectations may not be apparent and clear to the students. As researchers have found, the more transparent and clear teachers are about their expectations for behavior and academics, the more successful students are in meeting those expectations (as cited in Sayeski & Brown, 2014).
Training is an important part of any program. Both teachers and administrators stated that perceptions changed from skepticism to open-mindedness and willingness after attending the training. Frustration is increasing since the last training, however, because teachers are noticing those students who are not making progress with Tier 1 and Tier 2 and need Tier 3. Training for Tier 3 will not be ready to implement until 2019-2020. As Meyer and Behar-Horenstein (as cited in Widner, 2017) found, many teachers lack the professional development skills, support, and necessary resources needed to implement RTI and RTI2B effectively. Frustration, they found, stems from role uncertainty, trial and error decision-making, struggling students, and emotions.

Training is essential to promote not only the buy-in of the program but also to encourage confidence in the ability to implement the program (Widner, 2017). These frustrations were voiced in the interview process of the study.

**Instructional time.** Classroom management is an important component of instructional time. Without classroom management, instructional time is lost due to behaviors, poor transitions, and time management. At the research school, the fidelity of RTI²B is also part of the impact on instructional time. Teachers and administrators admitted fidelity was a major concern for program success. Two main components of the program, documentation, and consistency, were lacking across the school. It is the researcher’s opinion that once these components are corrected, there will be an increase in student engagement, therefore, increasing instructional time.

Furthermore, teachers continue to focus on negative behaviors rather than positive. This negatively impacts instructional time because the teacher’s attention continues to focus on alleviating the inappropriate behaviors by calling attention to these behaviors. As stated by the middle school teacher, “learn to pick your battles.” By not trying to correct every misdemeanor
and only focusing on the more severe disruptions, the instructional time has been less interrupted.

**Student behavior.** Inconsistency with documentation and following through with the rewards/incentives also reflects a lack of fidelity. This inconsistency does not provide stable expectations for student behavior. Students need to learn how to use their metacognitive skills to regulate their behavior. Most students already know how to use these skills. Others do not. For these students, they must be taught the self-regulated behaviors based on metacognitive skills. The most qualified person to teach these skills is the student’s teacher. The teacher is with the student in multiple settings throughout the day where the student can experience engagement, productivity, social interactions, work accuracy, and disruptions. Within these settings, it is the teacher who must intervene and teach the student the correct behavior (Bruhn, Bogelgesand, Schabilion, Waller, & Fernando, 2015).

As indicated by the research, the upper grades at the research school are finding it difficult to get the students to buy-in to the program. This problem can be related to the research conducted by Pas, Waasdrop, and Bradshaw (as cited in Roberts-Clawson, 2017), Tillery, Varjas, Meyers, and Collins (2010), and Santrock (2017). These researchers found that older students’ behavior has escalated and have become resistant to interventions. Older students also lack the emotional regulation and developmental expectations. Younger students are still developing these skills making behavior intervention and modifications more effective in the lower grades.

ODR evidence from the study has shown that student behavior has improved at the research school after the first year of implementation. The development and implementation of a flow chart for discipline procedures have significantly improved the number of students being isolated in detention or with suspension, thus increasing the amount of time spent in the
classroom receiving instruction.

**Student achievement.** With only two years of implementation completed, the participants believed there was not sufficient evidence to conclude that RTI²B had made a positive impact on student achievement. Participants concluded that more time was needed in order to determine if students had made gains with the program. Data from the TVAAS Growth Measurement did provide evidence that after one year of implementation students had made minimal gains on end of year testing.

The number of ODRs has an impact on instructional time. Instructional time has an impact on student achievement. ODR data from the research indicates a significant decrease in ODRs, suspensions, and students being removed from the classroom to isolated environments. Since students are remaining in the classroom and receiving instruction more during the Tier 2 phase of implementation, student achievement should increase with this year’s testing. Due to a lack of fidelity with the second year of implementation, however, it is the researcher’s opinion student gains will once again be minimal for 2018-2019 testing.

**Implications**

This phenomenological qualitative research study was conducted to determine the implications of perceptions of teachers and administrators on the implementation and impact of RTI²B on a rural K-8 East Tennessee school. The findings of this study have not only implications for the school but also other county schools within the district and other schools similar in demographics and clientele who are looking to implement RTI²B or other PBIS programs.

**The research K-8 school.** Teachers and administrators continue to find fidelity of implementation a challenge according to the data from the study. Based on areas of concern
reported in the interviews and teacher survey, multiple facets could be conducted to begin to rectify this challenging aspect. The RTI2B team members should consider training for the implementation process set by the school to transferring teachers immediately as soon as possible to maintain fidelity. All teachers in the building should receive training on the implementation process, not just the RTI2B team. Once the summer training is completed, it would behoove the RTI2B team members to return to the school and conduct in-service training for the entire staff utilizing everyone in the building including custodians, secretaries, teaching assistants, and cafeteria staff. This creates a more unified front school-wide. Developing behavior PLC meetings for each grade level to discuss student behavior, fidelity, and student achievement should also be considered. Other members of the grade level could have creative ideas to contribute to the implementation process. These discussions can then be reported back to the RTI2B team meetings by team leaders.

Fidelity should be continuously checked. Administrators should consider conducting periodic teacher surveys to determine faculty and staff understanding of roles and responsibilities in the implementation process or evaluate for concerns/questions with the process. Fidelity should be checked as it provides ways to find problems and solutions. Evaluation of the program determines the fidelity and locates areas of weaknesses and strengths (Robbins & Antrim, 2013). Participants acknowledge problems with the implementation process specifically with the middle school grades. By conducting a fidelity evaluation, school members could locate problems and solutions before the development of major complications.

One complication hindering fidelity is reward celebrations. Since teachers admitted to forgetting to have the reward celebrations, the creation of a school-wide calendar identifying specific dates and times for these events would be beneficial. Teachers would then not have to
remember to build in these reward times. Reminders could also be done with the Alert-Now system or daily intercom announcements.

**The other schools or district leaders.** Research has shown that PBIS and other similar programs can be a more effective approach to discipline tactics than traditional reactive and punitive approaches. Impacts from the implementation of such programs can improve not only student behavior, but also student achievement, teacher morale and effectiveness, and overall school climate. Foundational theories for PBIS and SWPBS are based on long-standing, proven practices in both education and behavior sciences. These practices include behavior analysis, differentiated instruction, and data-driven decision-making (as cited in Nocera, Whitbread, & Nocera, 2014).

With the implementation of a new initiative also comes a change in behavior and mindset of those implementing the program. Change affects our environment and culture around not only us, but also our perceptions, beliefs, and values within ourselves. Past experiences dictate reactions to new initiatives. To avoid dangerous reactions, researchers such as Slovic (as cited in Cooper, 2012) and Joyce and Callhoun (as cited in Rury, 2005) explained that the only way to approach change was by creating a preset goal. Instead of perceiving change as a danger, they suggested it to be challenge or innovation. Also, administrative leaders need to reassess and adapt the plan to continue moving forward constantly. An open communication system should be created to exchange ideas and concerns, engage in active listening, and promote an understanding of both sides. The effective leader should also model expectations and establish and display a positive attitude toward his staff and other stakeholders. Fullan (2006) expressed that experience has taught most educators to see change as just another program in a sea of many resulting in the loss of deeper meaning. This was the initial perception of the administrators in
this study. Fullan (2006) explained that “cultures do not change by mandate; they change by the specific displacement of existing norms, structures, and processes by others; the process of cultural change depends fundamentally on modeling the new values and behavior that you expect to displace the existing ones” (p. 9).

Schools are often labeled as elementary, junior high, middle school, or high school. Grades for elementary schools tend to range from kindergarten to fourth grade while middle or junior high schools range from fifth to eighth. Research from this study could benefit districts with schools categorized as K-8. Being a K-8 school has created significant challenges for implementation for the study school. Districts leaders can benefit from knowing these challenges ahead to prepare possible solutions before implementation.

Other district and school leaders could benefit from this study by examining how leadership perceptions and actions can either promote or hinder teacher buy-in for initiatives. Leadership strategies discussed and teacher perceptions about those strategies can guide other district leaders in how to introduce best and follow through with implementation of RTI\(^2\)B or other PBIS programs in districts or schools. This study can also provide insight into how teacher perceptions can impact the effectiveness of RTI\(^2\)B due to challenges faced in the implementation process. District leaders can use this information to inform possible difficulties in the areas of instructional time, student achievement, and fidelity.

**Summary**

The findings of this qualitative study indicated that teacher and administrative perceptions did have an impact on the implementation and impact of RTI\(^2\)B. The leadership skills displayed by the administrators in the first year of implementation laid the foundation for teachers’ acceptance of the program and its implementation. With a combination of democratic
and authoritative leadership styles, administrators were able to obtain teacher buy-in by “hooking” those believed to be leaders within the grade levels. The administrators’ support and encouragement throughout the implementation process for Tier 1 and Tier 2 along with turning over some of the responsibilities have empowered the teachers to take control of the initiative.

Teachers’ perceptions remain mixed. Although empowered by the prospect and positive outcomes of the program and its implementation, teachers in the lower grades are seeing more positive results with student behavior and the instructional time those teachers in the upper grades. Upper-grade teachers are becoming discouraged from the lack of results causing negative perceptions toward the program, its implementation, and the possible impact for students. It is the researcher’s opinion that this problem will eventually rectify itself as students in the lower grades move forward. Lower grade students’ exposure to RTI²B will lay a foundation for expectations which will be carried over as these students move forward in grade level. As these lower grade students move forward and expectations are consistently enforced each year, the behavior should improve in the upper-level grades.

**Recommendations for Further Studies**

Because the research school was completing Tier 2 year of implementation and had been exposed to Tier 3 training, this was a limitation of the study. Data results were limited to only two years of implementation. As a result, full impact results for instructional time, student behavior, and student achievement of RTI²B cannot be determined. The researcher, therefore, suggests extending the time frame for the study until after training and completion of Tier 3 year of implementation.

The sampling used was restricted to a small, rural K-8 school with between 200-300 students and 43 staff members — this limited member participation. Since the school has a low
number of faculty and staff, the number of participants was low. The researcher suggests choosing a sample with a larger number of faculty and staff in order to increase the number of participants for the study.

The inclusion of counselors in the implementation process of RTI\textsuperscript{2}B is an integral part of the program. A limiting factor in this study was the inconsistency of the availability of the counselors and their partnership with the school, its teachers, and its students. The researcher suggests choosing a sample where counselors are full-time at the school and are considered a member of the RTI\textsuperscript{2}B team.

**Researcher’s Reflection**

As a seasoned educator, the researcher has witnessed the passing of many initiatives looking to make improvements to education. Like many of those programs, response to intervention was thought to be one of those by the researcher. RTI for academics has found its place and has embedded itself into the curriculum to improve student academic achievement. With student behavior problems increasing across the country, behavior RTI is becoming more prominent in the educational world.

Most often students with behavior issues are part of the special education program. As a special education teacher, the researcher found RTI\textsuperscript{2}B to be an integral aspect of her position in the classroom. As part of her philosophy on education, research on RTI\textsuperscript{2}B found the incorporation of her core beliefs on relationship building, the utilization of counselors, classroom management, and positive reinforcement. By researching a school where the researcher has a direct association, the research project made a personal impact on her understanding, application, and outcomes of the implementation and impact of RTI\textsuperscript{2}B. Also, more relationships were formed with teachers and administrators encouraging communication about RTI\textsuperscript{2}B, collaboration
with problems and solutions for students, and sustaining professional relationships.

The doctoral process has enhanced the researcher’s knowledge about leadership skills and teacher empowerment. Being a leader does not mean one must be in administration. Being a leader can come in many forms. The researcher has been able to share the knowledge with colleagues as problems focused on in courses and from the research. This knowledge has empowered the researcher with more confidence in her ability to problem-solve, collaborate, and lead.
References


Chitiyo, J. & May, M. E. (2018, Winter). Factors that may hinder the implementation of the school-wide positive behavior intervention support model. *JAASEP*.


Evans, C. (2012). Teacher perceptions and behavioral strategies for students with emotional disturbance across educational environments. Preventing school failure. 56(2), 82-90.


students at risk for or with emotional disabilities: Current issue and considerations.


Behavior disorders. 43(3), 357-369.


Martin, D. (2013, Fall). Teachers’ perceptions and satisfaction with positive behavioral intervention supports in a Southeast Georgia school district. (Doctoral Dissertation, Georgia Southern University). Retrieved from digitalcommons.georgiasouthern.edu


myths/


What is qualitative research?. (n.d.). The University of Utah. Retrieved from https://nursing.utah.edu/research/qualitative-research/what-is-qualitative-research.php


### RTI²B STAFF SATISFACTION SURVEY

<table>
<thead>
<tr>
<th>Survey Statements: Please respond to the following statements indicating your agreement or disagreement with each statement listed below by checking the appropriate box to the right of the corresponding statement.</th>
<th>1=Strongly Disagree</th>
<th>2=Disagree</th>
<th>3=Neutral</th>
<th>4=Agree</th>
<th>5=Strongly Agree</th>
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<tbody>
<tr>
<td>1. My school has clearly defined expectations for appropriate behavior.</td>
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<td>2. I have taught the expectations to my students this year.</td>
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<td>3. Student compliance to rules and expectations is reinforced consistently in my school.</td>
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<td>4. The hierarchy of consequences for inappropriate behavior is used consistently.</td>
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<td>5. I find it easy to follow the office referral process.</td>
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<td>6. I am satisfied with the process that is in place to discuss student behavior concerns in my school.</td>
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<td>7. Student behaviors have improved since implementing RTI²B.</td>
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<td>8. Instruction time has increased in my classroom because I am not dealing with disruptive behaviors since beginning RTI²B.</td>
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<td>9. My students' grades and academic achievement have improved since beginning RTI²B.</td>
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<td>10. My students are more engaged in class discussion and projects.</td>
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<td>11. I communicate with parents regarding their child's behavior.</td>
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<td>12. I regularly receive data about behavior concerns across the school.</td>
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<td>13. Staff and students in this school show respect for each other.</td>
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<td>14. I feel safe and comfortable in this school.</td>
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<td>15. The students in my classroom feel safe and comfortable at this school.</td>
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</table>
16. The students feel safe and comfortable in non-classroom settings.

17. Overall, I feel the RTI²B initiative has had a positive impact on student behavior.

18. Overall, I feel the RTI²B initiative has had a positive impact on teacher/staff behavior.

19. Overall, I feel the RTI²B initiative has had a positive impact on instructional time.

20. Overall I feel the RTI²B initiative has had a positive impact on student achievement.

Would be willing to participate in an interview concerning this RTI²B and its implementation and impact on the school?

_____ No, I do not wish to volunteer for interview.

_____ Yes, I, ______________________, would be willing to volunteer to participate in an interview.

Signature_______________________________

Date____________________________________________
Appendix B

Semi-constructed Principal Interview Questions

1. Name
2. Teaching background
3. What was your first impression of behavior RTI?
4. Why did you decide to implement the initiative at MES?
5. Who is on your RTI²B team?
   a. Why did you choose these people as members? What did you feel they had to offer to the program?
   b. According to both counselors assigned to MES, they were not included on the team. Since counselors, according to research, are considered an integral member of the RTI²B team, why did you not include them?
6. How often does the team meet?
7. What data do you use to evaluate student behavior?
8. Do you share this data with teachers who are not on the team?
9. How did you get the teachers to buy-in to the initiative?
10. What kind of leadership role have you taken as a member of the team and as principal to encourage participation in the program?
11. What has been teacher reaction to the implementation?
12. What have been teacher comments made to you about the program or what they are seeing in their classrooms?
13. What are your perceptions about your teachers’ reactions? Do you feel they have put forth their best efforts for implementation?
14. What has been student reaction to the implementation?
15. Have students said anything about the program, their achievement, or school climate?
16. What have you noticed in relation to behavior, classroom climate, and instruction time when conduct your walk-throughs and evaluations?
17. When you review student data, achievement and behavior, what have you noticed since implementing RTI²B?
18. What types of incentives have you used for both teachers and students for this initiative?
19. What has been your greatest challenge(s) while implementing?
20. What have been your successes?
21. What are some changes you feel need to be made in order to be more successful with the program?
22. What behavior program are established and used for each tier?
23. Who is responsible for data recording in each tier?
Appendix C

Semi-constructed Assistant Principal/Testing Coordinator

Interview Questions

1. Name
2. Teaching background
3. What was your initial perception of RTI²B when it was mentioned/first developed?
4. What were your thoughts when you heard MES would begin implementing the initiative?
5. What is/was your role in implementation?
6. What is your role on the RTI²B team?
7. As an administrator, what leadership role do you use to promote teacher and student buy-in?
8. What were your teachers’ initial perceptions when they were told about implementing RTI²B?
9. Have teacher perceptions changed over since RTI²B was first started?
10. Describe teacher involvement before, during, and currently.
11. Have you observed changes in student behavior?
12. During evaluations and walk-throughs, what are you seeing in regards to instructional time, student engagement, student achievement, and student behavior?
13. As testing coordinator, are there any differences in achievement for students who have chronic behavior problems? For teachers who do and do not support the initiative?
14. Do you share information/data presented or discussed at the RTI²B meetings with others in the building?
15. Give a general description of the RTI²B process utilized at MES. Include reward systems, incentives for teachers and students, and ODR policy.
16. Research indicates that counselors are a vital member of the behavior. According to both counselors who were or are currently assigned to MES, they were not part of the team. Can you elaborate as to why?
17. How would you describe student reaction to the initiative?
18. As an administrator and testing coordinator, what would you describe as the most challenging and most successful aspects of the program? Are there any aspects you would change?
19. What are your thoughts about the teachers’ efforts and reactions toward the implementation? Do you feel they have put forth their best efforts to support the program?
Appendix D

Semi-constructed Focus Group Interview Questions

1. Name
2. Describe your role, if you have one, in the RTI²B implementation process at MES.
3. What changes, if any, have you noticed in regards to instructional time? Are you still having a significant amount of disruptions from dealing with behavior, or have they decreased?
4. What evidence, if any, have you seen to indicate student achievement has improved?
5. Do you feel the lack of a counselor on the RTI²B team had an effect on the effectiveness of implementation?
6. Compare your initial perceptions to the program to your current perceptions.
7. How would you describe Sharon and Sherry’s leadership skills during the implementation process? What do you feel they should have done differently before, during, and currently?
8. Describe the most challenging and most successful aspects of the program.
9. If you could change something about the initiative/implementation process, what would it be?
10. Have you noticed a difference in teacher perceptions toward the program?