BEHAVIORAL INTERVENTIONS USING THE RESPONSE TO INTERVENTION MODEL FOR STUDENTS WITH AUTISM SPECTRUM DISORDER

A Project

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Department of Graduate and Professional Studies in Education
Abstract

of

BEHAVIORAL INTERVentions USING THE RESPONSE TO INTERVENTION MODEL FOR STUDENTS WITH AUTISM SPECTRUM DISORDER

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Penelope Schrader-Rogers

As more children are diagnosed with Autism Spectrum Disorder (ASD), schools are struggling to meet their behavioral needs in the general education environment. Oftentimes, school administrators, behavior support teams, and general education teachers do not have a good understanding of how to modify behavioral interventions for students with ASD. The purpose of this project is provide administrators, behavior support teams, and general education teachers with resources and best practices for administering behavior interventions to students with ASD. More specifically, participants and readers will be presented with specific modifications to make behavioral interventions often used in the response to intervention model more suitable for the specific needs of students with ASD.

____________________________, Committee Chair
Stephen E. Brock, Ph.D.

____________________________
Date

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Chapter 1

INTRODUCTION

Background of the Problem

According to the Center for Disease Control and Prevention (CDC, 2012), the incidence rate for Autism Spectrum Disorder (ASD) is now as high as 1 in 110; and of that 1 in 70 boys. A review of diagnostic trends indicates that there is an overall increase in diagnosis, not just in the United States but worldwide. Some of the factors that could be contributing to an increase in identification could be an increase in public awareness and policies, diagnostic substitution, case identification, and improved detection (Saracino, Noseworthy, Steiman, Reisinger, & Fombonne, 2010).

Given that students with ASD often struggle to understand nonverbal communication and engage socially, it can be difficult for these students to understand school rules and function in the classroom. These issues can make it difficult for students with ASD to participate academically in the least restrictive environment, the general education classroom. There are, however, behavioral interventions that can support students with ASD to learn social rules and socially acceptable replacement behaviors in the general education classroom (Sansosti, 2010).

Many schools use or are planning to use the Response to Intervention (RTI) Model to provide systematic and data based tiers of academic and behavioral interventions based on the needs to students. The behavioral interventions include three tiers. Tier one includes a school-wide behavioral program that is presented to all
students. The goal of this tier is to teach students prosocial behavior and reduce problem behaviors. Usually, 80% to 90% of students only need Tier I intervention to be successful in the school environment. Tier II interventions are often needed by about 5-10% of students. Tier II interventions often include strategic small group intervention with progress monitoring. For students with behavioral issues, Tier II intervention often includes social skills training. Tier III behavioral interventions often are needed for 1-5% of students who do not respond adequately to Tier I or Tier II interventions or display dangerous behaviors that require immediate individualized intervention. Tier III behavioral interventions often include functional behavior assessment and cognitive behavioral therapy (Reese, Richman, Zarcone, & Zarcone, 2003; Rotherham-Fuller & MacMullen, 2011). Tier III intervention sometimes includes evaluation for disability eligibility and special education services (Brown-Chidsey & Steege, 2010)

There are evidence-based interventions that are effective for students with ASD. For example, Integrated Play Groups (Wolfberg & Schuler, 1993), Social Stories (Gray, 2000), and Power Cards (Sansosti, 2010) have all been shown to improve the social skills and communication skills of students with ASD. However, RTI Models for behavioral interventions do not specifically address the behavioral or learning needs of these students. However, it is possible to modify RTI interventions using research-based methods or Best Practice for meeting the behavioral needs to students with ASD.
Purpose of the Project

This project aims to help administrators, behavior support teams, and teachers modify RTI behavioral interventions to be more effective for students with ASD. The primary purpose is to educate school personnel about ASD, review the tiers of RTI behavioral interventions, and teach intervention modifications using best practices in providing behavior support to students with ASD.

Information in this project has been developed into a three hour training workshop and handouts that accompany the presentation. The workshop is designed for administrators, behavior support teams, and educators who are involved in providing behavior support to students with ASD. It is hoped that through the development of this project readers or participants in the workshop will obtain the knowledge necessary to understand the symptoms of ASD and effectively provide effective and research based behavior support to students with ASD. The goal is that given this training, more students with ASD will be able to learn in the least restrictive environment of the general education classroom with modified behavior interventions using RTI.

Definition of Terms

Autism Spectrum Disorder: general term for a group of complex disorders of brain development. These disorders are characterized, in varying degrees, by difficulties in social interaction, verbal and nonverbal communication and repetitive behaviors. They include Autistic Disorder, Rett syndrome, Childhood Disintegrative Disorder,
Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) and Asperger syndrome. With the May 2013 publication of the new *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (DSM-V), these autism subtypes will be merged into one umbrella diagnosis of ASD.

*Cognitive Behavioral Therapy*: Cognitive behavioral therapy (CBT) is a form of treatment that focuses on examining the relationships between thoughts, feelings and behaviors

*Functional Behavior Assessment*: Functional behavioral assessment is generally considered to be a problem-solving process for addressing student problem behavior. It relies on a variety of techniques and strategies to identify the purposes of specific behavior and to help teams select interventions to directly address the problem behavior.

*Positive Behavior Support (PBS)* PBS is a practical and empirically driven approach to decreasing problem behaviors and increasing quality of life. It involves using direct instruction to teach students appropriate, prosocial school behavior.

*Response to Intervention (RTI)*: is a method of academic and behavior intervention used to provide early, systematic assistance to students who are having difficulty learning or functioning in the classroom. RTI seeks to prevent academic failure through early intervention, frequent progress measurement, and increasingly intensive research-based instructional interventions for children who continue to have difficulty.
Social Stories: Social stories are short, child-specific situations presented in formats that show appropriate skills and social responses to people, events and concepts. The stories elicit relevant cues that call for appropriate social responses.

Limitations

This project is designed to give administrators, behavior support teams, and educators a better understanding of the behavioral challenges faced by students with ASD. The goal is to teach how to modify behavioral interventions in the Response to Intervention (RTI) model to be more effective for students with Autism Spectrum Disorder. This project is an information guide and a tool that provides modifications and best practice suggestions for providing behavioral support for students with Autism Spectrum Disorder.

Statement of Collaboration

This project was developed collaboratively. Each co-author had equal responsibility in the research, collection and compilation of the project. All duties performed in the development of the project and training workshop were shared equally.
Chapter 2

LITERATURE REVIEW

There are many factors that contribute to the rise in prevalence of autism such as the use of better screening and diagnostic tools, increased public awareness of the disorder, earlier diagnosis of children, and the use of the broader term autism spectrum disorder (ASD; Boyd & Shaw, 2010). Given that autism is now considered a spectrum disorder, this means that symptoms can range in severity in presentation. Children who exhibit few characteristics are at the mild end of the spectrum, whereas children with many characteristics are at the severe end. At times, students with ASD may struggle with understanding social cues and functioning in the classroom, transitions, and less structured environments such as recess and lunch. The behavior needs of these students can often be served in a less restrictive environment such as the general education environment with supports provided by the Response to Intervention (RTI) Model. This model of progressively more intensive and individualized interventions uses data collection and progress monitoring in order to guide practice and level of intervention. Many students with milder symptoms of ASD can be successful in general education classrooms with the addition of what is referred to as Tier 1 and Tier 2 supports of a school’s RTI behavioral intervention program (Sansosti, 2010). For students who need Tier 3 intervention, there are evidence-based interventions that provide guidelines for best practice in meeting the behavioral needs of students with ASD. After further
discussing autism and RTI, this chapter will review the literature and outline the best practices for providing behavior support for students with ASD using the RTI model.

**Autism (ASD)**

Autism is identified as a range of “spectrum disorders,” meaning that symptoms can affect each person differently and there is a range of symptom severity falling along a continuum. ASD can be categorized as a group of developmental disabilities that can cause significant communication, social and behavioral challenges. Symptoms can fluctuate from extreme to mild. There are several categories along the spectrum that equate to five specific diagnoses that are detailed within the *Diagnostic and Statistical Manual of Mental Disorders* (DSM IV-TR). These diagnoses include Autistic Disorder, Asperger’s Syndrome, Rett’s Disorder, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder Not Otherwise Specified. Out of the listed disorders the two most frequently associated with ASD are Autistic Disorder and Asperger’s Syndrome. These two disorders have received the most attention in the last decade and are at the forefront of most schools’ and parents’ minds. Autistic Disorder is often referred to as “classic autism,” it is marked by abnormal or impaired development in social interaction, most markedly lack of language skills. The child may also display a restricted repertoire of activity and interests. Asperger’s Disorder is characterized as children that have impaired social development, with restrictive patterns of behavior, interests or activities, with the deviation being that they do not have delays in communication. Pervasive Developmental Disorder is characterized
when children experience difficulty in two of the three identified areas of Autistic Disorder but do not meet the diagnostic criteria. It can also be used for clinicians who are hesitant to diagnosis a child with Autism. Within the confines of these definitions there is great variability. As stated previously, symptoms can vary greatly from person to person, and each child’s manifestations and challenges are unique (American Psychiatric Association, 2000).

ASD can inhibit social interactions, language/communication, and behavior. Social variations can fluctuate between being completely socially unaware to being interested in social interactions with peers and adults. Communication can vary between having no language system to being able to communicate effectively. Finally, under the guise of behavior, a child may experience very directed and simple body movements to being able to express themselves abstractly with very limited repetitive or stereotyped behaviors (Wing, 1991). It is for this reason that it is difficult to define the disorder in very specific terms and chart its prevalence. Additionally, the variability within the description makes tracking and diagnosing difficult (Brock, Jimerson, & Hansen, 2006). When conducting research for statistics for national numbers, there were several regional studies with findings however those findings were not generalized for the entire population.

For those diagnosed with autism there currently is no specific causational link; however there are several factors that have been associated with the symptomology of autism. These factors include: genetics, environmental factors, and neurobiology. In
the area of genetics, Ozonoff and Rogers (2003) noted there is a 3 to 6 percent increase in probability for siblings of children who have autism. Additionally, identical twin studies have found a 60 percent chance that both twins will be diagnosed with autism if one twin has been diagnosed. Absent a specific genetic disorder such as Fragile X Syndrome, less than 10 percent of autism cases have a specific genetic causal link and currently there is no evidence that autism is associated with a specific gene deficit (Ozonoff & Rogers, 2003). Environmental factors are also thought to contribute to the development of autism, in that, they interact with the genetic factors at play, despite this belief there has not been one specific environmental factor linked specifically to autism and the development of the disorder. However there are some environmental factors that are thought to play a role, these factors include prenatal and postnatal factors, which would include material infections, drug exposure and infant infections (Newschaffer, Fallin, Lee, 2002). (Courchesne, Carper, & Aksoomoff, 2003) and colleagues noted certain neurobiological factors that have been identified include a slightly smaller brain size at birth followed by a rapid increase in head circumference. Additionally Brock et al. (2006) noted a difference in the amount of “cerebral grey matter, cerebellar white matter volumes, and the anterior cerebellar vermis area” (p. 17) for individuals affected with autism versus those who are not affected. Additionally there has been an association with an increase in serotonin in individuals affected with autism. Again, despite these causational links there is not one identified factor
associated with autism. It is, however, believed that there are a variety of factors that in combination contribute to the symptoms associated with autism.

Due to the variability of autistic symptoms there is not a prescribed outcome or prognosis; one certainty is that the disorder will be present for the entirety of a person’s life. One of the greatest indicators for a more positive outcome is the development of language. Children who fail to develop functional communication tend to develop more problematic behaviors (Brock et al., 2006). When working with children with autism, the most effective interventions include “the services of multiple professionals, including resource specialists, speech and language pathologists, occupational therapists and physical therapists” (Brock et al., 2006, p. 88-89). This team should be focused on meeting each student’s individual needs. Mastergeorge, Rogers, Corbett, and Solomon (2003) note that interventions need to begin early, be intensive, with a low teacher/student ratio, involve the whole family, delivered by experienced practitioners, have targeted interventions based on the child’s needs, and frequent evaluation of progress. One of the most effective strategies for working with children with autism is applied behavioral analysis, which is useful in addressing core deficits as well as challenging behaviors (Mastergeoge et al. 2003). Specific interventions can include a social skill training that is tailored to the individual needs of the child and psychopharmacological interventions. It should be noted that psychopharmacological interventions are employed to as “adjunctive therapies to educational interventions, targeted to behaviors that are not completely addressed by behavioral interventions
alone” (Brock et al., 2006, p. 94). Medications are only implemented to reduce problematic behaviors and will not completely remediate the symptomology of the disorder.

According to the Center for Disease Control and Prevention (CDC, 2012), the incidence rate for ASD is now as high as 1 in 110; and of that 1 in 70 boys are diagnosed with ASD. Of those diagnosed with ASD, only 2.59% of children under age three are being served through the federally-funded Early Intervention Program, a program designed to mitigate developmental delays and disorders. A 2008 CDC survey was conducted by the Autism and Developmental Disabilities Monitoring (ADDM) Network and of the 14 sites surveyed, 1 in 88 children, age 8, were diagnosed with an ASD in the United States. A comparison to data that was collected in 2002 showed a 78% increase in children being diagnosed with ASD. A review of the statistics noted that most children were being identified at an earlier age, primarily before the age of three; however a majority of the diagnoses were occurring after the age of four unless there was severe symptomology present. Of those diagnosed, boys were five times more likely to be diagnosed than girls (CDC, 2012). A review of diagnosis trends indicate that there is an overall increase in diagnosis, not just in the United States but worldwide. Some of the factors that could be contributing to an increase in identification could be an increase in public awareness and policies, diagnostic substitution, case identification, and improved detection (Saracino, Noseworth, Steiman, Reisinger, & Fombonne, 2010).
Response to Intervention (RTI)

Response to Intervention (RTI) is a way of looking at the cause-effect relationship(s) between academic or behavioral intervention and the student’s response to the intervention. RTI is a systematic and data based method of identifying, defining, and resolving students’ academic and/or behavior difficulties. Most of the early research about RTI has focused on reading interventions. However, more work is being done to show how to use RTI to support students’ behavioral needs (Nelson et al., 2009). RTI activities are primarily part of general education instruction (Moore & Whitfield, 2009). The 2011 RTI Implementation Report by Spectrum K12 (2011) indicates that implementation of RTI for academics is ahead of implementation for behavior, particularly in the areas of screening assessments, research based interventions, and data driven decision-making.

Although teachers have always tried to help students who are struggling, RTI is different in that it helps students by putting the assessment and instruction practices in a data based system with stages (Glover & DiPerna, 2007). In the RTI model, all students are screened and monitored for educational outcomes and those needing more assistance are given targeted intervention and monitored regularly. RTI is systematic and data based.

The figure of the RTI model is a triangle with three sections of the triangle representing the three tiers of RTI (See appendix A). Tier I is at the bottom of the triangle and represents general education curriculum. This tier is provided to all
students in each grade level and is comprehensive and universal. Usually 80 percent of students will be successful with Tier I intervention alone. For 20 percent of students, who are not successful with Tier I alone, Tier II interventions are added. Tier II consists of strategic small group instruction with regular progress monitoring. Tier II should be added in addition to Tier I interventions. These students require more instruction to attain their learning and/or behavioral goals. About 15 percent of students require Tier I plus Tier II interventions. A small subset of students, usually around five percent overall, do not respond well enough to the interventions in Tier I and Tier II. Tier III activities include comprehensive evaluation to identify whether a student has a disability and/or meets the criteria for special education. While a comprehensive evaluation is being conducted, students in Tier III require intensive instruction and/or behavior support daily, sometimes supplanting portions of their Tier I and Tier II interventions. If the student is found eligible for special education, an individualized education plan (IEP) is developed that specifies what instruction and behavior support the student needs across all three tiers. In some models, Tier III is not special education. In models where Tier III requires special education eligibility, students who do not qualify receive Tier II interventions while the team participates in ongoing problem solving (Brown-Chidsey & Steege, 2010).

There are five steps of problem solving in the RTI model by Brown-Chidsey and Steege (2010). The first step is problem identification by observing the student and recording student performance. The second step, problem definition, involves
quantifying the perceived discrepancy. The third step is designing intervention plans by exploring alternative goals and solution hypotheses. The fourth step is implementing the intervention and progress monitoring, as well as monitoring fidelity of the intervention and data collection. The fifth step is problem solution by requantifying the discrepancy and determining if the original problem is being solved through this attempted solution.

Research on applying the RTI three-tiered model to behavior support is associated with improved school climate and improved social and academic student outcomes (McIntosh, Campbell, Carter, & Dickey. 2009. Hawkin, Vincent, and Schumann (2008) describe RTI as both an efficient and effective approach for teaching positive and productive behavior. Furthermore, a study by McClain, Schmertzing, and Schmertzing (2012) also found that the implementation of RTI in a rural preschool program lead to fewer referrals for special education.

With behavioral interventions, schools use several strategies to determine if Tier I interventions are not working. They often look at Office Discipline Referrals (ODRs), student attendance, tardies, and poor academic performance. Some schools screen students to determine which student may not be responding to Tier I interventions (Walker, 2010). The Systematic Screening for Behavior Disorders (SSBD) rating system allows identification of students who may benefit from Tier II interventions. On the SSBD, teachers rate and identify students who they believe are at high risk for externalizing and internalizing disorders. During the second stage,
teachers complete behavior rating scales on these students. The third stage involves
direct observation in the classroom of students who appear most at risk (Hawken et al.,
2008).

When identifying students who do not appear to be benefitting from Tier II
interventions, schools most often rely on data from direct observation of the problem
behavior. Another option is to use Daily Progress Reports (DPRs). On DPRs, students
are given a rating on predetermined behavioral goals throughout the school day. At the
end of the day, the percentage of points is calculated and progress over time is
measured to determine if the student is reaching his or her goals. Preliminary research
indicates that points earned on DPRs can serve as indicators of effectiveness of
behavior interventions and are easily gathered and analyzed by school staff (Chaney,
Flower, & Templeton, 2008). When evaluating behavior interventions in Tier III, best
practices states that data should be collected regarding individual behaviors using a
functional behavior assessment, or for even more rigorous data collection, a functional
analysis assessment.

**Autism Spectrum Disorder and Response to Intervention**

With an increase in diagnoses there is a movement to ensure that children with
ASD have their educational needs met. According to the National Center for Education
Statistics (2012), the percentage of children being served in special education with the
designation of autism rose to .8 percent. This is a .4 percent increase in children from
2004-2005, this increase equates to approximately 696,548 children nationwide.
Additionally of those children with a primary diagnosis of autism, 53.1 percent of them are spending 21 to more than 60 percent of their time outside the general classroom, 9.6 percent of children are being serviced in a separate school or residential facility, only 37.4 percent of autistic students spend less than 21 percent outside the general education classroom (National Center for Education Statistics, 2012).

Yianni-Coudurier et al. (2008) note that the public policies of most countries favor inclusion for individuals with disabilities. In the U.S., there is an increasing trend to include students with ASD in general education classrooms (National Research Council, 2001). This trend is sometimes problematic for schools, especially when the needs of students with ASD exceed the abilities and skills of teachers in general education classrooms. It is sometimes difficult to serve students with ASD due to the variety and severity of the symptoms that they may display. For example, a child may perform academically with their same age peers but not socially. Yanni-Coudurier et al. (2008) noted several studies demonstrating that the social skills of students with ASD improve following mainstreaming, thus providing a positive outcome for the child with ASD.

Many children with ASD are being excluded from the mainstream classroom because of behavior. These behaviors can include: not showing a wide range of emotions, exhibiting behavioral extremes (unusually aggressive, fearful, sad, shy), unusually withdrawn and not active in social situations, easily distracted and having trouble focusing on an activity for more than five minutes. In response to meeting the
needs of these students, schools and school districts are looking to the Response to Intervention model. Theoretically, this tiered system will allow children’s needs to be met in the least restrictive means possible using a multtier service delivery, data collection at each tier, and data-based decision making (Brown-Chidsey & Steege, 2010). However, given that RTI is a comprehensive model rather than a specific curriculum, there are many variations in its implementation from setting to setting (Sansosti, 2010).

**Best Practices in Addressing Behavioral Issues**

**Tier 1 School Wide Positive Behavior Rules and Implementation**

The most current research on the RTI model primarily focuses on implementation for academic concerns and provides services on a continuum. This model is easily applied to behavioral concerns as well, given that behavior issues also manifest on a continuum of severity. McIntosh et al. (2009) indicate that the incentive to implementing an RTI program is that it focuses not only on the remediation of a problem but also on the prevention of more severe problems. They state, “A continuum of behavior support ranges from universal strategies to prevent the occurrence of problems for all students in the school, to a highly structured, individualized interventions for students who display severe skill deficits” (p. 83). That being said, there are researched models that are effective in mediating behaviors on a school wide implementation level. Positive Network Environment for Trainers (PENT) outlined the foundations for a Tier 1 school-wide behavioral program. The necessary components
include: unconditional positive regard, five to one positive gestures to corrective comments, fostering human needs in each class, individual reinforcement as needed, on-going rule and procedure teaching, and differentiated instruction and accommodations offered to all students (Browning-Wright, 2009).

The basic premise of a Tier 1 intervention is that school personnel will implement a proactive universal system for all students. This system is assumed to be a generic set of interventions aimed at providing 80 to 85 percent of the school population with adequate support in the general education environment (McIntosh et al., 2009).

As previously noted, children with ASD can have deficits in numerous areas including: language, nonverbal communication, cognitive abilities, and sensory processing. These deficits can affect the child’s ability to access the general curriculum and classroom both academically and socially. It is imperative that the school finds a way to encourage positive behavior support not only for the children at risk but school wide. Special consideration needs to be taken when working with children with ASD; there should be a priority for interventions that focus on functional spontaneous communication, social instruction, cognitive development, and play skills (Brock et al., 2006). It has been found that the most effective interventions for children with ASD occur in a setting with ongoing interactions with typically developing peers. A well-structured and implemented Tier 1 program will provide just this interaction while interjecting skills for positive behavior change.
There are several steps that have to be implemented to ensure that a Tier 1 intervention is effective and targeting the appropriate students. Initially the school needs to have an established screening measure. Most schools using RTI have an established team that is responsible for filtering the student referrals. This team is usually referred to as the leadership team, and is comprised of administrative, certificated and classified staff, as well as any necessary support staff (Walker, 2010). It is this team that determines which screening tool will be utilized and how the children will be screened. Once the tool has been identified the school will systematically screen all students for academic and behavioral risk factors. It is the team’s responsibility to determine how often students will be screened and re-evaluated. Walker (2010) suggests that once the screening has taken place, the results should be reviewed by a Student Study Team (SST). The SST team is responsible for collaborating with classroom teachers to review screening results, matching students to existing services, managing incoming referrals, and providing support and consultation when needed. Students with the most immediate needs are matched with Tier 2 or 3 supports, while the entire study body will be introduced to the school wide behavior intervention program. Walker noted that the most important step in a Tier 1 intervention is the continuous monitoring of student progress. This allows the team to determine if the services being provided are effective. Additionally children can be moved up or down the tiers if necessary. There are several established and validated programs that a school can choose that provide a structured school wide intervention.
These programs are designed to target social emotional and behavioral issues on a school wide level.

**Second Step.** Second Step is a program designed to create a school wide culture that embraces respect and acceptance. “Second Step is a violence-prevention curriculum created with the dual goals of reducing development of social, emotional, and behavioral problems and promoting the development of core competencies (Frey, Hirschstein, & Guzzo, 2000, p. 1).” The cornerstone of the program is to help teachers “see” the invisible child or “see beyond” challenging behaviors (Committee for Children, 2002). Teachers and counselors are primarily responsible for implementing Second Step. This program is suitable for children from preschool to middle school. The purpose is to cultivate a school-wide environment that addresses children's social problems and supports learning and the ongoing use of positive social behaviors.

Second Step emphasizes the importance of observation, self-reflection, performance, and reinforcement in the acquisition and maintenance of behavioral repertoires that are integrated into a developmental sequence of social-emotional skill acquisition (Frey et al., 2000). The program is rooted in Cognitive Behavioral Theory, in that one’s thoughts dictate one’s actions and by changing one’s thought pattern we can alter reactions to social situations.

Second Step is structured so that all teachers in the school provide the lesson to their class. The program is focused on improving children’s skills in three general areas (Committee for Children, 2002). The first area is empathy; children are taught to
identify their emotions and recognize possible causes of these emotions. They then learn to respond to social situations thoughtfully rather than impulsively. As a way of achieving this, they are taught problem solving skills. Finally, they are taught ways to manage their anger. The effectiveness of the program is rooted in the implementation; because it is structured as a school-wide program the children are all receiving the same message. They are learning the principles from their teachers and hearing the philosophy from all of the staff. Everyone is speaking the same language and focused on the same goal. The expectations for the children are universal.

In a 2012, Brown, Jimerson, Dowdy, Gonzalez, and Stewart studied the effectiveness of Second Step. The study implemented the Second Step curriculum in a California elementary school for a year. At the end of the year they assessed the data and found that “there were significant increases in student knowledge of social emotional skills from pre- to post- intervention” (p. 870). Their results were consistent with previous findings in that Second Step is an effective program as “compared with control groups, leading to increases in prosocial behavior and decreases in aggressive behaviors, and having strong ecological validity (p. 865).” Despite their consistent findings they did not find an increase in social-emotional functioning at their post-intervention screening. A possible explanation for the lack of changes and increase in anti-social behaviors, most notably in the third grade, could be attributed to a greater self-awareness on the part of the child. This self-awareness was attributed to the program and the lessons, and therefore a more accurate self-report at post-intervention.
Brown et al. (2012) also suggested external influences, such as exposure risks in the community could have impacted the children during the school year and lead to vulnerability to engaging in at-risk behaviors.

**School Wide Positive Behavior Intervention and Support (SWPBIS).**

School Wide Positive Behavior Intervention and Support (SWPBIS) is a Tier 1 intervention program that focuses on behavior and educates all children, including those with ASD, in a general education setting. SWPBIS is the school system-level application of Positive Behavior Support (PBS); PBS is a practical and empirically driven approach to decreasing problem behaviors and increasing quality of life (McIntosh, Filter, Bennett, Ryan, & Sugai, 2010). Although SWPBIS is a behavior program separate from RTI, the authors believe that they can be utilized together and therefore address academic and behavior concerns simultaneously. SWPBIS is a behavior intervention program that many schools with RTI are examining as a way of addressing social and behavior problems on a school wide level. The program is structured as a continuum of behavior interventions that are consistent with the core principles of RTI.

The interventions offered with SWPBIS are systematically applied to all students based on their demonstrated level of need and addresses the role of the environment as it applies to the prevention and improvement of behavior difficulties (Benner, Nelson, Sanders, & Ralson, 2012). Thus, the program can be well suited for children with ASD due to their often varying severity of social skill and
communication deficits. A study conducted by Benner et al. (2012) examined the efficacy of implementing SWPBIS as a school wide program and found that the behavior intervention program had a significant to moderate effect on reducing problem behaviors and a trend, albeit not significant, for increasing the percentage of on-task behavior. As a means of implementing the program, the entire student body was taught about the expectations of the program. This ensured that when the teachers began implementing the program, the children understood the expectations of the teachers. The study did note that results varied depending on the socioeconomic status of the school. Schools with higher socioeconomic status often had higher gains. This factor would need to be considered when looking at the child with ASD and the school that the child is attending. The gains that are expected from a Tier 1 intervention may be hindered by the child’s socioeconomic status and not just by the student’s behaviors. The study also noted that the effects of treatment were influenced by the students’ initial baseline level of problem behavior. The study found that children who were assessed as having externalizing behaviors would receive a greater benefit being served at the Tier 2 level.

Programs like Second Step and SWPBIS provide systematic expectations for children in a structured setting. For many students with ASD, this level of structure may provide sufficient support and adequate direct instruction of behavioral expectations. Many students with ASD will be able to participate in the general population without being excluded. By implementing Tier 1 interventions, many
schools will be able to reduce problem behaviors of all students and at the same time meet the needs of at risk students. The effectiveness of these programs will allow the child with ASD to remain in the general education classroom and still receive support.

Most studies focus on inclusion of children with ASD while adding modifications to the general education classroom, and although these interventions could be considered a Tier II or III intervention they may be applicable as a Tier I intervention by exposing the entire class to the modification. Crosland and Dunlap (2012) suggest utilizing antecedent procedures in the classroom, thereby manipulating an aspect of the environment to reduce an undesired behavior. Along with antecedent procedures prompting strategies and visual schedules have also been found to be effective interventions. Prompting strategies “that supplement the general instructional routine are often needed to elicit responding to academic or behavioral activities” (p. 255). Additionally visual schedules are an effective strategy to increase predictability in the classroom. As stated previously, although these interventions have been found to reduce problematic behaviors for children with ASD and maintain them in a general education classroom they can also be effective in providing structure and consistency to the general population and therefore effective as a Tier I strategy. If the program is not effective in mitigating a student’s behavior, it may be necessary to utilize Tier 2 interventions as appropriate. At this time, there are no studies showing that Tier I interventions are specifically effective for students with ASD. There is a need for more research on this topic. Sansosti (2010) states that some Tier I interventions may be too
subtle for some students with ASD. He suggests that they may be effective for some higher functioning students but that many students with ASD will need Tier 2 interventions. Sansosti (2010) states that Tier 2 interventions may provide the more direct, systematic instruction on the specific social skills that many students with ASD need to learn to develop appropriate social skills.

**Tier II Strategic Small Group Instruction with Regular Progress Monitoring**

The majority of the research on response to intervention for behavioral interventions has been on Tier 1 implementation. There has been little research describing or evaluating Tier II interventions. One analysis of a nationwide sample of middle schools participating in SWPBS found that most schools try a variety of interventions for Tier II and there needs to be significantly more research regarding which interventions work best (Hoyle, Marshall, & Yell, 2011).

Tier II interventions are set up to help students who did not respond to the school-wide universal interventions. These students often need more help in learning new behavioral skills. Tier II interventions are often designed so they can be used quickly to work with students needing this more intense assistance before their behaviors escalate and they need Tier III individualized interventions. Tier II interventions for behavior include social skills groups, mentoring or peer mediated approaches, integrated play groups, and the Behavior Education Program, also called the Check In/Check Out System (Hawken, O'Neill, & MacLeod, 2011). Given that many students with ASD often have significant problems in the development of
communication and social functioning, some Tier II interventions may need to be modified slightly for students with ASD. Interventions for students with ASD may need to include more direct instruction, role-play, visual aids and other accommodations as appropriate (Sansosti, 2010). In addition, teachers may want to plan embedded interventions such as planned opportunities to practice so that students with ASD have the chance to regularly apply the social skills they are learning.

**Social Skills Groups.** Tier II behavioral interventions often include social skills groups. Students with ASD can often benefit from social skills groups both as a Tier II intervention and as a prevention tool for students who may be at high risk for behavioral issues. Many students with ASD lack skills for navigating social situations. According to Dunlap and Fox (1999), cooperative learning groups also provide a format for including the student with ASD who may be learning skills that are different from his or her peers.

However, an analysis by Sansosti, Powell-Smith, and Kincaid (2004) indicates that the format of traditional social skills training, including direct instruction of these skills, role-play, and specific feedback, demands reciprocal interactions between the teacher and student. Students with ASD often have difficulty interpreting social cues. Therefore, Sansosti et al. (2004) state that traditional social skills training may become meaningless to students with ASD because they do not understand the interaction they are having in the role-play with the teacher. Students with ASD often need more direct instruction and repeated practice in real life situations. Furthermore, research shows
that traditional small group social skills training programs have only minimal effect in teaching social skills that generalize to other environments (Gresham, Sugai, & Horner, 2001). Sansosti (2010) suggests that in order to improve effectiveness, social skills instruction should involve first identifying target skills, outlining and implementing appropriate teaching techniques, evaluating the effectiveness of instruction, and adjusting instruction based on interviews, observational and rating scale data.

Another social skills training intervention for students with ASD is creating a club crafted around the general interests of the student with ASD. The identified student participates in the club with typically developing peers. The goal of the group is to provide the student with ASD an opportunity to engage in repeated social exposure and practice social skills and relationship building skills. Koegel, Werner, and Vismara (2005) found that by incorporating the circumscribed ritualistic interests of children with ASD as a theme of clubs involving typically developing peers, the amount of engaged time with peers and verbal initiations of the three participants in their study greatly improved.

Circle of Friends network is a group of typically developing students who meet on a regular basis to help an individual, or small group of students who is/are socially isolated (Sansosti, 2010). The group helps the student(s) with ASD to build relationships with peers and increase a sense of belonging. Circle of Friends networks also often result in improvements in peer’s acceptance of individual with disabilities
(Frederickson & Turner, 2003). There is very limited research on the Circle of Friends network. One study found Circle of Friends network to be effective at increasing appropriate social interactions during unstructured activities in schools (Miller, Cooke, Test, & White, 2003) and improving spontaneous social initiations (Gold, 1994; Kalyva & Avramidis, 2005). Sansosti (2010) suggests that schools follow a few steps to ensure safeguards for students with ASD before implementing Circle of Friends network as an intervention. He suggests selecting typically developing peers who are compliant with schools rules, interested in helping students with ASD, and have similar interest as target students. Sansosti (2010) also suggests providing training to teach peers how to deal with specific behaviors of the target student(s).

Integrated Play Groups (IPG) is a method in which the group environment is physically arranged to promote social interaction, communication, and play experiences between children with ASD and typical peers (Wolfberg & Schuler, 1993). Also, typically developing participants are trained to use skills such as getting a friend’s attention, asking to play, sharing, and giving compliments (Bass & Mulick, 2007). There are usually three to five students who regularly play together under the guidance of an adult facilitator or play guide. The play guide encourages the target child to interact with peers. The peers use skills to engage the target child. Wolfberg and Schuler (1993) found that IPG resulted in a reduction of stereotyped and isolated play and increased the amount of social play in several students with ASD. IPG was used to increase the amount of pretend play (Yang, Wolfberg, Wu, & Hwu, 2003),

**Mentoring and Peer Buddies.** Mentoring programs and peer buddy systems are used to help students develop a relationship with an adult or peer and provide attention for replacement or positive behaviors, as well as, teach prosocial behaviors. This relationship can provide support and guidance. However, research has yet to find a consistent positive finding for improved social interaction skills of students with ASD using a mentor or peer buddy (Sansosti, 2010).

McIntosh et al. (2009) found that Tier II interventions were more effective if they were based on the function of the student’s behavior. For example, if a student’s behavior is primarily motivated by attention seeking, the student would benefit more from a mentor or peer buddy in that the student will receive the attention he or she desires without engaging in target behaviors. However, students with ASD often engage in behaviors to escape social interaction and attention from others. Therefore, the mentoring program or peer buddy system may need to be adapted for students with ASD. Modifications may include a mentor creating visual reminders of social rules, giving direct step by step instruction of appropriate social skills, providing feedback, organizing opportunities for the student to practice social skills in real life situations, and providing desirable reinforcements such as escape or breaks from undesirable activities after the student engages in the desired replacement behavior (Sansosti, 2010).
Another example of a mentoring program is Power-PALS (Peers Assisting, Leading, Supporting (Collet-Klingenberg, Neitzel, & LaBerge, 2012). This program is an example of a peer-mediation intervention for students with ASD. In a study by Collet-Klingenberg et al. (2012), they organized three groups with one or two students with ASD and six typically developing students. The groups met weekly over a semester. The typically developing students taught social skills and supported the students with ASD. Unfortunately, this paper was not designed as a research study but the writers did find through data collection and antidotal feedback from students, teachers, and parents that the program was successful and warrants additional study.

**Behavior Education Program Check-In/Check-Out System.** This program was developed by Crone, Hawken, and Horner (2010). The Behavior Education Program uses the Check In/Check-Out (CICO) system that regularly checks small groups of students’ progress using daily progress reports. The CICO intervention specifically provides additional structure, prompts, instruction, feedback, and acknowledgement for students engaging in low-level social behavior errors. The student checks in with the same person every morning and afternoon. The staff member gives the student feedback on a daily progress report that is taken to classes during the day. Staff can use the daily progress report to collect data to evaluate the student’s progress. This system can be helpful for teaching students with ASD appropriate social skills while at school. Again, students with ASD who are not seeking
attention with their problem behavior may need an added reward or a desirable reinforcer during the check in/check out process.

Two studies investigating the use of CICO in 2nd grade classrooms found that it was successful in supporting the social behavior success of four of eight students whose problem behaviors were unresponsive to Tier 1 universal classroom management practices (Fairbanks, Sugai, & Guardino, 2007). The other four students needed more individualized, function-based interventions involved in Tier III interventions. Currently, there are no studies available on the effectiveness of CICO with students with ASD. More research is needed to evaluate and develop effective Tier II interventions for students in general, and specifically for students with ASD.

**Tier III Individualized Instruction**

Browning-Wright (2009) describes Tier III intervention as highly individualized in that the intervention is developed specifically based on the needs of the individual. This intervention occurs after Tier I and Tier II interventions have been found to be ineffective because the behaviors are still present or have not improved significantly (Browning-Wright, 2009). Tier III interventions can take several forms, such as: Functional Behavioral Assessment, social stories, power cards, individual counseling, such as Cognitive Behavioral Therapy; multisystemic wrap around services, and family therapy. The focus of this intervention is specifically on the child and the family. The services are tailored to their exact needs. This is a deviation from the upper two tiers that focus on groups of children rather than individuals. Functional
Behavioral Assessment is the most common behavioral intervention for children with ASD receiving Tier III intervention. Students with ASD frequently engage in disruptive behaviors to escape demands and gain or maintain access to perseverative items and activities (Reese et al., 2003). The focus of a functional assessment should include special attention to perseverative behaviors that might serve to obtain desirable sensory stimuli. Students with ASD also frequently engage in disruptive behaviors to escape aversive sensory stimuli (Reese et al., 2003). The functional assessment should also direct attention to perseverative behaviors that might serve to escape from aversive sensory stimuli. From the functional behavioral assessment, the examiner determines if differential reinforcement of alternative, other, or incompatible behavior will be necessary. The technique employed should be directed by the behavioral assessment (Neidert, Iwata, & Dozier, 2005).

**Social Stories.** Social stories are another valuable social skills training tool. Social stories are short, child-specific situations presented in formats that show appropriate skills and social responses to people, events and concepts. The stories elicit relevant cues that call for appropriate social responses (Gray, 2000). Social stories can be very useful in addressing social and communicative development issues of students with ASD. These issues include poor imitation skills, deficiencies in verbal and nonverbal communication, unusual responses to people, and inappropriate behavior. Children with ASD often are good at following routines. Social stories may draw on
this ability and assist these children in establishing a rule or routine for a particular social situation (Scattone, Wilczynski, Edwards, & Rabian, 2000).

Sansosti (2010) reports that in the past decade there has been strong support for the use of social stories. However, in a comprehensive review and synthesis of the existing research, he found that the majority of studies lacked experimental control, had weak treatment effects, and were confounded by several treatment variables making it difficult to determine if social stories alone were responsible for changes in target behaviors. They also state that there are preliminary indications that social stories may be a practical option for people with ASD due to a small number of studies with a high rate of success (Sansosti et al., 2004). Sansosti (2010) suggests completing a functional behavior assessment before writing a social story. Then, he states the educator should follow the specific guidelines outline by Carol Gray to ensure efficacy of the intervention. In a study by Xin & Sutman (2011), two teachers developed social stories including self-modeling with two children with Autism utilizing a smart board. The steps they followed for their study are the following: identify the target behavior and function, develop an appropriate social story, use power point to create a social story with pictures, use a “self-as-a-model” strategy by creating the social story again with photos of the child engaging in the replacement behavior, physically prompt the student to view the social stories on a Smart board, and have the student practice the skill in a real life situation. Both students in the study demonstrated a decrease in target behaviors and an increase in replacement behaviors.
**Power Cards.** Power cards are small cards with pictures or visual cues that represent the student’s special interest and are motivating (Sansosti, 2010). One side of the card has a motivating visual cue and the other side has a brief script providing details about a specific problematic situation or target behavior and how a hero (related to the student’s special interest) solves the problem. Usually the solution to the problem situation is written in three to five steps (Sansosti, 2010). There is some empirical support for the use of power cards. Myles, Keeling, and Van Horn (2001) documented marked improvement in student behavior in two cases after using power cards. In 2003, Keeling, Myles, Gagnon, and Simpson found a power card intervention to be effective in increasing sportsmanship behaviors in a 10 year old girl with ASD.

**Cognitive Behavioral Therapy.** Cognitive Behavioral Therapy (CBT) is a form of therapy that is widely used to treat anxiety, mood, and psychotic disorders. Psycho-education is a basis for the theory that involves teaching the participant about their disorder and the common symptoms or problems that they experience. To address their immediate symptoms, participants are taught relaxation techniques. The purpose of the relaxation techniques is to help the children deal with anxiety provoking situations. Children with ASD can be taught these techniques as a means of preventing anxiety in predictable situations. Children are also taught to identify their personal or environmental triggers so they can predict and understand what cognitions those triggers elicit. Once they identify the thoughts that are associated with those triggers they can work to change the self-statements that they make during those situations.
They are then asked to replace their faulty statements with positive statements as a means of changing their behavior and reactions. CBT also can be used with children with ASD to treat anxiety and social skills deficits (Rotherham-Fuller & MacMullen, 2011).

Though CBT has been shown to reduce anxiety for children with ASD, it is necessary when working with children with ASD to tailor the therapy to meet the needs of the particular child. The language skills of the child need to be assessed because of the linguistic nature of CBT. Children with ASD can have difficulty with cognitive flexibility and they may take information and statements very literally. Therefore, it may be necessary to adjust the language that is used with the child in order to meet their linguistic abilities and account for any cognitive rigidity (Rotherham-Fuller & MacMullen, 2011).

CBT has been shown to be effective in a clinical setting. However, the skills learned in these artificial contexts are unlikely to translate into sustainable reductions in anxiety or improvements in social success on the playground where children may need the skills the most. Focusing on the concrete examples that children with ASD will face in a school setting will help them to integrate how their thoughts influence their feelings and behaviors. It also helps them address the target behaviors that are impacting their ability to be successful in the general education setting. Although this form of therapy has been used with children with ASD, it has been primarily used with high functioning children with mild symptoms of ASD. “Although CBT has been used to
target anxiety and social problems of children with ASD, it is unknown whether these techniques will extend to other emotional or behavioral challenges” (Rotherham-Fuller & MacMullen, 2011, p. #). Consequently, there is a need for more research to determine if the benefits of CBT can extend to a wider range of challenges faced by children with ASD.

**Using RTI with Students with ASD who have Challenging or Extremely Challenging Behaviors**

When using Response to Intervention for children with extremely challenging behaviors, Barnett, Elliott, and Wolsing (2006) first describe challenging behaviors as, “inappropriate, disturbing, or harmful behavior that might be pervasive social excesses or deficits, situational disturbances, low activity engagement, and episodic crises” (p. 569). The authors describe the term “extreme challenges” as aggression and elopement with children who often have minimal language. In Tier I, teachers may use Positive Behavior Intervention and Support to increase active engagement or instructional modifications as needed. Preschool programs including children with ASD often use Applied Behavior Analysis as well as Positive Behavior Support. Tier II includes social curriculum for groups, and possibly embedded interventions, to provide additional practice opportunities for specific skills. Teachers may need added support from the school psychologist or behavior specialist to implement and monitor embedded interventions. In Tier III, students with challenging behaviors will likely need more frequent progress monitoring such as direct observation and data collection, as well as
more immediate comprehensive programming depending on the severity of the behaviors. Brief intervention trials are used to confirm and refine appropriate intervention plans. A more intensified behavior plan for the student would then be developed by an expanded team of parents and professionals.

Prevent-Teach-Reinforce (PTR) is a standardized model for individualizing procedures of behavior support for students with ASD in General Education classrooms. The Strain, Wilson, and Dunlap (2011) report that the PTR model was developed to address the need to effectively carry out the processes of functional behavioral assessment and interventions by typical school personnel in a typical school setting. The PTR model includes a step-by-step process outlined in detail in a manual. Each step concludes with a self-evaluation that the school-based team completes before moving to the next step. The functional behavioral assessment process is completed as a checklist for each core component (prevent, teach, and reinforce). In one study, researchers used a multiple baseline design to test the effects of PTR on the occurrence of problem behaviors and academic engagement with two hundred and forty-seven students in a randomized controlled trial in five school districts in Colorado and Florida. The students were in kindergarten through eighth grade. The study found that problem behaviors were reduced and engagement was increased for all participants. The researchers used a functional behavioral assessment that provides the individualized information needed to construct an effective and efficient behavior support plan,
environmental modifications that alter stimulus control exerted by antecedent and contextual events, and careful arrangement of reinforcers and other consequences.

**Future Directions and Best Practices**

Although a review of the literature provides research based support for implementation of RTI for behavior problems, there has been little research in the area of applying the RTI model to the behavioral concerns often associated with ASD. A review of the literature also reveals that there is substantial criticism of the RTI model. Witsken, Stoeckel, and D’Amato (2008) state that there is a need for universal screening procedures, more research, and development of evidence-based interventions. They report a central concern surrounding the RTI model is the lack of defined measures and criteria used in the implementation process. Kavale, Kauffman, Bachmeier, and LeFever (2008) state concerns about the vague definition of a successful RTI model implementation and the lack of information regarding who decides when formal referral for Tier 3 or special education is necessary.

Besides the need for more research regarding interventions and best practice approaches of the RTI model, other studies report that there is a need for more professional development of teachers and staff regarding the rationale for RTI and the skills necessary to implement RTI. Building level support encompassing necessary resources, such as time allocated for school psychologists to help assist district level staff to develop structures that promote RTI, and district level support to drive the
broader system are needed to ensure the success of the RTI model (O’Connor & Freeman, 2012).

Hawkin et al. (2008) state that to continue developing implementation strategies for students who need added support after Tier I, there must be collaboration between behavioral and academic student support teams. These teams need to acknowledge that different resources are often needed to design behavioral and academic support interventions. Data should be collected and shared for both the academic and behavioral interventions. Development of a school’s capacity to interpret behavioral data and design interventions accordingly is important. Metrics for student success teams need to be easily understandable and capture social/behavioral and academic performance. The school then needs to link this social and behavioral success to improved academic performance, fewer referrals to special education, improved student motivation and attachment to school, and greater teacher satisfaction. Hoover and Love (2011) indicate that each district needs to operate from a clear understanding of the RTI framework. Additionally, school teams should adhere to clear decision rules where rate of progress and gap analysis results are taken into consideration. Finally, districts need a process for providing periodic and ongoing support to team leaders in their task of implementing RTI in their schools.

**Summary**

Students with ASD are increasingly having their educational and behavioral needs met in the general education classroom. Many schools are utilizing the Response
to Intervention model to provide tiered levels of behavioral and academic interventions to students. Research exists on the best practices for behavioral supports for students with ASD. However, a review of the literature demonstrates that there is very little research on how to apply and modify behavioral interventions in the RTI model for students with ASD. There is a need for more research in this area, as well as, a need to create trainings for school behavior support teams on appropriately modifying RTI behavioral interventions to be effective for students with ASD.
Chapter 3

METHODOLOGY

Research

We conducted a review of the current literature including scholarly books, journal articles, and Internet resources. We searched the Academic Search Premier database to location relevant articles using the key terms autism spectrum disorder, autism, behavioral interventions, and response to intervention. Additionally, the National Association of School Psychologists’ website, www.nasponline.org, was searched for topics on autism, behavior interventions, and response to intervention.

We used books from graduate courses and professional practice, as well as those written by other professionals in the field as resources. References cited within articles and books were also reviewed for additional information. Articles found were categorized by themes according to an initial outline, which we revised and adapted, based on the gathered information. Each author focused on specific topics when writing the literature review.

Development of the Presentation

We developed the presentation to provide participants with knowledge of Autism Spectrum Disorder (ASD); Response to Intervention model (RTI); and research based behavioral interventions for students with ASD. The intended audience of administrators, school psychologists, behavior support teams, and educators can all expect to learn the symptoms and behaviors commonly associated
with ASD, research based behavior interventions, and how to modify behavior interventions associated with the RTI model to be more effective with students with ASD. The main points from the literature review were summarized in the presentation. The presentation includes activities, handouts, and discussion to provide an interactive experience.

The training session and accompanying PowerPoint presentation is designed to be administered in two to three hours, including time for completion of practice activities for which handouts have been provided. All these materials including notes and instructions for use are located in the appendix of this project.
Chapter 4

FINDINGS

Information obtained during the literature review was used to create a training workshop for administrators, behavior support teams, and educators. The workshop is designed to last two to three hours. The PowerPoint slides with presentation notes and activities for the workshop are included in the project appendices. This research project and the related workshop aim to give information about children with Autism Spectrum Disorder (ASD) and Response to Intervention (RTI). Specifically, it provides information about ASD, behavioral intervention in the RTI model, and modifications of these behavioral interventions to make them more suitable to the behavioral needs of students with ASD.

Workshop Objectives

The verbal presentation should include staff friendly language, audience participation, visual aids and handouts to assist in the discussion of the main topics. Given that some schools and staff may have more experience than others using the RTI model, presenters should take into consideration the audience’s level of awareness and experience of the subject. The primary focus of the workshop is to present and discuss the behavioral needs of students with ASD and how to modify behavioral interventions in the RTI model to be more appropriate for these students.
Discussion

Research has shown a steady increase, since 2004, in children with ASD being served in special education, with this increase it is necessary for schools to develop systems to support these children while meeting their unique set of behavioral needs. Research shows that more than half of children with ASD in schools are served outside of the general education classroom. However, with more schools adopting a Response to Intervention model, there now a method by which to meet the academic and behavioral needs of students with ASD in general education classroom. The RTI model has historically focused on remediating academic difficulties prior to implementing special education services. More schools are starting to use the same model to address behavioral concerns, as a means of maintaining students in the general education classroom. Children with ASD often pose a unique set of behavioral needs, and it is understandable that many teachers and administrators are not aware of the best interventions to meet the needs of these students.

Working with children with ASD can be difficult given the variety of behaviors that students may exhibit. However, many students with less severe symptoms of ASD are capable of completing grade level work and should be afforded the opportunity to remEDIATE their behaviors in an effort to remain in the general education classroom. This project highlights the tiered levels of interventions of the RTI model as best suited to address the behavioral issues of children with ASD. There remains a need for further research in the area of Response to Intervention specifically targeted for children with
ASD to ensure that these children are being given the best opportunity to access the general education curriculum.

**Recommendations**

This workshop is intended for use as a guide for implementing behavioral supports for children with ASD in a RTI framework. This project contains suggestions with information on research-based interventions. However, there is a significant need for more research in the area of school-based interventions for students with ASD using the RTI model. The workshop serves as a guide for understanding Response to Intervention and ASD and how the model can best serve these students. This project also offers suggestions that can be used as classroom and school wide interventions to support children with ASD within a RTI framework.

**Conclusion**

Historically, students with disabilities such as ASD have often been placed in more restrictive educational environments. However, given that there are more students being diagnosed with ASD and more public awareness, there is a push for inclusive education for these students. Administrators, behavior support teams and educators in the general education environments have many resources such as the RTI model that provides varying levels of behavior support. However, they often do not have the knowledge or expertise to modify these behavior interventions for the specific behavioral needs of students with ASD. A review of the literature suggests several behavioral interventions that have been shown to work with students with ASD. In
evaluation of this project, it is hoped that this information on behavior needs of students with ASD and effective intervention modifications will help schools better support more students with ASD achieve success in the general education classroom.
Appendix A

Three-tiered model of school supports. (Sansosti, 2010)

FIGURE 1. Three-tiered model of school supports.
Appendix B

Presenter’s Manual

Introduction

Given that students with Autism Spectrum Disorders (ASD) often struggle with understanding nonverbal communication and engaging socially, it can be difficult for these students to understand school rules and function in the classroom. These issues can make it difficult for students with ASD to participate academically in the least restrictive environment, the general education classroom. However, there are many research based behavioral interventions that can support students with ASD to learn social rules and socially acceptable replacement behaviors, as well, increase appropriate classroom behavior and address problem behaviors. Many schools use or are planning to use the RTI model to provide systematic and data based tiers of academic and behavioral interventions based on the needs of students. However, there is a need to examine how to best incorporate effective behavioral interventions for students with ASD into the RTI framework.

This PowerPoint presentation and handouts are designed to provide an understanding of common behavior of students with ASD, how to provide interventions using the RTI model, and examples of research based interventions and modifications to increase appropriate behavior and address problem behaviors. This
information is based on a literature review completed between September 2012 and February 2013.

**Nature of the Presentation**

This presentation is for training and educating school administrators, behavior support teams and educators who are in charge of behavioral interventions. The presentation is designed to last at least two to three hours with a 15-minute break incorporated into the schedule. Although the content of the presentation and instructions for presenter actions are available in the slide notes, presenters must use appropriate and engaging presentation techniques such as pausing for questions, demonstrating active listening, and validating audience input as necessary throughout the presentation. Before beginning the workshop, the presenter will need to make copies of the appropriate handouts and PowerPoint slides for each participant. The presenters must also be open to listen to alternative interventions and frameworks used by other professionals in the field.

In preparation for giving this workshop, the presenter(s) should study the slides and accompanying notes thoroughly so they have excellent knowledge of their content. On the initial slide, there is space where the presenter(s) may insert their own names. They may also feel free to change the PowerPoint slide theme if desired. It is also imperative that the presenter(s) be familiar with the articles referenced at the end of the presentation as well as the corresponding handouts. Audience members may have questions that go beyond the scope of the presentation and presenters must be very
careful not to recommend specific interventions that are not feasible for specific children or in specific situations. The interventions provided are thought to be best practice. However, they may not be applicable to all children and presenters need to be aware of these differences and note that to the audience.

**Guidance to Presenters**

The workshop is presented as a series of Microsoft PowerPoint slides. Each slide has all the necessary information needed to present the workshop. In addition, the notes section has general information needed to discuss each slide. Sample language is provided in *italics*; however, presenters may use their own words when discussing slide material.

Discussion questions are embedded in the PowerPoint slides to enhance audience participation. Certain notes from specific slides will direct presenters to ask the audience questions and access the audiences’ existing knowledge of the subject area. Handouts are included to give the audience tools to use in professional practice.

One or two presenters can give the presentation. Change presenters at natural times: after breaks or when presenting a new section or topic. All presenters should introduce themselves prior to starting the workshop. However, presenters may reintroduce themselves when presenting a new topic or section if they feel it is necessary. Presenters will likely want to divide the presentation into sections prior to starting the workshop and incorporate introductions into the agenda slides. A recommended timeline is provided on the next page:
Behavior and ASD and RTI:

<table>
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<th>Slides</th>
<th>Topic</th>
<th>Duration (minutes)</th>
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<td>Introduction</td>
<td>10</td>
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<tr>
<td>#5-#17</td>
<td>Autism</td>
<td>25</td>
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<tr>
<td>#18-#27</td>
<td>Response to Intervention</td>
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<td></td>
<td>BREAK</td>
<td>15</td>
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<tr>
<td>#28-29</td>
<td>Implementation of RTI</td>
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</tr>
<tr>
<td>#30-#42</td>
<td>Tier I and II</td>
<td>25</td>
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<tr>
<td>#43-56</td>
<td>FBA and Social Story Handouts</td>
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<td>#57-58</td>
<td>Tier 3 Interventions</td>
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<td>#61-64</td>
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About the Authors

Jennifer Lausier and Penelope Schrader-Rogers are both students in the School Psychology Graduate Program at California State University Sacramento. This workshop was created to satisfy requirements for their Education Specialist program. Jennifer Lausier has a Masters in Counseling from the University of Wisconsin-Madison. Penelope Schrader-Rogers has a Masters in Education from California State University, Sacramento.
Appendix C

Presentation

Slide 1

Sample Language:
*Welcome to today’s presentation regarding serving students with ASD* using the RTI* model. My name is _____________ (give description current position and professional background; have each presenter provide introduction if more than one presenter.)

*We’re here today to provide you with information to better serve students with ASD within an RTI model. We will provide best practice interventions for children with ASD and explain how these interventions can fit into your schools current RTI framework. Traditionally children with ASD have many adverse behaviors and as a result they are taken from mainstream education and placed into separate classrooms where their behaviors can be managed with less disruption, however many of these students are capable of completing grade level work and should their behaviors be mediated they would be capable of maintaining their current placement within the general education classroom.*

Notes to Presenter:
*If presenting to a small group (less than 10), have group members introduce themselves and their role in education. If presenting to a large group (10 or more), ask questions to
get a sense of the professionals in the audience. Questions include: *Do you have an RTI program at your school? Could you raise your hand if you’re a teacher? How many directors of special education are present?*

*The abbreviation ASD and RTI will be used throughout the presentation notes when referring to *Autism Spectrum Disorder* and *Response to Intervention*.*
Sample Language:
As we begin today we would like to get a sense of what you know about RTI and ASD. So, take out a piece of scratch paper, and draw a line down the middle. On one side write all the things you know about ASD and on the other side all the things you know about RTI. This can include any stereotypes you have heard, or difficulties in working with either these students or within the RTI framework. Once you’ve completed that, jot down all the questions that you may have regarding this topic.

Notes to Presenter:
Have scratch sheet and pens/pencils available so everyone can participate. Additionally, hand out hard copies of slides.
Sample Language:
As you are looking at your list, have you put down some things that may answer these questions? If not that is fine, it is the hope of this presentation is that by the end you will have answers to these questions.

Notes to Presenter:
Give participants a few minutes to look over their papers and reflect what they have written. Poll the group and determine if they have any questions.
Sample Language:
This is an outline of the presentation. First we will define the disorders that fall under Autism Spectrum Disorder. Then, we will discuss the changes to DSM-5. Next, we will go through the Response to Intervention Model. We will review how to use the interventions in the RTI model with students with ASD. We will give you two handouts on how to implement two individualized interventions with students with ASD. Finally, we will present resources.
Sample Language:
*The most recent statistics indicate that currently 1 in 110 children have a diagnosis of ASD. There are significantly more boys than girls at 1 in 70. This means that on average a school of 500-600 children would have a minimum of 4-5 children with a diagnosis of ASD.*
Sample Language:
The following is a visual depiction of ASD umbrella and the associated disorders.
Sample Language:
As previously stated, the prevalence of ASD is increasing. The following slide reviews the national trends in diagnosis of ASD. It also highlights the educational trends in regards to placement of children with ASD.

Notes to Presenter:
Take a moment to ask for questions or comments regarding the provided statistics.
Sample Language:
*Autistic Disorder is diagnosed following validation of 6 or more of the 12 listed symptoms in the DSM IV. Within the DSM IV there are three categories of symptoms that are outlined. These include: social interactions, communication, and restricted repertoire. To validate a diagnosis currently the child has to have two documented symptoms listed within the social interactions section, one in impaired communication, and one in a restricted repertoire of interest.*

Notes to Presenter:
This slide coincides with the next slide; presenter will want to wait until the presentation of the subsequent slide before asking for questions from the audience.
Sample Language:
*Autism is considered a “Spectrum Disorder” because symptoms can vary along a continuum from minimal to severe. Despite the variation in symptoms there are hallmarks of the disability, these hallmarks include: little to no eye contact, failing to respond to their name, impaired communication abilities, restrictive repertoire and/or activities, and they may seem aloof or uninterested.*

Notes to Presenter:
*Presenter may wish to stop and answer any questions from the audience about Autism and the variation of symptoms associated with the disorder.*
Sample Language:
Asperger’s Syndrome is considered by many professionals to be a less severe form of Autism. It should be noted, however, that a primary distinction between Autism and Asperger’s is no lack of communication delay. Regardless of the development of language there still has to be a documented impact of social interaction and repetitive pattern of interests in the child’s life.

Notes to Presenters:
This slide coincides with the next slide; presenter will want to wait until the presentation of the subsequent slide before asking for questions from the audience.
Sample Language:
Children with Asperger’s usually want to “fit in” socially with other children their age however they lack the social skills necessary to engage in social interaction. Most notably, they do not understand visual cues or facial expressions, and body language. There is difficulty with the unspoken social rules that other children adapt as they get older.

Notes to Presenters:
Stop and wait for questions. Ask the group a series of questions: Can you identify a child in your school with Autism, with Asperger’s? What do you see as a difference between these children? What differences do you see between these children and other children in the school?
Sample Language:
Rett’s Disorder falls under the ASD umbrella however, unlike Autism and Asperger’s there is a genetic causational link found to be associated with the disorder. Rett’s is caused by a mutation of the X chromosome. The mutation causes difficulty with brain function, the affected areas include: cognitive, sensory, emotional, motor and autonomic functioning.

Notes to Presenters:
This slide coincides with the next slide; presenter will want to wait until the presentation of the subsequent slide before asking for questions from the audience.
Sample Language:
*The beginning of symptoms occurs after a period of normal development. This disorder is relatively easy to diagnosis, via a blood test. It is important to note that the child can display physical symptoms, diminished gait or hand movements, as well as cognitive impairments. Interventions for these children involve special education, and possible Occupational Therapy assistance.*

Notes to Presenters:
If any of the participants are interested in finding the suggested handbook “The Rett’s Syndrome Handbook” it is available at www.amazon.com for $400.00
Sample Language:

*Childhood Disintegrative Disorder falls under the ASD umbrella. Children affected by this disorder develop normally through ages 3-4, they then begin to lose learned skills, such as: language, motor, or social skills. The cause of this disorder is still unknown.*
Lastly there is Pervasive Developmental Disorder Not Otherwise Specified, also known at PDD-NOS. The diagnosis is usually given when a child experiences some symptoms of Autism but not all of the symptoms. It can also be given as a diagnosis if a clinician is reluctant to give the diagnosis of autism.

Sample Language:

Notes to Presenters:

At this point take the opportunity to ask the audience if they have worked with or have knowledge of children with these other disorders. Given that these disorders are rarer they may not have any experience with children who have these disorders.
Sample Language:
Currently the DSM is undergoing a revision, in the spring of 2013 the DSM V will be published and with that publishing there are proposed changes to the diagnosis of ASD. With the information that has been provided thus far it is believed that the separate categories are going to be combined under one diagnosis of autism. The Social and Communication categories will be combined into one category. It requires three components for Social Interaction and Social Deficit. All the criteria must be met and the deficit has to be across all contexts.

Notes to Presenters:
This slide coincides with the next slide; presenter will want to wait until the presentation of the subsequent slide before asking for questions from the audience.
Sample Language:
*The following are examples of the specific requirements resulting from the new diagnostic criteria that will need to be met for a diagnosis of autistic.*

Notes to Presenters:
At this point the audience should be asked for questions or concerns that may be addressed by the presenters. Prior to the actual publishing of the DSM it should be noted that these are proposed changes and the final criteria will not be known until publishing. The presenter should also provide an example of a child that would fit the previous diagnostic criteria but not the new criteria.
Notes to Presenter:
First, ask your audience if their districts are using Response to Intervention for academic and behavioral interventions. Ask if someone from the audience can define or describe RTI. If the audience is familiar with RTI, provide a brief summary or skip this slide if the audience is knowledgeable. If your audience is not familiar with RTI, use the sample language below.

Sample Language:
*Response to Intervention is a systematic and data based method of identifying and providing intervention to students with academic or behavioral concerns. RTI was originally used mostly for reading and academic interventions. However, it is beginning to be used more for behavioral interventions. It is a school wide system. It uses early intervention and remediation of skills, with a level or tier of system. Teachers and staff collect on-going data to determine if the intervention at the different tiers is effective.*
Sample Language:
Here is a model of the Response to Intervention structure as it is used for academic interventions. Tier 1, is the first level of school wide intervention that 100% of students receive. This is usually evidence based direct instruction. Teachers use universal screening tools or benchmarks to determine that students are responding to instruction. If they are not, they may receive Tier 2 intervention. Tier 2 involves small group instruction. The teachers use curriculum based measures to progress monitor that students are making progress on achieving foundational skills. Students, who do not make progress, receive Tier 3 intervention. Tier 3 is individualized instruction based on the needs of the student. A hallmark of the program is that the teacher continues to frequently progress monitor to ensure that the student is making progress. Depending on the school district, Tier 3 may include a referral for evaluation to determine if the student has a disability and is in need of special education services.
Sample Language:
Here is a review of the Tiers. Tier 1 is the general education curriculum. Usually around 80% of students will respond with only this intervention. Tier 2 involves strategic small group instruction with regular progress monitoring. Usually, 15% of students respond to Tier 2 intervention. Tier 3 is the intensive instruction and assessment for the 5% of student who need this level of intervention.
Sample Language:

RTI is mostly thought of as a model for academic intervention. More recently, there is interest in using the tiered system and progress monitoring for behavior interventions. There is some research suggesting that RTI is associated with improved school climate and improved social and academic outcomes. Also, the use of RTI is associated with fewer referrals for special education services.
Sample Language:
This figure shows the academic interventions on the left side of the RTI triangle and behavior interventions on the right. As you can see 80-90% of students should respond with only the universal, preventive and proactive instruction/intervention. Tier two is for 5-10% of students who do not make adequate progress with just Tier 1. These students should receive small group instruction as soon as they are identified by the universal screeners from Tier 1. Then, if students are not making progress as measured by regular curriculum based measures or measures of behavior, 1-5% of students will move to Tier 3. Tier 3 involves high intensity, individualized intervention. This tier may also involve an evaluation for special education or a functional behavior assessment as needed.
Sample Language:
*The behavior tiers of RTI include a behavior curriculum presented to all students at Tier 1. Tier 2 intervention involves small group intervention with progress monitoring. Tier 3 starts with a functional behavior assessment to determine the function of the behavior and then intensive counseling or services depending on individual needs.*
Sample Language:
This is a brief overview of each Tier of the RTI Model, specifically tailored for behavior interventions. Tier 1 behavior intervention involves a school wide intervention. The necessary components include: unconditional positive regard, five to one positive gestures to corrective comments, the classroom provides to the basic needs to students, teachers provide individual reinforcement as needed, ongoing rule and procedure teacher is extremely important. Given that some students, often students with ASD, will need more re-teaching with learning rules and procedures. Therefore, teachers are asked to provide differentiated instruction and accommodations to students who need additional support.
Sample Language:
When students are not able to follow school rules, or procedures with re-teaching, differentiated instruction, and accommodations, the student is identified as needing more help learning behavioral skills. Students the may receive Tier 2 intervention. These interventions may include social skills training, social skills groups, mentoring, or the Behavior Education Program which includes a check in/check out system to review behavior progress.
Sample Language:
When the Tier 1 and Tier 2 interventions are ineffective and the behavior continues, students move to Tier 3. Tier 3 involves individualized intervention. The focus is on the function of the child’s intervention. Often, the parents and family are involved with the school in developing a specific intervention that is specifically tailored to the child and their specific needs.
Sample Language:

*Here are some examples of Tier 3 interventions. Usually, a school would start with a functional behavior assessment to determine the function of the behavior and then create a behavior support plan possibly using some of the interventions listed below. The interventions may include any of the following as appropriate for the individual student: social stories, power cards, cognitive behavior therapy, multi-systemic wrap around services, and family therapy.*
Sample Language:

The steps for implementation will be different depending on how your district decides to organize staff and interventions. Usually, a school will develop an RTI team or Student Study team to implement a screening tool, filter student referrals, review data, and work with teachers to meet the needs of students in need of more intensive interventions. The team has the responsibility of managing referrals, providing support and consultation, and matching students to services or levels of intervention using data based decision making.

In choosing Tier I interventions schools need to focus on the needs of their population of students and the impact that the program will have on those students. For children with ASD the most effective interventions should focus on the areas of language, nonverbal communication, cognitive abilities and sensory processing.
Sample Language:
*Children with ASD display a variety of behaviors that can impede their ability to access the general education classroom. These behaviors can range from complete withdrawal to rages, non-communicative to communicative, the more extreme the behaviors the less likely that the child will remain in the general education classroom.*
Sample Language:

The hallmark of a Tier I intervention is that it is applied as a school-wide intervention. Second Step is an evidenced based program that is structured in this manner. The focus of the program is to reduce youth violence, by educating children in the areas of empathy, increasing their problem solving skills, and providing children ways to manage their anger.

This program is well suited for children with ASD because it is structures, in that there is a daily lesson that follows a prescribed pattern, with a universal set of expectations.

Notes to Presenter:
Should the audience ask Second Step is a copyrighted program. Should a school/district wish to invest in the program they will have to purchase the program prior to implementation.
Sample Language:

The following is a sample of a Second Step lesson. This lesson, or one like it, would be taught to the students daily. The lessons follow the same theme and build upon each other. This way the children continue to build on their learned skills.
Sample Language:

SWPBIS is another Tier I intervention aimed at the student body as a whole. The premise of the program is that by changing the environment of the school and the schools expectations of students, the students’ behaviors change.

This type of program has been shown to be effective for children with ASD due to the various levels of support and the prescribed norms and expectations.

Notes to Presenter:
There are various PBIS programs available if a school/district is considering implementing a program they need to review the possible programs and determine which program is appropriate for their school and environment.
Sample Language:
Several interventions have been shown to be effective when working with children with ASD. Many of the Tier I intervention programs employ these various techniques which makes them effective when working with students with ASD. These interventions include: direct instruction of desired behaviors, visual icons or reminders, incentives for positive outcomes.

Most Tier I programs come with a prescribed lesson plan that is taught to the school. As a result, children with ASD have very clear boundaries provided in a repetitive and repeated manner. Additionally many of the programs come with posters and visual reminders that the school will post around the school to remind students of expectations, this way children with ASD are receiving visual cues all around the school that reinforces the classroom lessons. Finally most schools implement a reward system for positive behaviors; the children are then receiving an intrinsic reward for positive behaviors.
Sample Language:

*Tier 2 Interventions often include social skills training. This approach often encourages cooperative learning where student practice social skills in a safe environment of a small group. It also involves direct instruction in social skills and practice with others in the group. This intervention allows students with ASD to receive direct instruction in learning social cues and managing the social situation of a small group.*
Sample Language:
To improve the social skills of students with ASD, research has shown that creating a club around the specific interests of a student or students with ASD can help these students to be engaged with other students, practice social skills, and increase social interactions with typically developing peers.

The make-up of the group should include children without ASD so the children with ASD have interaction with mainstream students which will help to develop their social skills.
Circle of Friends

- Group of typically developing students meet with one or a few students with ASD
- The group helps the targeted student(s) build relationships with peers and increase a sense of belonging
- Found to increase appropriate social interactions during unstructured activities in schools

When using this intervention:
- Typically developing students should be compliant with rules
- Interested in helping students with ASD
- Have similar interests as the students with ASD

Sample Language:

_circle of friends is a group intervention in which a group of typically developing students meets with one or a few students with ASD. The group helps the students with ASD build relationships with peers and increase their sense of belonging. Circle of Friends was found to increase appropriate social interactions during unstructured activities in schools.

If you are going to use this intervention at your school, make sure to recruit typically developing students who are compliant with school rules, are interested in helping students with ASD and have similar interests as the students with ASD.
Sample Language:

*Integrated Play Groups (IPG)* is a group with 3-5 students with one or two students with ASD and the other participants typically developing students. IPG includes an adult facilitator or play guide. The play guide trains the typically developing students in play skills such as asking the student with ASD to play, sharing, giving compliments, and reacting appropriately to target behaviors. A study found that IPG resulted in a reduction of stereotyped and isolated play and increased the amount of social play in several students with ASD.
Sample Language:

*Mentoring is a common Tier 2 intervention used in schools. Mentoring helps students develop a relationship with an adult or peer. The student receives positive attention.*

*However, this intervention often works best for students with attention seeking behavior.*
Sample Language:
For students with ASD, there are many modifications that your team should consider when using it as a Tier 2 intervention for students with ASD. Given that the function of many behaviors for students with ASD is NOT attention, mentoring may not always be appropriate given that it provides attention. However, by offering a desirable incentive after participating in mentoring, the child may become engaged in the process and build social skills. One example is to allow a student who loves cars to play with them after meeting with the mentor. The mentor may also set up situations for the student to practice desirable behavior. For example, the mentor may provide direct instruction on appropriate voice volume in the library and then walk the student to the library to practice talking in the library and giving immediate feedback.
Sample Language:

The Behavior Education Program, also called Check-In/Check-Out is a popular Tier 2 intervention. It involves having a student check in and check out with the same person every morning and afternoon. The check in and check out person provides additional structure, prompts, instruction, feedback, and acknowledgement. They also give feedback and review a daily progress report. The daily progress report can use used to evaluate the student’s progress.
Sample Language:
Here is an example of a daily progress report. This card can be used with points for defined behaviors. This example uses smiley faces which may be more appropriate for young children.
Sample Language:

*It is important to consider modifications of the Check-In/Check-Out intervention for students with ASD. Modifications may include having the student self-rate anxiety or anger. Staff may also review and practice appropriate social rule, social cue, and correct procedures using a visual reminder if needed. Also, staff may review replacement behaviors for specific situations. Finally, some students with ASD may need to earn a desirable incentive during the checkout in order to be motivated to engage in replacement behavior.*
Sample Language:
*Functional Behavior Assessment is a very important aspect of determining the appropriate individualized behavior intervention for students who need Tier 3 intervention. Functional Behavior Assessment involves gathering and analyzing information about the student’s behavior and circumstances in the environment in order to determine the function of the behavior. FBA also includes identifying replacement behaviors or appropriate behaviors instead of the inappropriate or target behavior that serves the same function. The FBA also includes positive interventions that reduce the undesirable or target behavior.*
Sample Language:

Functional Behavior Assessment should be used for most students who need Tier 3 intervention. Often students with ASD need intervention for perseverative behaviors. These behaviors are disruptive behaviors that serve to escape classwork or escape aversive sensory stimuli. These behaviors also serve to obtain desirable sensory stimuli.

Continuous monitoring of the Functional Behavior Assessment needs to be conducted to ensure that it is targeting the correct stimuli. If the plan is implemented and does not reduce/increase the targeted behavior then the function of the behavior was not clearly established.
Notes to Presenter:
Hand out ABC Chart to all participants. If it is preferred project the handout next to the power point projection.

Sample Language:
_Here is a sample ABC chart we created for you to use. You should record the date of the observation, the student’s name, the observer (if it was you or the teacher), and the setting and times of the observations. Also, it is important to provide a detailed description of the problem behavior. Then record each instance of one behavior. The A stands for the Antecedent or what was happening right before the behavior occurred. Under B, provide a detailed description of the behavior. Under consequence, provide a detailed description of what happened immediately after the behavior. At the bottom of the handout is space to provide your conclusions as to the function of the problem behavior._
Notes to Presenter:
You may review this example using the power point or you may manually write in the example on the projected hand out. However, plan for an extra 5-7 minutes if you are going to manually write in the example.

Sample Language:
*Here is an example behavior for the ABC chart. The problem behavior is that Adam yells his teacher’s name repeatedly when he enters the room. The identified antecedent is Adam entering the classroom from recess. The behavior is yelling his teacher’s name, Mrs. Garcia, Mrs. Garcia, and the consequence is that the teacher given Adam attention and helps him to find a book for independent reading time.*

Ask participants, “What is the function of Adam’s problem behavior?” If no one raising a hand or participates, state, “The function of Adam’s behavior is attention.”

Sample Language: Therefore, we need to create a behavior support plan that includes teaching Adam ways to get attention from his teacher without yelling his teacher’s name and we also to teach the teacher to not give Adam the attention or help he requests when he engaging in yelling her name.
Sample Language:
Another effective Tier 3 intervention for students with Autism is creating individualized social stories. Social stories are short, student specific stories that show appropriate social responses to people, events and concepts. They are often used to help children with ASD establish a rule or routine for a particular social situation.
Notes to presenter:
Pass out the hand out “Tips for Writing Effective Social Stories.”

Sample Language:
We created a handout for you using materials from Carol Gray’s website, The Gray Center for Social Learning and Understanding. We will give you that website later in our presentation.

Tip one; you should use the data from your functional behavior assessment to define the problem behavior and the function of the behavior. The goal of the social story is to help students with ASD to understand problematic social situations and learn appropriate social skills.

Tip two; is that you should usually write the social story in the 1st person for most students with ASD. However, if the student is older and/or extremely bright, you can use the 3rd person.
Sample Language:

*Tip Three is to use positive language. Instead of writing, “Don’t yell in the library,” write, “I will talk quietly in the library.” Another example of using positive language is the example; I will raise my hand when I want my teacher’s attention.*
Sample Language:
*Tip Four is to keep your social story short. For younger children, 2-12 sentences are the best length. Ideally, write the story with the student. If a student is older and enjoys writing, you can teach the student to write his or her own social story.*
Sample Language:
*Tip five is to make sure that your social story answers “wh” questions. These questions answer: who, what, where, and when questions. If possible write the story with the student and ask the student the answers to these questions as your write the story.*
Sample Language:

*Tip six involves proving step-by-step instructions for appropriate or replacement behaviors in your social story. The story should include factual statements; describe internal states, thoughts, feelings, opinions, and motivation. Also, include what others will do to help the child. Also, include a suggested response or choice of responses or replacement behaviors. The social story may also state a commonly shared valid or opinion or social rule in a given culture. This could include a statement such as, “When I meet a new person, I say hello, I give eye contact, I state my name and say nice to meet you. This is a polite greeting.”*
Sample Language:

*With social stories, it is useful to use repetition, rhythm, and rhyme whenever possible. It is also useful to include a statement to help the student remember the social rule or strategies in the social story. For example, “Feeling angry is okay, what’s important is what I do and what I say.”*
Sample Language:

*Students* with ASD often respond well to visual aids. These visual aids may include the child’s drawings of the social story, color-coding, self-rating scale, photographs of the child in the situation, and computer graphics chosen by the students. Older students may enjoy writing and creating their own power points of the social story.
Notes to Presenter:
You may decide to ask someone to read the social story and summary phrase out loud. Otherwise, you may decide to read the social story to participants.

Sample Language:
*May I have a volunteer to read this social story out loud? The phrase at the end of the social story is meant to be easy for the student to memorize the rule about voice volume.*
Sample Language:
*This is an example of a color-coded scale for voice volume that could be kept in the student’s pocket or taped on the inside of a locker or desk. The color-coded levels also give examples of environments where each voice volume level is appropriate.*
Sample Language:

CBT has been shown to be effective when working with children with ASD, by teaching the children their personal triggers and reducing anxiety. Anxiety plays a predominant role, at times, in the behaviors of children with ASD. Children with ASD can be taught relaxation skills that are effective in reducing anxiety.

It should be noted when employing CBT that there are several areas to attend to before working with a child. The child’s language skills need to be assessed; they need to have developed enough language skills to articulate themselves during the sessions, therefore this type of intervention is more suited to higher functioning autistic children. Therapy conducted in a clinic, with a child with ASD, does not necessarily transfer to real-life situations on the playground. The examples used in therapy need to be concrete and basic.
Sample Language:

*Power cards are small cards with pictures or visual cues of a hero that represent the student's special interest and are motivating. On the other side of the card is a brief script providing details about a specific problematic situation and replacement behavior that solves the problem. Usually the solution to the problem situation is written in three to five steps.*
Sample Language:

*Here are some useful resources to help you in developing your RTI interventions for students with ASD. The RTI Network provides support in developing interventions. Second Step provides resources on this School Wide Tier One intervention. There is also a website for the Tier 2 intervention: Behavior Education System or Check in/Check Out system.*
Sample Language:
This slide has websites for Tier 3 individualized interventions. The Gray Center website has information on developing social stories. The pent website has many resources for conducting functional behavior assessments and writing behavior support and behavior intervention plans. This last website has examples of power cards.
Sample Language:
Thank you for attending our workshop! We have about ten minutes, what are your questions?
References

References


References

References

Appendix D

Handouts for Participants
ABC Data Sheet

Record each instance of one behavior, as well as the antecedent (what happened right before the behavior), and what the possible function of that behavior was (what outcome did it achieve for the student).

Date:________________________

Student:_________________ Observer:_____________________

Observation
Setting/Times:________________________________________

Description of problem behavior:
________________________________________________________________________________________________________________________________________________________

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Conclusions:_________________________________________________________________________________________________________
What is a social story?
- A short student-specific story that shows appropriate skills and social responses to people, events and concepts
- Helps children with ASD establish rule or routines for a particular social situation

Tips for Writing Effective Social Stories

Tip One:
- Determine the problem behavior
- Help student understand the problematic social situation

Tip Two:
- Write social story in the 1st person for younger or more severely impaired students
- Write social story in the 3rd person for older or more advanced and/or mature student

Tip Three:
- Use positive language
  Example: I will talk quietly in the library.
  Example: I will raise my hand when I want my teacher’s attention

Tip Four:
- Keep it short
- For young children, 2-12 sentences

Tip Five:
- Answer wh questions
  o Who
  o What
  o Where
  o When

Tip Six:
- Provide step by step instructions for desirable and appropriate behavior
  o Factual statements
  o Describe internal state, thoughts, feelings, opinions, motivation
  o Identify what others will do to assist the child
  o Identify a suggested response or choice of responses
  o Express commonly shared value or opinion within a given culture

Tip Seven:
- Use Repetition, rhythm, and rhyme
  Include statements to help child remember strategies of social story
  Example: “Feeling anger is okay, what’s important is what I do and what I say.”

Tip Eight:
- Consider using visuals:
  o Child’s drawings
  o Color coding
  o Self Rating Scale
  o Photographs of the child in the situation
  o Computer graphics chosen by the child
  o For older students, student may create power point of social story
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on the social interactions of elementary age students with mild disabilities.


