ABSTRACT

THE EFFECTS OF SOCIAL SKILLS TRAINING ON A STUDENT WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

In recent years, pressure for students to achieve high test scores in academics has limited the provision of social skills training. To examine the effectiveness of social skills training in increasing time on-task and improving the initiation of peer interaction for students diagnosed with ADHD, an elementary student attending public school and receiving special education services was given social skills training. Social skills training was provided in the form of direct lessons, role-play activities, and guided practice. The student with identified social skills deficits significantly increased his time on-task behavior from an average of 44% at baseline to an average of 78% after training and showed an increase in initiation of peer interaction from zero times per day for 9 days to one time per day for 12 out of 20 days.

Ella Shasky
May 2010
THE EFFECTS OF SOCIAL SKILLS TRAINING ON A
STUDENT WITH ATTENTION DEFICIT
HYPERACTIVITY DISORDER

by
Ella Shasky

A thesis
submitted in partial
fulfillment of the requirements for the degree of
Master of Arts in Special Education
in the Kremen School of Education and Human Development
California State University, Fresno
May 2010
APPROVED

For the Department of Counseling, Special Education, and Rehabilitation:

We, the undersigned, certify that the thesis of the following student meets the required standards of scholarship, format, and style of the university and the student's graduate degree program for the awarding of the master's degree.

Ella Shasky
Thesis Author

Susan Tracz (Chair) Educational Research and Administration

Dana Powell Counseling, Special Education, and Rehabilitation

Hong Shen Counseling, Special Education, and Rehabilitation

For the University Graduate Committee:

Dean, Division of Graduate Studies
AUTHORIZATION FOR REPRODUCTION
OF MASTER’S THESIS

X I grant permission for the reproduction of this thesis in part or in its entirety without further authorization from me, on the condition that the person or agency requesting reproduction absorbs the cost and provides proper acknowledgment of authorship.

Permission to reproduce this thesis in part or in its entirety must be obtained from me.

Signature of thesis author: ________________________________
I would like to sincerely thank the members of my committee, Dr. Susan Tracz, Dr. Dana Powell, and Dr. Hong Shen, for their guidance and support. They were able to share their knowledge in the fields of education and special education with me to make this process very meaningful.

I would also like to thank my mentor and friend, Linda Richards, for all she has done for me. The passion and conviction she shows towards students with special needs has inspired me to become a better teacher. I am forever grateful for all of the support she has given me in this process and many others.

I owe my deepest gratitude to all of the wonderful students I have the opportunity to work with every day. They make every ounce of hard work worthwhile.

My parents, John and Xe Pohida, have given me support through my many endeavors, and I would like to thank them for always believing in me. Their constant encouragement has allowed me to reach for and achieve my goals.

Lastly, I owe my loving thanks to my husband, Thomas, and daughter, Ariana. Without their love and understanding it would have been impossible for me to finish this work.

Thank you all.
# TABLE OF CONTENTS

| LIST OF TABLES | viii |
| LIST OF FIGURES | ix |

## Chapter

1. **INTRODUCTION**
   - Attention Deficit Hyperactivity Disorder: 1
   - Purpose of Study: 4
   - Scope of Study: 5
   - Importance of Study: 5
   - Description of Study: 6

2. **REVIEW OF RELEVANT LITERATURE**
   - Special Education: 9
   - Social-Emotional Learning: 11
   - Social Competence: 12
   - Social Skills Training: 13
   - ADHD: 14
   - Review of Single-Subject Design Research: 16
   - Review of Group Design Research: 18
   - Specific Social Skills Training Programs: 20
   - Generalization and Maintenance: 25
   - Conclusion: 26
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. METHODOLOGY</td>
<td>27</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>27</td>
</tr>
<tr>
<td>Data Collection</td>
<td>28</td>
</tr>
<tr>
<td>Instrument</td>
<td>28</td>
</tr>
<tr>
<td>Participant</td>
<td>30</td>
</tr>
<tr>
<td>Functional Analysis</td>
<td>33</td>
</tr>
<tr>
<td>Reinforcement</td>
<td>37</td>
</tr>
<tr>
<td>Design and Procedures</td>
<td>38</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>39</td>
</tr>
<tr>
<td>4. RESULTS</td>
<td>40</td>
</tr>
<tr>
<td>Observations of Time on Task</td>
<td>40</td>
</tr>
<tr>
<td>Observations of Initiation of Peer Interaction</td>
<td>49</td>
</tr>
<tr>
<td>5. CONCLUSIONS</td>
<td>55</td>
</tr>
<tr>
<td>Limitations</td>
<td>56</td>
</tr>
<tr>
<td>Implications for Future Research</td>
<td>58</td>
</tr>
<tr>
<td>Conclusion</td>
<td>59</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>61</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>68</td>
</tr>
<tr>
<td>A. DSM-IV DIAGNOSTIC CRITERIA FOR ADHD</td>
<td>69</td>
</tr>
<tr>
<td>B. WALKER-MCCONNELL SCALE OF SOCIAL COMPETENCE AND SCHOOL ADJUSTMENT</td>
<td>72</td>
</tr>
<tr>
<td>C. OBSERVER EVENT SAMPLE RECORDING SHEET</td>
<td>75</td>
</tr>
<tr>
<td>D. OBSERVER TIME SAMPLE RECORDING SHEET</td>
<td>77</td>
</tr>
<tr>
<td>E. REINFORCEMENT SURVEY</td>
<td>79</td>
</tr>
</tbody>
</table>
Appendix

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. POINTS CARD</td>
<td>81</td>
</tr>
<tr>
<td>G. PARENT CONSENT</td>
<td>83</td>
</tr>
<tr>
<td>H. SOCIAL SKILLS LESSONS</td>
<td>85</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Walker-McConnell Scale of Social Competence and School Adjustment Results</td>
<td>33</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Student’s progress throughout the intervention for on-task behaviors observed</td>
<td>42</td>
</tr>
<tr>
<td>2.</td>
<td>Student’s progress throughout the intervention for looking at teacher</td>
<td>43</td>
</tr>
<tr>
<td>3.</td>
<td>Student’s progress throughout the intervention for following along when reading</td>
<td>44</td>
</tr>
<tr>
<td>4.</td>
<td>Student’s progress throughout the intervention for writing on whiteboard</td>
<td>45</td>
</tr>
<tr>
<td>5.</td>
<td>Student’s progress throughout the intervention for initiation of peer interaction</td>
<td>51</td>
</tr>
</tbody>
</table>
Chapter 1

INTRODUCTION

In recent years school personnel have faced an increasing incidence of behavior problems displayed in the classroom among students. Many students exhibit aggression, depression, and underachievement in academics. Such behaviors often lead to peer rejection and an unhealthy self-concept (Forness & Kavale, 1996; Hampel, Manhal, Roos, & Desman, 2008; Lahey & Willcutt, 1998; Whalen & Henker, 1985). These behaviors, along with others, are frequently found in children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) (Weathers, 1998).

Attention Deficit Hyperactivity Disorder

ADHD is defined as “a chronic biobehavioral disorder that initially manifests in childhood and is characterized by hyperactivity, impulsivity and/or inattention” (American Psychiatric Association, 2000, p. 21). Up until the early 1970s, children with symptoms of ADHD were simply diagnosed as being hyperactive (Woodrich, 2000). The definition of ADHD has changed over the years, and current understanding of the disorder is better.

Statistics show that in the past 10 years ADHD is diagnosed more in children in the United States than any other behavior disorder (Wallis, Russell, & Muenke, 2008). School-age children are diagnosed at a prevalence rate of between 3% and 12% (Barkley, Edwards, Laneri, Fletcher, & Metevia, 2001; Biederman & Faraone, 2005; Faraone, Sergeant, Gillberg, & Biederman, 2003; Hampel et al., 2008). To diagnose a child as having ADHD, parents, teachers, and
doctors typically observe the child, conduct interviews, and fill out rating scales related to the child’s behavior. Certain criteria must be met to obtain a diagnosis of ADHD (see Appendix A). The symptoms, stated above, must have begun before the age of 7, consistently exhibit themselves in more than one setting for more than 6 months, and be evident to the extent that they are developmentally deviant (Holowenko, 1999). Children may not exhibit all three of the classical behaviors. They may show little to no hyperactivity but show signs of inattention or distractibility and still be diagnosed with ADHD.

Some difficulties attend the diagnosis of ADHD. Students may be distracted for a number of reasons not related to ADHD. One behavior that is sometimes mistaken for an inability to focus is avoidance (Silver, 2004). A student who is asked to complete a distasteful task may consistently display lack of attention and focus just to avoid completing the task. For example, a student who does not want to do homework may repeatedly get up instead of sitting and attending to the work. Other factors that may lead to an inaccurate diagnosis are anxiety and depression. Anxious or depressed students may have difficulty maintaining focus and attention because their minds are drawn to other thoughts (Silver, 2004).

To collect data with which to make a diagnosis, professionals observe the student in real-life situations, interview people who interact with the student on a regular basis, and use rating scales to determine how the student compares with the normative average. One commonly used rating scale is found in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition [DSM-IV]* (American Psychiatric Association, 2000). This scale has five steps with specific criteria (Appendix A). The instrument categorizes ADHD according to three different subtypes: ADHD combined type (Criteria A1 and A2), ADHD
predominantly inattentive type (Criterion A1) and ADHD predominantly hyperactive-impulsive type (Criterion A2).

Several studies link the symptoms of ADHD to deficits in social skills and social competence (Forness & Kavale, 1996; Gresham, Sugai, & Horner, 2001; McIntosh & MacKay, 2008). Forness and Kavale suggested that impulsivity and lack of control explains why social deficits develop in students with ADHD. According to Gresham et al., students with ADHD are perceived by peers as being disruptive, annoying, and distracting. This perception often leads to peer rejection. Students who experience peer rejection show a lower self-concept and have fewer opportunities to develop appropriate social skills. With this knowledge, students with the disorder as well as educators and parents learn strategies to cope with it.

Typically schools address the needs of students with ADHD in a number of ways. One management technique is medication. The use of psychostimulant medication is often viewed in one of two ways. Some people believe children should not be medicated, and others believe medication is necessary (Ward & Guyer, 2000). Any one of several different types of medication may be prescribed, such as Adderall, Ritalin, Dexedrine, and Clonidine. All these medications are used to manage the symptoms of ADHD.

An alternative to the medication approach for managing ADHD in schools and homes is the behavioral approach. Behavioral management techniques include social skills training through explicit instruction, self-management strategies, and behavior modification with use of positive and negative reinforcement. Modeling is another strategy teachers often use to shape behavior. The teacher models the desired behavior and students are reinforced when they copy the modeled behavior.
Another treatment that is often used in the home setting is control of diet. Feingold (1975) explored synthetic foods and colors in food in relation to hyperactivity. Much of his research was based on his clinical experience. In 1980, Prinz, Roberts, and Hartman suggested a possible connection between certain sugars and hyperactivity. However, much of the research was done on a clinical basis and did not produce significant results.

When it comes to educating students with ADHD, research shows that best practices include generalization of taught skills, self-monitoring concepts, use of positive reinforcement, and explicit social skills instruction (Antshel & Remer, 2003; Feuerborn & Tyre, 2009; Lewis & Doorlag, 1995). Antshel and Remer believed that the most effective way to treat students with ADHD is to use a combination of behavioral and medication treatments. Using implicit means to teach social skills has also been effective in many schools. Feuerborn and Tyre found an increase in the use of social-emotional learning programs in American schools. Many of these programs target students with learning disabilities, including ADHD.

**Purpose of Study**

The purpose of this study was to examine the effects of social skills training on a student who is diagnosed with ADHD and displays social deficits. Current research is inconclusive regarding the effectiveness of social skills programs. Some of the limitations of research studies that have focused on social skills training with students who have ADHD and with other students are narrow choice of training program or strategies, lack of generalization of skills across settings, and the inability to address the specific needs of particular students. Often, the
social skills training programs are started, taught in very isolated environments, and not reinforced or addressed again.

To overcome some of these limitations, this study explored the use of a social skills program with one student diagnosed with ADHD. A number of social skills strategies were used in a program designed to meet all of the student’s specific needs, and attention was given to the generalization of the skills taught. For programs to be successful, students need a mixture of teaching strategies such as modeling, direct instruction, role-play, and numerous opportunities to practice the targeted skills (Charney & Kriete, 2001). Practicing across settings and using numerous teaching strategies make the student more likely to internalize the skills.

Scope of Study

This study includes a review of relevant literature; behavioral observation before, during, and after implementation of social skills training; behavioral analysis; and a summary of the results and the conclusions drawn from all sections. The research question addressed was: Is social skills training effective in remediating social skills deficits in students with ADHD?

Importance of Study

With the growing number of school-age children being diagnosed with ADHD, more educators are using social skills training programs. This study critically examined whether social skills training is effective in remediating social skills deficits in a student with ADHD. It analyzed the social changes a specific student diagnosed with ADHD experienced as a result of social skills training.

Facing various problems without the social skills or emotional intelligence to deal with conflicts and stress can lead to undesired behaviors, poor attitudes towards school, higher dropout rates, and academic failure in school. Having the
skills to reduce or eliminate poor behavior will inevitably reduce stress for teachers and students and help them maintain healthy learning environments.

This study will help fill in the gap in the literature and add more information to a topic of growing concern. The results of many studies demonstrate a need for more in-depth case studies and more evidence to show the effectiveness of social skills training. This study presents information on generalization and consistency of techniques, information often missing in social skills training studies.

**Description of Study**

In this case study, one student was analyzed. The student, a 9-year-old African American boy, was diagnosed with ADHD and was taking medication for his ADHD at the time of the study. He had an individualized education plan in place and was receiving special education services in a resource specialist program (RSP) setting.

To determine the student’s social skills deficits, the resource specialist, the general education teacher, and the student’s parent assessed the student with the Walker-McConnell Scale of Social Competence and School Adjustment (Appendix B). This scale is discussed in detail in chapter 2. The student’s cumulative file and confidential special education file were also reviewed to determine past and consistent social concerns.

After his social deficits were identified, a behavior baseline was established through 5 days of observations. The social behaviors targeted were on-task behavior and initiation of social interactions with peers. The researcher implemented a specialized social skills training program to meet the student’s needs. During implementation, the researcher documented the student’s behavior.
The researcher then stopped the intervention and documented the student’s behavior without intervention to see if any improvements in behavior were maintained. The method is described in detail in chapter 3.
Chapter 2

REVIEW OF RELEVANT LITERATURE

Educators generally agree that social skills training is important; however, determining the effectiveness of specific social skills training programs is difficult because of student dynamics, teacher and parent responsibilities, and other variables present in any given study. The concentration of this study was the use of social skills training on a student diagnosed with ADHD. To get an in-depth perspective on the topic, literature was reviewed on the topics of special education, social-emotional learning, social competence, social skills training, attention deficit hyperactivity disorder, and numerous social skills training programs.

Exhibiting appropriate social behaviors is important for becoming a successful member of society. Elias (2003) stated, “Social and emotional skills, or emotional intelligence, is the name given to describe a set of abilities that allows students to work with others, learn effectively, and serve essential roles in their families, communities, and places of work” (p. 3).

To become a successful member of society, one must meet a certain number of goals. Academic goals include learning to read and write, understanding mathematical concepts, and being able to problem solve. Other goals society imposes on its members are developing social relationships, working collaboratively, and participating in social situations appropriately. To meet these goals and participate in society in a meaningful manner, children need to be taught social and emotional skills in a continual and efficient way (Elias, 2003). Teaching social skills in this manner leads to social competence, especially for children with special needs.
In 1997 the Individuals with Disabilities Education Act (IDEA, Public Law 105-17) was signed into law. The legislation states that all students with disabilities are entitled to a free and appropriate public education. Students with disabilities and special needs cannot be excluded from public education, and they have the right to be educated in the least restrictive environment possible. This right is for all students with disabilities, even those with emotional disturbance, autism, and mental retardation. This law has resulted in an increase of inclusion of special-needs students in both the mainstream classroom and public school in general.

Social skill development begins at home with the children’s caregivers as models (Gerwetz, 2003). Students with disabilities are often developmentally delayed and may begin school without many of the learned social skills their same-age peers have developed at home. This deficit may be due to cognitive delays or the inability to naturally pick up social cues as typically developing children do. The delay puts the students with disabilities at a disadvantage and hinders their ability to create and maintain appropriate relationships (Kam, Greenberg, & Kusche, 2004). Because they are already behind socially, their peers do not readily play with them. Thus, they have even fewer opportunities to develop appropriate social skills. The lack of appropriate social skills can lead to problem behaviors.

Problem behaviors can lead to rejection from both peers and teachers. Bender, Rosenkrans, and Crane (1999) found that students with learning disabilities are at greater risk for depression and suicide. These researchers found that 50% of children younger than 15 years of age who committed suicide had a diagnosed learning disability. In their study of 10 students with a diagnosis of
ADHD, half showed a significant level of suicidal ideation based on student and family interviews. Thirty percent of the students met the criteria for anxiety disorders, and 20% met the criteria for major depressive disorders.

Special education teachers face pressure from administration and parents to solve these problems. Many methods have been used, such as behavior modification techniques, preventive interventions, and specific programs that address social awareness. However, a majority of these solutions lack data-based research and evidence of effectiveness.

The lack of research, data-based methods, and evidence of effectiveness is cause for much speculation. When social-emotional learning techniques are used in the classroom simultaneously with other academic techniques, determining which influences a student’s academic achievement is difficult. Currently, the school curriculum is based on academic test scores, not on environmental factors (Elias, Parker, Kash, & Dunkeblau, 2007).

In the field of special education, researchers have found that teachers who are sensitive to the students’ needs have more consistent expectations and tend to model appropriate interactions to all students (Carter, 2006). When students have their basic needs met, they are able to open up, learn, and develop appropriate social foundations.

Teacher-student interactions have many conceptual complexities. Carter (2006) demonstrated that students were able to develop in several areas as a result of teacher-student interactions. As part of a comprehensive assessment, she examined cognitive skills, social-emotional skills, and fine and gross motor skills with 7 students. The students and teachers played with bubbles. The teachers observed and filled out a checklist to rate the students’ skills. Seventy percent of
the students showed significant growth in the all of the targeted areas when interacting with the teacher and the bubbles.

Research has shown that teachers develop appropriate relationships with typically developing students easily. However, they do not always develop appropriate relationships with students with special needs. According to Carter (2006), teachers who are more sensitive are more likely to engage the special-needs students and meet both their academic and social-emotional needs.

Because teachers are role models for their students, educators recommend that they show compassion and maintain proper interactions with all students. Students with special needs can lack social skills, thus needing appropriate models more than typically developing students. Teachers must adjust their interactions to meet the needs of students with disabilities (Carter, 2006).

Social-Emotional Learning

Social-emotional learning (SEL) is not only a way to promote social growth and mental health, but also a way to improve academic achievement (Pellitteri & Smith, 2007). SEL involves understanding students’ emotional backgrounds, environmental factors, and learning needs. SEL strategies, such as teaching explicit social lessons and modeling appropriate social interactions, focus not only on emotions, but also on educating the whole child (Elias, 2003).

Fishbein (2000) stated that considering social-emotional development should “take into account how children’s experiences and relationships affect the children’s brain organizations, structuralization, and development” (p. 74). Social-emotional development produces important skills needed for learning new concepts in reading and mathematics. Children who do not have a solid
foundation set for learning will not be able to process the important information presented in school.

Zins, Weissberg, Wang, and Walberg (2004) described how SEL can not only help build social development, but also increase students’ academic achievement. In their comprehensive review of studies, they explored several aspects of academic success. First, they suggested that to be ready to learn academically, children must have a set foundation of social skills that enable them to interact appropriately with classmates and teachers. Secondly, they recommended that social skills training be a part of the curriculum to make learning more meaningful. They examined two programs: one that focused on social decision-making and one that focused on problem solving. The evidence they found directly links social skills to academic achievement.

In one study Zins et al. (2004) reviewed, Johnson and Johnson (2004) analyzed the effects of learning with others on student engagement in learning. Among the 50 participants, students who were able to work well with others showed an effect size of .76, whereas students who did not socialize and work well with others showed an effect size of .64. This difference was reflected in the achievement of these students. The students who worked cooperatively had an effect size of .88 in achievement, and the students who did not had an effect size of .07 in achievement. This research showed that the more a teacher can connect material in a meaningful way and promote students’ cooperation with one another, the more social behaviors and academic behaviors improve.

Social Competence

The terms social competence and social skills are often used interchangeably. However, they have two different meanings. Social competence
is defined as the judgment someone has made that a person has performed appropriately in a social situation (Saarni, 1997). Possessing social competence does not mean a person has mastered social skills or greatly exceeded expectations; it simply means the person acted appropriately in a given situation. Social competence is generated and determined by the judgments of others and self-reflection (Nowicki, 2003).

According to Merrell and Gimpel (1998), “Social skills are defined as the specific behaviors that an individual must exhibit to perform competently on a given task” (p. 9). Social skills can also be defined as the ability to communicate, listen, and interact effectively (Pasi, 2001). Social skills can be taught and are incorporated into developmental milestones. Because social competence is based on judgments of others, it is important for parents and professionals to use research-based measures to determine what social skills they need to address.

Research-based assessments make it easy for teachers and other professionals to provide norm-referenced data and make appropriate decisions based on the results. Children with social deficits can be identified and helped. Research-based assessments also aid in narrowing down what specific social skills training a student needs to work on and what program would be most effective. For this particular study, the Walker-McConnell Scale of Social Competence and School Adjustment was used; it is discussed in detail in chapter 3.

**Social Skills Training**

Children often develop social skills as they grow physically and emotionally. Parents look for milestones in their children’s development to determine the health of their child. Many families believe social deficits in students with disabilities are due to poor self-esteem, lack of socialization
opportunities, developmental delays, and cognitive delays (Forness & Kavale, 1996). Students who start school behind their peers, not having developed the social skills appropriate for their age, are predisposed to less involvement and fewer opportunities to develop appropriate social skills with typically developing students, thus widening the gap even more (Harris, 1998).

Research also shows that an important aspect of a child’s development is the ability to develop and maintain healthy relationships (Gresham et al., 2001). Students who are diagnosed with ADHD have high levels of peer rejection and negative responses from their teachers and are often socially excluded due to their impulsive behavior (Whalen & Henker, 1985). When students are faced with these negative situations, they sometimes become withdrawn, aggressive, and depressed. These emotions may manifest in self-destructive behavior, self-medication/substance abuse, or in some cases suicide (Ostrander, Crystal, & August, 2006). Something needs to be done for these students, but the question is: Is social skills training effective in reducing social deficits in students with ADHD?

ADHD

As stated previously, ADHD is an increasingly common diagnosis for many school-age children. Some of the typical symptoms of ADHD are inattention, hyperactivity, and impulsivity (Woodrich, 2000). These symptoms lead to social skills deficits and, in turn, poor social outcomes for many students with ADHD.

Students with ADHD are often aggressive and exhibit a lack of positive requests in a social setting. Instead of verbalizing their needs, students with ADHD may yell out or impulsively take what they need. Madan-Swain and
Zentall (1990) examined whether the behavior of elementary children without ADHD who are liked differs from the behavior of children with ADHD who are disliked. Participants were 25 children diagnosed with ADHD and a group of children undiagnosed. The children were paired, one child with ADHD and one without. The researchers measured the amount of positive rough play and the number of positive requests. Both boys and girls with ADHD demonstrated less positive rough play and fewer positive requests and were generally disliked by the other children.

Being disliked by peers leads to low self-concept. Ostrander et al. (2006) examined children with ADHD to see a correlation could be found between positive comments from teachers and parents on social competence and the children’s self-concepts. The research examined 246 children in Grades 1-4. Of these, 148 had ADHD and exhibited problem social behaviors and 98 were in a control group. The researchers administered a classroom-wide assessment survey to the students and recorded the number of positive comments students received during observations. The researchers found a strong relationship between ADHD and the lack of positive self-concept in relation to social competence reports with an effect size of $0.567, p > .05$.

A review examining the impact teachers have on students with ADHD was conducted by Sherman, Rasmussen, and Baydala (2008). The review looked at various studies with populations of school-age children in Grades 1-6 with an ADHD diagnosis. The studies all had the common thread of teacher factors. Some of the teacher factors were attitudes, beliefs, social skills, and training. After an in-depth review, the researchers concluded that teacher factors have a large effect on students with ADHD. Teachers who had positive attitudes towards their students described an increase in student success. The teachers’ positive
attitudes led to use of successful strategies, implementation of social skills training programs, and teaching of self-help skills. The way students believed their teachers perceived them also impacted their relationships with their peers and their self-concepts.

Review of Single-Subject Design Research

Single-subject design is used to perform in-depth research in an isolated situation and collect data that can be used to generalize information to similar groups. A collection of single-subject design studies was analyzed to determine the effectiveness of various social skill strategies. The results were consistent with the findings of group studies, in that social skills training programs were shown to produce some benefit, whether social, emotional, or academic.

Peer Tutoring

In 1993, DuPaul and Henningson used a single-subject reversal ABAB design to determine the effectiveness of a peer tutoring program on on-task behavior and fidgeting in a student with ADHD. The participant was a 7-year-old boy diagnosed with ADHD. The researchers found a significant difference in on-task behavior before and after peer tutoring. At baseline, the student was on task 39% of the time and fidgeting 31% of the time. After peer tutoring, the student was on task 89% of the time and fidgeting 4% of the time. When the peer tutoring was taken away, the student’s on-task behavior decreased to 70% and his fidgeting increased to 23%. The researchers implemented the peer tutoring again, and on-task behavior increased to 90% and fidgeting decreased to 3.8%. Overall, peer tutoring was an effective means of addressing the targeted behaviors for this student.
Self-Monitoring

A single-subject ABA study was done by Shimabukuro, Prater, Jenkins, and Edelen-Smith (1999). The researchers examined the effects self-monitoring had on on-task behavior and academic performance. The participants were 3 sixth-grade males with a diagnosis of ADHD. All 3 participants increased their academic productivity from a baseline of 10-17% for on-task behavior to 34-39% after developing the self-monitoring skills.

A similar study was conducted by Mathes and Bender (1997) to examine the effect self-monitoring had on on-task behavior for students with ADHD. The 3 participants from Grades 3, 4, and 5 all had a diagnosis of ADHD. Mathes and Bender used a single-subject ABA design. Their baseline data showed Student 1 was on task 40% of the time, Student 2 was on task 38% of the time, and Student 3 was on task 37% of the time. The students filled out a self-monitoring checklist independently and the teacher also filled out a checklist. The students and teacher compared their checklists and discuss the similarities and differences. After the intervention, participants’ on-task behavior increased to 97%, 87%, and 94%. This study yielded a more significant increase than the Shimaburkuro et al. (1999) study.

Self-Management

The effect of self-management on classroom behavior in students with ADHD was analyzed by Shapiro, DuPaul, Bradley, and Bailey in 1996 and Barry and Messer in 2003. The first study used an ABCD design with 2 sixth-grade males with ADHD. For Student 1, the teacher targeted five different behaviors: having needed materials, attending to task, not talking, using appropriate language, and raising a hand instead of yelling out. The behaviors were scored on a 0-5 scale, 0 being poor and 5 being excellent. His baseline showed an average score
of 2. When the reinforcement was put into place, his average score rose to 3, and by the end of the self-management program, his average score was 4. The study showed the effectiveness for this student, who increased in on-task behavior from 75% to 100%.

For Student 2, the teacher targeted five different behaviors: being prepared for class, completing homework, following instructions the first time, staying on-task, and completing work. The scale was from 0-5, 0 being poor and 5 being excellent. The student could receive a total of 25 points per period for staying on-task and completing work. The student’s baseline for impulsivity was 10. After a reinforcement was introduced, the score for impulsivity was 5, and after the management program was complete, his score was 4. This study showed that a self-management system effectively decreased the student’s impulsivity.

The second conducted by Barry and Messer (2003) had 5 participants who were sixth-grade males diagnosed with ADHD. The participants were taught techniques to monitor academic performance, on-task behavior, and disruptive behavior. All of the students displayed disruptive behaviors in the general education classroom. The study showed an increase in on-task behavior and academic performance from 75% to 85% after the self-management training. The results for decreasing disruptive behavior were not as conclusive.

**Review of Group Design Research**

Thorell and Rydell (2008) explored two key aspects of social competence: positive peer interactions and the ability to initiate and engage in social interactions. The researchers assessed four different groups: one group of 4-year-olds with high levels of ADHD symptoms \((n = 29)\), one group of 9-year-olds with high levels of ADHD symptoms \((n = 31)\), one comparison group of 4-year-olds
(n = 238), and a comparison group of 9-year-olds (n = 261). The group of 4-year-olds with ADHD had an effect size of .76, whereas the comparison group of the same age had an effect size of .55 in social competence. The 9-year-olds with ADHD had an effect size of .59, and the comparison group had an effect size of .60 in social competence. In this study, the results show a difference in students with ADHD versus students without ADHD but not a significant difference in age groups.

Antshel and Remer (2003) conducted a study to determine the efficacy of social skills training on students with ADHD. The participants of the study were 120 children ages 8-12 with ADHD. The children were randomly assigned to groups. One group received 8 weeks of social skills training and the control group did not receive any social skills training. In this particular study, 30% of the students showed an improvement after treatment, whereas 70% remained unchanged. The results do not show strong efficacy of social skills training.

De Boo and Prins (2006) analyzed the effects social skills training had on students with ADHD. The researchers reviewed six studies that all used a control-group design. In four of the studies, social skills training did appear to improve social functioning in students with ADHD. Some of the factors that made four of the six social skills programs effective were length of time, type of program, and targeted social skills. In two of the six studies, no significant difference in the social functioning of the students with ADHD was found after treatment.

Forness and Kavale (1996) looked at 53 different studies to determine the effect of treating social skills deficits in children with ADHD with social skills training. The studies had a total of 2,113 participants with an average age of 11.5 years. The students had an average of 3 hours of social skills training per week for over 10 weeks. The studies yielded similar findings: students made minimal gains
in social competence. Sixty-five percent of the students reported they felt an increase in their social status after the treatments; however, teachers and peers did not report such a high effect. The overall mean effect size was .211, the effect size by self-report was .24, by peers was .21, and by teachers was .16.

Specific Social Skills Training Programs

Some of the specific programs researched for this study were Promoting Alternative THinking Strategies (PATHS), Self-Discovery Program (SDP), DARE to Be You, I Can Problem Solve (ICPS), and peer mediation used in schools. All of these programs address the importance of social-emotional learning and character and moral education. Each program targets a different population and has research to support its usefulness with that specific population.

Promoting Alternative THinking Strategies (PATHS)

Promoting Alternative THinking Strategies (PATHS) is a curriculum for school-age students with special needs (Kam et al., 2004). This curriculum focuses on three main areas of social competence: emotional development, self-regulation, and social problem-solving skills. It is designed for the social and psychological adjustment of students in special education.

The program contains 60 lessons in units consisting of different topics (Kam et al., 2004). Some of the topics addressed are self-control, feelings, and problem solving. The self-control unit was specifically developed for the primary special education setting. It focuses on a reinforcement program that a teacher developed for her classroom. The feelings unit explores feelings and relationships. This unit contains techniques for generalization. The generalization aspect is important for student achievement and academic success. The problem-
solving unit was also designed for students in special education. The lessons promote improvement in cognitive skills.

One integral aspect of the PATHS curriculum is the ABCD model. The ABCD model of development stands for “affective behavioral cognitive dynamic.” The thesis underlying this model is that children develop emotionally before they develop much of their cognition. According to Kam et al. (2004), “A critical development achievement occurs when the child begins to regulate internal affective states” (p. 67). This occurs before the child learns anything academically.

Evaluation of this curriculum showed varied results. Determining the actual effect the curriculum had was difficult because the students were so varied. The study was conducted with 133 students with disabilities. The intervention group decreased externalizing behaviors at a rate of .37 points per year, whereas the control group showed an increase of .72 points per year. As for social competence, no significant differences were found between the groups. The study would benefit from conducting research in different settings. Kam et al. (2004) stated that using a more school-wide approach would help generalization and research validity.

Self-Discovery Program

The Self-Discovery Program was developed for students between the ages of 10 and 14 who have behavioral and emotional difficulties and may be at risk for exclusion from the general education classroom (Cullen-Powell & Barlow, 2005). The main focuses of this curriculum are self-awareness, thoughts, emotions, and behaviors. It is designed to give students ranges of skills that enable them to better interact in mainstream society.
The program is a yearlong program that can be taught in weekly sessions of 45 minutes. For young children, the program consists of sensory awareness, peer massage, communication, and relaxation (Cullen-Powell & Barlow, 2005). The sensory awareness involves use of colors, music, and tactile objects. Peer massage occurs as students learn to massage a peer’s hand. The massage aids in helping students recognize their thoughts and feelings and how others may feel. All of the topics are used to help students self-discover their own emotions.

The research on this program showed an increase in engagement and a decrease in aggressive behaviors after implementation (Cullen-Powell & Barlow, 2005). Children began to interact with peers appropriately, using a lot of sharing strategies that were developed in the program, with an effect size of .21. Participants also took very important steps forward in social-emotional learning and thinking. The changes were small, but they demonstrated a direct correlation between behavioral change and learning.

Dare to Be You

Dare to Be You is a program designed to prevent problem social behaviors in students before they get to school (Miller-Heyl, MacPhee, & Fritz, 1998). It is targeted for children between the ages of 2 and 5 years. Its main concerns are issues that arise in the family, school, and community. The program addresses self-responsibility, communication, social skills, problem solving, and decision-making in each of those settings. Parents are highly involved and are educated on how to implement this program. They attend 30 hours of workshops and meet regularly with workshop participants.

The researchers could not demonstrate the success of this program. In a 5-year study, they randomly assigned children from ages 2 to 5 to either a control
group \((n = 301)\) or an experimental group \((n = 496)\). Surveys completed by parents and teachers revealed improvement in only three of the nine criteria needed to meet curriculum needs. Too much responsibility was put on the parents, no generalization was reported, and the study lacked replication across settings, all of which made the results limited (Miller-Heyl et al., 1998).

**I Can Problem Solve (ICPS)**

I Can Problem Solve is a program used to teach young children problem-solving skills. It focuses on problem-solving, social cues, perspectives, and creating solutions. Spivack, Platt, and Shure (1976) developed this program, which is still used today.

It is designed to be implemented over a 12-week period using numerous games, discussion techniques, and group activities. The teacher runs the program and helps the students gain the necessary information. The teacher also keeps data, or behavior ratings, to determine the effectiveness of the program.

Many studies by Cullen-Powell and Barlow (2005) have shown a decrease in problem behavior as a result of the use of the program, with an effect size of .46. Students learned how to think critically and use various problem-solving techniques. However, students who displayed aggressive behavior did not decrease their aggressiveness after completing this program.

**Peer Mediation**

According to Jones and Brickman (1994), peer mediation programs train students to use effective problem-solving skills and decrease problem behaviors. Burrell, Zirbel, and Allen (2003) showed that peer mediation works across grade levels and settings. In a review of studies in elementary, intermediate, and high schools, students showed an average effect size of .67. Student mediators were
encouraged to use the skills they learned in the programs to make better choices and encourage others to do the same.

Burrell et al. (2003) also found that peer mediation programs had a high transfer rate of generalization of school behavior to home behavior. Students who used school-based mediation techniques were more likely to be educated in appropriate conflict-resolution strategies. The researchers found that students’ knowledge about conflict increased, with an effect size of .53 ($p < .05$).

According to Roush and Hall (1993), students are also more likely to gain self-concept skills and higher self-esteem after participating in mediation.

Burrell et al. (2003) reported a direct decrease in aggressive behavior and increases in prosocial values due to peer mediation. The students who participated in peer mediation had an effect size of .44 in terms of reduction in conflicts. At-risk students benefited from direct mediation more than students not at risk. The at-risk students had a greater increase in self-awareness and self-esteem.

**Second Step**

Second Step: A Violence Prevention Curriculum was designed to address social-emotional learning in the areas of social competence and emotional problems (Committee for Children, 2002). The three main areas covered by the curriculum are understanding and expressing empathy, controlling impulses, and managing anger. Each unit covers one of these areas and has complete lessons and activities for educators to complete with students.

Unit I addresses empathy in a number of ways. It explores empathy through emotion, thoughts, and behavior (Committee for Children, 2002). Students learn to analyze their own thoughts and emotions to better understand and interact with their peers.
Unit II addresses controlling impulses and how to develop problem-solving skills. This area of knowledge gives students tools for interacting and reacting appropriately in difficult social situations. Research has shown that when children develop problem-solving skills they are less aggressive (Cohen, 2001).

One benefit of this program is continuity. Second Step has specific programs for preschool/kindergarten, Grades 1-3, Grades 4-5, and middle school. As students grow socially and emotionally, new obstacles present themselves, and programs that are taught consistently year after year are more effective than programs that are short-term (Weissberg & Bell, 1997). The long-term program also gives students opportunities to practice skills over time and across settings.

**Generalization and Maintenance**

Two important aspects to consider in social skills training programs are generalization and maintenance. These elements are often left out of social skill training programs. Competing behaviors already established in students’ lives tend to overpower new behavior concepts (Gresham et al., 2001).

Since the research shows mixed results in terms of efficiency in increasing social skills, one area to be aware of is generalization. Although school is an ideal environment for teaching social skills, the skills must be generalized to different settings in order for them to be truly effective. Focusing on specific skills across settings can make social skills training more effective (McIntosh & MacKay, 2008).

Education is a dynamic field. Methodologies and practices are continually changing to promote higher academic achievement. According to Elias and Butler (1999), developing social skills is also a dynamic process and takes practice. To
truly develop and internalize social skills, students need to practice, get feedback, and continue to practice.

**Conclusion**

After reviewing relevant literature on the subject of social skills training for students with ADHD, a few things are clear. First of all, social skills training is important for many students, especially students with special needs. It is also clear that human development and academic learning cannot be separated and can be addressed in a meaningful way (Pellitteri & Smith, 2007). According to the research, social skill deficits are of growing concern and have been addressed with numerous social skills training programs in various settings.

Because social skills are important to many students, various programs could be used to connect the standards-based curriculum to social skills training. The more teachers gather information and teach social strategies in a meaningful way, the more the students will be prepared to learn important academic information (Carter, 2006). Such instruction will also help with the inclusion of students with special needs in the general population.

When examining ADHD, researchers look at behavior and social problems. As stated previously, human development and learning cannot be separated. For students to be socially and academically successful, they must have certain foundations in place. This means having their basic needs met and being part of a warm, nurturing environment (Gerwetz, 2003).

This study explored the question: Is social skills training effective in remediating social skills deficits in a student with ADHD? Data were collected and analyzed, and the results are presented in subsequent chapters.
Chapter 3

METHODOLOGY

The purpose of this study was to examine the effect social skills training had on a student with a history of weak social skills and inattentive and impulsive behavior associated with his ADHD diagnosis and below average academic growth. Two specific behaviors were targeted for this particular student: time on task and initiation of social interaction. The goals of the training were to increase the percentage of time the student spent on task and increase the percentage of times the student initiated appropriate interactions with peers. This study addressed the question: Is social skills training effective in remediating social skills deficits in a student with ADHD?

Hypothesis

This research tested the following hypothesis: A student with ADHD who receives social skills training will increase on-task behavior in the classroom and initiate appropriate peer interactions on the playground.

On-task behavior was defined as (a) looking at the teacher when the teacher is speaking; (b) keeping eyes on paper, tracking words with eyes and/or finger when reading; or (c) writing to complete a math problem. Initiation of peer interaction was deemed to occur when the student approached a peer or peers, walking up to them and engaging in a conversation or a shared activity, using appropriate eye contact and volume of voice.
Data Collection

The researcher, who is also the resource specialist teacher, first selected two behaviors of the participant to target with the social skills training: time on task and initiation of peer interaction. She monitored the targeted behaviors using a time sampling recording system for on-task behavior and an event recording system for the peer interaction behavior. The time sampling was done three to four times a week in the general education classroom. Using a stopwatch and starting at 11 a.m., the researcher looked at the student every minute and recorded if the student was on-task or not for twenty 1-minute intervals. Percentages were calculated of the total time the student was on task. Separate percentages were created to show information for each specific on-task area: looking at the teacher, following along while reading, and working on the whiteboard.

During the event sampling, the researcher observed the student at recess on the playground. The researcher assigned a 0 if the student did not initiate any interaction, a 1 if the student initiated interaction with prompting, and a 2 if the student independently initiated interaction. A percentage was derived to represent the occurrence of the behavior. The data were gathered over an 8-week period.

Instrument

The Walker-McConnell Scale of Social Competence and School Adjustment (Walker & McConnell, 1995) was used to determine the participant’s social competence and school adjustment before implementing the social skills training. The instrument has two age-specific scales: one for students in Grades K-6, and one for students in Grades 7-12. Each scale has three subscales. The subscales are teacher-preferred social behavior, peer-preferred social behavior, and school adjustment behavior. The scales have 43 statements that measure social competencies that are used in a school setting. The answer options are on a
Likert-type scale and range from 1 (never occurs) to 5 (frequently occurs). The results are given in standard scores for each of the three subscales and a total score. The total score has a mean of 100 and a standard deviation of 15.

According to Merrell and Gimpel (1998), the scales are short, easy to use, and cover appropriate topics seen in a school setting. The items on the scale are randomly ordered, eliminating any order bias. The Walker-McConnell scale was standardized during a study conducted in 1985 and 1986. The study examined 1,812 elementary-age children. According to the researchers who standardized the scale, one of the limitations was the composition of the sample. The sample seemed to have an overrepresentation of Caucasian children, mainly (49%) from the Northwestern United States. Eighteen percent came from Alaska. A large portion of the sample population was classified as “unspecified” in the ethnic/race category.

The standardization data and psychometric properties are described in the manual. Many studies cited in the manual indicated the scale has adequate to excellent psychometric properties (Fennerty, Lambert, & Majsterek, 2000). A test-retest method was conducted to establish reliability. The data collected showed correlations of .88 to .92 over a 3-week period across more than 300 participants. Internal consistency was also established by the test-retest method; alpha coefficients ranged from .95 to .97.

Validity was analyzed and assessed in a number of ways (Merrell & Gimpel, 1998). Discriminate validity was demonstrated in various studies focused on different groups, such as at-risk, learning disabled, and typically developing students. Criterion validity was established using various criterion variables, such as socioeconomic status, academic achievement assessments, and other behavior screenings. Construct validity was established by researching correlations
between peer and teacher rating scales. The manual also provides evidence of
test-retest reliability, internal consistency, and inter-rater reliability.

Fennerty et al. (2000) analyzed the wording of several behavior rating
scales, including the Walker-McConnell scale. Their evaluation of the Walker-
McConnell scale showed a reliability coefficient of .83 and contained 36
agreements that the questions were worded in a positive tone. This finding
demonstrates that researchers can look at desired behaviors rather than label
students as having negative deficit social behaviors.

Participant

In this single-subject design, one participant was studied. The participant,
John, had a history of inattentive and impulsive behavior. He began to see a
speech and language therapist at the age of 4 to address his needs in articulation,
phonological development, and receptive and expressive language skills while
attending preschool at a public elementary school. At that age, he was also
diagnosed with sensory integration disorder. Sensory integration disorder is a
neurological disorder that affects the brain’s ability to integrate sensory
information appropriately (Ayres, 2005). Some reported characteristics of the
disorder are low self-esteem, impulsiveness, lack of interest, and increased visual
input.

At the end of his kindergarten year, John’s report card indicated he needed
to improve in the areas of rhyming words and sequencing numbers. Numerous
comments addressed his lack of attention and focus during station work. A
student study team meeting was held to discuss strategies to use in the classroom

\[1\text{Participant’s name has been changed to maintain confidentiality.}\]
to help John succeed. After first grade, his teacher indicated he had difficulty grasping anything abstract and could not attend during whole class instruction.

John’s speech and language triennial review was held in 2007. John’s mother requested a full psycho-educational evaluation to address educational concerns. Other concerns addressed were attention/concentration, reading comprehension, written language, and his tendency to become frustrated. When the testing was complete, the IEP team recommended John continue receiving speech and language services and begin receiving RSP services to address his academic needs. John’s mother discussed the information with a pediatrician, and John was diagnosed with Attention Deficit Hyperactivity Disorder and began taking medication for the condition.

The researcher, who is also the resource specialist teacher, began working with John when he was in third grade. John was often described as hyperactive and unable to focus. Some of the strategies employed to address his inattention were use of noise cancellation headphones, preferential seating with minimal distractions, sending home of a daily behavior journal, token systems, special cushion, and numerous other accommodations. Many of the strategies did not have an effect on John. Others helped briefly, but results were inconsistent.

One common comment made about John was that he seemed distracted by his own thoughts. This made the noise cancellation headphones and distraction-free environment irrelevant. The strategies that did work were making John aware of his actions and accountable for them. If he failed to finish an assignment, he would have to miss recess. John did not like missing recess, and would quickly finish his work so he would not miss it.

At the time of the study, John was 9 years old and attending public school in a suburban area. He was in the fourth grade, had an IEP, and continued to
receive special education and speech and language services. He was pulled out of the general education classroom 3% of the time for individualized instruction in a resource specialist program. He took a higher dose of medication for ADHD than he did when he was first diagnosed.

John is African American and from a single-parent home. He was an only child but lived with other children in the home. He received help with his schoolwork every night from his mother. She had recently expressed concern to the RSP teacher about his lack of social skills. The social skills he lacked were making eye contact when interacting, initiating interactions, and engaging in appropriate conversations. Based on his background and history of social skills deficits across settings, John was selected for this study.

To measure the student’s social competence and school adjustment, the resource specialist, the participant’s general education teacher, and the participant’s mother completed the Walker-McConnell Scale of Social Competence and School Adjustment. The scores were analyzed to determine the student’s social skills needs.

After analysis of the completed scales (Table 1), the researcher selected two primary behaviors to target: on-task behavior and engaging in appropriate interactions with peers. John’s lack of appropriate eye contact and his poor voice volume had led to many misunderstandings among peers and lessened his interactions considerably. The researcher focused on these two behaviors when observing his interactions. Teacher reports also indicated that John did not join groups independently and played by himself rather than initiate interactions.
Table 1
Walker-McConnell Scale of Social Competence and School Adjustment Results

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Teacher-preferred social behavior (subscale 1)</th>
<th>Peer-preferred social behavior (subscale 2)</th>
<th>School adjustment behavior (subscale 3)</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education Teacher Assessment</td>
<td>42</td>
<td>36</td>
<td>26</td>
<td>104</td>
</tr>
<tr>
<td>Raw Scores</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>74</td>
</tr>
<tr>
<td>Standard Scores</td>
<td>12</td>
<td>4</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>General Education Teacher Assessment</td>
<td>58</td>
<td>34</td>
<td>27</td>
<td>119</td>
</tr>
<tr>
<td>Raw Scores</td>
<td>10</td>
<td>3</td>
<td>6</td>
<td>81</td>
</tr>
<tr>
<td>Standard Scores</td>
<td>46</td>
<td>2</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Parent Assessment</td>
<td>48</td>
<td>45</td>
<td>29</td>
<td>122</td>
</tr>
<tr>
<td>Raw Scores</td>
<td>8</td>
<td>6</td>
<td>7</td>
<td>82</td>
</tr>
<tr>
<td>Standard Scores</td>
<td>27</td>
<td>11</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

**Functional Analysis**

A functional analysis was done to relate John’s problem behaviors to environmental events that preceded or followed the behavior. The analysis was also used to determine the functions of his behavior. The researcher completed an anecdotal analysis by interviewing the general education teacher and observing the student in the general education classroom.

**Anecdotal Analysis**

The researcher observed the student for 5 days in the general education classroom during a whole-group math lesson from 11:00 a.m. to 11:20 a.m. The 1st day the researcher observed the student looking around the room while the teacher was reviewing key concepts on the board. The student was verbally redirected, briefly looked at the board, and was off task within the same minute.
Day 2 was a repeat of the exact same situation. The student was off task, playing with his pencil, was verbally redirected, and was soon off task again. On the 3rd day, the researcher observed the student working on the whiteboard at his desk to complete a math problem. The teacher verbally praised him for following along and completing the math problem. On the last 2 days of observation, the student was off task during the lesson and the teacher redirected him.

The researcher interviewed the general education teacher about John’s behavior in the classroom. The general education teacher stated she spent a lot of time redirecting John during lessons. She also tried to work one-on-one with him when she was available. She noticed that after redirecting him he was often off task within a few seconds and needed to be redirected again.

During this time, the researcher also observed John at recess on the playground from 10:00 a.m. to 10:20 a.m. On Day 1 the researcher watched John run around the blacktop by himself. He did not interact with anyone during the 20 minutes of recess. On the 2nd day, John stood near the students playing tetherball but did not interact with anyone. He did not initiate conversation, and no one talked to him. On the 3rd day, John ran around by himself again and played with no one. On the 4th day, his general education teacher had recess duty and was outside with the students. John approached her and talked with her. She told John to go and find some friends to play with. John stated he did not have anyone to play with. On the 5th day, John ran around for the whole recess and did not interact with anyone.

The researcher interviewed the general education teacher and asked about John’s lack of interactions. The general education teacher stated John never played with anyone but was often seen talking with adults and staff members. She
consistently told him to find friends to play with, but he continued to talk with adults.

The anecdotal analysis indicated that certain events consistently preceded John’s challenging (off-task) and appropriate (on-task) behaviors. John was on task less when he was asked to work independently in the subject areas of math and writing. He was on task more when he was asked to do a visual hands-on activity. At recess, John did not interact or initiate any interaction with peers.

The consequences that followed John’s actions were consistent but did not motivate him to change his behaviors. When he was off task he was verbally redirected, and when he was on task he was verbally praised. At recess, if he did not interact with anyone he continued to play alone and walk around the playground.

During math and writing, the function of John’s behavior seemed to be self-stimulation. Because his off-task behavior had been a recurring problem, it seemed to stem from his ADHD; he could not control his focus. Due to his impulsivity, he did not think about his actions nor did he fully understand the consequences of his behaviors.

After analyzing the data, the researcher concluded that the same antecedents were producing the same behaviors and the same consequences were following. Based on the results of the functional analysis, two behavioral objectives were created for John.

**Objective 1**

By February, 2010, instead of being off task (looking out the window, playing with objects, looking in the direction opposite of the teacher), John will be on task (looking at the teacher when the teacher is speaking, having eyes on paper
and tracking words with eyes and/or finger when reading, or writing to complete a math problem) and maintain concentration during a math lesson in the general education classroom in the period from 11:00 to 11:20 a.m. 80% of the time in 4 out of 5 days as observed and measured by teacher-created charts and verified by the resource specialist.

**Objective 2**

By February, 2010, instead of playing alone at recess, John will initiate peer interaction by starting a conversation or participating in a shared activity (i.e., games, etc.) during recess in the period of 10:00 to 10:20 a.m. two times per day for 3 consecutive days as measured by teacher created charts as verified by the resource specialist.

**Baseline**

To develop a baseline, the participant was observed in the general education classroom and at school recesses on the playground. On the playground the resource specialist collected data using an event recording method for objective 2 by noting the number of times John initiated interaction with a peer or peers (Appendix C). Data were collected three to four times a week for the period from 10:00 a.m. to 10:20 a.m.

In the general education classroom, the resource specialist used a time sampling recording method for objective 1. Using a stopwatch, she looked at the student every minute for 20 minutes and recorded what the student was doing (Appendix D). Thus behavior was recorded over twenty 1-minute intervals. The percentage of time the student spent on task in this setting was then calculated. On-task behavior was defined as one of three possible behaviors. In Behavior 1, the student would look at the teacher when the teacher was speaking or explaining
something. In Behavior 2, the student’s eyes would be on the paper, tracking words with eyes and/or finger when reading. In Behavior 3, the student would be writing to complete a math problem when instructed to do so. Every minute the resource specialist checked what the student was doing and what the teacher was doing.

To maintain consistency, the observations were made in the same settings and at the same time every day. John was observed from 10:00 to 10:20 a.m. and from 11:00 to 11:20 a.m. Monday (or Tuesday when there was no school on Monday) through Thursday for 8 weeks. The observer used a stopwatch and timed every observation to the minute to maintain validity.

Reinforcement

As previously stated, many accommodations and strategies had not worked for John in the past. The only reinforcements John received were that his off-task behavior was met with verbal redirection and his on-task behavior was met with verbal praise. To help John become more aware of his actions, the reinforcer of earned rewards was put in place. John was given a reinforcement survey (Appendix E). When asked what he would like to work for, John named free time to talk with the teacher and candy mints. The teacher had John reflect on his behavior every day by filling out a self-reflecting points card (Appendix F). The card had five boxes for John to use to record five behaviors: come into the room quietly, get right to work, be kind to others, complete work accurately and neatly, and listen and follow directions. If he received points for all five, he could get a candy mint at the end of the session.
Design and Procedures

This study used an ABAB reversal design to measure both behavioral objectives. Prior to the beginning of the study, permission was obtained from the parent of the participant. The parent was given an informed consent form (Appendix G), which explained the purpose of the study, the social skills training methods involved, and how the collected data would be used.

The researcher collected field notes from all of the observations. The general education teacher and parent were consistently interviewed throughout the process to gain insight on the student’s behavior during times of the day other than those under investigation. Relevant information is reported in the results section of this study.

Intervention

After the baseline data were collected, the researcher looked for any trends in behavior. The researcher began the intervention. The targeted behaviors were addressed using a variety of lessons (Appendix H), direct instruction, modeling and role-play. Social skills lessons were chosen from some of the programs described in chapter 2. Direct instruction, which is explaining step-by-step how to act in various social situations, was used. The resource specialist and John discussed and practiced specific social skills, such as making eye contact, using an appropriate voice volume, and using appropriate body language. The resource specialist also modeled how to act and what to say to peers on the playground and in the classroom to initiate peer interaction. Role-play was used with peers to practice techniques and social skills strategies in meaningful ways.

The participant received 30 minutes of direct instruction a week from the resource specialist, saw interactions with peers modeled weekly, and participated
in social skills lessons weekly for 8 weeks. Data were collected throughout the 8 weeks to determine if targeted behaviors improved after the training.

The researcher then withdrew the intervention and direct instruction and gathered data to determine if the targeted behaviors were retained, if they decreased, and if the student returned to baseline. These data also helped determine whether the social skills training produced generalization and maintenance of desired behaviors. If the student responded positively to the intervention, the strategies could be transferred to different teachers and settings. The results are discussed in detail in the next chapter.

**Data Analysis**

To analyze the data, the researcher compiled graphs for all the observed behaviors. After the observations were completed, percentages were calculated and reported in charts and graphs. Field notes were also kept and examined. Analysis of the researcher’s, teacher’s, and parent’s reactions was done to gather more detail. The percentages, frequencies, and observations are reported in the following chapter.
The purpose of the present study was to examine the effects social skills training had on a student with ADHD. Two behaviors were targeted as a result of assessment using the Walker-McConnell Scale of Social Competence and School Adjustment. Based on the results derived from the resource specialist teacher, the general education teacher, and the participant’s parent, the behaviors selected were time on task and initiation of peer interaction.

The researcher, who is also the resource specialist, had worked with the participant for 2 years prior to the research and had consistent contact with the participant’s parent and teachers. She had been concerned about the student’s social skills since she was introduced to him. The data collected give a picture of the behaviors that were measured using time sampling and event sampling and the researcher’s reactions and observations throughout the study.

Observations of Time on Task

The student was observed three to four times a week for 8 weeks. The researcher collected data from 11:00 a.m. to 11:20 a.m., using a time sampling method. Figure 1 displays the percentage of time the student was on task each day. The researcher considered the student on-task if he was looking at the teacher when the teacher was talking, following along when reading, or writing on the whiteboard to solve a math problem. Figures 2, 3, and 4 give more detail about the student’s on-task behavior. Figure 2 shows the amount of time the student looked at the teacher when the teacher was talking. Figure 3 displays the
percentage of time the student followed along while reading. Figure 4 illustrates the percentage of time the student wrote on his whiteboard to solve a math problem.

**Baseline I**

The first five data points on the graphs represent the initial baseline data. After the intervention was withdrawn, a second baseline was established for the purpose of measuring maintenance of behaviors. At initial baseline, the student was on task for an average of 31% of the time during the week. The researcher observed the student consistently looking around, looking out the window, and playing with objects. Examining each of the three individual behaviors that make up the time on task measure, the student looked at the teacher for an average of 19% of the time, followed along when with the reading for an average of 5% of the time, and worked on his whiteboard for an average of 61% of the time. This indicated that John was on-task more when asked to do a hands-on math problem on the whiteboard than when expected to follow along while the class read together.

At this time, the general education teacher stated that she tried to keep John on-task and focused by constantly verbally redirecting him, placing his seat in the front row, and tapping his desk to get his attention. She also tried to have students share answers with one another so they heard the information numerous times. None of these strategies kept John’s attention for very long. He would go back to staring out the window and fidgeting.

The researcher noted that John’s behavior was typical across settings. In the general education classroom the student consistently displayed off-task behavior. Accommodations had been in place to address these attention issues
Figure 1. Student’s progress throughout the intervention for on-task behaviors observed.
Figure 2. Student’s progress throughout the intervention for looking at teacher.
Figure 3. Student’s progress throughout the intervention for following along when reading.
Figure 4. Student’s progress throughout the intervention for writing on whiteboard.
from the time he entered special education, but was still attending at an average rate of only 31% of the time. Socially he did not engage in appropriate eye contact or display appropriate body language. This was noted as an area of need in the results of the Walker-McConnell Scale testing.

**Intervention I**

The next 14 data points on the graph show data for Intervention I. For the first lesson (data points 6-8), which was taught and reinforced January 1-7, the student received direct instruction on how to make appropriate eye contact with the teacher and on what appropriate body language looks like for a good student attending to task. Appropriate body language was explained as sitting up in his seat, not resting his head on the desk, and having his legs and chair legs under the desk. The resource specialist explained each component of what being a good student who pays attention looks like. She also modeled the social skills and had the student practice. With constant reminders in a small-group setting, the student was told to try making eye contact and using appropriate body language in the classroom. The student began using a Points Card to self-reflect on his behavior. If he performed all five behaviors on the Points Card (come in quietly, get right to work, be kind to others, follow directions, and complete work accurately and neatly), he received a mint or other candy of his choice.

As Figure 1 indicates, the participant went from being on-task an average of 31% of the time to being on-task an average of 70% of the time in the first 3 days of Intervention I. The researcher noted that the student was able to make appropriate eye contact and use appropriate body language in a whole-group setting with simple redirection strategies. The student was observed paying attention for longer periods of time and completing more in-class work. John
looked at the teacher an average of 72% of the time, followed along while reading
an average of 47% of the time, and completed work on the whiteboard an average
of 76% of the time. The lesson on eye contact and body language helped the
student look at the teacher when the teacher was talking for a greater amount of
time. During Baseline I, he had looked at the teacher for an average of only 19% of
the time; that figure increased to 72% after the lesson.

The next lesson, introduced during the week of January 11-14 and reflected
in data points 9-12, also showed an average time on task behavior of 70% of the
time. The resource specialist had reminded the student to use appropriate eye
contact and body language and also introduced a lesson on what happens when
you don’t listen to what the teacher is saying. The lesson was delivered with a
reproducible book that the student and teacher filled out together. The book asked
questions about a specific social situation in which a student is not paying
attention in class. The student and teacher discussed the importance of listening in
class. During this lesson, the researcher observed that the student continued to
need constant reminders and redirection. The student was responsive when the
researcher was watching, but got off task if he felt the researcher was not watching
him.

The student looked at the teacher an average of 66% of the time, 19% for
followed along when reading an average of 19% of the time, and wrote on the
whiteboard an average of 98% of the time. John was on task much more while
writing on the whiteboard than when asked to follow along with reading.

The following week, January 19-21, the resource specialist taught a lesson
on waiting to talk and turn taking. Again, the student received a reproducible
book to aid in discussing a situation about taking turns, and he answered questions
pertaining to that social skill. At this point, he was on-task for an average of 80%
of the time during observations on Days 13-15. He looked at the teacher an average of 74% of the time, followed along while reading an average of 53% of the time, and completed his work on the whiteboard an average of 93% of the time.

During the week of January 25-28, reflected in data points 14-17, the student was on-task an average of 85% during the interval recording. The researcher noted that the class was playing a math game that day, and the student was very engaged. During this week, the resource specialist teacher reinforced the previous lessons taught. The participant was on-task an average of 81% of the time. Averages for looking at the teacher, following along when reading, and writing on the whiteboard were 68%, 81% and 87% of the time, respectively. The researcher noted an increase in the behavior of following along while reading. The increase may have been caused by the social skills lesson and the math game the students played in class. The day the class played the game, John was on-task in all areas for 85% of the time.

During the first intervention time, the student knew he was being observed. John also received reinforcement in the form of a mint or other candy every time he earned the required points. Based on parent and teacher interviews, the participant was still off-task the majority of the time in other settings throughout the day.

Baseline II

The first intervention was withdrawn and the student was again observed during the week of February 1-4, reflected in data points 20-23. The student’s on-task behavior began to drop from an average of 75% of time on-task to an average of 56% of time on-task. On the 2nd day, the student noticed he was not getting
any reinforcement and asked the researcher if she was looking. The researcher made no reply and the student seemed to lose interest in the lesson. The student looked at the teacher less (31% of the time) and followed along only 46% of the time. He continued to complete his work on the whiteboard an average of 88% of the time.

**Intervention II**

When the intervention was introduced again, the student’s on-task behavior increased. He was on-task for an average of 84% of the time observed. He said he understood what was expected of him (eye contact, appropriate body language). He also understood that he would be rewarded if he received all of the required points on his points card and he would be verbally acknowledged if he followed along and tried to pay attention to his teacher. Once the intervention was back in place, the student increased all on-task behaviors. John looked at the teacher an average of 73% of the time, followed along when reading 89% of the time, and wrote on his whiteboard an average of 91% of the time.

Throughout the intervention, the researcher’s relationship with John played a role in the data collection. The student expressed a desire to please the researcher and was willing to try the interventions discussed. He often asked if he was doing a good job and looked to the researcher for reassurance. Overall, John increased his time on task from an average of 44% to an average of 78%.

**Observations of Initiation of Peer Interaction**

The student was observed three to four times a week for 8 weeks. The researcher collected data from 10:00 a.m. to 10:20 a.m., using an event recording method. The researcher recorded how many times John interacted with a peer.
Baseline I

The first five data points on the graph in Figure 5 are the baseline data for the dates December 11-17. The student did not initiate any interaction with anyone. When the researcher asked the participant why he did not play with anyone, he said he did not want to. The participant consistently complained to his teachers about not having any friends and no one to play with at recess.

Intervention I

The intervention began the week of January 5 with a lesson about eye contact and appropriate body language. The resource specialist teacher and the student completed a reproducible book about not having anyone to play with. They discussed how to ask someone to play. The resource specialist teacher also modeled how to approach peers and ask them to play. The participant had the opportunity to practice role-playing in a small group.

During the first 2 days of intervention, January 5 and 6, John did not initiate peer interaction. He refused to try the new strategies and became agitated and upset with his teacher. The researcher realized the participant displayed a lack of social skills in this area. He did not know how to approach a peer or what to say. Being asked to do something he was not used to and unsure of created high anxiety for him.

On the 3rd day, January 7, the participant initiated peer interaction. He needed to be prompted by his teacher numerous times. The teacher selected someone for him to approach and told him exactly what to say and how to say it. The interaction was brief and the participant still displayed anxiety and discomfort.
Figure 5. Student’s progress throughout the intervention for initiation of peer interaction.
The next week of the intervention started on Monday, January 11. The student practiced with his teacher in class and said he would try to find someone to play with. During the observation, the student refused to initiate interaction and became very upset with his teacher. He yelled and would not listen to the strategies the teacher encouraged him to try.

On the remaining days of the week, the participant initiated interaction after teacher prompting, and on one day he initiated independently. The teacher and student made a chart that was split into four sections. The first section listed all the peers John liked to play with. The second section listed the activities they could do together. The third section listed different appropriate things to say to initiate interaction. The last section described the plan decided on for that day. The student selected a peer to approach, an activity to do together, and what to say to develop the plan for that day. He then practiced the plan with the teacher.

The next week, January 19-21, the participant displayed similar behavior. On Tuesday and Wednesday, the first 2 days of the school week, he refused to implement the plan and interact with anyone. The next day he interacted after heavy prompting and abruptly put his arm around the other student. The researcher observed this behavior and made a note of the student’s inability to recognize appropriate social distance and space.

During the intervention, the student requested more social skills lessons. He expressed a desire to learn the social skills in class but would not implement the strategies on the playground. During the lessons the student had the opportunity to spend one-on-one time with the teacher and discuss how he was feeling. The researcher observed that the student enjoyed socializing with the adult, the resource specialist teacher, in a one-on-one setting, but did not want to transfer the lessons to other settings, such as the playground with classmates. He
did increase the occurrence of initiation from initiating interaction 0 times out of 5 days to initiating interaction 8 times out of 14 days.

**Baseline II**

When the intervention was withdrawn the week of February 1-4, the student’s behavior returned to the baseline level. He did not interact with anyone. The student still requested lessons from the teacher, but did not attempt to play with a peer at recess. The researcher observed the student without being seen and noticed the student standing near other students but still not approaching them or interacting with them.

**Intervention II**

When the intervention was introduced again the week of February 9-18, the behavior took on a pattern similar to that during the first intervention. The student did not interact on Monday and became angry with the teacher for prompting him. He continued to make plans and practice appropriate social skills in class, but was very resistant on the playground. The researcher observed the student initiating peer interaction independently after having a successful prompted interaction the day before. He increased the occurrence of initiating interaction to interacting one time per day for 4 days out of 6 days.

The student also had a difficult time transitioning back to school on Mondays. He often refused to cooperate with the interventions and reverted to his old behaviors every Monday, or Tuesday if Tuesday was the first day back from the weekend. This difficulty may have been due to the 2-day gap between reinforcement and practice.

Throughout the intervention, the student was very resistant to implementing the strategies he practiced in the classroom. He exhibited high anxiety and
displayed anger after being repeatedly prompted. When asked why he would not follow the plan, he gave various reasons specific to the students or the activities. He said a student was mean or he changed his mind and did not want to play with him. He also changed his mind about the activity, saying it was too hard or there were too many other people playing.

The researcher interviewed the teacher and parent. The parent stated the student often complained about not having friends at school. She said he did play with neighborhood children and often with his cousins. The teacher stated that John had trouble interacting in the classroom and choosing a partner. He worked well when assigned a partner.

**Expectations**

The researcher expected the student to implement the strategies and develop more appropriate social skills. This study shows a small piece of the intervention and training this student will receive. In the special education system, students have goals, and once they meet their goals, new goals are created. This student will continue to receive social skills training and his teachers will continue to monitor his progress.

The Walker-McConnell Scale of Social Competence and School Adjustment was used at the beginning of this study. The researcher would like to conduct a posttest using the same instrument. The results should provide interesting data regarding student growth in the area of social competence. The posttest was not administered due to the time constraints of the study.
Chapter 5

CONCLUSIONS

This study examined the effects social skills training had on a student with ADHD. First, the Walker-McConnell Scale of Social Competence and School Adjustment was completed by the participant’s general education teacher, special education teacher, and parent. The results showed similar concerns specific to the student’s target behaviors from all three individuals. Secondly, two behaviors were targeted for study in the hope that the student would improve. One of the behaviors was time on task, measured by looking at the teacher when the teacher is talking, following along when reading, and completing work on the whiteboard. The other targeted behavior was initiation of peer interaction at recess.

The researcher hypothesized that a student with ADHD who received social skills training would improve in on-task behavior in the classroom and in ability to initiate appropriate peer interactions on the playground. Data were gathered and analyzed by one researcher who used time sampling in the classroom and event sampling on the playground.

In the literature review, the researcher examined many studies regarding the effects of social skills training on improving time on task and peer interaction in students with ADHD. The studies showed social skills training to have both small and relatively large effects on social competence (Gresham et al., 2001). One study showed an overall effect size of .43 (Forness & Kavale, 1996). That particular study focused on students learning self-monitoring techniques to stay on task.
Antshel and Remer (2003) assessed social competence among children with ADHD. Their study examined over 120 participants who received 8 weeks of social skills training. The training led to greater initiation of peer interaction as reported in both student and parent interviews. The results had an overall effect size of .87.

One finding of interest is the actual time implementing these interventions takes. In most of the research on social skills training, intervention was done for an average of 6-8 weeks. The current study was no different. Specific social skills may take years to teach, and reinforcement needs to be incorporated constantly to produce generalization across settings. The interventions truly require a lot of participation from numerous sources to be successful.

In conclusion, a change of pattern occurred twice in both baselines, showing the functional relationship between the social skills training and time on task. A significant increase of on-task behavior occurred during both Intervention I and Intervention II. The student increased his on-task behavior from an average of 44% of the time to an average of 78% of the time. A similar increase was significant for initiation of peer interaction as well. The student increased the occurrence of initiation from 0 times per day to one time per day for 12 days out of 20 observed.

**Limitations**

Some general limitations are found in most ABAB reversal designs. One such limitation is stopping effective interventions to return behavior back to a baseline level. In an education setting, withdrawing an intervention that is working and watching a student regress is very undesirable. In an ABAB model, this may be done twice to verify the effect of the intervention.
Specific limitations found in this study include typical obstacles teachers face. The study began in December, right before winter break. Most of the students were excited to be out of school for 2 weeks and celebrate the holidays. Many inappropriate behaviors and lack of focus tend to surface during this time of year. The participant in this study was not an exception.

Since this study took place in an educational setting, the student had received numerous interventions in the past to address the behaviors targeted in this study. These interventions helped shape his current behaviors. They may have also played a role in his willingness to change his behavior and work with an instructor to address his social issues.

This study would also have benefited from inter-rater reliability. Another person could have recorded data simultaneously to determine reliability. Since the researcher who collected the data is only human, having a degree of agreement among raters would have solidified the results.

A changing criterion design would have been more appropriate for this study. The student was able to increase his targeted behavior of time on task, but a change in criteria would help him generalize the behavior and not be so dependent on reinforcers. A changing criterion design is also a good design to use in schools because the intervention does not need to be withdrawn.

Time constraints were also a limitation in this study. If the researcher had more time, she would have been able to conduct an ABC functional analysis to determine the factors that affect the student’s targeted behavior. With more time, more data would have been collected to support the hypothesis.

Another limitation to this study was the amount of time needed to implement effective interventions. The researcher had to be available every day at the same time to consistently reinforce the student for appropriate behavior. This
particular student needed a lot of attention and reinforcement to change his behavior, which made generalizing his behavior across settings difficult. If no one was watching him, redirecting, reinforcing, and rewarding him, he would be very unlikely to display the desired behavior.

Social skills take years to develop. Some interventions must be carried out across settings with different people for a long time to produce developed skills in a student. This study was a snapshot of the interventions this student has received and will receive in the future. In education settings, students are always working towards a goal, and this student’s social skills training will not end with this study.

**Implications for Further Research**

Due to limitations of the current research, there is a need for further research in the area of how social skills training may or may not affect students diagnosed with ADHD. Current research often refers to the parts of the social skills training programs and not the individual needs of the student. Researchers have an opportunity to examine the needs of specific students and develop appropriate training programs to meet their needs.

Researchers should consider conducting studies with participants with different types of disabilities and social skills deficits. A meta-analysis by Gresham et al. (2001) examined students with various disabilities. Because teachers work with a variety of students with different needs, it is important for them to build on current research to teach students effectively.

Another aspect to consider for future research is the teachers’ role in social skills training. Teachers are expected to teach state standards and help students pass important tests, but in order to do this, the students must be able to learn.
More importantly, the goal of educators is for students to develop critical thinking skills and become active, participating members of society.

A number of social skills programs are available to teachers, but more research on their effectiveness needs to be available and shared with the whole educational community. These programs can connect the standards-based curriculum teachers are already using to social skills training. The more resources teachers have, the more likely they will be to use them. If the strategies are taught in a meaningful way, the students will be more prepared to learn important academic information (Carter, 2006). Such instruction will also help make the inclusion of students with special needs in the general population successful.

Conclusion

The review of current literature on social skills training and the results from the study of one student with ADHD make a few facts very clear. First of all, teaching social skills and social competence is important for students with social skills deficits, especially students with special needs. It is also clear that human development and academic learning cannot be separated and should be addressed together in a meaningful way (Pellitteri & Smith, 2007). The student in this study was able to perform better in the classroom when he used appropriate eye contact and body language. He also became a better student when he was made aware of the social inappropriateness of his actions.

Social growth and emotional wellbeing are growing concerns, and people in the education system have become more aware of the importance of social skills training. Schools have adopted various programs to address these concerns. The keys to success are consistency in implementation, planning for generalization and
maintenance of targeted social skills, and building the concepts into meaningful experiences.

This study is important to the educational community because it shows that providing social skills training is important for students to succeed both academically and emotionally. Whether it is effective in specific situations and with specific students depends on many factors. Teachers who view social skills as an important area to develop with their students recognize that social skills training can be effective in promoting the academic and emotional growth of the students in their classrooms.
REFERENCES
REFERENCES


APPENDIX A

DSM-IV DIAGNOSTIC CRITERIA FOR ADHD
DSM-IV Criteria for ADHD  I. Either A or B:

A. Six or more of the following symptoms of inattention have been present for at least 6 months to a point that is disruptive and inappropriate for developmental level:

Inattention

1. Often does not give close attention to details or makes careless mistakes in schoolwork, work, or other activities.

2. Often has trouble keeping attention on tasks or play activities.

3. Often does not seem to listen when spoken to directly.

4. Often does not follow instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions).

5. Often has trouble organizing activities.

6. Often avoids, dislikes, or doesn't want to do things that take a lot of mental effort for a long period of time (such as schoolwork or homework).

7. Often loses things needed for tasks and activities (e.g. toys, school assignments, pencils, books, or tools).

8. Is often easily distracted.

9. Is often forgetful in daily activities.

B. Six or more of the following symptoms of hyperactivity-impulsivity have been present for at least 6 months to an extent that is disruptive and inappropriate for developmental level:

Hyperactivity

1. Often fidgets with hands or feet or squirms in seat.

2. Often gets up from seat when remaining in seat is expected.

3. Often runs about or climbs when and where it is not appropriate (adolescents or adults may feel very restless).

4. Often has trouble playing or enjoying leisure activities quietly.
5. Is often "on the go" or often acts as if "driven by a motor".

6. Often talks excessively.

**Impulsivity**

1. Often blurts out answers before questions have been finished.

2. Often has trouble waiting one's turn.

3. Often interrupts or intrudes on others (e.g., butts into conversations or games).

II. Some symptoms that cause impairment were present before age 7 years.

III. Some impairment from the symptoms is present in two or more settings (e.g. at school/work and at home).

IV. There must be clear evidence of significant impairment in social, school, or work functioning.

V. The symptoms do not happen only during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder. The symptoms are not better accounted for by another mental disorder (e.g. Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder).

**Based on these criteria, three types of ADHD are identified:**

1. ADHD, *Combined Type*: if both criteria 1A and 1B are met for the past 6 months

2. ADHD, *Predominantly Inattentive Type*: if criterion 1A is met but criterion 1B is not met for the past six months

3. ADHD, *Predominantly Hyperactive-Impulsive Type*: if Criterion 1B is met but Criterion 1A is not met for the past six months.

APPENDIX B

WALKER-MCCONNELL SCALE OF SOCIAL COMPETENCE AND SCHOOL ADJUSTMENT
<table>
<thead>
<tr>
<th>Item</th>
<th>Rating Format</th>
<th>Subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Is sensitive to the needs of others.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Initiates conversation(s) with peers in informal situations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Expresses anger appropriately (e.g., reacts to situation without becoming violent or destructive).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Listens carefully to teacher instructions and directions for assignments.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Answers or attempts to answer a question when called on by the teacher.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Displays independent study skills (e.g., can work adequately with minimum teacher support).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Appropriately copes with aggression from others (e.g., tries to avoid a fight, walks away, seeks assistance, defends self).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Responds to conventional behavior management techniques (e.g., praise, reprimands, timeout).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Cooperates with peers in group activities or situations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Interacts with a number of different peers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Uses physical contact with peers appropriately.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Responds to requests promptly.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Listens while others are speaking (e.g., as in circle or sharing time).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Controls temper.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Compliments others regarding personal attributes (e.g., appearance, special skills, etc.).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Can accept not getting her/his own way.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Is socially perceptive (e.g., “reads” social situations accurately).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Attends to assigned tasks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Plays games and activities at recess skillfully.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Keeps conversation with peers going.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Finds another way to play when requests to join others are refused.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Is considerate of the feelings of others.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Maintains eye contact when speaking or being spoken to.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Gains peers’ attention in an appropriate manner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Accepts suggestions and assistance from peers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. Invites peers to play or share activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. Does seatwork assignments as directed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Produces work of acceptable quality given her/his skill level.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Add subtotals for each column) Total Scale Score:
APPENDIX C

OBSERVER EVENT SAMPLE RECORDING SHEET
Observer Event Sampling Recording Sheet

Student Name: _________________________
Observer Name: ________________________
Date: _________________________________
Setting: ______________________________

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of times interaction occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/11</td>
<td></td>
</tr>
<tr>
<td>12/14</td>
<td></td>
</tr>
<tr>
<td>12/15</td>
<td></td>
</tr>
<tr>
<td>12/16</td>
<td></td>
</tr>
<tr>
<td>12/17</td>
<td></td>
</tr>
<tr>
<td>1/05</td>
<td></td>
</tr>
<tr>
<td>1/06</td>
<td></td>
</tr>
<tr>
<td>1/07</td>
<td></td>
</tr>
<tr>
<td>1/11</td>
<td></td>
</tr>
<tr>
<td>1/12</td>
<td></td>
</tr>
<tr>
<td>1/13</td>
<td></td>
</tr>
<tr>
<td>1/14</td>
<td></td>
</tr>
<tr>
<td>1/19</td>
<td></td>
</tr>
<tr>
<td>1/20</td>
<td></td>
</tr>
<tr>
<td>1/21</td>
<td></td>
</tr>
<tr>
<td>1/25</td>
<td></td>
</tr>
<tr>
<td>1/26</td>
<td></td>
</tr>
<tr>
<td>1/27</td>
<td></td>
</tr>
<tr>
<td>1/28</td>
<td></td>
</tr>
<tr>
<td>2/01</td>
<td></td>
</tr>
<tr>
<td>2/02</td>
<td></td>
</tr>
<tr>
<td>2/03</td>
<td></td>
</tr>
<tr>
<td>2/04</td>
<td></td>
</tr>
<tr>
<td>2/09</td>
<td></td>
</tr>
<tr>
<td>2/10</td>
<td></td>
</tr>
<tr>
<td>2/11</td>
<td></td>
</tr>
<tr>
<td>2/16</td>
<td></td>
</tr>
<tr>
<td>2/17</td>
<td></td>
</tr>
<tr>
<td>2/18</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D
OBSERVER TIME SAMPLE RECORDING SHEET
Observer Time Sampling Recording Sheet

Student Name: _________________________
Observer Name: ________________________
Date: _________________________________
Setting: _______________________________

Operational Definition:
On-task: when student is looking at the teacher when the teacher is speaking, student’s eyes on paper tracking words with eyes and/or finger when reading, or writing to complete a math problem.

<table>
<thead>
<tr>
<th></th>
<th>Looking at Teacher</th>
<th>Following when reading</th>
<th>Writing on whiteboard</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of time on-task: ____________
Percentage of time off-task: ____________
APPENDIX E

REINFORCEMENT SURVEY
Reinforcement Survey

Name:__________________________________ Date:__________

1. If I had 10 minutes of free time I would most like to___________

2. My favorite activity that I wish we would do more often in this class
   is_____________________________________________________

3. In this class, I feel proudest of myself when__________________

4. The nicest thing that has ever happened to me in this class for
   doing good work is_____________________________________

5. I feel great when_______________________________________

6. Something I really want is________________________________

7. The best thing that my parents can do for me is_______________

8. The very best reward in this class that the teacher could give me
   for good work is_______________________________________

9. What are your favorite hobbies or activities?_________________

10. The best thing my teacher can say to me is__________________

11. The thing I like about school is____________________________

12. It makes me mad when I cannot__________________________

13. I wish my teacher would not_____________________________

14. A goal I would like to set for myself is_____________________
APPENDIX F

POINTS CARD
<table>
<thead>
<tr>
<th></th>
<th>11/30</th>
<th>12/01</th>
<th>12/02</th>
<th>12/03</th>
<th>12/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Come in quietly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get right to work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be kind to others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow directions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete work accurately and neatly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Earn all five points for the day and get a treat!
CONSENT FORM

Dear Parent/Guardian,

You are asked to allow your child to participate in a study conducted by Ella Shasky, Resource Specialist at Weldon Elementary School. I hope to learn effective strategies to help improve your child’s social skills. Your child was selected as a possible participant in this study because of previous discussions about social concerns.

If you decide to allow your child to participate, I will perform a functional analysis to determine your child’s area of need, collect data by observation, and implement an intervention to explicitly teach social skills through direct instruction and modeling. The procedures will be conducted over an 8-10 week period. The social skill lessons will take some instructional time. I hope to see improved social skills from your child. I cannot guarantee, however that your child will receive any benefits from this study.

Any information that is obtained in connection with this study and that can be identified with your child will remain confidential and will be disclosed only with your permission or as required by law.

Your decision whether or not to participate will not prejudice your future relations with California State University, Fresno or Clovis Unified School District. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without penalty. The Committee on the Protection of Human Subjects at California State University, Fresno has reviewed and approved the present research.

If you have any questions, please ask Ella Shasky, Resource Specialist, Weldon Elementary, (559) 327-8300. Questions regarding the rights of research subjects may be directed to Constance Jones, Chair, CSUF Committee on the Protection of Human Subjects, (559) 278-4469, or Susan Tracz, Principle Investigator (559) 278-0347.

You will be given a copy of this form to keep.

YOU ARE MAKING A DECISION WHETHER OR NOT TO ALLOW YOUR CHILD TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO ALLOW PARTICIPATIONS, HAVING READ THE INFORMATION PROVIDED ABOVE.

Date __________________________ Signature ________________________________

Relationship to Subject ________________________________
1. Why didn’t Sarah hear the teacher?

2. What should Sarah say now to the teacher?

3. What will the teacher probably say to Sarah?

4. What should Sarah do when the teacher is talking?

5. What should Brett do if Sarah tries to talk to him?
1. What is Josh doing that he shouldn't be doing?

2. What should all of the kids be doing instead of talking at the same time?

3. Why shouldn't the kids all talk at the same time?

4. How many times should Josh ask for something?

5. What will Mrs. Raphael probably say to the kids and Josh?

Waiting to Talk
1. What is Kyle doing that he shouldn't be doing? Why?

2. What will Miss Greta probably say to Kyle? Why?

3. What should Kyle do now?

4. What should Kyle do the next time someone else is talking first?

5. Why should Kyle do that?
Choosing Partners

1. What will Skye probably say to Abby?

2. How will this make Abby feel?

3. What could Abby say to Skye?

4. What should Abby do next?

5. Who could Abby talk to if she can't find a partner?
1. How does David feel?

2. What could the teacher tell David?

3. What could David do?

4. How would he ask someone to play with him?

5. What may the other person say when David asks him or her to play?
1. Where is Abdul going?

2. Why is Abdul going over there?

3. What will Abdul probably say to Hunter?

4. What might Hunter say to Abdul?

5. How will both boys feel after they talk?
California State University, Fresno

Non-Exclusive Distribution License
(to make your thesis available electronically via the library’s eCollections database)

By submitting this license, you (the author or copyright holder) grant to CSU, Fresno Digital Scholar the non-exclusive right to reproduce, translate (as defined in the next paragraph), and/or distribute your submission (including the abstract) worldwide in print and electronic format and in any medium, including but not limited to audio or video.

You agree that CSU, Fresno may, without changing the content, translate the submission to any medium or format for the purpose of preservation.

You also agree that the submission is your original work, and that you have the right to grant the rights contained in this license. You also represent that your submission does not, to the best of your knowledge, infringe upon anyone’s copyright.

If the submission reproduces material for which you do not hold copyright and that would not be considered fair use outside the copyright law, you represent that you have obtained the unrestricted permission of the copyright owner to grant CSU, Fresno the rights required by this license, and that such third-party material is clearly identified and acknowledged within the text or content of the submission.

If the submission is based upon work that has been sponsored or supported by an agency or organization other than California State University, Fresno, you represent that you have fulfilled any right of review or other obligations required by such contract or agreement.

California State University, Fresno will clearly identify your name as the author or owner of the submission and will not make any alteration, other than as allowed by this license, to your submission. By typing your name and date in the fields below, you indicate your agreement to the terms of this distribution license.

Ella Shasky

Type full name as it appears on submission

4/08/2010

Date