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The Impact of a Year-Long, Same School Social Skills Instruction Program on Students' with Verified Behavioral Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders Perceptions of Program Effectiveness

Gregory G. Gaden

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The Impact of a Year-Long, Same School Social Skills Instruction Program on Students’ with Verified Behavioral Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders Perceptions of Program Effectiveness

By
Gregory G. Gaden

A DISSERTATION
Presented to the Faculty of
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In Partial Fulfillment of Requirements
For the Degree of Doctor of Education
Major: Educational Administration

Under the Supervision of Dr. John W. Hill

Omaha, Nebraska
December, 2012

Supervisory Committee
Dr. Jeanne L. Surface
Dr. Neal F. Grandgenett
Dr. Peter J. Smith
Abstract

THE IMPACT OF A YEAR-LONG, SAME SCHOOL SOCIAL SKILLS INSTRUCTION PROGRAM ON STUDENTS’ WITH VERIFIED BEHAVIORAL DISORDERS, AUTISM SPECTRUM DISORDERS, AND ATTENTION DEFICIT HYPERACTIVITY DISORDERS PERCEPTIONS OF PROGRAM EFFECTIVENESS

Gregory G. Gaden
University of Nebraska
Advisor: Dr. John W. Hill

The purpose of this study was to determine the impact of a year-long, same school classroom social skills instruction program on students’ with verified Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders perceptions of program effectiveness. This study indicated that youth can demonstrate pro-social replacement social skills and reflects that students, parents, and teachers differ in their perceptions of how well the social skill instruction is impacting student outcomes in the areas of inattention, hyperactivity/impulsivity, learning problems, and defiance/aggression as measured by the Conners 3 Rating Scales. The results of this study suggest that when children and youth with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders are provided with intensive social skill instruction they will demonstrate fewer undesirable behaviors. However, when reporting Perceptions for Hyperactivity/Impulsivity Parents, Teachers, and Students were found to be in disagreement about student progress in this important domain where Parents Very Elevated level of concerns were found to be consistently greater than Teachers Elevated level of concerns and Students High Average perceptions
of their own rating for Hyperactivity/Impulsivity. Finally, when reporting Perceptions for Defiance/Aggression Parents, Teachers, and Students were found to be in disagreement about student progress in this domain where Parents Elevated level of concerns and Teachers Very Elevated level of concern scores were found to differ significantly from Students Average reported perceptions of their own Defiance/Aggression scores
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First and foremost, I would like to dedicate this dissertation to our Brook Valley School students, families, and staff, which in 1995 began its mission of helping children and youth with social-emotional and academic needs. I am blessed to be a part of Brook Valley School and Educational Service Unit #3.

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CHAPTER ONE

Introduction

Students placed in alternative educational programs are typically removed from their regular school buildings due to their inability to effectively interact socially within their mainstream school setting with their peers and adults. This is especially true for students verified with disabilities or identified as at risk due to low academic performance or social isolation. School districts across the nation are implementing School Wide Behavioral Support programs at all age and grade levels. What was once an issue for only a small population of students lacking in social competence is now an issue for all age groups and classifications of children in our public schools from birth to age twenty-one. Social competence is defined as “the ability to interact successfully with peers and significant adults” (Gresham, Sugai, & Horner, 2001, p 331). The skill of interacting with others in multiple settings is paramount in being successful in the community, at school, and at home. As detailed by Gresham and his colleagues (2001, p. 23), “social skills are behaviors that must be taught, learned, and preformed, whereas social competence represents judgments or evaluations of these behaviors within and across situations.” Social competence, automaticity of behavioral responses, is defined by significant others within the context in which the individual has opportunities for interaction such as acceptance and friendships that directly effect children’s self concept, school performance, and cognitive development (Asher & Gazelle, 1999). More and more educators across the nation are struggling how to provide meaningful intervention to students that are far less ready to function constructively in several social settings in school, their community, and in the workplace.
A lack of social competence is probably the one area of dysfunction that most uniformly describes students with an Emotional Behavior Disorder (EBD; Maag & Katsiyannis, 1999) and other students demonstrating significant academic, cognitive, and emotional/behavioral deficits, including specific learning disabilities, mental retardation, emotional disturbances, and attention deficit hyperactive disorder (Gresham & MacMillan, 1997). Furthermore, according to support groups for children with Emotional Behavior Disorders and Attention Deficit Hyperactive Disorder 60% of youth identified with behavioral disorders, hyperactive impulsive dimension may later be identified with more restrictive diagnostic verifications such as Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD; C.H.A.D.D; Fowler, Barkley, Reeve, & Zentall, 1990). Intensive goals for students with Emotional Behavioral Disorders include (a) controlling behavioral excesses, such as noncompliance and aggression, (b) remediating academic skill deficits, (c) remediating social skill deficits, (d) teaching internal guides to behavior replacements, and (e) preventing crime (Jones, Downing, Lakowski, Ferre, & McMahon, 1992, Sherman, et al., 1997). These issues have a profound impact on the students they describe, their families, and the programs that reach out to serve this high need’s population. Despite all of these facts about teaching social skills as part of our everyday school curriculum, students with and without disabilities continue to be deprived of social skills instruction required to enable them to be successful in everyday life activities such as home, work, school, and community settings.

Managing student misbehavior or inappropriate classroom behavior is a major challenge and concern for many classroom teachers (Anderson & Kincaid, 2005;
Richardson & Shupe, 2003). In fact, both general and special education teachers reported that they do not feel they are adequately training to deal with disurtive, defiant, and aggressive behaviors observed increasingly in younger children (Fox, Dunlap, & Cushing, 2002; Stormont, Lewis, & Beckner, 2005). Effective classroom management is essential to teach, it is not surprising to any teacher to find that management issues are frequently cited among reasons for leaving the field (Browers & Tomic, 2000, Ingersoll & Smith, 2003). Poor classroom management results in lost instructional time, feelings of inadequacy, and stress.

Behaviors that are distractive or disruptive occur more commonly than severe behaviors and comprise the majority of school-based disciplinary referrals (Sterling-Turner, Robinson, & Wilczynski, 2001). Decreased funding, turf wars over grant and research allocation, poor teacher training, and a lack of awareness and sensitivity for the needs students with behavioral needs has resulted in behavioral skills programs being more about housing or containing the behavior and the child as opposed to replacing inappropriate behaviors with pro social behaviors through high quality and intentional social skill instruction and opportunities for generalized practice in multiple settings.

**Achievement Gap**

Because aggressive and violent behaviors are not tolerated in public school classrooms (Bower, 1995) it has been estimated that as many as 43% to 56% of students with emotional and behavioral disorders drop out or are pushed out of school, a rate that is almost twice that of all students with disabilities (Marder, 1992). Academically, students with aggressive and violent behaviors score several years below grade level in reading and math (Reid, Gonzalez, Nordness, Trout, & Epstein, 2004; Trout, Nordness,
Pierce, & Epstein, 2003). There is also evidence to suggest that unlike other disabilities, students with disruptive behavior disorders tend to lag farther academically with an ever-widening achievement gap (Nelson, Benner, Lane, & Smith, 2004). These students perform significantly below norms on standardized achievement tests and lower in math than in reading (Reid et al., 2004). While the prevalence of academic difficulties is uncertain it has been asserted that between 33% and 83% of children with an Emotional Behavior Disorder also have academic difficulties (Reid et al., 2004). Academic research has primarily focused on three areas; (a) comparison of academic achievement of behaviorally disordered students and non disabled peers and those with learning disabilities and mental retardation, (b) investigation into prevalence rates and academic underachievement, and (c) studies of problem behaviors related to academic achievement (Nelson et al., 2004). Academic achievement in relation to students with an Emotional Behavior Disorder has been well researched in the public school arena. More than 80% score below their mean group in the area of academic achievement. This is due to the behavior interfering with their academic learning or the opposite view of learning deficits leading to emotional and behavioral problems in the school setting. Lower academic achievement is found across content areas but more specifically reading, math, written language, and spelling (Nelson et al., 2004).

**Positive Behavioral Support for Problem Behavior**

Recent research indicates that school wide positive behavior is associated with decreased exclusionary, reactive, and punitive discipline practices (Horner, Sugai, Todd, and Lewis-Palmer, 2005; Luiselli, Putnam & Sunderland, 2005), increased student satisfaction (Lewis-Palmer, Horner, Sugai, Eber, & Phillips, 2002).
Higher rates of office discipline referrals are associated with problematic behavioral climates in schools (Irvin, Tobin, Sprague, Sugai, & Vincent, 2004). Several studies (Larsen, Steele, & Sailor, (in press); McIntosh, 2005; Tobin & Sugai, 1999) have found relationships between academic performance and problem behavior across grade levels. This relationship between academic performance and problem behaviors has also been studied at the middle and high school levels (Fleming, Harachi, Cotes, Abbott, & Catalano, 2004, Larsen, et al., (in press); Morrision, Anthony, Storino, & Dillion, 2001: Roeser, Eccles, & Sameroff, 2000; Tobin & Sugai, 1999). Tobin and Sugai (1999) found that individual student’s academic failure in high school was correlated with three or more suspensions in ninth grade. They also found correlations between grade point average and certain types of behaviors like fighting, harassing, and threats of violence for boys in sixth grade. In order to support the behavioral and educational needs of students with complex verified disabilities, a greater understanding of their perceptions of intervention effectiveness is necessary.

Social Skill Interventions

The acquisition of social skills by students with learning disabilities has been cited as a problem that is equally significant as the academic and language problems of this group of learners (Bender & Wall, 1984; Bryan, 1991; Pearl, 1992). These deficits continue to persist through adulthood, when they appear to have devastating effects on the lives of individuals – perhaps even more than the lack of academic skills (Vogel & Forness, 1992). The fact that many students with learning disabilities fail to learn and practice appropriate behavior as required by the demands of the social setting in which they find themselves is one of the most frustrating challenges that confront teachers and
parents alike (Smith, 1995). The failure to practice social conventions and participate in social networks creates a situation that encourages isolation for these students. Unfortunately, what often emerges is the vicious cycle; the student who is socially isolated seldom has the opportunity to practice and, therefore, improve the social skills that he or she does have (Salmon, 1996).

A number of variables might be responsible for the lack of significant pro-social skill growth, including insufficient training periods, questionable measurements techniques, lack of pilot testing of intervention strategies, and insufficient emphasis on cognitive, linguistic, or academic components. Researchers suggest that social skill training might need to be more closely coordinated with academic training to achieve maximum results.

Thirty-seven percent of students who have been identified as needing social skills intervention had Individualized Education Program (IEP) goals reflecting this need (Baum, Duffelmeyer, & Greenlan, 1988). Social skill training is considered a low priority given the focus on academic and standards based outcomes. In a review of the literature on social skills training in the schools, researchers suggest that more effort should be devoted to changing the perception of social skills as a frill rather than a necessity for students with disabilities.

**Purpose of the Study**

The purpose of this study was to determine the impact of a year-long, same school classroom social skills instruction program on students’ with verified Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders perceptions of program effectiveness.
Research Questions, Sub-Questions, and Data Analysis

The following research question will be used to analyze students, parent, and teacher pretest-posttest perceptions of students’ social skills program participation effectiveness.

**Research Question #1.** Do Students diagnosed with Emotional Behavior Disorders ($n = 8$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Inattention?

**Sub-Question 1a.** Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #1a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #2.** Do parents ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 2a.** Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared
to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #2a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #3.** Do teachers ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 3a.** Was there a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #3a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.
**Research Question #4.** Do Students diagnosed with Autism Spectrum Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Inattention?

**Sub-Question 4a.** Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #4a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #5.** Do parents ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 5a.** Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?
**Analysis.** Research Sub-question #5a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #6.** Do teachers ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 6a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #6a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #7.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Inattention?
**Sub-Question 7a.** Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #7a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #8.** Do parents (n = 6) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 8a.** Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #8a was analyzed using dependent t tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #9.** Do teachers ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 9a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #9a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #10.** Do Students diagnosed with Emotional Behavior Disorders ($n = 8$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

**Sub-Question 10a.** Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3
Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #10a was analyzed using dependent \( t \) tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #11.** Do parents \((n = 8)\) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 11a.** Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #11a was analyzed using dependent \( t \) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #12.** Do teachers \((n = 8)\) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program
lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 12a. Was there a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #12a was analyzed using dependent t tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #13. Do Students diagnosed with Autism Spectrum Disorder (n = 6) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

Sub-Question 13a. Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #13a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #14.** Do parents \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Connors 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 14a.** Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #14a was analyzed using dependent \(t\) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #15.** Do teachers \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Connors 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 15a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured
by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #15a was analyzed using dependent t tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #16.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder (n = 6) who participated in a year-long social skills intervention program lose, maintain, or improve their Connors 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

**Sub-Question 16a.** Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #16a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #17.** Do parents (n = 6) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention
program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 17a. Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #17a was analyzed using dependent *t* tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #18. Do teachers (*n* = 6) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 18a. Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #18a was analyzed using dependent *t* tests to examine the significance of the difference between teacher pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #19.** Do Students diagnosed with Emotional Behavior Disorders (n = 8) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

**Sub-Question 19a.** Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #19a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #20.** Do parents (n = 8) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 20a.** Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the
Conners 3 Student Report Short Form scale scores following student participation in
daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #20a was analyzed using dependent \( t \) tests to
examine the significance of the difference between parent pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be
displayed on tables.

**Research Question #21.** Do teachers \((n = 8)\) of students diagnosed with Emotional
Behavior Disorders who participated in a year-long social skills intervention program
lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning
Problems?

**Sub-Question 21a.** Was there a significant difference between teachers
of students diagnosed with Emotional Behavior Disorders pretest first nine weeks
compared to posttest final nine weeks perceptions of student Learning Problems as
measured by the Conners 3 Student Report Short Form scale scores following student
participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #21a was analyzed using dependent \( t \) tests to
examine the significance of the difference between teacher pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be
displayed on tables.
Research Question #22. Do students diagnosed with Autism Spectrum Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

Sub-Question 22a. Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #22a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #23. Do parents ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 23a. Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?
**Analysis.** Research Sub-question #23a was analyzed using dependent *t* tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #24.** Do teachers (*n* = 6) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 24a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #24a was analyzed using dependent *t* tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #25.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder (*n* = 6) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?
Sub-Question 25a. Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #25a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #26. Do parents ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 26a. Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #26a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #27.** Do teachers \( (n = 6) \) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 27a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #27a was analyzed using dependent \( t \) tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #28.** Do Students diagnosed with Emotional Behavior Disorders \( (n = 8) \) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 28a.** Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student
Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #28a was analyzed using dependent *t* tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #29.** Do parents (*n* = 8) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 29a.** Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #29a was analyzed using dependent *t* tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #30.** Do teachers (*n* = 8) of students diagnosed with Behavior Disorders who participated in a year-long social skills intervention program lose,
maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 30a.** Was there a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #30a was analyzed using dependent t tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type I error. Means and standard deviations will be displayed on tables.

**Research Question #31.** Do students diagnosed with Autism Spectrum Disorder (n = 6) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 31a.** Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #31a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #32.** Do parents \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 32a.** Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #32a was analyzed using dependent \(t\) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #33.** Do teachers \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 33a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as
measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #33a was analyzed using dependent t tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type I error. Means and standard deviations will be displayed on tables.

**Research Question #34.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder (n = 6) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 34a.** Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #34a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type I error. Means and standard deviations will be displayed on tables.

**Research Question #35.** Do parents (n = 6) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention
program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 35a.** Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #35a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #36.** Do teachers ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 36a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #36a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #37.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Inattention?

**Analysis.** Research Questions #37 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Inattention. An $F$ ratio will be calculated and an alpha level of .05 will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.

**Research Question #38.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?
**Analysis.** Research Questions #38 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity. An $F$ ratio will be calculated and an alpha level of .05 will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.

**Research Question #39.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Learning Problems?

**Analysis.** Research Questions #39 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Learning Problems. An $F$ ratio will be calculated and an alpha level of .05 will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast
analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.

**Research Question #40.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Analysis.** Research Questions #40 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Defiance/Aggression. An $F$ ratio will be calculated and an alpha level of .05 will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.

**Assumptions**

The study has several strong features. All students in this research study were enrolled in the same intensive alternative education school for a one-year period. The Conners 3 Parent, Teacher, and Student Short Form were given within the first three weeks of school. All youth in this study have been diagnosed with a disruptive Emotional Behavior Disorder, Autism Spectrum Disorder, or Attention Deficit
Hyperactive Disorder as determined by 92 Nebraska Administrative Code 51. Training for all staff responsible for student instruction in the study were provided pre-service training on implementing the Positive Behavior Supports program, the Behavioral Intervention Support Team (BIST) program, and the Skill Streaming curriculum materials. Following each of the behavioral support trainings, there was a coaching period for staff with an experienced behavioral consultant to ensure the proper use of the Positive Behavioral Supports, Behavioral Intervention Support Team and the Skill Streaming models. Annual refresher training is mandatory of all staff working directly with students. Student behavioral data from behavioral point sheets are kept daily and entered into a database for accurate behavioral data collection and reporting. Staff meetings are held to weekly to reinforce the model techniques and strategies.

**Delimitations of the Study**

This study was delimited to students enrolled in Brook Valley South during the years of 2011-2012. Youth range from ten to eighteen years of age. All parents, teachers, and students were required to take the Conners 3 Parent, Teacher, and Student Short Form Survey of behavioral perceptions. Some parents refused to participate in the study due to personal reasons and were not used in the study. Study findings were limited to student who were enrolled during 2011-2012, were verified with an Emotional Behavior Disorder, Autism, or Attention Deficit Hyperactivity Disorders.

**Limitations of the Study**

This exploratory study was confined to youth ages ten to eighteen years ($N = 26$) of age participating in a pro social skills program at Brook Valley South for at least one full year. Study participants in the first arm ($n = 8$) were verified with an Emotional
Behavior Disorder. Study participants in the second arm \((n = 6)\) were verified with Autism Spectrum Disorder. Study participants in the third arm \((n = 6)\) were verified with Attention Deficit Hyperactive Disorder. The limited sample size and limited intervention time used may limit the utility and ability to generalize the study results and finding.

**Definition of Terms**

**Aggression.** Hostile, injurious, or destructive behavior especially when caused by frustration.

**Autism (Aspergers).** The essential features of Asperger’s Disorder are severe and sustained impairment in social interaction (Criterion A) and the development of restricted, repetitive patterns of behavior, interests, and activities (Criterion B). The disturbance must cause clinically significant impairments in social, occupational, and other areas in functioning (The American Psychiatric Association, 2000).

**Attention Deficit Hyperactivity Disorder (ADHD).** Attention Deficit Hyperactivity Disorder is defined as a neurobehavioral developmental disorder primarily characterized by the co-existence of attention problems and hyperactivity. While symptoms may appear to be innocent and merely annoying to some observers, if left untreated, the persistent and pervasive effects of Attention Deficit Hyperactive Disorder symptoms can insidiously and severely interfere with one's ability to get the most out of education, fulfill one's potential in the workplace, establish and maintain interpersonal relationships, and maintain a generally positive sense of self (American Psychiatric Association, 2000).

**Conners 3.** This assessment specializes in assessing youth for Attention Deficit Hyperactive Disorder and other related disorders that commonly co-occur with Attention
Deficit Hyperactive Disorder. It is a comprehensive and valid assessment tool that, in conjunction with other sources of information, aids in the diagnosis process. Perhaps one of the most unique features of the Conners 3 is its versatility: different versions of the assessment are available to suit your individual needs, including full length and short versions, as well as two, different indices that can be used for screening.

**Defiance.** A disposition to resist or willingness to contend or fight.

**Executive Functioning.** Relates to difficulty in self regulation, organizing, integration, or high order reasoning skills. "Executive Function Disorder, is a disability of not being able to show what you know" Executive Function disorder is associated with many disabilities: Attention Deficit Hyperactivity Disorder (AD/HD), Learning Disabilities (LD), Tourette Syndrome (TS), Obsessive Compulsive Disorder (OCD), Autism, Depression, Bipolar, etc. Most people with Attention Deficit Hyperactive Disorder also have Executive Function Disorder, but someone can have Executive Function Disorder without being diagnosed with a disability. Executive Function program and services would be needed if the student progress in the general growth in the acquisition of knowledge and skills are being negatively impacted.

**Following instructions.** Following instructions is defined as looking at the person, saying okay, doing the task immediately, and checking back if necessary.

**Hyperactivity.** The state or condition of being excessively or pathologically active.

**Impulsivity:** Acting momentarily or without long thought.

**In-vivo Modeling.** Traditional role-playing (Ogilvie, 2011)

**Inattention.** Failure to pay attention to tasks or activities presented.
Learning Problems. Deficits in areas such as reading, writing, arithmetic, problem solving and other areas of academic and social-emotional competencies.

Off-task Behavior. Off task behavior is defined when a youth has difficulty maintaining attention during tasks or play; repeatedly runs around in an area while non-cooperative; is easily distracted by other stimuli; displays a short attention span; has difficulty organizing task activities.

Peer Relationships. The ability to exhibit pro-social behaviors in the presence of people your own age.

Perspective Taking. Understanding the point of view of another person; The ability to consider the contents of the other person’s minds (Winner, 2007).

Pro-Social Skills. Pro-social skills are defined as replacement behaviors for those problem behaviors that most seriously interfere with a youth’s ability to successfully function in society (Christe, Sterba, & Davis, 2000; Hill & Coufal, 2005).

Seeking Positive Attention. Seeking positive attention is defined as waiting until the adult has time, look at the person, wait for acknowledgement, and appropriately ask for time to talk, discuss positive events or activities.

Self-control. Self-control is defined as various cognitive-behavioral strategies for maintaining self-control that they can use in times of anger or stress, or prior to episodes of maladaptive coping (Criste et al., 2000).

Social Cognition. One form of intelligence that creates overall “smarts,” it allows us to interpret and respond to social information through interpersonal communication, written expression, sharing space, or interpreting thoughts and actions in fictional characters (Winner, 2007).
**Theory of Mind.** Understanding of your own and other people’s thoughts, emotions, physical and language based motives, intentions, and belief system (Winner, 2007).

**Video Modeling.** A promising practice endorsed by the Council for Exceptional Children (Bellini & Akullian, 2007), which involves demonstrating desired behaviors and role playing through video images. The student with Autism watches the video that demonstrates the desired behavior and the student is asked to imitate the behavior. The video focuses on the event or problem situations, for example a social interaction (Williams, Glaser, Reith, Kinzer, Colburn, & Peter, 1999). Video Modeling strategies include video prompting, in vivo modeling, video modeling, and video self-modeling.

**Video Prompting.** Showing video clip of one step of a task and then allowing the student to complete that step before the next step of the task is shown.

**Video Self-Modeling.** The video features the target student performing the desired correct behavior (Ogilvie, 2011).

**Significance of the Study**

This study has the potential to contribute to research, practice, and policy. It is of significant interest to educators seeking to help students (Emotional Behavior Disorder, Autism Spectrum Disorder, or Attention Deficit Hyperactivity Disorders) with disruptive behaviors learn pro-social behavior replacement skills.

**Contribution to research.** There is an ongoing need to constantly add to the existing corpus of real world based research that supports the behavior improvement of youth placed in an alternative educational setting with disruptive behavior disorders. Research like this is leading to successful transition to less restrictive school placements.
for students placed in alternative schools. The results of this study may inform the theoretical and practical literature on the effectiveness of pro-social behavior replacement intervention instruction.

**Contribution to practice.** Based on the outcomes of this study alternative educational schools may decide to consider providing structured social skill instruction for a student to become aware of and demonstrate the required pro-social behavior replacement skills.

**Contribution to policy.** Brook Valley South School Wide Positive Behavioral Supports program implementation procedures maybe impacted by this study. If results show students with a certain verification category (EBD, ASD, ADHD) improve pro-social behaviors significantly more than one or more of the other groups, we must be compelled to determine how outcomes for all group of students can be maximized.

**Organization of the Study**

The literature review to this study is presented in Chapter 2. This chapter reviews professional literature on behavioral modification and positive behavioral replacement programs and strategies for students verified with Emotional Behavior Disorder, Autism Spectrum Disorders, and Attention Deficit Hyperactive Disorders. Chapter 3 describes the research design, methodology, and procedures used to gather and analyze the data of the study.
CHAPTER TWO

Review of Literature

An increasing number of children with special needs are coming to school without the adequate repertoire of social skills required to help them strengthen interpersonal relationships and facilitate success in school (Knoff, 2002). This is especially true for students with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactive Disorders who require pro-social replacement systems and behavioral supports in less restrictive alternative educational environments. Providing pro-social instructional supports for behaviorally challenged students is imperative if we are to meet their demanding social and academic needs allowing them to be highly productive and successful in our communities. Because this study focuses on social and emotional interventions for students with Emotional Behavioral Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactive Disorders a complete diagnostic features and description of verification placement criteria of these disorders is required here.

Diagnostic and Verification Criteria

Informed clinical and educational opinion by professional in the medical and educational field would tell us the disabilities categories known as Emotional Behaviorally Disorder, Autism Spectrum Disorder, and Attention Deficit Hyperactive Disorder we are working with demonstrate very similar emotional and behavioral attributes that manifest themselves similarly and across all life domains. In fact, youth referred for most restrictive residential treatment programs (Boyd, Eibinder, Rauktis, & Portwood, 2007; Daly, Schmidt, Spellman, Criste, Dinges, & Teare, 1998); Connell,
Criste, Dinges, Larzelere, Schmidt, & Spellman, 2001) often have complex and co-
morbid mental health issues including Attention Deficit Hyperactivity Disorder (Budde et
al., 2004; Foltz, 2004; Piepho & Hill, 1992), Oppositional Defiant Disorder, and Conduct
Disorder (Barkley, 1998; Conner & Doerfler, 2008). Even if treated as many as 75% of
youth with an early onset identification of Attention Deficit Hyperactive Disorder go on
to have a diagnosis of Oppositional Defiant or Conduct Disorder (Barkley, Fischer,
Edelbrock, & Smallish, 1990; Barkley, 1998; Connor & Doerfler, 2008; Evans,
Langberg, Raggi, Allen, & Buvinger, 2005). These are students that require intensive
behavioral replacement interventions that are researched based and implemented with the
highest levels of fidelity and integrity possible. These are children and youth that are
highly deviant from the typical peers that are not verified with these behavioral deficits.
Without high quality, research and results based instructional practices in place in these
education and adult programs, we are sentencing youth to low quality of life standards,
parents worried about incarceration, depression, and a community that is not accepting of
behaviors that deviate from the norm enough that requires special one on one attention or
coaching in vocational settings. By providing pro-social behavioral replacement
instruction through results/researched based instructional interventions, we are meeting
the expanding needs of students that can and will have a functional and meaningful life.

**Emotional Behavioral Disorder**

The Diagnostic and Statistical Manual of Mental Disorders IV-TR (Attention
Deficit Hyperactive Disorder) does not specify a definition for Behaviorally Disordered.
The Disruptive Behavior Disorder category in the DSM IV-TR is for disorders
characterized by conduct or oppositional defiant behaviors that do not meet criteria for
Conduct or Oppositional Defiant Disorder. For example, includes clinical presentations that do not meet full criteria either for Oppositional Defiant Disorder or Conduct Disorder, but in which there is clinically significant impairment (DSM IV-TR, 2000).

To qualify for Special Education services in Nebraska under the category of Emotional Behavior Disorder, the child must have a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance or, in the case of children below age five, development. The child must demonstrate an inability to learn that cannot be explained by intellectual, sensory, health factors and demonstrate an inability to build or maintain satisfactory interpersonal relationships with peers and teachers or demonstrate inappropriate types of behavior /feelings under normal circumstances or show a general pervasive mood of unhappiness or depression or tendency to develop physical symptoms or fears associated with personal or school problems. The term includes schizophrenia. The term does not apply to children with social maladjustments; unless it is determined they have an Emotional Behavior Disorder. This definition parallels the federal definition of Emotional Disturbance in the regulations implementing IDEA 2004 (Verification Guidelines for Children with Disabilities, 2008).

**Effectiveness research based instructional and behavioral interventions for students verified as Emotional Behavior Disorder.** Intervention procedures (interventions) used to accomplish the goal of improving student behavior and learning outcomes (Bauer, Shea, & Keppler, 1986) commonly incorporate positive reinforcement (Jones, Mandler-Provin, Latkowski, Ferre, & McMahon, 1992), shaping, (Bauer et al., 1986), and fading (LaNunziata, Hunt, & Cooper, 1984), combine token economies with
hierarchies of self-management (Algozzine, 1990) behavior expectations or levels (Hill & Coufal, 2005; Hill, Esser, & Weidner, 1996), and often include social skills, goal setting, and behavior replacement curricula (Weidner & Esser, 1996) the ability to perform the behavior successfully without prompts. Behavioral expectations and rewards change as students demonstrate progress. Students who progress through intervention programs have more privileges while receiving fewer external rewards in increasingly less restrictive educational settings (Smith & Ferrell, 1993). Pro-social skills are taught using pre teaching/priming and role-playing methods when youth are not acting out and are most available to instruction (Hill & Coufal, 2005). Social skills programs and token economies are among the most widely used and least restrictive interventions.

**Social skills instructional programs.** Social skills instruction is widely accepted as an intervention to teach positive replacement behaviors to youth with disruptive behavior disorders (Dowd, Tobias, Connolly, Christe, & Nelson, 1993; Ison, 2001). Teaching to specific behaviors can contribute to positive social interactions for students (Miller, Lane, & Wehby, 2005). Teachers, administrators, counselors, and psychologists typically provide social skills instruction in schools. Social skills instruction is designed to change the social behavior of students. Skills taught can range from basic to complex and are often segmented into steps broken down by task analysis (Goldstein & McGinnis, 1997). A basic skill might be following an instruction by looking at the person speaking, doing the task asked, and then checking back to see if another task is required (Criste et al., 2000). Complex social skills are taught usually only when basic social skills have been mastered. For example, accepting a compliment is considered a more complex skill that requires more abstract thinking than simply following instructions. The steps for
accepting compliments are: looking at the person who is speaking, using a pleasant voice tone, and as a last step thanking the individual who gave the compliment without looking away or mumbling (Criste et al., 2000). Social skills instruction is directly taught by using discussion, modeling, role-playing, and positive feedback. When social skills instruction is used with students who have disruptive behavior disorders, typically it results in a display of more socially appropriate behaviors (Carter & Lunsford, 2005). Social skills instruction can reduce levels of inappropriate behaviors (Lewis, Sugai, & Colvin, 1998). Social skills programs promote the use of replacement and socially acceptable behavior through problem solving, friendship building, and self-reflection (Dowd et al., 1993; Luiselli, McCarthy, Coniglio, Zorilla-Rameriz, & Putnam, 2005).

Pro-social behavior replacement models utilize direct instruction to teach skill steps, having youth repeat the skill steps, model the skill steps, and then practice by role playing the new skills while teachers and other students provide feedback to the youth who is acquiring the skill (Criste et al., 2000; Goldstein, 1988). As students replace severely disruptive behaviors including (a) violence towards staff, (b) violence towards students, (c) verbal and physical threats toward staff, (d) verbal and physical threats toward students, and (e) destruction of property with pro-social replacement behaviors they are more likely to be ready for transition back to a less restrictive placement alternatives (Hill & Coufal, 2005; Luiselli et al., 2005). In addition, when students with disruptive behavior disorders participate in social skills programs chances for positive effects in employment and relationships are improved (Carter & Lunsford, 2005).

**Token economies.** Token economies represent a well-documented procedure to improve classroom behaviors (Kazdin, 2003; McLaughlin, & Williams, 1998). Token
economy systems are pervasive in schools used in many special education and self-contained classrooms, and also in general education classrooms (Alberto & Troutman, 2003). In a classroom, token economies typically involve the use of rules for earning tokens which represent value that a student may later use to purchase tangibles such as candy, stickers, and privileges such as extra computer time or working on a favorite activity. Classroom token economies can be utilized across grade levels and used with students of varying levels of academic and social behaviors (Kazdin, 1977). The token economy system has been widely used, researched, and validated as a behavior intervention model in schools (McLaughlin & Williams, 1998; Swain & McLaughlin, 1998).

**Social Skill Generalizations**

In the workplace, for example, employee supervisors consider social competence to be more important than the ability to perform specific occupational skills (Schloss, Schloss, Wood, & Kiehl, 1986; Williams, Walker, Holmes, Todis, & Fabre, 1989). Consequently, difficulties in acquiring social skills that lead to social competence can present significant barriers in adjusting to school and adult life and result in significant negative consequences. Researchers have consistently pointed out that social interaction skills result in peer relationship difficulties (e.g., Bierman & Furman, 1984; Hundert & Houghton, 1992; Knapczyk, 1992). In fact, according to Kratochwik and French (1984), difficulty in developing and maintaining positive peer relationships is an early indicator of being seriously at risk for delinquency and suicide. Schloss and Merrell added juvenile delinquency, discharges from the military due to bad conduct, school
dropout and psychologically hospitalization as possible outcomes for individuals whose social needs are left unmet.

**Social Skills Instruction as a Positive Behavioral Support**

Socially important outcomes, those that make a difference in terms of individual functioning and age appropriate expectations, include school adjustments (Gresham & MacMillan, 1997; Walker, Irwin, Noell, & Singer, 1992), parent and teacher acceptance (Gresham, 1992, Merrell, 1993; Walker & McConnell, 1995), and peers acceptance and friendship (Newcomb, Bukowski, & Pate, 1993). Social skills instructional intervention is used to remediate deficits in social competence functioning. Social skills are taught, learned and performed (Gresham et al., 2001) taking into account the broad dimensions of socially important outcomes, including (a) peer relationship skills (b) self management skills, (c) academic skills, (d) compliance skills and, (e) ascertain skills (Caldarella & Merrell, 1997). Published social skills instruction intervention programs (Elias & Clabby, 1992; Elliott & Gresham, 1992, Goldstein, 1988; Goldstein, Glick, & Gibbs, 1998; Goldstein, Glick, & Gibbs, 1998, Goldstein & McGinnis, 1997) serve as models for intervention. In this study, the social skill instructional intervention was Skill Streaming developed by Goldstein and McGinnis (1997).

Extensive research over the past 20 years has shown that students with high incidence disabilities (i.e., behavioral disorders, autism spectrum disorders, and attention deficit hyperactivity disorder) often display maladaptive behaviors that negatively influence their relationships with other students and adults (Gresham, 1992; Parker & Asher, 1987). This failure in social relationships can result in poor interpersonal
development, peer, and adult rejection, as well as academic failure (Kupersmidt, Coie, & Dodge, 1990).

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Many argue that reducing challenging behavior is not considered successful unless it changes the social situation of individual to no longer being segregated or isolated from peers and increases their opportunities and successes in developing social relationships. For students exhibiting emotional or behavioral disorders or those with other challenging behaviors, including students with autism spectrum disorders, quality of life has improved when student’s exhibit learned behaviors that are valued by the community in new and novel situations over a long period of time.
**Tootling**

Incorporated into the structure of School Wide Positive Behavioral Supports is the use of classroom based Positive Behavioral Supports (Fairbanks, Sugai, Guadino, & Lathrop, 2007). Classroom based Positive Behavioral Supports systems facilitate the development of educational environments by promoting academic engagement and productivity, while minimizing disruptive behaviors (Hieneman, Dunlap, & Kincaid, 2005). Classroom based Positive Behavioral Supports also promotes positive peer behaviors, or pro-social behaviors, which improve the classroom milieu and assists appropriate modeling for students with problem behaviors. Encouraging pro-social behaviors can have extended effects in the classroom and for the individual students. Researchers describe pro-social behaviors as positive actions that benefit others, prompted by empathy, moral values, and sense of personal responsibility, rather than a desire for personal gain. Increasing teachers’ awareness of day-to-day pro-social behavior results in teacher praising (i.e., reinforcing) these behaviors and ideally praise increases the probability that students will engage in these pro social behaviors (Seymour & Stokes, 1976; Stokes & Baer, 1971). Using peers to monitor and report pro-social behaviors in the classroom can result in increasing a teacher’s awareness of these desired behaviors and increases classmates’ awareness and reinforcement of pro-social behaviors (Cashwell, Skinner, & Smith, 2001; Skinner, Cashwell, & Skinner, 2000).

One method of promoting peer reporting of classmates’ pro-social behaviors is known as “tootling”. Skinner et al., (2002) developed tootling to enhance day-to-day social interactions among diverse students. Tootling is a term that was constructed from the word “tattling” and the expression “tooting your own horn” (Skinner et al., 2000).
Tootling is like tattling, but students report their classmates’ pro-social behaviors instead of inappropriate behaviors when tootling. Students are taught to “catch” each other performing pro-social behaviors (e.g., opening doors, giving positive verbal comments, helping peers with difficult tasks, sharing materials) and write the behavior on a card, which they will then submit to their teacher. In addition, employing an interdependent group contingency (i.e., the whole class working to earn the group reinforce) may build cohesion among classmates as they work together to try to achieve a common goal (Slavin, 1991). Cashwell and colleagues (2001) suggested positive effects when classmates worked together to report peers’, pro-social behaviors, to reach group-contingency, and to obtain a group reinforce. Finally, daily publicity posted progress feedback may stimulate peers and educators to provide additional reinforcement (e.g., social praise) for pro-social behaviors (Gresham & Gresham 1982; Seymour & Stokes, 1976; Van Houten, 1984).

**Conduct Disorder**

The essential feature of Conduct Disorder is a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms are violated. These students exhibit aggressive behaviors that stand out significantly after being enrolled at Brook Valley South. Teachers and administrators report that students with co-morbid verifications under Emotional Behavioral Disorders and Conduct Disorders are far more aggressive in a physical intimidating manner than peers of their same age. These students often exhibit anger control issues and are more frequently known to damage property at the school. Parents report these students have a very small group of friends and most are involved with the court in some manner.
These behaviors fall into four main groupings: Aggressive conduct that causes or threatens physical harm to others or animals, nonaggressive conduct that causes property loss or damage, deceitfulness or theft, and serious violations of rules. Three (or more) characteristics behaviors must have been present during the past 12 months, with at least one behavior present in the past 6 months to meet this verification in the Diagnostic Statistical Manual IV-TR. The student’s disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning. The behavior patterns are usually present in a variety of settings such as home, school, or the community. Because individuals with Conduct Disorder are likely to minimize their conduct problems, the clinician often must rely on additional informants. However, the informant knowledge of the child’s problems may be limited based on inadequate supervision or the child not having revealed them.

Children or adolescents with Conduct Disorders often initiate aggressive behavior and react aggressive to others. They may display bullying, threatening, or intimidating behavior; initiate frequent physical fights; use a weapon that can cause serious physical harm (e.g., bat, brick, broken bottle, knife, or gun); be physically cruel to people or animals; steal while confronting a victim (e.g., mugging, purse snatching, extortion, or armed robbery); or force someone into sexual activity. Physical violence may take the form of rape, assault, or in rare cases homicide.

Deliberate destruction of others’ property may include deliberately fire setting with the intention of causing damage or deliberately destroying others people’s personal property in other ways (e.g., smashing car windows, school vandalism).
Acts of deceitfulness or theft may include breaking into someone else’s house, building, or car; frequently lying of breaking promises to obtain goods or favors or to avoid debts or obligation (e.g., conning other people); or stealing items of nontrivial value without confronting the victim (e.g., shoplifting, forgery).

There may also be a serious violation of rules (e.g., school, parental) by individuals with Conduct Disorder. Students with Conduct Disorder often have patterns, beginning before age 13 years, of staying out late at night despite parental prohibitions. There may be a pattern of running away from home overnight. Students with this disorder may often be truant from school, beginning prior to 13 years. In older individuals, this behavior is manifested by often being absent from work without good reason (American Psychiatric Association, 2000).

**Research about the effectiveness of behavior, medication, and family intervention for students verified with a Conduct Disorder.** Conduct Disorder in youth is often resistant to treatment. Early onset of Conduct Disorder can set a youth on a difficult life course (Moffitt, 1990). Children with early Oppositional Defiant Disorder can then turn into Conduct Disorder. Oppositional Defiant Disorder and Conduct Disorder have similar environmental relationships in regard to economic hardship, discipline practices, and poor parental or adult supervision (Loeber, Lahey, & Thomas, 1991). There is no medication treatments specifically designed for Conduct Disorder approved by the Federal Drug Administration. However, psychotropic drugs have proven effective in the control of some of the symptoms of Conduct Disorder including aggression, a symptom of Conduct Disorder is often treated with medication (Connor, Ozbayrak, Harrison, & Melloni, 1998). Impulse control, explosive rage filled behaviors,
and hostile behaviors seem to respond to medication (Campbell, Gonzalez, & Silva, 1992). Treatment of Conduct Disorder cannot be based on medication only. Psychosocial programs that focus on covert and manipulative behaviors and have the family as the central focus can be effective (McMahon & Kolter, 2006). Cognitive behavior skills programs have also shown promise in engaging youth to take control of their own behaviors at school and at home (Singh et al., 2007).

Oppositional Defiant Disorder

The most significant difference in regard to students with Conduct Disorders and students with Oppositional Defiant Disorders is the overt verbal and physically aggressive behavior demonstrated by students with Conduct Disorders verses a more passive aggressive mannerism demonstrated by students with Oppositional Defiant Disorders. In short, students with Conduct Disorders are more frequently involved in physical violence while students with Oppositional Defiant Disorders tend to be less aggressive and passively defiant. Students with Oppositional Defiant Disorders often become verified Conduct Disordered.

The essential feature of Oppositional Defiant Disorder is the recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persist for at least six months (American Psychiatric Association, 2000) and is characterized by the frequent occurrence of at least four of the following behaviors; losing temper, arguing with adults, actively defying or refusing to comply with the request or rules of adults, deliberately doing things that will annoy other people, blaming others for his or her own mistakes or misbehavior, being touchy, or easily annoyed by others, being angry and resentful, or being spiteful or vindictive. To qualify in the
Diagnostic Statistical Manual as Opposition Defiant Disorder, the behaviors most occur more frequently than in typically observed in individuals of comparable age and developmental level and must lead significant impairment in social, academic, and occupational functioning. The diagnosis is not made if the disturbance in behavior occurs extensively during the course of the Psychotic or Mood Disorder or if the criteria are met for Conduct Disorder or Antisocial Personality Disorder (American Psychiatric Association, 2000).

Negativistic and defiant behaviors are expressed by persistent stubbornness, resistance to directions, and an unwillingness to compromise, give in, or negotiate with adults or peers. Defiance may also include deliberate or persistent testing of limits, usually by ignoring orders, arguing, and failing to accept blame for misdeeds. Parents and teachers frequently report these students low in the area of peer and family relations. Hostility can be directed at adults or peers and is shown by deliberately annoying others or by verbal aggression (usually without the more serious physical aggression seen in Conduct Disorder). Manifestation of the disorder is almost invariably present in the home setting, but may not be evident at school or in the community. Symptoms of the disorder are typically more evident in interactions with adults and peers, whom the individual knows well and thus may not regard themselves as oppositional or defiant, but justify their behavior as a response to unreasonable demands or circumstances.

Oppositional Defiant Disorder is one of the most common clinical disorders (Biederman, Ball, Monuteaux, Kaiser, & Faraone, 2008; Steiner & Remsing, 2007). Although not as common as Attention Deficit Hyperactive Disorder, prevalence rates of Oppositional Defiant Disorder range between 1% and 16% of the child and adolescent
population (Loeber, Burke, Lahey, Winters, & Zera, 2000). Complex mixes of factors contribute to a diagnosis of Oppositional Defiant Disorder. A pattern of hostile, negative, and defiant behavior that creates disturbances puts a youth at risk for a diagnosis of Oppositional Defiant Disorders. Many, if not most of these behaviors are directed at someone specific, most often an authority figure or adult (Steiner & Remsing, 2007).

Environment as well as neuro-chemical abnormalities contribute to the eventual development and diagnosis of Oppositional Defiant Disorder. Lower socioeconomic households and neighborhoods, family history of Attention Deficit Hyperactive Disorder, significant family dysfunction, unresponsive parents, substance abuse, and/or mood disorders increase potential risk (Burke, Loeber, & Birmaher, 2002; Greene et al., 2002).

Parents of youth with Oppositional Defiant Disorder seek help from mental health professionals due to the behaviors significantly impeding adult-child or child-child interactions (Cohen, Kasen, Brook, & Struening, 1991). Oppositional Defiant Disorder is more common in boys than girls but in recent years research suggests that this may disappear by adolescence (Biederman, Ball, Monuteaux, Kaiser, & Faraone, 2008). Oppositional Defiant Disorder is a persistent diagnosis with upwards of 57% of youth continuing to meet the criteria four years after initial diagnosis (August, Realmuto, Joyce, & Hektner, 1999). For youth who are diagnosed, an earlier age of onset paints a bleak picture. Earlier diagnosis of Oppositional Defiant Disorder promises a poorer prognosis of higher potential in developing Conduct Disorder or Antisocial Personality Disorder later in life (Connor, 2002; Loeber et al., 2000). Early intervention is the key.
Research about the effectiveness of behavior and medication intervention for students verified with Oppositional Defiant Disorder. Family and behavioral interventions are often used for treatment of Oppositional Defiant Disorder (MTA Cooperative Group, 1999). Medications on the other hand are not specifically used for treatment of Oppositional Defiant Disorder. Stimulants that are not approved for Oppositional Defiant Disorder are commonly prescribed for Attention Deficit Hyperactive Disorder and since the likelihood of a co-morbid condition of Oppositional Defiant Disorder is approximately 40% (Goldman, Genel, Bezman, & Shanetz, 1998) stimulants are often used when the two exist together.

Preschool programs such as Head Start begin early to prevent future delinquency (Connor 2002; Greenspan, 1992). Other early interventions include home visitations or in home family workers that coach high-risk families on preventative interventions (Eckenrode et al., 2000). Parent training that is evidence based for these types of externalizing behaviors can be effective (Burke et al., 2002; Eyberg, Nelson, & Boggs, 2008). Parent management strategies including psycho-educational programs targeting social skills, conflict resolution, and anger management skills are effective in treating Oppositional Defiant Disorder in school age youth (Burke et al., 2002). For treatment of adolescent Oppositional Defiant Disorder cognitive interventions, continued social skills training, academic learning, and vocational/job training are helpful (Burke et al., 2002; Connor, 2002). Finally, school based interventions are important. School interventions can range from anti-bullying programs (Olweus, 1994) to peer group programs.
**Autism Spectrum Disorder (Aspergers)**

The essential features of Asperger’s Disorder are severe and sustained impairment in social interaction and the development of restricted, repetitive patterns of behavior, interests, and activities. The disturbance must cause clinically significant impairments in social, occupational, and other areas in functioning (American Psychiatric Association, 2000).

In order to qualify for Special Education services in Nebraska in the category of Autism Spectrum Disorder, the child must have a developmental disability that significantly affects verbal and nonverbal communication and social interaction, is generally evident before age three, and that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual response to sensory experiences.

Autism Spectrum Disorder does not apply if a child’s educational performance is adversely affected primarily because the child has a Behavioral Disorder. A child who manifests the characteristics of Autism after age three could be identified as having Autism if the other criteria are met.

Autism Spectrum Disorders is an umbrella term used to describe a group of lifelong neurodevelopmental disorders that affect the functioning of the brain with resultant combinations of distinct behaviors. Children with Autism Spectrum Disorder present unique neurological and behavioral characteristics. In addition, there is a spectrum of involvement within the disability group. The range of categories under Autism Spectrum Disorder may include Autism Disorder, Rhett’s Disorder, Childhood
Disintegrative Disorder, Aspergers Disorder, and Pervasive Developmental Disorder – Not Otherwise Specified.


Autism Spectrum Disorders are behaviorally defined and commonly recognized by the manifestation of behavioral characteristics across multiple areas of functioning. Characteristics are observed, to varying degrees, in social relationships, communicative competence and pattern and range of interests. Although Autism Spectrum Disorders are defined by a certain set of behaviors, children may exhibit any combination of the behaviors in any degree of severity. These characteristics are generally evident during the child’s early years, and must adversely affect educational performance.

Autism is an educational verification and is a term used to facilitate early identification by public school personnel. The term Autism Spectrum Disorder can be used to verify children who demonstrate behaviors consistent with a medical diagnosis of Pervasive Developmental Disorders (PDD) from the Diagnostic and Statistical Manual of Mental Disorders (4th) Edition, American Psychiatric Association (American Psychiatric Association, 2000). A medical diagnosis is not required in order for the child to be verified under the Autism disability category. However, medical reports and information may be considered by the Multidisciplinary Disciplinary Team conducting the evaluation.
Effectiveness research based instructional and behavioral interventions for students verified as Autism Spectrum Disorder (Aspergers). Because a marked impairment in social interaction is one of the core features of Autism Spectrum Disorder, it is imperative that comprehensive autism planning incorporate social skill instruction for every child. It is important to note, however, that all individuals with Autism Spectrum Disorder do not exhibit deficits in a uniform manner. As a result, social skills instruction must be individualized to meet the needs of every child. While limited in terms of research base, a growing number of social skills tools have been shown to be effective with a variety of individuals in many different settings.

Communication and social interactions are two core areas that individuals with Autism Spectrum Disorders find challenging. According to the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000), individuals with Autism Spectrum Disorder exhibit qualitative impairments in communication and social interaction. While communication impairments are often thought of as a lack of verbal speech, it may also be found in individuals with adequate verbal capacity who struggle to initiate and sustain conversations with others. This is highly typical with students on the Autism Spectrum.

Individuals with Autism Spectrum Disorder may have difficulty with several aspects of communication. For example, in the area of expressive communication, they may struggle to produce verbal speech. Some have difficulty initiating requests, either verbally or nonverbally, to a communication partner. Some may produce echolalia, or repeated, speech patterns that seem to have little or no meaning. With deficits in these
areas the cards are stacked heavily against students verified with Autism Spectrum Disorders.

Receptive communication is also problematic for many on the autism spectrum. Students may have problems understanding verbal input and, despite responding to adult queries, often have little idea what was said to them. Instead they process and respond with greater accuracy to visual presented information.

**Picture Exchange Communication System**

The Picture Exchange Communication System is an alternative form of communication that teaches individuals to use pictures to express themselves. This communication system is extremely beneficial in the teaching visual cues to instruct social skills and interactions that require simple tasks such as putting a coat on or getting a snack. Students are repeatedly shown pictures of objects that are relevant to their educational goals. For example the student may be working on identifying a picture of a bus. The teacher may have three pictures out on the desk in front of the child. Only one picture is of the bus. The child is prompted to “get bus”. If the bus is selected the child is rewarded with items that have been identified as reinforcing. Picture Exchange Communication System is a researched-based strategy (Frost & Brody, 2002) that is based on principles of applied behavioral analysis. Some parents and professionals worry that if the child is encouraged to use pictures to communicate, they will shy away from verbal speech. In reality, the research on Picture Exchange Communication System (Charlop-Christy, Carpenter, Le, LeBlanc, & Kellet, 2002; Jones, 2005; Magiati & Howlin, 2003, Tien, in press) indicates that many children develop verbal speech when they are introduced to Picture Exchange Communication System, particularly when the
number of pictures they can use increases. A good example of this would be to add additional instructions to the child’s teacher instruction from “show bus” to “show bus then say bus”. The next applied behavioral request of the child may be to “pick yellow bus and say yellow bus”.

Parents and researchers have also noted a decrease in the child’s disruptive behaviors when Picture Exchange Communication System was used (Anderson, 2002; Chalop-Christy et al., 2002; Magiati & Howlin, 2003). For example, if a child is hungry she may cry to indicate that she is hungry. A teacher or parent may not know the child is crying to express her hunger and, as a result, the child’s needs remain unmet. By contrast, a child who is taught to exchange a picture of a food item when hungry will get the food he wants and remain regulated throughout the exchange, thereby decreasing the levels of frustration he may have been previously displaying.

**Social Stories**

Social Stories are meant to provide individuals with information they need to make sound decisions about a variety of social situations. Social Stories also provide a unique opportunity to look at the different perspectives people may take when experiencing the same situation. This perspective taking approach to social skills instruction is effective as it places the student in settings that are calm and deliberate verses on demand.

Briefly, Social Stories take a social encounter and break it down in manageable parts that can be explained and sorted in detail. Many individuals with Autism Spectrum Disorders have found this intervention to be practical, no-nonsense guide to challenging social scenarios. Social Stories may be written for specific situations. This feature
makes them a great option and very personalized to an individual’s strengths and/or weaknesses.

The idea behind social scripts is to give the child direct language to use in a particular social scenario. If the child with Autism Spectrum Disorder has difficulty joining a group of children at recess, for example, the script can describe the situation and offer specific phrases that the child could use to join the group. The script would be written from the point of view of the child so that it is grammatically appropriate. During the recess scenario the script may read, “Can I play with you?” It is important to practice the script with the child and incorporate scenarios that could occur once the child has used the scripted language (Henry & Smith-Myles, 2007). Robert and Lynn Koegel (2006), researchers in the area autism interventions, suggest that social stories are best used when “priming” the student for social situations that may not be familiar to the student. An example may be going to the movies for the first time. Social stories or coaching strategies “prime” or provide what is called Theory of Mind allowing the child to see into the situations they will be presented with in a setting they are not familiar with and need both communication and emotional regulation support. It is also important that when teaching these skills through pivotal response methods that the child be motivated through natural or selected rewards and that these rewards are given even when successful approximations as demonstrated. It is also important to go back and reteach the skill over again as needed. Dr. Phil Strain with the University of Colorado consistently reports that four successful transactions of a skill means the student has reached the level or mastery. It should be noted that the student should continue to be observed to ensure that master is sustained over time.
Pivotal Response Training

Pivotal Response Training is an empirical based intervention that includes using motivational procedures and natural reinforcers in natural environments (Koegel & Koegel, 2006). Research on Pivotal Response indicates that if certain pivotal skills are taught to the child, learning those pivotal skills will affect other areas of the child’s development (Baker-Ericsen, Stahmer, & Burns, 2007, Pierce & Schreibman, 1995, 1997, Sherer & Schriebman, 2005; Stahmer 1995). The four pivotal areas that have been researched by the Koegels include (a) motivation, (b) multiple cues, (c) self-initiation, and (d) self-management.

Pivotal Response Training has been successfully used to teach some children with Autism Spectrum Disorders to use verbal communication. The critical feature in teaching children to verbalize using Pivotal Response includes intensity and consistency of the intervention, family involvement, a functional approach to problem behaviors, and motivation.

Using Pivotal Response to encourage verbal language and first words creates multiple opportunities throughout the day for a child to practice because the intervention takes place in a natural environment using natural reinforcers. This protocol is highly effective in teaching children not only how to communicate, but how to use social cues to increase pro-social interactions which are most difficult for children with speech and language delays as part of their Autism Spectrum Disorder verification.

Discrete Trial

Most students with Autism Spectrum Disorder have good receptive language ability and would not generally need as structured an approach as discrete trial
methodology. However, discrete trials are extremely helpful for children with limited receptive language ability by helping them learn basic words so that they can later respond to verbal instructions and question. The discrete trial method can also help students attend to a task when they do not respond to verbal instructions to pay attention. Among other things, discrete trial can be used to help students maintain eye contact, and to identify objects, actions, or adjectives. For example, the student may be asked to stand up, walk to the sink, and come back. In discrete trail, the student may be taught the words stand, walk, and sink before getting to actually carrying out the next discrete trail of standing, walking, and returning from the sink.

A discrete trial consists of at least four components: cue, prompt, behavior, and reinforcement. Discrete trail is highly structured and relies heavily on the trainer cueing the child. As such it does not typically foster spontaneous social interaction, but it can be crucial in building prerequisite language and attention in preparation for other kinds of training that may facilitate greater social interaction.

**Incidental Teaching**

The term “incidental teaching” refers to teaching a student about social situations as it occurs rather than in a structure lesson. The goal is to amplify the social environment as it is unfolding so that students pick up on social cues, rules, and others’ feelings and perceptions that are all part of the social situation. This can be accomplished by explaining to the child what is happening in a social situation through words or visual aids, and by coaching and praising the child’s behavior. Incidental teaching must always be part of the social skill training because it involves teaching children in the real situations where they need the skill. This is particularly true when working with settings
in the home to help families develop skills at home that are not appropriate. However, incidental teaching is not enough for some students. In most, if not all cases, a structured teaching process such as Skill Streaming should be used.

**The Incredible Five Point Scale**

Created by Buron and Curtis (2003), The Incredible Five Point Scale is a self-awareness tool with a wide range of applications. Briefly, the individual with Autism Spectrum Disorder describes the five different points on the scale in his own words. The student then describes what behavior feels like from happy to angry at that particular number. Finally, often with adults, Buron and Curtis describe the action that needs to be taken (by the adult) to address the behavior identified by choosing an appropriate symbol. This is a self-regulation strategy that is effective for students on the autism spectrum, but is also effective with students with behavioral disorders (Baker 2003).

**Video Modeling**

One strategy for teaching social skills to children with Autism Spectrum Disorders is to use a combination of video modeling and peer mentoring (Bellini & Akullian, 2007, Fuchs & Fuchs, 2005). Videos can be played repeatedly, which is beneficial to students with Autism Spectrum Disorder who learn through repetition. In addition, video models provide real life examples of desired skills, taking the mystery out of some facets of social interaction and creating a concrete visual for students with Autism Spectrum Disorder (Bellini & Akullian, 2007; Sherer et al., 2001). Combining video modeling with peer mentoring—using peers of students with disabilities to practice skills, provide feedback on the skills, and provide increased chances for social
engagement (Fuchs & Fuchs, 2005) can foster a greater impact in providing social skills instruction.

Video modeling responds to the unique characteristics of students with Autism Spectrum Disorder—including their being visual learners; having restrictive, repetitive interests (e.g., watching the same video or TV over and over); and having relatively strong imitation skills—and has proven to be a valuable tool for teachers, practitioners, and family members. Video modeling can help students acquire new skills (Corbett & Abdullah, 2005), increase generalization of skills across settings (Bellini, Akullian, & Hopf, 2007), promote self-awareness (Charlop-Christy & Daneshvar, 2003), and enhance existing skills (Wert & Neisworth, 2003).

Video modeling also supports the learning of students with Autism Spectrum Disorders by reducing overselectivity (Charlop-Christy & Daneshvar, 2003). Stimulus overselectivity refers to taking in too much visual information without the ability to effectively filter out unnecessary information. Video modeling also capitalizes on the power of observational learning (Delano, 2007) and incorporates the students with Autism Spectrum Disorders ability to imitate behaviors (Ayres & Lagone, 2005; Charlop-Christy & Daneshvar, 2003). Temple Grandin, an adult author on the spectrum, noted the differences between being told what behavior is and actually seeing the behavior. If her mother told her to be nice, Grandin was not sure what that looked like. If her mother told her that being nice was giving someone flowers or giving someone a compliment, she could imitate those behaviors.

Peers mentoring is defined as (Carter, Cushing, Clark, & Kennedy, 2005, p.16) as an intervention that “involves one or more peers without disabilities providing academic
and social support to the students with disabilities”. Peer mentoring activities might include working with peers during classes on an assignment, participating in a social skills group, role playing social situations, and video modeling.

Preschoolers with autism demonstrated increased skills following a peer mentoring intervention; the effects of the peer mentoring support also generalized to a free-play condition where the students with autism continued to demonstrate increased peer interactions (Jones & Schwartz, 2004).

**Cognitive Theory and Therapeutic Application**

Three major theories guide our understanding and exploration of cognitive development in our students. Most professionals who study social cognitive learning disabilities acknowledge that these three concepts help describe the deficits of our students. However, it has yet to be determined whether these coexist or if one dominates the others. The concepts are Central Coherence Theory (Frith, 1989), Executive Dysfunctional Theory (McEvoy, Rogers, & Pennington, 1993), and Theory of Mind (Baron-Cohen, Leslie, & Frith, 1985).

The Central Coherence Theory states that students on the Autism Spectrum have difficulty conceptualizing to a larger whole. They tend to think in part and do not fully relate to pieces of information back to the larger pattern of behavior and thought. It is common for students with autism to participate well in rote activities of academics, but struggle with connecting what they know through interpretation and analysis. All of our higher functioning students have access to the vast amounts of data stored in their brains, but limited channels through which they can fully integrate or organize the data. Central Coherence Theory reveals that students with autism have a conceptual learning disability
that impacts effective communication, summarizing, recognizing expectations, and written expression (Winner, 2007).

The term “Executive Functioning” is used more widely in research and in cognitive rehabilitation than in the field of education. In effect, Executive Functioning describes the skills that an executive needs in order to perform his or her job (or more realistically, the skill the executive secretary needs for his or her job). Executive Dysfunction Theory speaks to the fact that people with social cognitive deficits have difficulty solving personal problems, communication effectively, and creating organizational structures that allow flexibility and prioritization. These persons crave structure but have difficulty creating their own healthy structures. This affects not only their social relationships, but for students, their ability to succeed throughout the school day.

Theory of Mind (or as it is described in this book, perspective taking) is the ability to intuitively track what others know and think during personal interactions. We use this information to understand and then monitor our own responses – verbal and non-verbal – in the presence of others. Students with social cognitive deficits have different degree of perspective taking impairment. Just as autism is a spectrum, so does perspective taking fall along the continuum from less to more. Unfortunately, at present there are no clinically based functional assessments of Perspective Taking skills across the functioning levels (Winner, 2007).

Perspective Taking, Central Coherence, and Executive Functioning are synergistic cognitive processes. A weakness in one co-mingles with dysfunction in the others. There appears to be strong positive relationships between one person’s perspective taking
deficit and his or her corresponding level of deficit in central coherence and executive functioning (Winner, 2007).

Michelle Garcia Winner developed a detailed framework based on the Central Coherence, Executive Functioning, and Theory of the Mind, Meta Cognitive Theories. The framework is referred to as the I LAUGH model. I LAUGH is an acronym for the different affected areas that contribute to the students overall social cognitive deficits, deficits that are displayed in academic, life skills, vocational, and social cognitive aspects of functioning. It does not detail other challenges common to individuals on the Autism Spectrum, such as sensory integration disorder and fine/gross motor skills dysfunctions. It elaborates upon the “triad” of impairments for persons on the autism spectrum: communication, socialization, and imagination (Wing & Gould, 1979).

Provide opportunities to practice new pro-social behaviors. If we expect students to learn appropriate social skills we must structure the learning environment so that these skills can be addressed and practiced. We need to increase the opportunity for students to interact within the school environment so that Pro-social skills can be learned. If all a student does is perform as a passive participant in the classroom, then little growth in social skill acquisition can be expected. Just as students improve in reading when they are given the opportunity to read, they get better at interacting when given the opportunity to initiate or respond to others' interactions.

It is necessary to target specific pro-social behaviors for appropriate instruction and assessment to occur. Pro-social behavior includes such things as taking turns, working with partner, following directions, working in group or with others, displaying appropriate behavior toward peers and adults, increasing positive relationships,
demonstrating positive verbal and nonverbal relationships, showing interest and caring, settling conflicts without fighting, and displaying appropriate affect (Algozzine, 1990).

**Treat social skills deficits as errors in learning.** Social skills deficits or problems can be viewed as errors in learning; therefore, the appropriate skills need to be taught directly and actively. It is important to base all social skill instructional decisions on individual student needs. In developing a social skill curriculum it is important to follow a systematic behavior change plan. During assessment of a student's present level of functioning, two factors should be addressed. First, the teacher must determine whether the social skill problem is due to a skill deficit or a performance deficit. The teacher can test the student by directly asking what he or she would do or can have the student role play responses in several social situations (e.g., "A peer on the bus calls you a name. What should you do?"). If the student can give the correct response but does not display the behavior outside the testing situation, the social skill problem is probably due to a performance deficit. If the student cannot produce the socially correct response, the social skill problem may be due to a skill deficit. More direct instruction may be required to overcome the skill deficits, while a performance deficit may simply require increasing positive contingencies to increase the rate of displaying the appropriate social response. During assessment, it is important to identify critical skill areas in which the student is having problems.

Once assessment is complete, the student should be provided with direct social skill instruction. At this point, the teacher has the option of using a prepared social skill curriculum or developing one independently. It is important to remember that since no
single published curriculum will meet the needs of all students, it should be supplemented with teacher-developed or teacher-modified lessons.

Social skill lessons are best implemented in groups of three to five students and optimally should include socially competent peers to serve as models. The first social skill group lesson should focus on three things. The first area is to provide an explanation of why the group is meeting, a definition of what social skills are, and an explanation of what is expected of each student during the group. It may also be helpful to implement behavior management procedures for the group (i.e., contingencies for compliance and non-compliance). It is important to prompt the students to use newly learned skills throughout the day and across settings to promote maintenance and generalization. It is also important to reinforce the students when they use new skills.

**Attention Deficit Hyperactive Disorder**

The essential feature of Attention Deficit Hyperactivity Disorder is a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequently displayed and more severe than is typically observed in individuals at a comparable level of development. Some hyperactive–impulsive or inattentive symptoms that cause impairment must have been present before age 7 years, although many individuals are diagnosed after the symptoms have been present for a number of years, especially in the case of individuals with Predominantly Inattentive Type. Some important impairments from the symptoms must be present in at least two settings (e.g., at home, and at school or at work). There must be clear evidence of interference with developmentally appropriate social, academic, occupational functioning. The disturbance does not occur exclusively during the course of the Pervasive Developmental Disorder, Schizophrenia, or other
Psychotic Disorder and is not better accounted for by another mental disorder (e.g., a Mood Disorder, Anxiety Disorder, Dissociative Disorder, or Personality Disorder). Inattention may be manifest in academic, occupational, or social situation. Individuals with this disorder may fail to give close attention to details or may make careless mistakes in schoolwork or other tasks. Work is often messy and performed carelessly and without considered thought. Individuals often have difficulty sustaining attention in tasks or play activities and often find it hard to persist with the task until completion. They often appear as if their minds are elsewhere as if they were not listening or did not hear what was said. There may frequent shifts from one uncompleted activity to another activity to another. Individuals diagnosed with this disorder may begin a task, move on to another, than turn to yet something else, prior to completing any one task. They often do not follow through on requests or instructions and fail to complete schoolwork, chores, or other duties. Failure to complete tasks should be considered in making this diagnosis only if it is due to inattention as opposed to other possible reason (e.g., failure to understand instruction, defiance). These individuals often have difficulties organizing tasks and activities. Tasks that require sustained mental effort are experiences as unpleasant and marked aversive. As a result, these individuals typically avoid or have a strong dislike for activities that demand sustained self-application and mental effort or that require organizational demands or close concentration (e.g., homework or paperwork). This avoidance must be due to the person’s difficulties with attention and not due to a primary oppositional attitude, although secondary oppositionalism may also occur. Work habits are often disorganized and the materials necessary for doing the task are often scattered, lost, or carelessly handled and damaged. Individuals with this
disorder are easily distracted by irrelevant stimuli and frequently interrupt ongoing tasks to attend to trivial noises or events that are usually and easily ignored by others (e.g., a car honking, a background conversation). They are often forgetful in daily activities (e.g., missing appointments, forgetting to bring lunch). In social situations, inattention may be expressed as frequent shifts in conversation, not listening to others, not keeping one’s mind on the conversation, and not following details or rules or games or activities.

Hyperactivity may be manifested by fidgetiness or squirming in one’s seat, by not remaining seated when expected to do so, by excessive running or climbing in situation where it is inappropriate, by having difficulty playing or engaging quietly in leisure activities, by appearing to be often “on the go” or as driven by a motor, or by talking excessively. Hyperactivity may vary with individual age and developmental delay level, and diagnosis should be cautiously approached in younger children. Toddlers and preschoolers with this disorder differ from normally active young children by being constantly on the go and into everything; they dart back and forth, are “out the door before their coats are on”, “jump or climb on furniture, run through the house, and have difficulty participating in sedentary group activities in preschool classes (e.g., listening to a story)”. School-age children display similar behaviors but usually with less frequently or intensity that toddlers and preschoolers. They have difficulty remaining seated, get up frequently, and squirm in, or hang on the edge of their seat. They fidget with objects, tap their hands, and shake their feet or legs excessively. They often get up from the table during meals, while watching Television, or while doing homework; they often talk excessively; and make excessive noise during quiet activities. In adolescents and adults,
symptoms of hyperactivity take the form of feelings of restlessness and difficulty in engaging in quiet sedentary activities.

Impulsivity manifests itself as impatience, difficulty in delayed responses, blurtitng out answers before questions have been completed, difficulty awaiting one’s turn, and frequently interrupt or intruding on others to the point of causing difficulties in social, academic, or occupational settings. Others may complain they cannot get a word in edge wise. Individuals with this disorder typically make comments out of turn, fail to listen to directions, initiate conversations at inappropriate times, interrupt others excessively, intrude on others, grab objects from others, touch things they are not suppose to touch, and clown around. Impulsivity may lead to accidents (e.g., knocking over objects, banging into people, grabbing hot pans) and engagement in potentially dangerous activities without consideration of possible consequences (e.g., repeatedly climbing to precarious positions or riding a skateboard over extremely rough terrain).

Additional behavioral manifestations usually appear in multiple contexts, including home, school, work, and social situations. To make the diagnosis, impairments must be present in at least two settings. It is very unusual for an individual to display the same level of dysfunction in all settings or within the same setting at all times. Symptoms typically worsen in situations that require sustained attention or mental effort or that lack intrinsic appeal or novelty (e.g. listening to classroom teachers, doing classroom assignments, listening to or reading lengthy materials, or working on monotonous, repetitive tasks). Signs of the disorder may be minimal or absent when the person is receiving frequent rewards for appropriate behavior, is under close supervision, is in novel setting, is engaged in especially interesting activities, or is in a one-on-one
situation (e.g., the clinician office). The symptoms are more likely to occur in group situations (e.g., in playgroups, classrooms, or work environment). The clinician should therefore gather information from multiple sources (e.g., parents, teachers) and inquire about the individual’s behavior in a variety of settings (American Psychiatric Association, 2000).

Attention Deficit Hyperactivity Disorder is the most prevalent of the disruptive behavior disorders and affects adolescents at a rate of 2% to 4% of the general population (The American Psychiatric Association, 1994; Barkley, 1998; Goldman, Genel, Bezman, & Shanetz, 1998; National Institute of Mental Health [NIMH], 2003; Nolan, Gadow, & Sprafkin, 2001). Attention Deficit Hyperactive Disorder is considered a biological and/or neurological disorder more common in boys than girls where symptoms can emerge prior to age seven although age of onset can be questioned in making a formal diagnosis (Castellanos, Lee, & Sharp, 2002; Piepho & Hill, 1992; Willoughby, Curran, Costello, & Angold, 2000). Health care providers can be divided in their diagnostic criteria and making a proper diagnosis can be complex (Block, 1996; Jumper, Douyon, & Falcone, 2008; Piepho & Hill, 1992). A diagnosis of Attention Deficit Hyperactivity Disorder puts students at a higher risk for not only behavioral problems over time but increases probability of learning and social difficulties throughout their school careers (Kollins, Barkley, & DuPaul, 2001). The impact on schools and teachers is apparent when you consider that in every classroom there will be approximately one child with Attention Deficit Hyperactive Disorder (Dupaul & Eckert, 1998). Teachers want to reach and educate every student with Attention Deficit Hyperactive Disorder, but these students can be unavailable or highly distracted from learning either academic or social skills being
taught in class, thus affecting their achievement overall in school (American Psychiatric Association, 2000; Barry, Lyman, Klinger, 2002; Piepho & Hill, 1992). Left untreated students will become at greater risk for substance abuse, impulsive behaviors that can lead to legal troubles, and continued declining achievement in school (Jumper et al., 2008).

**Effectiveness research based instructional and behavioral interventions for students with Attention Deficit Hyperactive Disorder.** In the past two decades the use of psychotropic medications has increased in the treatment of youth with disruptive behavior disorders (Kelleher, Hohmann, & Larson, 1998; Safer, Zito, & dosReis, 2003). Much of this attention has been geared towards stimulants. The use of psychotropic medications must not be taken lightly and should be approached cautiously. The most common treatment of Attention Deficit Hyperactive Disorder is the use of mediation, most often a psycho stimulant and more specifically methylphenidate and is known by the brand names of Ritalin, Dexedrine, and Cylert (Gushee & Hall, 2002; Hill & Van Haren, 2005; Piepho & Hill, 1992; U.S. Drug Enforcement, 1999). Improved attention, ability to follow directions, increase in task completion are benefits of the psycho stimulant medications, in addition decrease in distractibility and hyperactivity can also be present. Students have demonstrated a high positive response rate to stimulant medication in all age groups (Cantwell, 1996; Piepho & Hill, 1992). Other medications have been used to treat Attention Deficit Hyperactive Disorder, but have not been as popular as the psycho stimulants; including antipsychotics, antidepressants, anticonvulsants, antihypertensive, and selective norepinephrine reuptake inhibitors (Piepho & Hill, 1992; Ryan, Reid, Epstein, Ellis, & Evans, 2005).
Multimodal treatment planning for students with Attention Deficit Hyperactive Disorder. Treating the whole child should be the goal when any disorder is present. In 1996, Block found that only about half the children on prescriptions for Attention Deficit Hyperactive Disorder were not receiving any further guidance on modifying their life and behaviors. While medication alone cannot cure Attention Deficit Hyperactive Disorder the use of medication may result in a child becoming more available to learning new ways to behave. This learning is strengthened when the program offers clear behavior replacement interventions and family therapy (Dupaul & Eckert 1997; Piepho & Hill, 1992; Lo & Carledge, 2006). This type of combined therapy has ranked higher in outcomes than with medication alone. The largest and most comprehensive study of Attention Deficit Hyperactive Disorder was first published in 1999 by the, Multimodal Treatment Study of Children with Attention Deficit Hyperactive Disorder [MTA]. The combined therapy approach was successful in 12 out of 14 outcomes while medication alone only saw success in 4 out of 19 outcomes. It is clear that for children with Attention Deficit Hyperactive Disorder one size does not fit all when finding a treatment approach that will work.

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It is important to prompt the students to use newly learned skills throughout the day and across settings to promote maintenance and generalization. It is also important to reinforce the students when they use new skills.

**Teach students to take responsibility for their own learning.** Often overlooked is the need to increase student independence in learning. Students with an Emotional Behavioral Disorder may be particularly uninvolved in their learning due to problems with self-concept, lack of a feeling of belonging to the school, and repeated failures in school. Instructional strategies involving self-control, self-reinforcement, self-monitoring, self-management, problem solving, cognitive behavior modification, and
meta cognitive skills focus primarily on teaching students the skills necessary for taking responsibility and showing initiative in making decisions regarding their own instruction. These strategies, incorporating extrinsic reinforcement, have shown promise for enhancing student learning and independence.

**Focus on functional skills that will have broad applications.** Essential in a curriculum for students with behavioral problems are skills that can directly improve the ultimate functioning of the student and the quality of his or her life. The concept of functional skills is not limited to the areas of self-help or community mobility, but also include skills such as those required to seek and access assistance, be life-long independent learners, respond to changes in the environment, succeed in employment, be adequately functioning adults and parents, and achieve satisfying and productive lives. The concepts of the functional curriculum approach, the criterion of ultimate functioning, and participation to the highest degree possible in life must be extended to students with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactive Disorders.

**Final Thoughts**

There are a number of factors that indicate a positive pro-social behavior will manifest themselves following placement in an alternative educational program for youth with disruptive an Emotional Behavior Disorder, Autism Spectrum Disorder, and Attention Deficit Hyperactivity Disorder. Effective behavior intervention programs can reduce the frequency of undesired and/or anti social behaviors and promote positive social and learning outcomes (Ansari, Gouthrou, Ahmad, & Steele, 1996).
CHAPTER THREE

Methodology

Purpose of the Study

The purpose of this study is to determine the impact of a year-long, same school classroom social skills instruction program on students’ with verified Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders perceptions of program effectiveness.

For the purpose of this study, there are two buildings structured under the title of Brook Valley School. These two alternative schools in the Omaha area provide support for students with verified disabilities. The north building is comprised of students with more involved cognitive, emotional, and behavioral disabilities. The south building is comprised of students that perform higher academically, but continue to struggle with day-to-day compliance requests and social competencies with both peers and adults.

Brook Valley South was identified as the building for this study due to the consistency of social skill training supports being provided, data collected, and student academic performance. Brook Valley South’s educational programming is based on an Individual Education Plan (IEP) with an emphasis on strong behavioral replacement programming to help students learn alternative ways to succeed in social, community, home, and vocational settings. Brook Valley South offers services in the areas of autism consultation, physical therapy, occupational therapy, speech and language therapy, behavioral services, nursing services, counseling services, assistive technology, and vision services. Brook Valley South students served as this studies independent variable with three condition-students with Emotional Behavior Disorders, students with Autism
Spectrum Disorders, and students verified with Attention Deficit Hyperactivity Disorders receiving that received daily social skills instruction for nine months.

**Description of Procedures**

**Research design.** The pretest-posttest three-group comparative efficacy study design is displayed in the following notation:

- **Group 1 X₁ O₁ Y₁ O₂**
- **Group 2 X₁ O₁ Y₂ O₂**
- **Group 3 X₁ O₁ Y₃ O₂**

**Group 1 = study participants #1.** Naturally formed intact group of students with Emotional Behavior Disorders \(n = 8\).

**Group 2 = study participants #2.** Naturally formed intact group of students with Autism Spectrum Disorders \(n = 6\).

**Group 3 = study participants #3.** Naturally formed intact group of students with Attention Deficit Hyperactivity Disorders \(n = 6\).

**X₁ = study constants.** All students were verified with disabilities under 92 Nebraska Administrative Code 51 (Rule 51). Furthermore, students were referred to Brook Valley School, Omaha, Nebraska, to participate in a behavior replacement program designed to reduce incidences of observed insubordination, defiance, impulsivity, and aggression, based on classroom support strategies administered by teachers and staff, to accelerate the frequency of incompatible alternative, on-task desirable behaviors. All student behavior was recorded on fixed-interval individual behavioral point sheets carried by the students for teacher and student post behavior discussion and point tracking.
\text{Y}_1 = \text{study independent variable, emotional behavioral disorder students receiving daily behavior replacement instruction, condition #1.} \text{ Students determined to have verified Emotional Behavior Disorders completed daily social skill instructional support in the same alternative school program.}

\text{Y}_2 = \text{study independent variable, autistic spectrum disorder students receiving daily behavior replacement instruction, condition #2.} \text{ Students determined to be verified with Autism Spectrum Disorders that completed daily social skill instructional support in the same alternative school program.}

\text{Y}_3 = \text{study independent variable, attention deficit hyperactive disorder students receiving daily behavior replacement instruction, condition #3.} \text{ Students determined to have verified Attention Deficit Hyperactivity Disorders that completed daily social skill instructional support in the same alternative school program.}

\text{O}_1 = \text{study pretest dependent measures.} \text{ (1) Students’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Parent Report Short Form scale after their student completed the first nine weeks of classroom social skills instruction. (2) Parents’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Teacher Report Short Form scale, after their student completed the first nine weeks of classroom social skills instruction. (3) Teachers’ perceptions of (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Student Report Short Form scale, after the student completed the first nine weeks of classroom social skills instruction.}
\( O_2 = \text{study posttest dependent measures.} \) (1) Students’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Parent Report Short Form scale after their student completed the final nine weeks of classroom social skills instruction. (2) Parents’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Teacher Report Short Form scale after their student completed the final nine weeks of classroom social skills instruction. (3) Teachers’ perceptions of their (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Student Report Short Form scale after the student completed the final nine weeks of classroom social skills instruction.

**Participants**

All students were verified with disabilities under 92 Nebraska Administrative Code 51 (Rule 51). Furthermore, students were referred to Brook Valley School, Omaha, Nebraska, during the 2011-2012 school year to participate in a behavior replacement program designed to reduce incidences of observed insubordination, defiance, impulsivity, and aggression, based on classroom support strategies administered by teachers and staff, to accelerate the frequency of incompatible alternative, on-task desirable behaviors.

**Number of participants.** Study participants consisted of three naturally formed groups. Students determined to have verified Emotional Behavior Disorders \( n = 8 \), students determined to have Autism Spectrum Disorders \( n = 6 \), and students determined
to have Attention Deficit Hyperactivity Disorders \( n = 6 \) participating in the same alternative school program. The maximum accrual for this study was \( N = 20 \).

**Gender of participants.** Students with Emotional Behavior Disorders \( n = 6 \) (75%) were male and \( n = 2 \) (25%) are female. Students with Autism Spectrum Disorders \( n = 6 \) (100%) were male. Students with Attention Deficit Hyperactivity Disorders \( n = 6 \) (100%) were male. The imbalanced gender ratio is congruent with enrollment patterns for students with verified Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactive Disorders.

**Age range of participants.** The age range of the students in both groups was 10 years to 18 years. All students were in grades five through twelve and received small classroom instruction. The age range of the study participants was congruent with the alternative education programs age and grade ranges.

**Racial and ethnic origin of participation.** The eight Emotional Behavior Disordered subjects were Caucasian \( n = 7 \) (87%) and African American \( n = 1 \) (13%). Subjects with Autism Spectrum Disorder that were Caucasian \( n = 6 \) (100%). The Attention Deficit Hyperactive Disordered subjects were Caucasian \( n = 4 \) (68%), African American \( n = 1 \) (16%), and Native American \( n = 1 \) (16%). Overall, 35% of study participants received free meals, while 5% received reduce priced meals and 60% paid full price for their meals. The racial and ethnic origins of the study participants are congruent with the research school districts racial and ethnic origin demographics for grades six through twelfth students.

**Inclusion criteria for participants.** All students were verified with disabilities under 92 Nebraska Administrative Code 51 (Rule 51). Furthermore, students were
referred to Brook Valley South, Omaha, Nebraska, to participate in a behavior
replacement program designed to reduce incidences of observed insubordination,
defiance, impulsivity, and aggression, based on classroom support strategies administered
by teachers and staff, to accelerate the frequency of incompatible alternative, on-task
desirable behaviors. Study participants were in grades five through twelve.

**Method of participant identification.** Reasons for referral to Brook Valley
South include: (a) inattention, (b) impulsivity, (c) poor academic performance, (d)
aggression, and (e) poor family relationships. No individual identifiers will be attached
to the achievement, engagement or behavioral data of the 20 participating students in the
three groups.

**Implementation of the Brook Valley School Continuous Improvement Process and
School-Wide Positive Behavioral Supports**

The independent variable conditions for this study will be students verified with
Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit
Hyperactivity Disorders attending the same alternative school program who participated
in daily classroom social skills instruction.

**Description of the positive behavioral intervention supports.** As educators, we
know that the population of challenging children is increasing. The intensity of their
acting out is increasing as well. Many of our students are coming from difficult situations
in which physical and mental abuse, drug/alcohol usage, homelessness, and/or lack of
supervision are common. A greater number of children are managing these issues in a
disruptive manner that interferes with the teacher’s ability to create a safe and productive
learning community in their classrooms. It is evident that schools need to be more
resourceful and create new intervention strategies when dealing with the challenges of today’s students.

In 2010, Brook Valley South began using a systemic approach to the school improvement known as the Continuous School Improvement Process to assist in identifying specific school improvement initiatives such as increasing the ability of students to use appropriate social skills in order to get back into the least restrictive environment (i.e., general education classroom) in which they can function constructively in the content and social areas of school. The formalized school improvement process is used to coordinate curriculum, identify effective instructional strategies, encourages family and community engagement, assures equity, and addresses diversity. Each of these components is specifically reviewed and thorough consideration of all improvement areas is addressed in the school improvement process that was started in 2010 at Brook Valley South.

The first component of the improvement process identified implementing a school wide behavioral intervention system. The school adopted a behavioral intervention program known as the Behavior Intervention Support Team. Behavior Intervention Support Team, a unique outreach program created by the Ozanam Project, is a results-based behavior intervention model that allows teachers to confront disruptive behavior with grace and accountability rather than punitive consequences. This behavioral intervention process was developed to assist students in decreasing inappropriate responses to common classroom, school, home, and community opportunities as well as to assist teachers and staff in appropriately dealing with inappropriate behaviors with grace and accountability.
After the needs assessment was completed and analyzed, Brook Valley South’s common school improvement goal was established to provide every student with a safe, responsible, and kind learning environment each and every day. Behavioral Intervention Support Team consultants assisted in developing a customized behavioral intervention program at Brook Valley South that meets the unique needs of the school community. Brook Valley South’s school improvement goals are to assist students, parents, and teachers in reaching goals in areas such as increasing on-task teaching time, facilitating lifelong changes for the most challenging student behaviors, increase pro social behavior, and providing positive interventions and relief for adults.

Together with students, parents, and staff, an action plan was created that included, but is not limited to support systems for teachers which include ongoing training and individual consultation, observing students, collaborative problem solving, processing with students, creating a success plan for students, and conducting class meetings. The Behavioral Intervention Support Team implementation plan uses a comprehensive system of communication through regular meetings, behavioral checklists for student/administrator referral, and informal feedback and check-ups to assist students and staff in regulating behavior. Crisis intervention system were developed creating back-up plans in times of crisis in which everyone responds in a predictable and consistent manner.

Social Skills Instruction

Brook Valley South implemented a social skill instructional program known as Skill Streaming in the fall of 2011. Skill Streaming is provided to all students at Brook Valley South for thirty minutes a day, five days per week. Teachers define and teach
social skills terminology, model the social skills pro social strategies, and use role-playing skits to rehearse and practice social skill opportunities. Teachers also implement the social skills instructional program using readings, discussions, social stories, perspective taking, and writing to teach the social skills in domains such as listening, saying thank you, giving compliments, joining in, apologizing, asking for help, expressing feelings, dealing with anger, expressing affection, sharing, helping others, and avoiding trouble, standing up for a friend, and setting goals. Forty-five social skills in five domains represent the source of the student’s social skills intervention program. Students learn twenty self-management domain skills, eight assertion domain skills, six peer relationship domain skills, six compliance domain skills, and five academic domain skills.

The school improvement process revealed that Brook Valley South did not have a systemic kindergarten through twelfth grade social skill instructional framework or materials to support the instruction of pro-social skills for students enrolled. While some of the certified teaching staff in the building had been trained on Behavioral Intervention Supports Team strategies and had some knowledge of the token economy system, none had a standard research based curriculum that was being used in the classroom to teach pro-social behaviors. Some of the existing teaching and support staff were still familiar with the Behavioral Intervention Support Team intervention model, but had not been trained for over five years making the practice virtually impractical to use with students.

Throughout the first stage of the Continuous Improvement Process, staff, and identified teachers were not defining, modeling, practices, or looking for and teaching social skills in settings inside and outside of the classroom. Staff were not instructing on
pro social skills despite that being the primary reason for student being enrolled at Brook Valley South. The primary purpose of students coming to Brook Valley South is to teach them appropriate social and emotional skills in order to return to the least restrictive environment (i.e., general education classroom).

As a result of additional data gathering activities such as focus groups, cultural surveys, and external professionals from the University of Nebraska-Omaha Department of School Psychology started the process of implementing a Positive Behavioral Support program. The Positive Behavioral Support plan became a critically important part of the school improvement process. Again, the Brook Valley South trained staff on an evidence based social skills curriculum known as Skill Streaming and the behavioral intervention program known as the Behavioral Intervention Support Team process.

**Our Challenge**

As educators, we know that not only the population of challenging children is increasing, but the intensity and frequency of their acting out is increasing as well. Many students today are coming from difficult situations in which abuse, drug/alcohol usage, poverty, homelessness, and/or lack of supervision are common. A greater number of children are managing these issues in a disruptive manner that interferes with the teacher’s ability to create a safe, kind, and responsible learning community in the classroom. Schools need to be more resourceful and create new intervention strategies when dealing with the challenges of today’s students. Our common goal is to provide every student with a safe, responsible, and kind learning environment.

Together with students, parents, and staff, a School Improvement Plan Action Plan was created that included, but is not limited to support systems for teachers which
include ongoing training and individual consultation, observing students, collaborative problem solving, processing with students, creating a success plan for students, and conducting class meetings. The Behavioral Intervention Support Team implementation plan used a comprehensive system of communication through regular meetings, behavioral checklists for student/administrator referral, and informal feedback and check-ups. Crisis intervention systems were developed creating personnel trained to respond in times of crisis in which everyone must react in a predictable and consistent manner. BIST team members are dedicated to creating a caring school community in every learning environment.

**School-Wide Positive Behavioral Supports**

School-Wide Positive Behavioral Support is a systems approach to establishing the social culture and behavioral supports needed for all children in a school to achieve both social and academic success. School-Wide Positive Behavioral Support is not a packaged curriculum, but an approach that defines core elements that can be achieved through a variety of strategies. The core elements at each of the three tiers in the prevention model are defined in Tiers. Tier I supports being positive behavioral supports in place for students in the all settings from general education to self contained alternative settings. Behavioral terms and defined and agreed upon by all staff and students. The school culture gives definition to identified terms and skills that are expected in the school. Behavioral expectations and definitions such as safe, kind, and responsible define the behavioral program put in place for each school. For Brook Valley South, students all carry behavioral rating sheets that contain the words kind, safe, and responsible as well as additional IEP goal items. Each of these skills is defined at
different levels given the diversity of the students attending this K-12 alternative education program.

The core elements of the School-Wide Positive Behavioral Supports are integrated within organizational systems in which teams working with administrators and behavioral specialists, provide training, policy support, and organizational supports the need for the core elements. Positive behavioral support is only in the very beginning stages of its uses in schools today. However, the early results of positive behavioral support interventions at the indicated level, and the growing body of support for implementation at the universal and selective levels for children who have emotional behavioral problems are very promising.

Because the roots of positive behavioral support are in applied experimental analysis of behavior, the evidence for positive behavioral support, at this time, is primarily derived from single subject designs. This research, while not in the tradition empirical mode, nevertheless rigorous, generalizeable, and strong in social validity shows effectiveness (Horner and Sugai, 2002). Therefore, administrators have a preponderance of evidence to support their exploration of Positive Behavioral Supports as a viable model for School Based Mental Health programs.

Horner, Sugai, and colleagues (2005) provided a promising intervention prototype addressing violence prevention through school wide behavioral support (Horner, Sugai, 2005; Todd-Palmer, 2004). School-Wide Positive Behavioral Support is a process through which schools improve services for all students by creating systems wherein intervention and management decisions are informed by local data and guided by
intervention research. These approaches differ from previous school reform because they consider organizational management and contextual fit to sustain and refine over time. School-Wide Positive Behavioral Supports shifts emphasis from reactive and punitive methods to more proactive, preventative, and educationally focused methods.

Primary prevention efforts, or universal supports, are provided to all students through school-wide reform that involves research-based teaching and behavior management practices, ongoing monitoring of these practices and student outcomes, professional development, and systems level decision making. The goal of primary prevention is to create environments that promote student learning and engagement and decreasing students’ risk for learning and/or social behavior problems. School-Wide Positive Behavioral Support emphasizes effective instruction to teach pro social and content course work.

Within School-Wide Positive Behavioral Supports secondary/selected and tertiary/indicated prevention examines behavior in context or real problem solving, matching resources with problem intensity. For example, personnel may examine school-wide disciplinary patterns to determine whether particular settings or students experience greater behavioral difficulties than students on the whole.

Problem solving occurs at all three levels, but the unit of analysis and the target interventions vary. Assessment, prevention and intervention increase in intensity with increased risk or student needs. When students experience significant mental health or social-emotional problems, coordination across service delivery systems and monitoring responsiveness to intervention are needed (Gresham, 1997).
Dependent Measures

The study’s dependent variables are (1) opinion as measured by the Conners 3, 2008, Multi Health Systems rating scales on (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression to be completed by: (a) students, (b) parents, and (c) teachers.

Purpose of the Study

The purpose of this study was to determine the impact of a year-long, same school classroom social skills instruction program on students’ with verified Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders perceptions of program effectiveness compared to parents’ and teachers’ perceptions of program effectiveness.

Research Questions, Sub-Questions, and Data Analysis

The following research question will be used to analyze students, parent, and teacher pretest-posttest perceptions of students’ social skills program participation effectiveness.

Research Question #1. Do Students diagnosed with Emotional Behavior Disorders \( (n = 8) \) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale perceptions of reported Inattention?

Sub-Question 1a. Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?
**Analysis.** Research Sub-question #1a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #2.** Do parents ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 2a.** Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #2a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #3.** Do teachers ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?
**Sub-Question 3a.** Was there a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #3a was analyzed using dependent t tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #4.** Do Students diagnosed with Autism Spectrum Disorder \((n = 6)\) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Inattention?

**Sub-Question 4a.** Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #4a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.
Research Question #5. Do parents \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

Sub-Question 5a. Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #5a was analyzed using dependent \(t\) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #6. Do teachers \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

Sub-Question 6a. Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?
**Analysis.** Research Sub-question #6a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #7.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Inattention?

**Sub-Question 7a.** Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #7a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #8.** Do parents ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?
**Sub-Question 8a.** Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #8a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #9.** Do teachers ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 9a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #9a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
Research Question #10. Do Students diagnosed with Emotional Behavior Disorders ($n = 8$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

Sub-Question 10a. Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #10a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #11. Do parents ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 11a. Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured
by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #11a was analyzed using dependent *t* tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #12.** Do teachers (n = 8) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 12a.** Was there a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #12a was analyzed using dependent *t* tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.
**Research Question #13.** Do Students diagnosed with Autism Spectrum Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

**Sub-Question 13a.** Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #13a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #14.** Do parents ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Connors 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 14a.** Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?
Analysis. Research Sub-question #14a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #15. Do teachers ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 15a. Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #15a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #16. Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Connors 3 Scale Perceptions of reported Hyperactivity/Impulsivity?
Sub-Question 16a. Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #16a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #17. Do parents (n = 6) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 17a. Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #17a was analyzed using dependent t tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #18.** Do teachers (\(n = 6\)) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 18a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #18a was analyzed using dependent \(t\) tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #19.** Do Students diagnosed with Emotional Behavior Disorders (\(n = 8\)) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

**Sub-Question 19a.** Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student
Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #19a was analyzed using dependent \( t \) tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #20.** Do parents \((n = 8)\) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 20a.** Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #20a was analyzed using dependent \( t \) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #21.** Do teachers \((n = 8)\) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program
lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 21a. Was there a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #21a was analyzed using dependent t tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #22. Do students diagnosed with Autism Spectrum Disorder (n = 6) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

Sub-Question 22a. Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #22a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
Research Question #23. Do parents \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 23a. Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #23a was analyzed using dependent \(t\) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #24. Do teachers \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 24a. Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the
Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #24a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #25.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

**Sub-Question 25a.** Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #25a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #26.** Do parents ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention
program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 26a.** Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #26a was analyzed using dependent *t* tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #27.** Do teachers (*n* = 6) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 27a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #27a was analyzed using dependent *t* tests to examine the significance of the difference between teacher pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #28.** Do Students diagnosed with Emotional Behavior Disorders ($n = 8$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 28a.** Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #28a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #29.** Do parents ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 29a.** Was there a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by
the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #29a was analyzed using dependent \( t \) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #30.** Do teachers \((n = 8)\) of students diagnosed with Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 30a.** Was there a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #30a was analyzed using dependent \( t \) tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.
**Research Question #31.** Do students diagnosed with Autism Spectrum Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 31a.** Was there a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #31a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #32.** Do parents ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 32a.** Was there a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?
**Analysis.** Research Sub-question #32a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #33.** Do teachers ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 33a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #33a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #34.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?
**Sub-Question 34a.** Was there a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #34a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #35.** Do parents ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 35a.** Was there a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #35a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #36.** Do teachers \((n = 6)\) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 36a.** Was there a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #36a was analyzed using dependent \(t\) tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #37.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Inattention?

**Analysis.** Research Questions #37 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference
between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Inattention. An $F$ ratio will be calculated and an alpha level of $.05$ will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.

**Research Question #38.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Analysis.** Research Questions #38 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity. An $F$ ratio will be calculated and an alpha level of $.05$ will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.
**Research Question #39.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Learning Problems?

**Analysis.** Research Questions #39 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Learning Problems. An $F$ ratio will be calculated and an alpha level of .05 will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.

**Research Question #40.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Analysis.** Research Questions #40 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum
Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Defiance/Aggression. An $F$ ratio will be calculated and an alpha level of .05 will be utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test will be utilized for contrast analysis if a statistically significant $F$ ratio is observed. Means and standard deviations were displayed in tables.

Performance site. This research was conducted in a public alternative school setting through normal educational practices. The study procedures did not interfere with the normal educational practices of the public alternative school setting and did not involve coercion or discomfort of any kind. Data was stored on spreadsheets and computers flash drives for statistical analysis in the office of the primary researcher and the dissertation chair. Data and computer files were kept in locked file cabinets. No individual identifiers were attached to data.

Institutional Board of Review (IRB) for the protection of Human Subjects Approval Category. The exemption categories for this study were provided under 45CFR.101 (b) categories 1 and 4. The research was conducted using routinely collected archival data. A letter of support from Educational service Unit #3 was provided for IRB review.
CHAPTER FOUR

Results

Purpose of the Study

The purpose of this study was to determine the impact of a year-long, same school classroom social skills instruction program on students’ with verified Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders perceptions of program effectiveness.

Implementation of Positive Behavioral Intervention Support Program

As educators, we know that the population of challenging children is increasing. The intensity of their acting out is increasing as well. Many of our students are coming from difficult situations in which physical and mental abuse, drug/alcohol usage, homelessness, and/or lack of supervision are common. A greater number of children are managing these issues in a disruptive manner that interferes with the teacher’s ability to create a safe and productive learning community in their classrooms. It is evident that schools need to be more resourceful and create new intervention strategies when dealing with the challenges of today’s students.

In 2010, Brook Valley South began using a systemic approach to the school improvement known as the Continuous School Improvement Process to assist in identifying specific school improvement initiatives such as increasing the ability of students to use appropriate social skills in order to get back into the least restrictive environment (i.e., general education classroom) in which they can function constructively in the content and social areas of school. The formalized school improvement process is used to coordinate curriculum, identify effective instructional strategies, encourages
family and community engagement, assures equity, and addresses diversity. Each of these components is specifically reviewed and thorough consideration of all improvement areas is addressed in the school improvement process that was started in 2010 at Brook Valley South.

The first component of the improvement process identified implementing a school wide behavioral intervention system. The school adopted a behavioral intervention program known as the Behavior Intervention Support Team. Behavior Intervention Support Team, a unique outreach program created by the Ozanam Project, is a results-based behavior intervention model that allows teachers to confront disruptive behavior with grace and accountability rather than punitive consequences. This behavioral intervention process was developed to assist students in decreasing inappropriate responses to common classroom, school, home, and community opportunities as well as to assist teachers and staff in appropriately dealing with inappropriate behaviors with grace and accountability.

After a complete needs assessment was completed and analyzed, Brook Valley South’s common school improvement goal was established to provide every student with a safe, responsible, and kind learning environment each and every day. Behavioral Intervention Support Team consultants assisted in developing a customized behavioral intervention program at Brook Valley South that meets the unique needs of the school community. Brook Valley South’s school improvement goals are to assist students, parents, and teachers in reaching goals in areas such as increasing on-task teaching time, facilitating lifelong changes for the most challenging student behaviors, increase pro social behavior, and providing positive interventions and relief for adults.
Together with students, parents, and staff, an action plan was created that included, but is not limited to support systems for teachers which include ongoing training and individual consultation, observing students, collaborative problem solving, processing with students, creating a success plan for students, and conducting class meetings. The Behavioral Intervention Support Team implementation plan uses a comprehensive system of communication through regular meetings, behavioral checklists for student/administrator referral, and informal feedback and check-ups to assist students and staff in regulating behavior. Crisis intervention system were developed creating back-up plans in times of crisis in which everyone responds in a predictable and consistent manner.

**Social Skills Instructional Program**

Brook Valley South implemented a social skill instructional program known as Skill Streaming in the fall of 2011. Skill Streaming is provided to all students at Brook Valley South for thirty minutes a day, five days per week. Teachers define and teach social skills terminology, model the social skills pro social strategies, and use role-playing skits to rehearse and practice social skill opportunities. Teachers also implement the social skills instructional program using readings, discussions, social stories, perspective taking, and writing to teach the social skills in domains such as listening, saying thank you, giving compliments, joining in, apologizing, asking for help, expressing feelings, dealing with anger, expressing affection, sharing, helping others, and avoiding trouble, standing up for a friend, and setting goals. Forty-five social skills in five domains represent the source of the student’s social skills intervention program. Students learn twenty self-management domain skills, eight assertion domain skills, six
peer relationship domain skills, six compliance domain skills, and five academic domain skills.

The school improvement process revealed that Brook Valley South did not have a systemic kindergarten through twelfth grade social skill instructional framework or materials to support the instruction of pro-social skills for students enrolled. While some of the certified teaching staff in the building had been trained on Behavioral Intervention Supports Team strategies and had some knowledge of the token economy system, none had a standard research based curriculum that was being used in the classroom to teach pro-social behaviors. Some of the existing teaching and support staff were still familiar with the Behavioral Intervention Support Team intervention model, but had not been trained for over five years making the practice virtually impractical to use with students.

Throughout the first stage of the Continuous Improvement Process, staff, and identified teachers were not defining, modeling, practices, or looking for and teaching social skills in settings inside and outside of the classroom. Staff were not instructing on pro social skills despite that being the primary reason for student being enrolled at Brook Valley South. The primary purpose of students coming to Brook Valley South is to teach them appropriate social and emotional skills in order to return to the least restrictive environment (i.e., general education classroom).

As a result of additional data gathering activities such as focus groups, cultural surveys, and external professionals from the University of Nebraska-Omaha Department of School Psychology started the process of implementing a Positive Behavioral Support program. The Positive Behavioral Support plan became a critically important part of the school improvement process. Again, the Brook Valley South trained staff on an evidence
based social skills curriculum known as Skill Streaming and the behavioral intervention program known as the Behavioral Intervention Support Team process.

**Dependent Measures**

\[ O_1 = \textbf{study pretest dependent measures} \]

(1) Parents’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Parent Report Short Form scale after their student completed the first nine weeks of classroom social skills instruction. (2) Teachers’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Teacher Report Short Form scale, after their student completed the first nine weeks of classroom social skills instruction. (3) Students’ perceptions of (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Student Report Short Form scale, after the student completed the first nine weeks of classroom social skills instruction.

\[ O_2 = \textbf{study posttest dependent measures} \]

(1) Parents’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Parent Report Short Form scale after their student completed the final nine weeks of classroom social skills instruction. (2) Teachers’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Teacher Report Short Form scale after their student completed the final nine weeks of classroom social skills instruction. (3) Students’ perceptions of their (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as
measured by the Conners 3Student Report Short Form scale after the student completed the final nine weeks of classroom social skills instruction.

All study questionnaire data related to each of the dependent variables were retrospective, archival, and routinely collected school information. Permission from the appropriate school research personnel was obtained before data were collected and analyzed.

Research Questions

Research Question #1. Do Students diagnosed with Emotional Behavior Disorders (n = 8) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Inattention?

Sub-Question 1a. Was there a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #1a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #1 Results. As found in Table 1, the null hypothesis was not rejected for students with Emotional Behavior Disorders where negative t test results were in the direction of lower improving but not statistically significant posttest student
scores $t(7) = -1.58, d = -0.391, p = .08$ and the Conners 3 Scale reported student Inattention posttest mean score (55.50) fell within the Average Score guideline range indicating typically levels of concern.

**Research Question #2.** Do parents ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 2a.** Was there be a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #2a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #2 Results.** As found in Table 1, the null hypothesis was not rejected for parents of students with Emotional Behavior Disorders where negative $t$ test results were in the direction of lower improving but not statistically significant posttest parent scores $t(7) = -1.19, d = -0.233, p = .14$ and the Conners 3 Scale reported student Inattention posttest mean score (67.75) fell within the Elevated Score guideline range indicating more concerns than are typically reported.
**Research Question #3.** Do teachers \((n = 8)\) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 3a.** Was there be a significant difference between teachers of students diagnosed with Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #3a was analyzed using dependent \(t\) tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #3 Results.** As found in Table 1 the null hypothesis was not rejected for teachers of students with Emotional Behavior Disorders where negative \(t\) test results were in the direction of lower improving but not statistically significant posttest teacher scores \(t(7) = -0.54, d = -0.168, p = .30\) and the Conners 3 Scale reported student Inattention posttest mean score (71.13) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.
**Research Question #4.** Do Students diagnosed with Autism Spectrum Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Connors 3 Scale Perceptions of reported Inattention?

**Sub-Question 4a.** Was there be a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #4a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #4 Results.** As found in Table 1, the null hypothesis was not rejected for students with Autism Spectrum Disorder where positive $t$ test results were in the direction of deteriorating but not statistically significant posttest student scores $t(5) = 0.44, d = 0.241, p = .34$ and the Connors 3 Scale reported student Inattention posttest mean score (60.67) fell within the High Average Score guideline range indicating slightly more concerns than are typically reported.
Research Question #5. Do parents \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

Sub-Question 5a. Was there be a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #5a was analyzed using dependent \(t\) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #5 Results. As found in Table 1, the null hypothesis was not rejected for parents of students with Autism Spectrum Disorder where negative \(t\) test results were in the direction of lower improving but not statistically significant posttest parent scores \(t(5) = -0.73, d = -0.147, p = .25\) and the Conners 3 Scale reported student Inattention posttest mean score (62.17) fell within the High Average Score guideline range indicating slightly more concerns than are typically reported.
**Research Question #6.** Do teachers \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 6a.** Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #6a was analyzed using dependent \(t\) tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #6 Results.** As found in Table 1, the null hypothesis was not rejected for teachers of students with Autism Spectrum Disorder where positive \(t\) test results were in the direction of deteriorating but not statistically significant posttest teacher scores \(t(5) = 1.06, d = 0.328, p = .17\) and the Conners 3 Scale reported student Inattention posttest mean score \((62.17)\) fell within the High Average Score guideline range indicating slightly more concerns than are typically reported.
Research Question #7. Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Inattention?

Sub-Question 7a. Was there be a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #7a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #7 Results. As found in Table 1, the null hypothesis was not rejected for students with Attention Deficit Hyperactivity Disorder where positive $t$ test results were in the direction of deteriorating but not statistically significant posttest student scores $t(5) = 0.28$, $d = 0.153$, $p = .40$ and the Conners 3 Scale reported student Inattention posttest mean score (67.33) fell within the Elevated Score guideline range indicating more concerns than are typically reported.
**Research Question #8.** Do parents (n = 6) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

**Sub-Question 8a.** Was there be a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #8a was analyzed using dependent t tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #8 Results.** As found in Table 1, the null hypothesis was not rejected for parents of students with Attention Deficit Hyperactivity Disorder where negative t test results were in the direction of lower improving but not statistically significant posttest parent scores $t(5) = -0.12, d = -0.039, p = .45$ and the Conners 3 Scale reported student Inattention posttest mean score (74.50) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.
Research Question #9. Do teachers \((n = 6)\) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Inattention?

Sub-Question 9a. Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Inattention as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #9a was analyzed using dependent \(t\) tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #9 Results. As found in Table 1, the null hypothesis was not rejected for teachers of students with Attention Deficit Hyperactivity Disorder where negative \(t\) test results were in the direction of improving but not statistically significant posttest teacher scores \(t(5) = -0.64, d = -0.239, p = .27\) and the Conners 3 Scale reported student Inattention posttest mean score (67.50) fell within the Elevated Score guideline range indicating more concerns than are typically reported.
Table 1

*Pretest Beginning Program Compared to Posttest Ending Program Conners 3 Scale Perceptions of Student Inattention Reported by Students Diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their Parents and Teachers*

<table>
<thead>
<tr>
<th>Inattention</th>
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<tbody>
<tr>
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<td>Posttest</td>
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<td>SD</td>
<td>M</td>
<td>SD</td>
<td>d</td>
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<td>p</td>
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<td>Emotional Behavior Disorder</td>
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</tr>
<tr>
<td>Students:</td>
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<td>55.50 (10.86)</td>
<td>-0.391</td>
<td>-1.58</td>
<td>.08†</td>
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<td>-0.233</td>
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<td>.14†</td>
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<td>Teachers:</td>
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<td>71.13 (9.09)</td>
<td>-0.168</td>
<td>-0.54</td>
<td>.30†</td>
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<tr>
<td>Autism Spectrum Disorder</td>
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</tr>
<tr>
<td>Students:</td>
<td>58.50 (5.78)</td>
<td>60.67 (12.20)</td>
<td>0.241</td>
<td>0.44</td>
<td>.34†</td>
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<tr>
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<td>62.17 (15.68)</td>
<td>-0.147</td>
<td>-0.73</td>
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<tr>
<td>Teachers:</td>
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<td>62.17 (12.84)</td>
<td>0.328</td>
<td>1.06</td>
<td>.17†</td>
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<tr>
<td>Attention Deficit Hyperactivity Disorder</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Students:</td>
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<td>67.33 (18.31)</td>
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<td>0.28</td>
<td>.40†</td>
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<tr>
<td>Parents:</td>
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<td>.45†</td>
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</tr>
<tr>
<td>Teachers:</td>
<td>69.50 (7.55)</td>
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<td>-0.239</td>
<td>-0.64</td>
<td>.27†</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Negative t result is in the direction of lower improving posttest scores.*

Note. Mean T-score guideline for Conners 3 Scale Perceptions of Student Inattention are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Conners, 2009).

†ns.
Research Question #10. Do Students diagnosed with Emotional Behavior Disorders \((n = 8)\) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

Sub-Question 10a. Was there be a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #10a was analyzed using dependent \(t\) tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #10 Results. As found in Table 2, the null hypothesis was not rejected for students with Emotional Behavior Disorders where negative \(t\) test results were in the direction of lower improving but not statistically significant posttest student scores \(t(7) = -0.80, d = -0.212, p = .22\) and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (64.63) fell within the High Average Score guideline range indicating slightly more concerns than are typically reported.
Research Question #11. Do parents ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 11a. Was there be a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #11a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #11 Results. As found in Table 2, the null hypothesis was not rejected for parents of students with Emotional Behavior Disorders where negative $t$ test results were in the direction of lower improving but not statistically significant posttest parent scores $t(7) = -0.85, d = -0.263, p = .21$ and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (82.63) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.

Research Question #12. Do teachers ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program
lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 12a.** Was there be a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #12a was analyzed using dependent *t* tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #12 Results.** As found in Table 2, the null hypothesis was not rejected for teachers of students with Emotional Behavior Disorders where negative *t* test results were in the direction of lower improving but not statistically significant posttest teacher scores *t*(7) = -0.85, *d* = -0.263, *p* = .21 and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (82.13) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.

**Research Question #13.** Do Students diagnosed with Autism Spectrum Disorder (*n* = 6) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

**Sub-Question 13a.** Was there be a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine
weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #13a was analyzed using dependent t tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #13 Results.** As found in Table 2, the null hypothesis was not rejected for students with Autism Spectrum Disorder where positive t test results were in the direction of deteriorating but not statistically significant posttest student scores \( t(5) = 0.21, d = 0.088, p = .42 \) and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (58.50) fell within the Average Score guideline range indicating typical levels of concern.

**Research Question #14.** Do parents \((n = 6)\) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 14a.** Was there be a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?
**Analysis.** Research Sub-question #14a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #14 Results.** As found in Table 2, the null hypothesis was not rejected for parents of students with Autism Spectrum Disorder where negative $t$ test results were in the direction of lower improving but not statistically significant posttest parent scores $t(5) = -0.76$, $d = -0.110$, $p = .24$ and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (65.33) fell within the Elevated Score guideline range indicating more concerns than are typically reported.

**Research Question #15.** Do teachers ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 15a.** Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #15a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #15 Results.** As found in Table 2, the null hypothesis was rejected for teachers of students with Autism Spectrum Disorder where negative $t$ test results were in the direction of improving and statistically significant posttest teacher scores $t(5) = 2.20$, $d = 0.637$, $p = .04$ and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (62.00) fell within the High Average Score guideline range indicating slightly more concerns than are typically reported.

**Research Question #16.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Hyperactivity/Impulsivity?

**Sub-Question 16a.** Was there be a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #16a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.
Research Question #16 Results. As found in Table 2, the null hypothesis was not rejected for students with Attention Deficit Hyperactivity Disorder where positive t test results were in the direction of deteriorating but not statistically significant posttest student scores $t(5) = 0.56, d = 0.307, p = .30$ and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (67.50) fell within the Elevated Score guideline range indicating more concerns than are typically reported.

Research Question #17. Do parents ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

Sub-Question 17a. Was there be a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #17a was analyzed using dependent t tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #17 Results. As found in Table 2, the null hypothesis was not rejected for parents of students with Attention Deficit Hyperactivity Disorder where positive t test results were in the direction of deteriorating but not statistically significant
posttest parent scores $t(5) = 0.17, d = 0.072, p = .44$ and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (82.67) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.

**Research Question #18.** Do teachers ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Sub-Question 18a.** Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Hyperactivity/Impulsivity as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #18a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #18 Results.** As found in Table 2, the null hypothesis was not rejected for teachers of students with Attention Deficit Hyperactivity Disorder where negative $t$ test results were in the direction of improving but not statistically significant posttest teacher scores $t(5) = -1.54, d = -0.567, p = .09$ and the Conners 3 Scale reported
student Hyperactivity/Impulsivity posttest mean score (66.67) fell within the Elevated Score guideline range indicating more concerns than are typically reported.
Table 2

Pretest Beginning Program Compared to Posttest Ending Program Conners 3 Scale Perceptions of Student Hyperactivity/Impulsivity Reported by Students Diagnosed with Emotional Behavior Disorders, Autism, and Attention Deficit Hyperactivity Disorders their Parents and Teachers

<table>
<thead>
<tr>
<th>Source</th>
<th>Pretest</th>
<th>Posttest</th>
<th>d</th>
<th>t&lt;sup&gt;a&lt;/sup&gt;</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Behavior</strong></td>
<td></td>
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<tr>
<td>Disorder</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Students:</td>
<td>66.88 (10.28)</td>
<td>64.63 (10.86)</td>
<td>-0.212</td>
<td>-0.80</td>
<td>.22&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
<tr>
<td>Parents:</td>
<td>84.75 (6.60)</td>
<td>82.63 (9.53)</td>
<td>-0.263</td>
<td>-0.85</td>
<td>.21&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
<tr>
<td>Teachers:</td>
<td>84.75 (6.60)</td>
<td>82.63 (9.53)</td>
<td>-0.263</td>
<td>-0.85</td>
<td>.21&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Autism</strong></td>
<td></td>
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<tr>
<td><strong>Spectrum</strong></td>
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<td></td>
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<tr>
<td>Disorder</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Students:</td>
<td>57.83 (6.08)</td>
<td>58.50 (9.02)</td>
<td>0.088</td>
<td>0.21</td>
<td>.42&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
<tr>
<td>Parents:</td>
<td>67.33 (18.82)</td>
<td>65.33 (17.30)</td>
<td>-0.110</td>
<td>-0.76</td>
<td>.24&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
<tr>
<td>Teachers:</td>
<td>72.33 (16.24)</td>
<td>62.00 (16.17)</td>
<td>-0.637</td>
<td>-2.20</td>
<td>.04*</td>
</tr>
<tr>
<td><strong>Attention</strong></td>
<td></td>
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<tr>
<td><strong>Deficit</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students:</td>
<td>63.17 (11.47)</td>
<td>67.50 (16.71)</td>
<td>0.307</td>
<td>0.56</td>
<td>.30&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
<tr>
<td>Parents:</td>
<td>81.83 (8.75)</td>
<td>82.67 (14.40)</td>
<td>0.072</td>
<td>0.17</td>
<td>.44&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
<tr>
<td>Teachers:</td>
<td>73.67 (12.32)</td>
<td>66.67 (12.37)</td>
<td>-0.567</td>
<td>-1.54</td>
<td>.09&lt;sup&gt;†&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup>Negative t result is in the direction of lower improving posttest scores.

Note. Mean T-score guideline for Conners 3 Scale Perceptions of Student Inattention are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Conners, 2009).

<sup>†</sup>ns. *p < .05.
**Research Question #19.** Do Students diagnosed with Emotional Behavior Disorders \((n = 8)\) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

**Sub-Question 19a.** Was there be a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #19a was analyzed using dependent \(t\) tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #19 Results.** As found in Table 3, the null hypothesis was not rejected for students with Emotional Behavior Disorders where negative \(t\) test results were in the direction of lower improving but not statistically significant posttest student scores \(t(7) = -1.08, d = -0.369, p = .16\) and the Conners 3 Scale reported student Learning Problems posttest mean score (59.00) fell within the Average Score guideline range indicating typical levels of concerns.

**Research Question #20.** Do parents \((n = 8)\) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?
**Sub-Question 20a.** Was there be a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #20a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #20 Results.** As found in Table 3, the null hypothesis was rejected for parents of students with Behavior Disorders where negative $t$ test results were in the direction of lower improving and statistically significant posttest parent scores $t(7) = -2.36, d = -0.377, p = .04$ and the Conners 3 Scale reported student Learning Problems posttest mean score (65.88) fell within the Elevated Score guideline range indicating more concerns than are typically reported.

**Research Question #21.** Do teachers ($n = 8$) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 21a.** Was there be a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the
Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #21a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type I error. Means and standard deviations will be displayed on tables.

**Research Question #21 Results.** As found in Table 3, the null hypothesis was rejected for teachers of students with Emotional Behavior Disorders where positive $t$ test results were in the direction of deteriorating and statistically significant posttest teacher scores $t(7) = 2.18, d = 0.368, p = .03$ and the Conners 3 Scale reported student Learning Problems posttest mean score ($72.25$) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.

**Research Question #22.** Do students diagnosed with Autism Spectrum Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

**Sub-Question 22a.** Was there be a significant difference between students with an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #22a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #22 Results.** As found in Table 3, the null hypothesis was not rejected for students with Autism Spectrum Disorder where positive $t$ test results were in the direction of deteriorating but not statistically significant posttest student scores $t(5) = 0.97, d = 0.573, p = .19$ and the Conners 3 Scale reported student Learning Problems posttest mean score (59.67) fell within the Average Score guideline range indicating typical levels of concern.

**Research Question #23.** Do parents ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

**Sub-Question 23a.** Was there be a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #23a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.
Research Question #23 Results. As found in Table 3, the null hypothesis was not rejected for parents of students with Autism Spectrum Disorder where negative $t$ test results were in the direction of lower improving but not statistically significant posttest parent scores $t(5) = -0.31$, $d = -0.089$, $p = .39$ and the Conners 3 Scale reported student Hyperactivity/Impulsivity posttest mean score (59.33) fell within the Average Score guideline range indicating typical levels of concern.

Research Question #24. Do teachers ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 24a. Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #24a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #24 Results. As found in Table 3, the null hypothesis was rejected for teachers of students with Autism Spectrum Disorder where positive $t$ test results were in the direction of deteriorating and statistically significant posttest teacher
scores \( t(5) = 3.60, d = 0.923, p = .01 \) and the Conners 3 Scale reported student Learning Problems posttest mean score (66.50) fell within the Elevated Score guideline range indicating more concerns than are typically reported.

**Research Question #25.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder \((n = 6)\) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Learning Problems?

**Sub-Question 25a.** Was there be a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #25a was analyzed using dependent \( t \) tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #25 Results.** As found in Table 3, the null hypothesis was not rejected for students with Attention Deficit Hyperactivity Disorder where positive \( t \) test results were in the direction of deteriorating but not statistically significant posttest student scores \( t(5) = 0.95, d = 0.327, p = .19 \) and the Conners 3 Scale reported student Learning Problems posttest mean score (65.33) fell within the Elevated Score guideline range indicating more concerns than are typically reported.
Research Question #26. Do parents \((n = 6)\) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 26a. Was there be a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #26a was analyzed using dependent \(t\) tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #26 Results. As found in Table 3, the null hypothesis was not rejected for parents of students with Attention Deficit Hyperactivity Disorder where positive \(t\) test results were in the direction of deteriorating but not statistically significant posttest parent scores \(t(5) = 0.66, d = 0.165, p = .27\) and the Conners 3 Scale reported student Learning Problems posttest mean score (63.50) fell within the High Average Score guideline range indicating slightly more concerns than are typically reported.

Research Question #27. Do teachers \((n = 6)\) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention
program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Learning Problems?

Sub-Question 27a. Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Learning Problems as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #27a was analyzed using dependent t tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #27 Results. As found in Table 3, the null hypothesis was not rejected for teachers of students with Attention Deficit Hyperactivity Disorder where positive t test results were in the direction of deteriorating but not statistically significant posttest teacher scores t(5) = 0.38, d = 0.178, p = .36 and the Conners 3 Scale reported student Learning Problems posttest mean score (64.33) fell within the High Average guideline range indicating slightly more concerns than are typically reported.
Table 3

Pretest Beginning Program Compared to Posttest Ending Program Connors 3 Scale Perceptions of Student Learning Problems Reported by Students Diagnosed with Emotional Behavior Disorders, Autism, and Attention Deficit Hyperactivity Disorders their Parents and Teachers

<table>
<thead>
<tr>
<th>Learning Problems</th>
<th>Pretest</th>
<th>Posttest</th>
<th>d</th>
<th>t^a</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Behavior Disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Students:         | 63.88 (12.40) | 59.00 (13.03) | -0.369 | -1.08 | .16^
| Parents:          | 70.50 (12.08) | 65.88 (12.38) | -0.377 | -2.36 | .04*
| Teachers:         | 68.13 (11.07) | 72.25 (11.28) | 0.368  | 2.18  | .03*
| Autism Spectrum Disorder |         |          |      |       |      |
| Students:         | 55.83 (8.03)  | 59.67 (5.35)  | 0.573  | 0.97  | .19^
| Parents:          | 60.17 (9.53)  | 59.33 (9.20)  | -0.089 | -0.31 | .39^
| Teachers:         | 57.33 (7.96)  | 66.50 (11.91) | 0.923  | 3.60  | .01**
| Attention Deficit Hyperactivity Disorder |         |          |      |       |      |
| Students:         | 60.50 (11.55) | 65.33 (17.91) | 0.327  | 0.95  | .19^
| Parents:          | 61.50 (12.62) | 63.50 (11.60) | 0.165  | 0.66  | .27^
| Teachers:         | 62.83 (6.36)  | 64.33 (10.48) | 0.178  | 0.38  | .36^

^Negative t result is in the direction of lower improving posttest scores.

Note. Mean T-score guideline for Connors 3 Scale Perceptions of Student Inattention are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Connors, 2009).

^ns. *p < .05. **p = .01.
**Research Question #28.** Do Students diagnosed with Emotional Behavior Disorders (n = 8) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 28a.** Was there be a significant difference between students with an Emotional Behavior Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #28a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #28 Results.** As found in Table 4, the null hypothesis was not rejected for students with Emotional Behavior Disorders where negative $t$ test results were in the direction of lower improving but not statistically significant posttest student scores $t(7) = -1.05$, $d = -0.322$, $p = .16$ and the Conners 3 Scale reported student Defiance/Aggression posttest mean score (54.38) fell within the Average Score guideline range indicating typical levels of concerns.

**Research Question #29.** Do parents (n = 8) of students diagnosed with Emotional Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?
**Sub-Question 29a.** Was there be a significant difference between parents of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #29a was analyzed using dependent *t* tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #29 Results.** As found in Table 4, the null hypothesis was rejected for parents of students with Emotional Behavior Disorders where negative *t* test results were in the direction of lower improving and statistically significant posttest parent scores *t*(7) = -1.18, *d* = -0.431, *p* = .14 and the Conners 3 Scale reported student Defiance/Aggression posttest mean score (65.88) fell within the Elevated Score guideline range indicating more concerns than are typically reported.

**Research Question #30.** Do teachers (*n* = 8) of students diagnosed with Behavior Disorders who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 30a.** Was there be a significant difference between teachers of students diagnosed with Emotional Behavior Disorders pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by
the Conners 3 Student Report Short Form scale scores following student participation in
daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #30a was analyzed using dependent \( t \) tests to
examine the significance of the difference between teacher pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will
be employed to help control for Type I error. Means and standard deviations will be
displayed on tables.

**Research Question #30 Results.** As found in Table 4 the null hypothesis was
rejected for teachers of students with Emotional Behavior Disorders where positive \( t \) test
results were in the direction of deteriorating and statistically significant posttest teacher
scores \( t(7) = 0.64, d = 0.317, p = .27 \) and the Conners 3 Scale reported student
Defiance/Aggression posttest mean score (77.63) fell within the Very Elevated Score
guideline range indicating many more concerns than are typically reported.

**Research Question #30.** Do students diagnosed with Autism Spectrum Disorder \((n = 6)\)
who participated in a year-long social skills intervention program lose, maintain, or
improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 31a.** Was there be a significant difference between students with
an Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine
weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report
Short Form scale scores following student participation in daily classroom social skills
instruction activities?

**Analysis.** Research Sub-question #31a was analyzed using dependent \( t \) tests to
examine the significance of the difference between student pretest-posttest perception
scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #31 Results.** As found in Table 4, the null hypothesis was not rejected for students with Autism Spectrum Disorder where negative t test results were in the direction of improving but not statistically significant posttest student scores $t(5) = -1.057, d = -0.742, p = .09$ and the Conners 3 Scale reported student Learning Problems posttest mean score (49.17) fell within the Average Score guideline range indicating typical levels of concern.

**Research Question #32.** Do parents ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 32a.** Was there be a significant difference between parents of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #32a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.
**Research Question #32 Results.** As found in Table 4, the null hypothesis was not rejected for parents of students with Autism Spectrum Disorder where negative $t$ test results were in the direction of lower improving but not statistically significant posttest parent scores $t(5) = -0.141$, $d = -0.78$, $p = .24$ and the Conners 3 Scale reported student Defiance/Aggression posttest mean score (55.00) fell within the Average Score guideline range indicating typical levels of concern.

**Research Question #33.** Do teachers ($n = 6$) of students diagnosed with Autism Spectrum Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 33a.** Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #33a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #33 Results.** As found in Table 4, the null hypothesis was rejected for teachers of students with Autism Spectrum Disorder where positive $t$ test results were in the direction of deteriorating and statistically significant posttest teacher
scores $t(5) = 1.03, d = 0.202, p = .18$ and the Conners 3 Scale reported student Defiance/Aggression posttest mean score (73.33) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.

**Research Question #34.** Do Students diagnosed with Attention Deficit Hyperactivity Disorder ($n = 6$) who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported Defiance/Aggression?

**Sub-Question 34a.** Was there be a significant difference between students with an Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #34a was analyzed using dependent $t$ tests to examine the significance of the difference between student pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #34 Results.** As found in Table 4, the null hypothesis was not rejected for students with Attention Deficit Hyperactivity Disorder where positive $t$ test results were in the direction of deteriorating but not statistically significant posttest student scores $t(5) = 0.55, d = 0.395, p = .30$ and the Conners 3 Scale reported student Defiance/Aggression posttest mean score (65.67) fell within the Elevated Score guideline range indicating more concerns than are typically reported.
Research Question #35. Do parents ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

Sub-Question 35a. Was there be a significant difference between parents of students diagnosed with Attention Deficit Hyperactivity Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

Analysis. Research Sub-question #35a was analyzed using dependent $t$ tests to examine the significance of the difference between parent pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

Research Question #35 Results. As found in Table 4, the null hypothesis was not rejected for parents of students with Attention Deficit Hyperactivity Disorder where positive $t$ test results were in the direction of deteriorating but not statistically significant posttest parent scores $t(5) = 0.58, d = 0.252, p = .29$ and the Conners 3 Scale reported student Defiance/Aggression posttest mean score (81.33) fell within the Very Elevated Score guideline range indicating many more concerns than are typically reported.

Research Question #36. Do teachers ($n = 6$) of students diagnosed with Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention
program lose, maintain, or improve their Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Sub-Question 36a.** Was there be a significant difference between teachers of students diagnosed with Autism Spectrum Disorder pretest first nine weeks compared to posttest final nine weeks perceptions of student Defiance/Aggression as measured by the Conners 3 Student Report Short Form scale scores following student participation in daily classroom social skills instruction activities?

**Analysis.** Research Sub-question #36a was analyzed using dependent $t$ tests to examine the significance of the difference between teacher pretest-posttest perception scores. Because multiple statistical tests were conducted, a one-tailed .01 alpha level will be employed to help control for Type 1 error. Means and standard deviations will be displayed on tables.

**Research Question #36 Results.** As found in Table 4, the null hypothesis was not rejected for teachers of students with Attention Deficit Hyperactivity Disorder where positive $t$ test results were in the direction of improving but not statistically significant posttest teacher scores $t(5) = -0.32, d = 0.185, p = .38$ and the Conners 3 Scale reported student Defiance/Aggression posttest mean score (80.17) fell within the Very Elevated guideline range indicating many more concerns than are typically reported.
Table 4

Pretest Beginning Program Compared to Posttest Ending Program Conners 3 Scale Perceptions of Student Defiance/Aggression Reported by Students Diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their Parents and Teachers

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
<th>d</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional Behavior Disorder</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students:</td>
<td>60.38 (19.63)</td>
<td>54.38 (17.62)</td>
<td>-0.322</td>
<td>-1.05</td>
<td>.16*</td>
</tr>
<tr>
<td>Parents:</td>
<td>75.13 (16.22)</td>
<td>68.75 (13.33)</td>
<td>-0.431</td>
<td>-1.18</td>
<td>.14*</td>
</tr>
<tr>
<td>Teachers:</td>
<td>73.13 (16.10)</td>
<td>77.63 (12.23)</td>
<td>0.317</td>
<td>0.64</td>
<td>.27*</td>
</tr>
<tr>
<td><strong>Autism Spectrum Disorder</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students:</td>
<td>56.83 (14.38)</td>
<td>49.17 (6.27)</td>
<td>-0.742</td>
<td>-1.57</td>
<td>.09*</td>
</tr>
<tr>
<td>Parents:</td>
<td>56.67 (13.83)</td>
<td>55.00 (9.79)</td>
<td>-0.141</td>
<td>-0.78</td>
<td>.24*</td>
</tr>
<tr>
<td>Teachers:</td>
<td>70.50 (14.59)</td>
<td>73.33 (13.42)</td>
<td>0.202</td>
<td>1.03</td>
<td>.18*</td>
</tr>
<tr>
<td><strong>Attention Deficit Hyperactivity Disorder</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students:</td>
<td>60.50 (10.50)</td>
<td>65.67 (15.65)</td>
<td>0.395</td>
<td>0.55</td>
<td>.30*</td>
</tr>
<tr>
<td>Parents:</td>
<td>78.50 (12.70)</td>
<td>81.33 (9.72)</td>
<td>0.252</td>
<td>0.58</td>
<td>.29*</td>
</tr>
<tr>
<td>Teachers:</td>
<td>82.17 (6.67)</td>
<td>80.17 (14.87)</td>
<td>-0.185</td>
<td>-0.32</td>
<td>.38*</td>
</tr>
</tbody>
</table>

*aNegative t result is in the direction of lower improving posttest scores.

Note. Mean T-score guideline for Conners 3 Scale Perceptions of Student Inattention are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Conners, 2009).
Research Question #37. Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Inattention?

Analysis. Research Questions #37 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills Intervention program and their parents and teachers Conners 3 Scale Perceptions of reported student Inattention. An $F$ ratio was calculated and an alpha level of .05 was utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test was utilized for contrast analysis if a statistically significant $F$ ratio was observed. Means and standard deviations were displayed in tables.

Research Question #37 Results. Table 5 displays posttest results of Analysis of Variance (ANOVA) for posttest compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and teachers. As seen in Table 5 the null hypothesis for ending program Conners 3 Scale perceptions of student Inattention reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and their teachers was not rejected where parents’ posttest $M = 68.10, SD = 15.64$; teachers’ posttest $M = 67.35, SD = 10.51$;
and students’ posttest $M = 60.60$, $SD = 13.78$, and $F(2, 57) = 1.88$, $p = .16$. Because a statistically significant main effect $F$-ratio was not observed no post hoc contrast analyses Tukey Honestly Significant Difference Tests were conducted.

Table 5

\textit{Results of Analysis of Variance for Posttest Ending Program Conners 3 Scale Perceptions of Student Inattention Reported by Students Diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their Parents and Teachers}

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>df</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>682.50</td>
<td>341.25</td>
<td>2</td>
<td>1.88</td>
<td>.16$^*$</td>
</tr>
<tr>
<td>Within Groups</td>
<td>10357.15</td>
<td>181.70</td>
<td>57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^*$\textit{ns. No Post Hoc results calculated or displayed.}

\textbf{Inattention}

\begin{tabular}{lcccl}
\hline
Group & Mean & SD & Posttest Mean Perception Score Guideline (Conners, 2009) \\ 
\hline
Parents: & 68.10 (15.64) & Elevated Score (More concerns than are typically reported) & \\
Teachers: & 67.35 (10.51) & Elevated Score (More concerns than are typically reported) & \\
Students: & 60.60 (13.78) & High Average Score (Slightly more concerns than are typically reported) & \\
\hline
\end{tabular}

Note. Mean $T$-score guideline for Conners 3 Scale Perceptions of Student Hyperactivity/Impulsivity are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Conners, 2009).
**Research Question #38.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity?

**Analysis.** Research Questions #38 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers Conners 3 Scale Perceptions of reported student Hyperactivity/Impulsivity. An $F$ ratio was calculated and an alpha level of .05 was utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test was utilized for contrast analysis if a statistically significant $F$ ratio was observed. Means and standard deviations were displayed in tables.

**Research Question #38 Results.** Table 6 displays posttest results of Analysis of Variance (ANOVA) for posttest compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and teachers. As seen in Table 6 the null hypothesis for ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and their teachers was rejected where parents’ posttest $M = 77.45$, $SD =$
15.26; teachers’ posttest $M = 66.60$, $SD = 13.37$; and students’ posttest $M = 63.65$, $SD = 12.32$, and $F(2, 57) = 5.62$, $p = .005$. Because a statistically significant main effect $F$-ratio was observed post hoc contrast analyses Tukey Honestly Significant Difference (HSD) Tests were conducted. Post hoc analysis for all Parents ($n = 20$) verses all Teachers ($n = 20$) was statistically different where HSD = 10.44, $p < .05$. Post hoc analysis for all Parents ($n = 20$) verses all Students ($n = 20$) was statistically different where HSD = 13.15, $p < .01$. Post hoc analysis for all Teachers ($n = 20$) verses all Students ($n = 20$) was not statistically different where HSD = non-significant.
Table 6

Results of Analysis of Variance for Posttest Ending Program Conners 3 Scale Perceptions of Student Hyperactivity/Impulsivity Reported by Students Diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their Parents and Teachers

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>df</th>
<th>F</th>
<th>p</th>
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<tbody>
<tr>
<td>Between Groups</td>
<td>2112.43</td>
<td>1056.21</td>
<td>2</td>
<td>5.62</td>
<td>.005**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>10714.30</td>
<td>187.97</td>
<td>57</td>
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</table>

**p < .01.

Hyperactivity/Impulsivity

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>Posttest Mean Perception Score Guideline (Conners, 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>77.45 (15.26)</td>
<td>Very Elevated Score (Many more concerns than are typically reported)</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>66.60 (13.37)</td>
<td>Elevated Score (More concerns than are typically reported)</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>63.65 (12.32)</td>
<td>High Average Score (Slightly more concerns than are typically reported)</td>
<td></td>
</tr>
</tbody>
</table>

Tukey Honestly Significant Difference Post Hoc Test

All Parents (n = 20) verses All Teachers (n = 20) p < .05 where HSD = 10.44.
All Parents (n = 20) verses All Students (n = 20) p < .01 where HSD = 13.15.
All Teachers (n = 20) verses All Students (n = 20) non-significant.

Note. Mean T-score guideline for Conners 3 Scale Perceptions of Student Hyperactivity/Impulsivity are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Conners, 2009).
Research Question #39. Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Learning Problems?

Analysis. Research Questions #39 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills Learning Problems program and their parents and teachers Conners 3 Scale Perceptions of reported student Learning Problems. An F ratio was calculated and an alpha level of .05 was utilized to test the null hypothesis. Tukey Honestly Significant Difference Post Hoc Test was utilized for contrast analysis if a statistically significant F ratio was observed. Means and standard deviations were displayed in tables.

Research Question #39 Results. Table 7 displays posttest results of Analysis of Variance (ANOVA) for posttest compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and teachers. As seen in Table 7 the null hypothesis for ending program Conners 3 Scale perceptions of student Learning Problems reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and their teachers was not rejected where parents’ posttest $M = 63.20, SD = 11.04$; teachers’ posttest $M = 68.15, SD = 11.21$;
and students’ posttest $M = 61.10$, $SD = 13.14$, and $F(2, 57) = 1.87$, $p = .16$. Because a statistically significant main effect $F$-ratio was not observed no post hoc contrast analyses Tukey Honestly Significant Difference Tests were conducted.

Table 7

Results of Analysis of Variance for Posttest Ending Program Conners 3 Scale Perceptions of Student Learning Problems Reported by Students Diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their Parents and Teachers

<table>
<thead>
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<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
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<th>$F$</th>
<th>$p$</th>
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<td>1.87</td>
<td>.16†</td>
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<tr>
<td>Within Groups</td>
<td>7987.55</td>
<td>140.13</td>
<td>57</td>
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</table>

†ns. No Post Hoc results calculated or displayed.

Learning Problems

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>Posttest Mean Perception Score Guideline (Conners, 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents:</td>
<td>63.20 (11.04)</td>
<td>High Average Score (Slightly more concerns than are typically reported)</td>
<td></td>
</tr>
<tr>
<td>Teachers:</td>
<td>68.15 (11.21)</td>
<td>Elevated Score (More concerns than are typically reported)</td>
<td></td>
</tr>
<tr>
<td>Students:</td>
<td>61.10 (13.14)</td>
<td>High Average Score (Slightly more concerns than are typically reported)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Mean $T$-score guideline for Conners 3 Scale Perceptions of Student Learning Problems are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Conners, 2009).
**Research Question #40.** Do students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers have congruent or different Conners 3 Scale Perceptions of reported student Defiance/Aggression?

**Analysis.** Research Questions #40 was analyzed using a single classification Analysis of Variance (ANOVA) to determine the main effect congruence or difference between students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorder who participated in a year-long social skills intervention program and their parents and teachers Conners 3 Scale Perceptions of reported student Defiance/Aggression. An $F$ ratio was calculated and an alpha level of .05 was utilized to test the null hypothesis. Tukey Honestly Significant Difference *Post Hoc* Test was utilized for contrast analysis if a statistically significant $F$ ratio was observed. Means and standard deviations were displayed in tables.

**Research Question #40 Results.** Table 8 displays posttest results of Analysis of Variance (ANOVA) for posttest compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and teachers. As seen in Table 8 the null hypothesis for ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by students diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their parents and their teachers was rejected where parents’ posttest $M = 68.40, SD = 15.01$; teachers’
posttest $M = 77.10$, $SD = 12.98$; and students’ posttest $M = 56.20$, $SD = 15.32$, and $F(2, 57) = 10.53$, $p = .0001$. Because a statistically significant main effect $F$-ratio was observed post hoc contrast analyses Tukey Honestly Significant Difference (HSD) Tests were conducted. Post hoc analysis for all Parents ($n = 20$) verses all Teachers ($n = 20$) was not statistically different where HSD = non-significant. Post hoc analysis for all Parents ($n = 20$) verses all Students ($n = 20$) was statistically different where HSD = 11.02, $p < .05$. Post hoc analysis for all Teachers ($n = 20$) verses all Students ($n = 20$) was statistically different where HSD = 13.88, $p < .01$. 
Table 8

Results of Analysis of Variance for Posttest Ending Program Conners 3 Scale Perceptions of Student Defiance/Aggression Reported by Students Diagnosed with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders their Parents and Teachers

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<thead>
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<th>Source of Variation</th>
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<th>Mean Square</th>
<th>df</th>
<th>F</th>
<th>p</th>
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<td>4408.93</td>
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<td>2</td>
<td>10.53</td>
<td>.0001***</td>
</tr>
<tr>
<td>Within Groups</td>
<td>11937.80</td>
<td>209.44</td>
<td>57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < .001.

Defiance/Aggression

Group | Mean | SD | Posttest Mean Perception Score Guideline (Conners, 2009)

Parents: 68.40 (15.01) Elevated Score (More concerns than are typically reported)

Teachers: 77.10 (12.98) Very Elevated Score (Many more concerns than are typically reported)

Students: 56.20 (15.32) Average Score (Typical levels of concern)

Tukey Honestly Significant Difference Post Hoc Test

All Parents (n = 20) verses All Teachers (n = 20) non-significant.
All Parents (n = 20) verses All Students (n = 20) p < .05 where HSD = 11.02.
All Teachers (n = 20) verses All Students (n = 20) p < .01 where HSD = 13.88.

Note. Mean T-score guideline for Conners 3 Scale Perceptions of Student Defiance/Aggression are: 40-59 Average Score (Typical levels of concern); 60-64 High Average Score (Slightly more concerns than are typically reported); 65-69 Elevated Score (More concerns than are typically reported); and 70+ Very Elevated Score (Many more concerns than are typically reported; Conners, 2009).
CHAPTER FIVE
Conclusions and Discussion

The purpose of this study was to determine the impact of a year-long, same school classroom social skills instruction program on students’ with verified Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders perceptions of program effectiveness.

For this study due to the consistency of social skill training supports being provided, data collected, and student academic performance and educational programming based on Individualized Education Plans (IEP) with an emphasis on strong behavioral replacement programming to help students learn alternative ways to succeed in social, community, home, and vocational settings students with three verified disabilities—Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders—receiving daily social skills instruction for nine months served as this studies independent variable conditions.

The study’s pretest-posttest dependent measures were (1) Parents’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Parent Report Short Form scale following classroom social skills instruction. (2) Teachers’ perceptions of their students’ (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Teacher Report Short Form scale, following classroom social skills instruction. (3) Students’ perceptions of (a) Inattention, (b) Hyperactivity/Impulsivity, (c) Learning Problems, and (d) Defiance/Aggression, as measured by the Conners 3 Student Report Short Form scale following classroom social
skills instruction. All study behavior data related to each of the dependent variables were retrospective, archival, and routinely collected school information. Permission from the appropriate school research personnel was obtained before data were collected and analyzed.

The following conclusions may be drawn from the study for research questions 1 through 9.

**Conclusions: Emotional Behavior Disorder--Inattention**

**Research Question #1: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by students diagnosed with Emotional Behavior Disorder indicates that their pretest compared to posttest mean score difference (-3.88) resulted in an improving average score perception of their overall Inattention.

**Research Question #2: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by parents of students diagnosed with Emotional Behavior Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-3.75) resulted in an improving however elevated score perception of their students overall Inattention.

**Research Question #3: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by teachers of students diagnosed with Emotional Behavior Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (-1.62)
resulted in an improving however very elevated score perception of their students overall Inattention.

**Conclusions: Autism Spectrum Disorder--Inattention**

**Research Question #4: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by students diagnosed with Autism Spectrum Disorder indicates that their pretest compared to posttest mean score difference (+2.17) resulted in a deteriorating high average score perception of their overall Inattention.

**Research Question #5: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by parents of students diagnosed with Autism Spectrum Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-2.33) resulted in an improving however high average score perception of their students overall Inattention.

**Research Question #6: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by teachers of students diagnosed with Autism Spectrum Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (+3.67) resulted in a deteriorating high average score perception of their students overall Inattention.

**Conclusions: Attention Deficit Hyperactivity Disorder--Inattention**

**Research Question #7: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by
students diagnosed with Attention Deficit Hyperactivity Disorder indicates that their pretest compared to posttest mean score difference (+1.83) resulted in a deteriorating elevated score perception of their overall Inattention.

**Research Question #8: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by parents of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-0.50) resulted in an improving however very elevated score perception of their students overall Inattention.

**Research Question #9: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Inattention reported by teachers of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (-2.00) resulted in an improving however elevated score perception of their students overall Inattention.

The following conclusions may be drawn from the study for research questions 10 through 17.

**Conclusions: Emotional Behavior Disorder--Hyperactivity/Impulsivity**

**Research Question #10: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by students diagnosed with Emotional Behavior Disorder indicates that their pretest compared to posttest mean score difference (-2.25)
resulted in an improving high average score perception of their overall Hyperactivity/Impulsivity.

**Research Question #11: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by parents of students diagnosed with Emotional Behavior Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-2.12) resulted in an improving however very elevated score perception of their students overall Hyperactivity/Impulsivity.

**Research Question #12: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by teachers of students diagnosed with Emotional Behavior Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (-2.12) resulted in an improving however very elevated score perception of their students overall Hyperactivity/Impulsivity.

**Conclusions: Autism Spectrum Disorder--Hyperactivity/Impulsivity**

**Research Question #13: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by students diagnosed with Autism Spectrum Disorder indicates that their pretest compared to posttest mean score difference (+0.67) resulted in a deteriorating average score perception of their overall Hyperactivity/Impulsivity.

**Research Question #14: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student
Hyperactivity/Impulsivity reported by parents of students diagnosed with Autism Spectrum Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-2.00) resulted in an improving however elevated score perception of their students overall Hyperactivity/Impulsivity.

**Research Question #15: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by teachers of students diagnosed with Autism Spectrum Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (-10.33) resulted in an improving high average score perception of their students overall Hyperactivity/Impulsivity.

**Conclusions: Attention Deficit Hyperactivity Disorder--Hyperactivity/Impulsivity**

**Research Question #16: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by students diagnosed with Attention Deficit Hyperactivity Disorder indicates that their pretest compared to posttest mean score difference (+4.333) resulted in a deteriorating elevated score perception of their overall Hyperactivity/Impulsivity.

**Research Question #17: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by parents of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (+0.80) resulted in a deteriorating very elevated score perception of their students overall Hyperactivity/Impulsivity.
**Research Question #18: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Hyperactivity/Impulsivity reported by teachers of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (-7.00) resulted in an improving however elevated score perception of their students overall Hyperactivity/Impulsivity.

The following conclusions may be drawn from the study for research questions 19 through 27.

**Conclusions: Emotional Behavior Disorder--Learning Problems**

**Research Question #19: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by students diagnosed with Emotional Behavior Disorder indicates that their pretest compared to posttest mean score difference (-4.88) resulted in an improving average score perception of their overall Learning Problems.

**Research Question #20: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by parents of students diagnosed with Emotional Behavior Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-4.62) resulted in an improving however elevated score perception of their students overall Learning Problems.

**Research Question #21: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by teachers of students diagnosed with Emotional Behavior Disorder indicates
that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (+4.12) resulted in a deteriorating very elevated score perception of their students overall Learning Problems.

**Conclusions: Autism Spectrum Disorder--Learning Problems**

**Research Question #22: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by students diagnosed with Autism Spectrum Disorder indicates that their pretest compared to posttest mean score difference (+3.84) resulted in a deteriorating average score perception of their overall Learning Problems.

**Research Question #23: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by parents of students diagnosed with Autism Spectrum Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-0.84) resulted in an improving average score perception of their students overall Learning Problems.

**Research Question #24: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by teachers of students diagnosed with Autism Spectrum Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (+9.17) resulted in a deteriorating elevated score perception of their students overall Learning Problems.
Conclusions: Attention Deficit Hyperactivity Disorder--Learning Problems

Research Question #25: Students. Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by students diagnosed with Attention Deficit Hyperactivity Disorder indicates that their pretest compared to posttest mean score difference (+4.83) resulted in a deteriorating elevated score perception of their overall Learning Problems.

Research Question #26: Parents. Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by parents of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (+2.00) resulted in a deteriorating high average score perception of their students overall Learning Problems.

Research Question #27: Teachers. Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Learning Problems reported by teachers of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (+1.50) resulted in a deteriorating high average score perception of their students overall Learning Problems.

The following conclusions may be drawn from the study for research questions 28 through 36.

Conclusions: Emotional Behavior Disorder--Defiance/Aggression

Research Question #28: Students. Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression
reported by students diagnosed with Emotional Behavior Disorder indicates that their pretest compared to posttest mean score difference (-6.00) resulted in an improving average score perception of their overall Defiance/Aggression.

**Research Question #29: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by parents of students diagnosed with Emotional Behavior Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-6.38) resulted in an improving however very elevated score perception of their students overall Defiance/Aggression.

**Research Question #30: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by teachers of students diagnosed with Emotional Behavior Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (+4.50) resulted in a deteriorating very elevated score perception of their students overall Defiance/Aggression.

**Conclusions: Autism Spectrum Disorder--Defiance/Aggression**

**Research Question #31: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by students diagnosed with Autism Spectrum Disorder indicates that their pretest compared to posttest mean score difference (-7.66) resulted in an improving average score perception of their overall Defiance/Aggression.

**Research Question #32: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression
reported by parents of students diagnosed with Autism Spectrum Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (-1.67) resulted in an improving average score perception of their students overall Defiance/Aggression.

**Research Question #33: Teachers.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by teachers of students diagnosed with Autism Spectrum Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (+2.83) resulted in a deteriorating very elevated score perception of their students overall Defiance/Aggression.

**Conclusions: Attention Deficit Hyperactivity Disorder--Defiance/Aggression**

**Research Question #34: Students.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by students diagnosed with Attention Deficit Hyperactivity Disorder indicates that their pretest compared to posttest mean score difference (+5.17) resulted in a deteriorating elevated score perception of their overall Defiance/Aggression.

**Research Question #35: Parents.** Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by parents of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that parents’ perceptions of their students’ pretest compared to posttest mean score difference (+2.83) resulted in a deteriorating very elevated score perception of their students overall Defiance/Aggression.
Research Question #36: Teachers. Pretest beginning program compared to posttest ending program Conners 3 Scale perceptions of student Defiance/Aggression reported by teachers of students diagnosed with Attention Deficit Hyperactivity Disorder indicates that teachers’ perceptions of their students’ pretest compared to posttest mean score difference (-2.00) resulted in an improving very elevated score perception of their students overall Defiance/Aggression.

Conclusion: Research Question #37

Parents Conners 3 Scale Perceptions for Inattention was 68.10 at posttest indicating a reported score within the Elevated (More concerns than are typically reported) range. Teachers Conners 3 Scale Perceptions for Inattention was 67.35 at posttest indicating a reported score within the Elevated (More concerns than are typically reported) range. Students Conners 3 Scale Perceptions for Inattention was 60.60 at posttest indicating a reported score within the High Average (Slightly more concerns than are typically reported) range. When reporting Perceptions for Inattention Parents, Teachers, and Students were found to be in agreement about student progress in this important domain even though Parents and Teachers reported Elevated concerns and Students reported Average concerns for their Inattention.

Conclusion: Research Question #38

Parents Conners 3 Scale Perceptions for Hyperactivity/Impulsivity was 77.45 at posttest indicating a reported score within the Very Elevated (Many more concerns than are typically reported) range. Teachers Conners 3 Scale Perceptions for Hyperactivity/Impulsivity was 66.60 at posttest indicating a reported score within the Elevated (More concerns than are typically reported) range. Students Conners 3 Scale
Perceptions for Hyperactivity/Impulsivity was 63.65 at posttest indicating a reported score within the High Average (Slightly more concerns than are typically reported) range. When reporting Perceptions for Hyperactivity/Impulsivity Parents, Teachers, and Students were found to be in disagreement about student progress in this important domain where Parents Very Elevated level of concerns were found to be consistently greater than Teachers and Students perceptions of Students’ Hyperactivity/Impulsivity.

**Conclusion: Research Question #39**

Parents Conners 3 Scale Perceptions for Learning Problems was 63.20 at posttest indicating a reported score within the High Average Score (Slightly more concerns than are typically reported) range. Teachers Conners 3 Scale Perceptions for Learning Problems was 68.15 at posttest indicating a reported score within the Elevated (More concerns than are typically reported) range. Students Conners 3 Scale Perceptions for Learning Problems was 61.10 at posttest indicating a reported score within the High Average (Slightly more concerns than are typically reported) range. When reporting Perceptions for Learning Problems Parents and Students were found to be in agreement about student progress in this important domain. Teachers reported Elevated concerns and Students reported High Average concerns for their Learning Problems.

**Conclusion: Research Question #40**

Parents Conners 3 Scale Perceptions for Defiance/Aggression was 68.40 at posttest indicating a reported score within the Elevated (More concerns than are typically reported) range. Teachers Conners 3 Scale Perceptions for Defiance/Aggression was 77.10 at posttest indicating a reported score within the Very Elevated (Many more concerns than are typically reported) range. Students Conners 3 Scale Perceptions for
Defiance/Aggression was 56.20 at posttest indicating a reported score within the Average (Typical levels of concern) range. When reporting Perceptions for Defiance/Aggression Parents, Teachers, and Students were found to be in disagreement about student progress in this important domain where Parents Elevated level of concerns and Teachers Very Elevated level of concern scores were found to differ significantly from Students reported perceptions of their own Defiance/Aggression.

Discussion

**Implications for practice.** A lack of social competence is probably the one area of dysfunction that most uniformly describes students with an Emotional Behavior Disorder (Gresham & MacMillan, 1997; Maag & Katsiyannis, 1999). It has been estimated that as many as 43% to 56% of students with emotional and behavioral disorders drop out or are pushed out of school, a rate that is almost twice that of all students with disabilities (Marder, 1992). There is also evidence to suggest that unlike other disabilities, students with disruptive behavior disorders tend to lag farther behind academically with an ever-widening achievement gap (Nelson et al., 2004). These students perform significantly below norms on standardized achievement tests and lower in math than in reading (Reid et al., 2004). The prevalence of academic difficulties is uncertain. It is suggested that between 33% and 83% of children with behavioral disorders also have academic difficulties (Reid et al., 2004).

This study indicates that youth can demonstrate pro-social replacement social skills and reflects that students, parents, and teachers differ in their perceptions of how well the social skill instruction is impacting student outcomes in the areas of inattention, hyperactivity/impulsivity, learning problems, and defiance/aggression. The results of this study suggest that when children and youth with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention
Deficit Hyperactivity Disorders are provided with intensive social skill instruction fewer undesirable behaviors will be exhibited. However, it must also be recognized this study found that parental perception of how well the social skill instruction was decreasing student inattention, hyperactivity/impulsivity, learning problems, and defiance/aggression was significantly different than the perception of the students themselves and the teachers that rated these students.

**Home–School Communication Programs**

Given that children with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders experience significant difficulties across settings, home–school communication programs are important components of a comprehensive treatment plan. This study reflects evidence that parents do not report perceptual improving scores in social skill areas at the level that students and teachers do. A disconnect between what is taught at school and what is reinforced and implemented at home in terms of pro-social instruction and expectations. This study points directly to the need for school and home collective collaboration in the area of pro-social skill instruction, intervention, and reinforcement.

An example of home-school communication is the daily report card system. The daily report card system can be effective home–school communication strategy. Daily report cards are one of the most frequently implemented interventions for children with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders, and several studies have documented their effectiveness when used as a component in a multi-method intervention (Owens et al., 2005). Daily report cards incorporate ongoing feedback to students and parents regarding classroom
performance and can target a variety of important behaviors (DuPaul, Janusis, & Weyandt, 2011). Typically, a daily report card contains a list of 3 to 5 goals (e.g., complete assigned class work, get along with classmates) on which teachers indicate a student’s performance on a Likert scale (e.g., 1 represents superior performance and 5 represents unacceptable performance). Teacher ratings are provided throughout the day (e.g., by academic class period) and parents then provide home based reinforcement based on these ratings.

As students make progress, goals are increased in complexity. Daily report cards programs have been successful in enhancing classroom behavior and academic performance of students with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders, particularly those with milder levels of symptom severity (Murray, Rabiner, Schulte, & Newitt, 2008).

Interventions addressing social relationship for children with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders often experience difficulties with peer relationships, including making and keeping friends (DuPaul & Weyandt, 2006; Weyandt, 2007). Further, children with these disorders are more likely than their classmates to respond to interpersonal problems in an aggressive manner. Given the frequent association of children with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders with social relationship difficulties, interventions designed to address peer relations must be implemented for a sufficient duration to counteract the high risk for problematic outcome. Unfortunately, interventions that target social knowledge and the acquisition of pro-social behaviors in group therapy formats (i.e., traditional social skills training) have
not been found to lead to durable changes in interpersonal functioning in real-world environments (Gresham, 2002).

The lack of maintenance and generalization of traditional social skills training has led to proposals for a more comprehensive approach to social relationship intervention for children with disruptive behavior disorders. Relatively few studies of social relationship interventions for children with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders have been conducted, especially in school settings. Most prior investigations of social skills training have been conducted in outpatient clinic settings with minimal school outcome data beyond teacher ratings. Results of these clinic-based studies are equivocal with respect to efficacy (Piffner & McBurnett, 1997). Outcomes of these interventions are enhanced when specific strategies are included to program for maintenance and generalization of effects. For example, peers without Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders could be involved in all phases of a social relationship intervention to encourage generality of outcomes.

**Collaborative Consultation**

Developing positive partnerships among school professionals through collaboration can also increase the likelihood of treatment success (DuPaul & Stoner, 2003). Collaborative consultation can improve school functioning outcomes and academic achievement (DuPaul et al., 2006). Collaborative consultation involves an equal partnership between two partners (e.g., school psychologist and classroom teacher) to define a problem and develop interventions. This model is in contrast to the
traditional, expert model of consultation where a school psychologist/consultant prescribes interventions based on teacher input (Erchul & Martens, 2002). An example of an effective partnership model is the Promoting Academic Success in Students that uses a collaborative consultation model between teachers and school psychologist/consultants to design behavioral and academic interventions for children with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders. Collaborative consultation can vary in intensity with respect to the amount of data collected to design and evaluate interventions, as well as the degree to which consultants monitor teachers with respect to accuracy of treatment implementation. All models involve school psychologists/consultants and teachers jointly defining the behavioral and academic problem(s), discussing possible interventions (all of which are empirically supported), choosing an intervention plan that teachers believe to be feasible and effective, and evaluating the success of the plan so that modifications can be made, if necessary. Several studies have demonstrated that regardless of intensity, collaborative consultation leads to effective behavioral and academic interventions for the majority of students with these disorders (DuPaul et al., 2006). The most effective outcomes are found when teachers take the lead during the problem identification stage of the collaborative relationship and when consultants lead when possible strategies to address problems are discussed and designed (Erchul et al., 2007; Erchul et al., 2009). Stated differently, in most collaborative consultation relationships, teachers are the experts regarding their classroom, curriculum, and the target student’s difficulties, while the consultant typically is the expert regarding empirically supported interventions to address
student difficulties. The most successful outcomes occur when there is reciprocal recognition of these complementary areas of expertise.

School-based interventions are a critical component to a comprehensive treatment plan for students with Emotional Behavior Disorders, Autism Spectrum Disorders, and Attention Deficit Hyperactivity Disorders. These strategies are useful adjuncts to psychotropic medication and/or home-based behavioral interventions particularly in terms of directly addressing academic and behavioral functioning in classroom settings. In fact, the optimal treatment plan will include the combination of home and school based behavioral strategies, possibly in combination with psychotropic medication (Barkley, 2006; DuPaul & Stoner, 2003). There are three important principles to consider when designing and implementing school-based interventions for this population (DuPaul & Weyandt, 2006). First, treatment plans should be balanced by including both proactive (i.e., antecedent-based) and reactive (i.e., consequence-based) behavioral interventions. It is unlikely that a singular focus on antecedent or consequent events will be sufficient in addressing the behavioral difficulties exhibited by students with these disorders. Further, many antecedent based strategies have the additional advantage of directly addressing behavioral functioning. Second, assessment data should be used to design, evaluate, and modify interventions within and across school years. Assessment-based interventions presumably will be more effective and time-efficient than using strategies on a trial and-error basis. Finally, multiple mediators (e.g., peers, computer technology, researched based pro-social instruction) should be used to deliver treatment so that classroom teachers are not asked to shoulder all of the responsibility for intervention. The use of collaborative consultation in choosing and developing classroom interventions can
optimize the implementation of interventions across multiple mediators. Although many effective school-based interventions are available to address the needs of students with Attention Deficit Hyperactivity Disorders, it is clear that more research is needed particularly with respect to the functioning of secondary school students with these disorders (DuPaul, G. J., Janusis, G.M., & Weyandt, L. L. 2011).

Implications for policy. Brook Valley Schools implemented a year-long researched based pro-social skills instructional model to help students demonstrate appropriate pro-social behavioral replacement skills. This study indicates that social skill instruction given on a daily basis resulted in improving perception scores of students rating themselves, as rated by their parents, and as rated by their teachers overall. Students verified with Emotional Behavior Disorders, Autism a Spectrum Disorder, and Attention Deficit Hyperactivity Disorder showed perceptual rating improvement in the areas of Inattention, Hyperactivity/Impulsivity, Learning Problems, and Defiance/Aggression after participating in a year-long, same school classroom social skills instruction program.

Fidelity to this pro-social program implementation should be paramount in how Brook Valley School moves forward. Special attention should be paid to the precise student skills identified by both school and families. The student goals that are identified for regular and on-going communication between school staff and parents should be guideposts that provide consistent focus on all areas that impact student social and academic outcomes. There can no longer be any disconnect between school perception of program implementation and effectiveness. The development of a culture of parental involvement and consistent communication between school and home, along with
professional staff ensuring the integrity and fidelity in which this program evolves is critically important and will lead to great outcomes for our children and youth served in alternative educational programs.

**Implications for further research.** The results of this study indicate a need for further research regarding which practices support collective collaboration between school and home when providing consistent pro-social behavioral replacement strategies and academic supports in non-school settings. It is critical that educators identify effective methodologies that focus on increasing teacher and parent collaboration in the areas of pro-social behavioral replacement instruction in the home and community environment that is consistent with what teachers and administrators are using in the school setting. Furthermore, a long-term follow-up study could be conducted to determine the effects of the pro-social skills instruction once a collective collaboration model is implemented for teachers and parents becomes blended with the pro-social skills instructional model in place currently.
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