EFFECTIVENESS OF CHILD-CENTERED PLAY THERAPY AND PERSON-CENTERED TEACHER CONSULTATION ON ADHD BEHAVIORAL PROBLEMS OF ELEMENTARY SCHOOL CHILDREN: A SINGLE CASE DESIGN

April A. Schottelkorb, M.Ed., LPCI

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APPROVED:

Dee Ray, Major Professor
Sue Bratton, Committee Member
Janice Holden, Committee Member and Chair of the Department of Counseling and Higher Education
M. Jean Keller, Dean of the College of Education
Sandra L. Terrell, Dean of the Robert B. Toulouse School of Graduate Studies

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I examined the effectiveness of child-centered play therapy (CCPT) and person-centered teacher consultation (PCTC) for elementary school children identified with clinical or borderline levels of ADHD behaviors on the Teacher Report Form and the Conners' Teacher Rating Scale Revised - Short Form. Additionally, I examined the impact of CCPT and PCTC on the levels of parenting and teaching stress. Due to the current trend to determine interventions that are evidence-based through between-group or single case designs, for this study, I utilized a single case design experiment for which the behaviors of five children were examined.

Trained observers utilized the Direct Observation Form in observations of all five students three times per week. Additionally, parents and teachers completed behavioral rating scales and stress inventories at pre-, mid-, and post-intervention. To prevent biased observational ratings, observers were blind to the assignment of the five children. Three students participated in 24 sessions of twice-weekly 30-minute sessions of CCPT, and these students' teachers participated in six sessions of once-weekly 10-minute PCTC. Two students participated in twice-weekly 30-minute sessions of reading mentoring, after which they participated in 14 sessions of CCPT.

Visual analysis of the data indicated mixed results. Three students demonstrated substantial improvement in the observed ADHD behaviors within the classroom. Results of the parent and teacher assessment data were inconsistent, but did indicate behavior

change for some children and a reduction in teaching stress for one teacher. Parenting stress appeared unaffected. Implications for future research regarding the use of single case design, the measurement of student behavior change, and issues of comorbidity are indicated.

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INTRODUCTION

Teachers most commonly refer students for assistance in the schools due to student behavioral problems (Abidin & Robinson, 2002). Specifically, DuPaul and Stoner (2003) reported that problems with student attention and behavioral control are two of the leading reasons for referral to school and clinical psychologists (p. 23). Students exhibiting difficulties with attention and behavior may qualify for a diagnosis of attention-deficit hyperactivity disorder (ADHD), which is one of the most frequent diagnoses of childhood, with approximately 3% to 7% affected (American Psychiatric Association, 2000; Woodard, 2006). Teachers have reported significantly more stress working with students with the behaviors associated with ADHD- -inattention, hyperactivity, and impulsivity- -than students without ADHD (Greene, Beszterczey, Katzenstein, Park, & Goring, 2002).

Not only are the behaviors of these students more stressful for teachers, but the long-term ramifications for the students themselves are troubling. In a longitudinal examination of young adults diagnosed with ADHD in childhood, approximately 50% of the young adults continued to exhibit behavioral symptoms of ADHD (Barkley, Fischer, Smallish, & Fletcher, 2002). When comparing these young adults diagnosed with ADHD with a control group, researchers found the adults with ADHD had significantly lower levels of education, high school GPAs, and job performance ratings and significantly higher symptoms of ADHD at the workplace and arrests (p. 284). These research findings indicate the possible role that intervention early in the lives of children identified with ADHD might have on reduction of these problems.

Healthcare providers have used a variety of interventions with children identified with ADHD, such as psychotropic medication, behavioral interventions in the schools, and parent education (DuPaul & Stoner, 2003). The Society of Clinical Child and Adolescent Psychology, Division 53 of the American Psychological Association (APA), has determined that five evidence-based treatments exist for children with ADHD: (a) stimulant medication, (b) behavioral parent training, (c) behavioral classroom interventions, (d) social skills training, and (e) summer treatment programs (APA, 2007).

Although the APA has recognized only five interventions, many practitioners utilize different interventions in the school and clinic settings that they claim to be effective in improving the behavioral symptoms of children with ADHD. One such intervention is play therapy. Practitioners have utilized play therapy with children and found it to be effective in improving children's externalizing- -such as fighting- -and internalizing- -such as moodiness- -behavioral problems (Bratton, Ray, Rhine, & Jones, 2005).

Play therapy is an intervention designed to meet the development needs of children. It is through play that children most naturally express their inner selves; thus, therapy for children that utilizes play may provide children the most developmentally appropriate means for communication and growth (Landreth, 2002). Bratton et al. (2005) conducted meta-analytic research examining the various theoretical approaches to play therapy and found that humanistic and non-humanistic approaches are effective. They further found that humanistic play therapy approaches, such as child-centered play therapy (CCPT), are particularly effective with children and appear to be the most common approach to play therapy.

Statement of the Problem

Students exhibiting behavioral problems associated with ADHD are a common concern of teachers and parents, as well as counselors and psychologists, who work with these children in the school and community settings. Without early intervention, children with ADHD can experience negative long-term effects as adults. The Society of Clinical Child and Adolescent Psychology recognized five interventions that are effective in decreasing the negative effects of ADHD. These interventions are considered effective based on studies in which the researchers followed specific research protocols that are rigorous in design. In order for additional interventions to be considered effective and evidence-based by the American Psychological Association, investigators must research them using specific research criteria. These research designs must involve experimental between group designs or single case designs in which the researcher compares the intervention to another treatment, uses a treatment manual, and clearly specifies client characteristics (American Psychological Association, 2007).

One intervention that researchers have proven effective in improving children's behavioral problems, social adjustment, and self-concept is play therapy (Bratton et al., 2005). Although researchers have shown play therapy to be effective for many children, they have not yet demonstrated the effectiveness of play therapy for children with ADHD. Their research designs have not yet met the criteria that the APA established (Blinn, 1999; Hannah, 1986). Therefore, if the APA is to recognize play therapy as an effective treatment for ADHD, researchers will need to conduct experimental studies of play therapy for children with a diagnosis of ADHD that meet the APA's rigorous design specifications.

Review of Related Literature

Attention-Deficit/Hyperactivity Disorder

The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition*, *Text Revision* (*DSM-IV-TR*) includes a list of behavioral symptoms that qualify individuals for a diagnosis of ADHD (American Psychiatric Association, 2000; see Table 1). Specifically, children must demonstrate behaviors that meet these five criteria: (a) six or more symptoms of inattention or hyperactivity/impulsivity that has persisted at an inappropriate level for the individual's development for at least six months; (b) inattentive or hyperactive/impulsive behaviors must be present prior to 7 years of age; (c) the symptoms cause impairment for the individual in two or more settings (such as home, work, or school); (d) impairment from the symptoms must be severe and cause significant impairment in school, with relationships, and in work settings; and (e) the symptoms are not better accounted for by another diagnosis (American Psychiatric Association, p. 92-93).

Table 1

Behavioral Symptoms Associated with an ADHD Diagnosis

Inattention	Hyperactivity/Impulsivity
a. Often fails to give close attention to details	a. Often fidgets or squirms
b. Often has difficulty sustaining attention	b. Often leaves seat in classroom or other situations in which it is expected
c. Often does not seem to listen	c. Often runs around or climbs

(table continues)

Table 1 (*continued).*

Inattention	Hyperactivity/Impulsivity
d. Often does not follow through on completing instructions (not due to oppositional behavior or failure to understand directions)	excessively when inappropriate d. Often has difficulty engaging in leisure activities quietly
e. Often has difficulty organizing tasks	e. Often is “on the go”
f. Often avoids, dislikes engaging in tasks that require sustained effort	f. Often talks excessively
g. Often loses things necessary for tasks	g. Often blurts out answers
h. Often is easily distracted by extraneous activity	h. Often has difficulty waiting turn
i. Often is forgetful in daily activities	i. Often interrupts others

Note. Adapted from *Diagnostic and Statistical Manual of Mental Disorders – 4th ed., Text Revision* (p. 92), by American Psychiatric Association, 2000, Washington, DC: Author.

Prevalence. ADHD is considered one of the most common childhood disorders, with estimates between 3% to 7% of the population (American Psychiatric Association, 2000). In a classroom setting, this percentage translates to at least one student in 20 having ADHD (DuPaul & Stoner, 2003). Additionally, it is two to nine times more likely for boys than girls to be diagnosed with ADHD (American Psychological Association,

2007), depending on the setting and the specific type of ADHD (American Psychiatric Association, 2000).

The *DSM-IV-TR* lists three types of ADHD for which children may be diagnosed: (a) combined, (b) predominantly Inattentive, and (c) predominantly hyperactive-Impulsive (American Psychiatric Association, 2000, p. 87). The combined type includes symptoms from both the inattentive and hyperactive/impulsive types, whereas the other two types include behavioral symptoms that are primarily inattentive or hyperactive/ impulsive. Abikoff et al. (2002) found gender differences in the expression of ADHD with children in the classroom setting. In observing 502 children with ADHD, the researchers discovered that boys with ADHD exhibited more externalizing, disruptive, and rule-breaking behaviors than girls with ADHD. Thus, Abikoff et al. reported that girls with ADHD tended not to be diagnosed with the ADHD, Combined Type as compared to boys with ADHD, due to the difference in expression of symptoms.

Another group of researchers who examined the prevalence of ADHD, Nolan, Gadow, and Sprafkin (2001), assessed elementary, middle, and high school teacher ratings of student behavior. Teachers completed a *DSM-IV-TR* inventory for 3,006 children between the ages of 3 and 18 years. The researchers reported that teachers rated males across all ages to have higher rates of ADHD symptoms than female students. Additionally, younger students were assessed to have more severe scores than older students. Nolan et al. found no significant differences in ADHD symptomology across geographical region or socioeconomic status. However, a significantly higher number of African American students met the screening criteria for ADHD than white children.

Carroll et al. (2006) observed differences in the behaviors of students in grades third through eighth (Ages 8-13) diagnosed with and without ADHD. The researchers observed each student two times for a total of 40 minutes. The authors found that students with ADHD exhibited significantly different behaviors than students without ADHD. Specifically, Carroll et al. reported that students with ADHD were more talkative, two times more likely to display off-task behaviors, and three times more likely to be oppositional than students without ADHD. The results indicated that behavioral differences are evident for children with ADHD, thus indicating the importance of gathering observational data when assessing ADHD. Carroll et al. also examined the triggers for these inappropriate behaviors in the classroom setting. Results indicated that environmental and teacher-initiated distractions were the most common triggers for the ADHD behaviors.

Comorbidity. Behavioral problems associated with ADHD, such as inattention and oppositional behavior, can be suggestive of other internal problems that coexist with ADHD. Some of these conditions are conduct disorder, oppositional-defiant disorder, learning disabilities, mood disorders, anxiety disorders, and sleep disorders (Kronenberger & Meyer, 2001). Pfiffner and McBurnett (2006) stated that “the presence of at least one comorbid disorder in children having ADHD is the rule rather than the exception” (p. 725).

In one study of comorbidity, Baxter and Rattan (2004) examined the anxious and depressed behaviors of 86 male students between the ages of 9 and 11 who were diagnosed with ADHD. In their examination of parent-, teacher-, and self-report measures, Baxter and Rattan reported that the students with ADHD were significantly

more likely to have anxiety and depression when compared to the normative population. The authors recommended that professionals working with children with ADHD must consider comorbid conditions when designing treatment interventions.

Drabick, Gadow, and Sprafkin (2006) examined clinic-referred boys (*n*=203) diagnosed with ADHD (Ages 6-10 years) for possible comorbid development of depression and conduct disorder. When the researchers assessed teachers and parents, they found that specific risk factors appeared to contribute to this population developing or aggravating symptoms of conduct disorder and/or depression. Specifically, Drabick et al. determined that harsh and inconsistent parenting styles predicted conduct disorder, social problems predicted depression, and a chaotic family environment predicted conduct disorder and depressive symptoms for these boys with ADHD. The authors concluded that parenting interventions may prevent the development of comorbid disorders for ADHD youth.

Assessment. Because observed problems with children's inattention can be suggestive of a multitude of behavioral problems or diagnoses, researchers recommended that practitioners utilize a multimethod assessment when diagnosing ADHD (Angello et al., 2003; DuPaul & Stoner, 2003). DuPaul and Stoner recommended these components of an assessment for ADHD: teacher and parent interviews, review of student records, parent and teacher ratings of student behavior, direct observations of behavior, and an assessment of academic performance. After conducting a review of six behavioral rating scales, Angello et al. stated that diagnosticians using only ratings from behavior scales are limited in their ability to diagnose ADHD, and they affirmed the much greater diagnostic validity of conducting a multi-method assessment of ADHD (p.

259). Angello et al. reported that behavioral rating scales are helpful for screening purposes, as a part of the comprehensive assessment of ADHD, and for monitoring the progression of treatment. Angello et al. recommended that diagnosticians use behavior rating scales along with other forms of assessment, such as direct observation of behavior, interviews with parents and teachers, and a review of the student's academic performance. Angello et al. reported that a diagnosis of ADHD requires that professionals gather exhaustive information about the child and the child's environment through multiple methods of information gathering.

Effects. Researchers have established that the behaviors associated with ADHD effect the lives of children. Cornett-Ruiz and Hendricks (1993) examined the impact of the behaviors and the diagnostic label of ADHD on teachers and peers. The authors randomly assigned 39 teachers and 81 peers in the fourth through sixth grades to one of four groups in which they viewed videotapes of a student: (a) with an ADHD label and normal behavior, (b) with an ADHD label and ADHD behavior, (c) with a normal label and normal behavior, and (d) with a normal label and ADHD behavior (p. 351). After observing the tapes, teacher and peer participants rated their behavioral and academic impressions of the student. Cornett-Ruiz and Hendricks reported that the videotape portraying stereotypical ADHD behavior negatively influenced the perceptions of peers and teachers, but not the diagnostic label itself. Whereas the peers rated the students' ADHD behavior negatively in all behavioral and academic areas, the teachers rated negatively their first impressions and prediction of long-term success, whereas their ratings of student academic abilities were not affected. Thus, students' behavioral symptoms of ADHD may negatively influence the perceptions of their teachers and

peers, which could affect the relationships and well-being of students with ADHD at school.

Green et al. (2002) examined the level of stress for teachers of students with and without ADHD. Sixty-four general education elementary school teachers qualified for participation in this study by having one student in their classroom diagnosed with ADHD by a medical or mental health professional. Along with the 64 students identified with ADHD, the authors included 38 non-ADHD comparison children from the same classrooms. All children were in grades kindergarten through fifth and ranged in age from 5 to 11 years. Teachers involved in the study completed two assessments regarding teaching stress and student classroom behavior at two occasions during the school year, and Green et al. collected observational data of student behavior and student-teacher interactions in the classroom during the same two occasions. Green et al. reported that teachers experienced more stress with students with ADHD as compared to students without ADHD. Additionally, students with ADHD that had coexisting difficulties with social impairments and oppositional/aggressive behaviors were significantly more stressful to teach than students with ADHD only. The student-teacher interactions for students with ADHD were significantly more negative than interactions for students without ADHD. It appears that students with ADHD, particularly students who have additional difficulties with social and oppositional/aggressive behaviors, may experience more negative student-teacher interactions.

Treatment. Division 53 of the APA has developed specific guidelines by which to evaluate research and to help determine treatment approaches that are effective to utilize with specific problems of childhood, such as ADHD. In order for a treatment to be

considered “evidence-based,” researchers must examine a specific treatment approach for its effectiveness using rigorous research designs. Specifically, the American Psychological Association defined two types of evidence-based approaches: “well-established treatment” and “probably efficacious treatment.” The APA determined that well-established treatments are those that demonstrate efficacy through at least two between group design experiments with about 30 participants per group or through a series of single case design experiments (greater than or equal to nine studies). Researchers using these experimental designs must compare the intervention to another treatment, utilize treatment manuals, clearly delineate client characteristics, and incorporate research from at least two different investigators (APA, 2007). “Promising” or “probably efficacious treatments” are those for which researchers have conducted at least two experiments showing statistical significance as compared to a wait-list control group; or have conducted one between group experimental design that incorporated client characteristics, treatment manuals, and a comparison treatment; or have conducted three or more single case designs with client characteristics, treatment manuals, rigorous design, and a comparison treatment group (APA, 2007). The APA (2007) determined five interventions for children with ADHD to be evidence-based. The APA considered behavioral training with parents, behavioral classroom interventions, and stimulant medications to be “well-established” treatments and social skills training and summer treatment programs to be “probably efficacious” treatments.

Although the American Psychological Association has determined that only five interventions are evidence-based, some authors have different opinions about effective treatments. DuPaul and Stoner (2003) reported that interventions that utilize

punishment are seldom effective for children with ADHD; therefore, they did not recommend punishment-based interventions. DuPaul and Weyandt (2006) claimed that social skills interventions are not effective for children with ADHD because children with ADHD do not lack in social skills but, instead, are impulsive and fail to think about the consequences of their actions. DuPaul and Weyandt claimed that interventions should address areas in which students with ADHD have difficulty, such as behavior control. These authors claimed that interventions of a short duration- -lasting a few weeks- -are often not effective and that teacher consultation can be helpful.

Like DuPaul and Weyandt (2006), Edwards (2002) recommended that mental health counselors provide consultation for teachers of students with ADHD due to the frequency with which students have trouble in the school environment. Additionally, Edwards recommended empirically supported counseling treatment interventions, such as parent training in behavioral management techniques, facilitation of child's peer friendships and involvement in sports, and physician consultation regarding medication management.

Although many clinicians have cited the benefits of stimulant medication, researchers have not determined its long-term effectiveness. In a landmark study of 579 children diagnosed with ADHD aged 7 to 9.9 years of age, the MTA Cooperative Group (1999) found that medication management and a combined treatment of medication, behavioral intervention with parents and teachers, and classroom assistance were more effective in reducing ADHD symptoms than behavioral intervention alone or a nonspecific community intervention of the parent's choice. In a review of this landmark study, however, Taylor (1999) reported that the authors did not examine the long-term

effectiveness of the treatments utilized. In their own review of the literature, Pelham and Gnagy (1999) stated that long-term medication treatment for childhood ADHD does not appear to be helpful as children grow into adolescence. “Simply medicating children, without teaching them skills they need to improve their behavior and performance, is not likely to improve the children’s long-term prognosis” (Pelham & Gnagy, 1999, p. 226). Thus, Pelham and Gnagy asserted that children need psychosocial treatment for ADHD in the school and home settings.

Like Pelham and Gnagy, DuPaul and Weyandt (2006) encouraged researchers to discover effective school-based interventions for children with ADHD in the school setting instead of the laboratory setting to increase the generalizability of the results. They also asserted that school-based interventions must be “feasible, acceptable, and cost-effective” (DuPaul & Weyandt, 2006, p. 173).

Parent-Child Relationship

Researchers have found that the problematic behaviors associated with children with ADHD can create stress within the parent-child relationship (Baker, 1994; Podolski & Nigg, 2001). Podolski and Nigg (2001) demonstrated that this stress may differ for fathers and mothers of children with ADHD. In their study, Podolski and Nigg reported that maternal stress was associated with a child’s inattentive behaviors, as well as oppositional behaviors. In comparison, fathers were found to have their parenting stress associated with their children’s oppositional or aggressive behaviors, but not due to the severity of the ADHD behaviors. Thus, Danforth, Harvey, Ulaszek, and McKee (2006) speculated that children demonstrated improvement in comorbid conditions, such as

oppositional defiant disorder, instead of improvement in the inattentive, hyperactive, and impulsive behaviors of ADHD.

Beyond the impact of ADHD behaviors on parenting stress, researchers have also determined that parent-child interactions and parent psychopathology effects parent-child relationship stress (Anastopoulos, Guevremont, Shelton, & DuPaul, 1992; Podolski & Nigg, 2001). Because parents' functioning is known to impact the parent-child relationship, many researchers have examined the impact of parenting interventions on their stress level, such as through the parent stress management program or the Behavior Management Flow Chart (Danforth et al., 2006; Treacy, Tripp, & Baird, 2005). These researchers utilized a group format to help train parents in effective methods in dealing with the behavioral symptoms of ADHD and to help parents learn more effective coping strategies. Both programs resulted in decreased parenting stress in terms of the parent-child relationship.

Many researchers have examined the impact of parenting interventions on parent-child relationship stress in relationships involving both children with and without identified problems. Specifically, Ray (in press), examined the effectiveness of child-centered play therapy (CCPT) on parent-child relationship stress. She examined archival data for 202 child clients in a clinic setting, of whom 93 did not score in the clinical range on the CBCL and 109 scored in the clinical range for Externalizing Problems, Internalizing Problems, or both categories on the CBCL. Ray stated that for children from all subgroups who participated in 11 or more sessions of CCPT, their parents reported decreased relationship stress as indicated on the Parenting Stress Index (PSI). Parents reported improvement at a statistically significant level for the Total

Stress and Child Domain scores. Thus, Ray (in press) demonstrated that improvement in children's behavior using CCPT can positively impact the parent-child relationship. Therefore, this intervention could be effective in improving parent-child relationships for children diagnosed with ADHD.

Play Therapy

Although members of the APA identified only five types of treatment as "evidence-based" for helping reduce the symptoms of ADHD for children, mental health practitioners utilize other types of therapeutic interventions, such as play therapy (DuPaul & Stoner, 2003). Practitioners utilize play therapy in order to provide children a developmentally appropriate form of counseling for their mental health needs. Therefore, play therapy may be an appropriate intervention for children with ADHD.

Importance of play. Researchers have discovered that play is vitally important for the healthy growth and development of children. Play is a normal and healthy way for children to express themselves, discover who they are, learn problem-solving skills, develop language, and interact with their world. Piaget was one of the first to realize that make-believe play enabled children to practice and strengthen newly acquired skills (Berk, 2003). Since Piaget, various studies have proven that play is beneficial in many other ways, as well. Researchers have determined that make-believe play can strengthen a child's cognitive and social skills. Additionally, researchers determined that play helps children with attention, memory, logical reasoning, language, literacy, imagination, creativity, and the ability to see another's perspective (Berk, 2003).

When children are between the ages of 18 and 36 months, play typically consumes 5 to 6 hours of the day (Schaefer & DiGeronimo, 2000). Pretend play

requires children to think and problem-solve, which helps develop children's cognitive skills. Besides assisting with cognitive development, researchers have also found that pretend play enhances children's self-awareness, self-confidence, self-control, memory, and language skills (Schaefer & DiGeronimo, 2000).

Children between the ages of 36 months and 6 years continue to play, but the play looks more complex. Fantasizing and pretending to be grown-up is common at this age. Children experiment by assuming different roles, and through this process, children learn how to express their feelings and wishes. Themes of power and control are common in their play. Conquering "bad guys" or monsters is a natural way for children to release aggression. Researchers have proven that children with a higher level of fantasizing tend to be better at concentrating on tasks, have more self-control, and are able to come up with original ways to solve problems (Schaefer & DiGeronimo, 2000).

Between the ages of six and nine, imaginative play is still important; however, the focus is less on themselves and more on other characters that they can direct. These characters may be Barbie dolls or action figures. Play with action figures allows children to release aggressive and violent feelings in healthy, acceptable ways. If children cannot express these feelings, they could be acted out later in real-life situations (Schaefer & DiGeronimo, 2000).

History of play therapy. Mental health clinicians have realized that traditional talk therapy did not seem to be effective with children because of childrens' developmental levels (LaBauve, Watts, & Kottman, 2001). Instead, child counselors realized the benefits of using play in their therapeutic interventions. Play therapy has its roots in adult psychoanalysis, founded by Sigmund Freud. Psychoanalysis for children was

developed by Anna Freud, who adapted the adult model to children by interpreting children's words and pictures (Lee, 1997). Melanie Klein, another prominent psychoanalytic play therapist, likened the child's play and verbalizations to an adult's free associations (Dorfman, 1951). Klein's "Play Analysis" involved the interpretation of children's behaviors within the playroom with the hope of reducing the child's anxiety. Psychoanalysts believe in the importance of interpretation in assisting children to understand their unconscious, with the ultimate goal to aid children in reaching a healthy, normal developmental level (Lee, 1997).

Since the work of Freud and Klein, many child clinicians utilize play in their approach to working with children. Like psychoanalytic play therapy, non-directive play therapy developed when Virginia Axline adapted Carl Rogers' person-centered theoretical approach to her work with children. Axline (1947) believed that people of all ages have an innate drive toward maturity, independence, and self-direction; thus directing children in therapy would interfere with their natural tendency to grow. In non-directive play therapy, because children are believed to be able to naturally grow and self-actualize, no specific stages of therapy exist. However, Axline listed eight principles necessary for the therapist to provide to facilitate the therapist/client relationship: (a) the therapist must build rapport with the child, (b) the therapist accepts the child, (c) the therapist provides an environment in which the child can freely express his/her feelings, (d) the therapist recognizes and reflects the child's feelings to provide insight, (e) the therapist respects the child's ability to problem solve, (f) the therapist does not direct the session, (g) the therapist does not hurry the therapeutic process, (h) the therapist only sets limits that relate to the real-world setting of the child and to assist the child in

developing responsibility (p. 73-74). Like Rogers, Axline believed that development of the relationship provided the conditions for change. The relationship allows the child the freedom to express all feelings, from which the child "begins to realize the power within himself to be an individual in his own right, to think for himself, to make his own decisions, to become psychologically more mature, and by so doing, to realize selfhood" (Axline,1947, p. 16).

Child-centered play therapy. Landreth (2002) expanded Axline's non-directive play therapy approach to formalize child-centered play therapy (CCPT), a play therapy approach that is well utilized today. Landreth developed 10 tenets for understanding and working with children that are unique to the child-centered approach, which can be described as follows: (a) Children are not miniature versions of adults, and, therefore, the therapist should not respond as if they were; (b) Children are capable of experiencing all human emotions; (c) Children are worthy of respect and should be valued for their uniqueness; (d) Children are resilient; (e) Children have the innate ability to grow; (f) Children naturally communicate through play; (g) Children have the right to express themselves nonverbally, which should be respected by therapists; (h) Children will determine how they utilize their therapeutic sessions; (i) Children grow at their own pace, and therapists must be patient with this process (p. 54).

Landreth (2002) defined play therapy as:

> a dynamic interpersonal relationship between a child (or person of any age) and a therapist trained in play therapy procedures who provides selected play materials and facilitates the development of a safe relationship for the child (or person of any age) to fully express and explore self (feelings, thoughts,

experiences, and behaviors) through play, the child's natural medium of communication, for optimal growth and development. (p. 16)

Research. Due to a lack of studies with large sample sizes and statistical power, Bratton, Ray, Rhine, and Jones (2005) conducted *a* meta-analytic review of 93 studies examining the effectiveness of play therapy. The meta-analysis revealed a mean effect size of .80 standard deviations, signifying a large treatment effect for children who participated in play therapy versus those who did not. In addition, Bratton et al. found that therapists utilized humanistic-nondirective types of play therapy more often than non-humanistic-directive therapies. In comparison, the humanistic-nondirective therapies were more effective than the non-humanistic types. Bratton et al. concluded that future play therapy research should focus on specific problems of children with well-designed research methodology.

Since the publication of the meta-analysis, investigators have conducted additional play therapy research. Ray (2006) examined play therapy studies published in professional journals since 1990 that used a control or comparison group, a sample size of at least 20 participants, and detailed descriptions of treatment and statistics utilized. Ray stated that seven studies met these qualifications. Due to their adequate properties, these studies will be reviewed here.

Fall, Balvanz, Johnson, and Nelson (1999) examined the effectiveness of CCPT with 62 children aged five to nine identified as lacking coping behaviors in school. The researchers randomly assigned children to the CCPT treatment group (n=31) or the no-intervention control group (n=31). The treatment group participated in six 30-minute CCPT sessions one time/week. All participants were assessed at pre-and post-

intervention with a classroom observation, the Self-Efficacy Scale for Children and the Conners Teacher Rating Scale. Children who participated in the play therapy intervention significantly improved their levels of self-efficacy, but no differences were found between groups in classroom behavior and the Conners Teacher Rating Scale.

In another study examining elementary students at-risk for academic failure, Post (1999) specifically utilized CCPT with students of poverty, low academic achievement, special education placement, and high mobility. One hundred sixty-eight students participated in the study, with 77 students assigned to the CCPT experimental group and 91 to the no-intervention control group. Students in the treatment group participated in one session per week for a total of 1 to 24 sessions, with a mean of four sessions. A pre-test/post-test design was utilized, with three assessments: Coopersmith Self-Esteem Inventory, Intellectual Achievement Responsibility Scale-Revised, and State-Trait Anxiety Inventory. Students who participated in play therapy maintained their level of self-esteem and locus of control from pre- to post-testing, whereas the students in the control group experienced a significant loss in self-esteem and locus of control from pre- to post-test. No difference was found between groups on the level of anxiety from pre- to post-test.

Packman and Bratton (2003) conducted an examination of fourth and fifth grade students exhibiting behavioral problems within a school for children with learning difficulties. The researchers randomly assigned 30 students aged 10 to 12 years to a CCPT treatment group (n=15) or a no-intervention control group (n=15). Students in the play therapy treatment group were divided into groups of three and received group play therapy one time/week for 12 weeks. Although statistical significance was not achieved

on the Child Behavior Checklist, students in the treatment group significantly improved in the overall composite and internalizing problem scores on the Behavior Assessment System for Children – Parent Rating Form in comparison to the control group. Practical significance was calculated using Cohen's *d* statistic, and the results indicated a large treatment effect (*d*=.82).

In another study of student behavioral problems, Garza and Bratton (2005) utilized CCPT with Hispanic students aged 5 to 11 years. Fifteen students were assigned to the CCPT treatment group, and 14 students were assigned to a small counseling group (with two to three students per group) in which counselors used Kids Connection curriculum (Rainbow Days, 2002). Each group participated in 30 minutes of the assigned intervention one time/week for 15 weeks. Pre- and post-testing comparisons of the Behavior Assessment System for Children (BASC) – Parent Rating Form demonstrated statistically significant decreases in externalizing problems (*p*=.04) and modest improvements in internalizing behavioral problems (*p*=.12). The practical significance of the CCPT intervention indicated a large treatment effect (*d*=.76) on children's externalizing behaviors and a moderate treatment effect (*d*=.58) on children's internalizing behaviors when compared to the children in the curriculum group. Additionally, the researchers reported statistically significant improvement (*p*=.02), with a large effect size (*d*=.86) in conduct problem behaviors of children in the CCPT treatment group. For children who participated in CCPT, the anxious behaviors indicated on the Anxiety subscale of the BASC-PRS were reduced. Although not at a statistically significant level (*p*=.10), a moderate treatment effect (*d*=.60) was demonstrated for children's anxious behaviors within the CCPT group. Whereas parents

indicated significant improvement for children in the CCPT group, the Teacher Rating Form of the BASC indicated no statistical significance between the groups.

Jones and Landreth (2002) randomly assigned 30 children aged 7 to 11 years of age who had a diagnosis of diabetes to an experimental, CCPT treatment group or a no-intervention control group. All children were participants in a summer camp specifically tailored for children with diabetes. During the three weeks of the camp, participants in the treatment group received 12 CCPT sessions. When examining pre- and post-testing, the authors found that children in the experimental group showed improvement on the Filial Problems Checklist and statistically significant improvement on the Diabetes Adaptation Scale when compared to the control group. No difference was found in levels of anxiety on the Revised Children's Manifest Anxiety Scale between groups.

Two sets of researchers examined the effectiveness of CCPT with children that were victims of traumatic experiences. Kot, Landreth, and Giordano (1998) facilitated CCPT for children who were living in domestic violence shelters due to witnessing domestic violence. The researchers assigned twenty-two children aged 4 to 10 years to the experimental group, for which participants received 12 CCPT sessions within a period of two to three weeks. Eleven children were assigned to the no-treatment control group. Additionally, all children participated in the programs affiliated with living in the shelter. Results indicated that children in the treatment group exhibited significantly lower externalizing behavior problems and significantly higher self-concepts when compared to the control group.

Another researcher, Shen (2002), investigated the effectiveness of CCPT with children victims of trauma. She specifically examined the impact of CCPT with Chinese children who had lived through an earthquake of significant magnitude (Shen, 2002). Thirty children aged 8 to 12 years who experienced the earthquake and who were identified as at-risk for maladjustment were randomly assigned to a CCPT group of three children or a no-intervention control group. All children in the CCPT group participated in 10 group play therapy sessions over a four-week period. Shen stated that children in the CCPT group were significantly less anxious and less likely to be at-risk for suicide when compared to the control group.

Although many studies demonstrating the effectiveness of CCPT exist, Ray (2006) highlighted the difficulty play therapy has in being deemed an "evidence-based" therapeutic approach. The lack of a large number of participants due to the real world setting in which play therapy is provided, such as the school setting, makes it difficult to attain the high number of participants that the APA deems necessary for rigorous research. Additionally, Ray discussed the lack of play therapy research for children identified with specific diagnoses due to the tendency for play therapists to provide counseling for children with comorbid problems. Ray suggested that play therapy research must become more rigorous through developing and utilizing treatment manuals, specifying participant characteristics, and replicating research.

Play therapy for children with ADHD. Several authors have claimed that play therapy is not effective for children with ADHD but have not provided subsequent evidence for such claims. Pelham and Gnagy (1999) claimed that play therapy is not effective in treating ADHD. DuPaul and Stoner (2003) claimed that play therapy has

“minimal or no established efficacy” for helping children with ADHD (p. 238). Kronenberger and Meyer (2001) reported that the use of play therapy alone is often not appropriate, unless anxiety, depression, anger, or trauma accompany the ADHD diagnosis (p. 75).

Although researchers have not indicated clear support of play therapy in the literature, a few researchers have examined the benefits of play for ADHD symptomology. In a unique study, Panksepp, Burgdorf, Turner, and Gordon (2003) examined the effectiveness of free play with rats that were given frontal lobe lesions. By surgically damaging the frontal lobe of the 32 rats, the researchers attempted to simulate frontal lobe deficits similar to those that exist for human adolescents with ADHD. When comparing a control group of 32 rats with the surgically altered group, the group that received brain lesions exhibited significantly more activity and elevated playfulness than the control group, thus indicating the brain-altered group had behaviors similar to children with ADHD.

Panksepp et al. also observed the effects of “rough and tumble play” on the hyperactive, impulsive behavior of rats with “ADHD.” Specifically, the researchers examined the behavior of two groups of the lesioned rats: One group was allowed free play time for one hour over a one week period, and one group was not allowed free play time. Panksepp et al. reported a significant decrease in excessive playfulness for the group that had free play but not for the other group.

Panksepp et al. (2003) conducted a second experiment with 50 rats that did not receive any lesions. Two groups of rats were formed: One in which rats were paired and allowed to play with another rat for 20 minutes, and one in which rats were isolated for

20 minutes prior to three behavioral tests. The play group exhibited less active behavior (behavioral inhibition) than the non-play group, for which Panksepp et al. concluded that play may increase behavioral inhibition in the short term. Thus, Panksepp et al. concluded that play therapy might help with the behavioral excesses of children with ADHD, which is preferable to using medication for which the long-term effects are unknown.

Several researchers have examined the benefits of play therapy with children clients exhibiting ADHD behavior. Hannah (1986) utilized a single case design to explore the effectiveness of play therapy with nine children between the ages of 4 and 6 years. Each child was not reported to have any diagnosis but to have behavioral excesses or deficiencies for which the child was referred. Specifically, the children had aggressive, off-task, inattentive behaviors or had difficulty with peers. Thus, each child had a unique dependent variable that observers examined for change. All children participated in eight weeks of 50 minute sessions of play therapy. Observers examined the dependent variable for each child two to three times/week during the intervention phase and for three weeks prior to the intervention, which acted as a baseline control for each child. Hannah utilized visual analysis to examine the observational data and utilized ARIMA statistical procedures when visual analysis was not clear. Only one child did not show a significant improvement in behavior, but for eight students, Hannah found play therapy to be an effective intervention in reducing behavioral excesses.

Blinn (1999) conducted a case study examining the effectiveness of play therapy with a 6 year old Caucasian boy diagnosed with ADHD. A psychiatrist diagnosed the child participant with ADHD, a phonetic disorder, stuttering difficulties, and mild mental

retardation. Blinn utilized a licensed marriage and family counselor to provide 10 fifty-minute play therapy sessions over a period of seven months. Blinn assessed the child participant pre- and post-treatment for noncompliance, tantrums, and verbal and physical aggression through parent-report, caregiver-report, and direct observation. Based on the lack of significant change on the pre- and post-testing of the parents and the daycare provider, Blinn concluded that play therapy was not effective. Additional data came from Blinn's observations at the child participant's home at pre-treatment and post-treatment (two observations on each occasion). Blinn reported a significant decrease in noncompliant and tantrum behaviors and a slight decrease in aggressive behaviors for the afternoon observations, for which Blinn noted many noncompliant, tantruming, and aggressive behaviors at pre-testing but not post-testing. For the morning observations, Blinn observed no problematic behaviors of noncompliance, tantruming, or aggressive behavior at pre-test, but at post-test, Blinn noted one noncompliant behavior and one aggressive act. Therefore, for the morning observation period, it was impossible for improvement to occur. The author speculated that nontreatment factors explained the high amount of pretest noncompliant behaviors and the lower amount of posttest noncompliant behaviors. In other words, the author hypothesized that the lack of multiple observations, and not the play therapy intervention, may explain the outcome.

Blinn (1999) concluded that play therapy was not effective for this child participant; however, Blinn's study contained many limitations that reduced the meaningfulness of the findings. One limitation was the few number of play therapy sessions in which the child participated. The child participant experienced 10 sessions

over a seven month period, which is an average of only 1.5 sessions/month. A second limitation was that Blinn did not operationally define the type of play therapy the counselor provided for the participant. A third limitation was the lack of a single day care provider to assess the child participant. Blinn acknowledged that two different day care providers assessed the child participant at pre- and post-testing. A fourth limitation of this study was the lack of observational data: Blinn used only two observations pre-intervention and two observations at post-intervention. A fifth limitation was that Blinn did not discuss the possible impact of the comorbid conditions involved with this child participant. A sixth limitation was that Blinn did not provide detailed information regarding the play therapist's training and experience in play therapy. Although several limitations were evident in this study, Blinn (1999) recommended that "future research should attempt to procure several ADHD children with behavior problems and evaluate the efficacy of play therapy on a number of dependent measures. For example, future research should attempt to obtain a minimum of three to five subjects" (p. 44).

Although not a study of play therapy provided directly to a child from a therapist, Johnson, Franklin, Hall, and Prieto (2000) examined the effectiveness of parent-child interaction therapy (PCIT) with a seven-year-old boy diagnosed with ADHD. PCIT is an intervention in which a trained therapist utilizes two phases: First, parents learn to improve their relationship with their child for a few play sessions, and then counselors teach parents skills to manage their child's behavioral problems (Johnson et al., 2000). In the first phase, the child-directed phase, Johnson et al. coached the child's parents to describe his play, to reflect feelings and statements he made, and to praise his appropriate behavior. In this phase, the counselor discouraged parents from including

any toys in their play therapy time that would promote aggression and to ignore “obnoxious” and “whining” behaviors. Besides meeting in play therapy time for approximately three to five times with a counselor who provides coaching on their skills, the counselor encouraged the parents to spend five minutes/day in special playtime at home.

Although Johnson et al. believed that this playtime was important to improve the parent-child relationship, the authors did not believe it was enough to reduce the behavioral problems associated with ADHD. Once the child-directed phase was over, Johnson et al. taught the child’s parents some behavioral methods to manage his ADHD behaviors. During this parent-directed phase, the counselor instructed the parents to incorporate requests, called “minding exercises” into the special playtime. In these sessions, the parents asked the child to follow a direction, and if followed, he was praised. As the child learned to follow his parents’ requests during special playtime at home, the parents began utilizing the requests outside of playtime, as well. The counselor taught the parents to give choices and immediate consequences if the child did not comply with their requests. In the case study described by Johnson et al., ratings on parent-report assessments indicated a decrease in the child participant’s problematic behaviors, an increase in parental feelings of competence, and an increase in child compliance to parent commands. This intervention seemed helpful in reducing the participant’s ADHD behaviors.

In a final study examining the effectiveness of game play for children identified with ADHD, Kaduson and Finnerty (1995) randomly assigned 63 children aged 8 to 12 years diagnosed with ADHD to one of three groups. The authors formed several groups

of four children who participated in 10 hourly sessions of a specific type of game play. Group one participated in cognitive-behavioral game play. Specifically, a counselor used The Self-Control Game to teach children how to control their impulsive, hyperactive, and inattentive behaviors. The second treatment group participated in a biofeedback game, in which children had to operate a car in a racing game through their electromyography readings. The final group, the control group, did not receive any specific self-control training and, instead, played board games, such as Checkers, in the group and received some feedback regarding how to improve their game-playing. The researchers assessed the children at pre-test, post-test, and a three month follow-up through one child-report measure, the Child Self-Control Rating Scale, and many parent-report measures: the Self-Control Rating Scale, the Conners' Revised Parent Rating Scale, the Werry-Weiss-Peters Scale, the Home Situations Questionnaire, the Child Behavior Checklist, and the Attention Deficit Disorders Evaluation Scale (Kaduson & Finnerty, 1995).

Results indicated through the child-report assessment that the biofeedback group showed the largest improvement in perceived self-control. The parent-report assessments indicated that the biofeedback and control group interventions were the most effective in reducing ADHD behavioral problems with the children. Specifically, the authors reported that the control group intervention was significantly more effective than the other groups, particularly on the hyperactivity index subscale on the Conners' Rating Scale. Kaduson and Finnerty asserted that clinicians should utilize game play, such as the one used in the control group, to help reduce ADHD behaviors at school and at home.

A thorough review of the professional literature revealed no studies addressing the effectiveness of CCPT for children with ADHD. This finding indicates a need for empirical research on this potentially effective intervention.

School-Based Teacher Consultation

As an adjunct to play therapy and other forms of child counseling, mental health professionals often utilize teacher consultation to assist with a child client's problematic behaviors at school. Consultation can be defined as "a process in which a human service professional assists a consultee with a work-related (or caretaking-related) problem with a client system, with the goal of helping both the consultee and the client system in some specified way" (Dougherty, 1995, p. 9). Alderman and Gimpel (1996) surveyed 122 teachers to discover the problems for which teachers most likely utilized consultation and from whom they received consultation for these problems. The authors also asked teachers to rank the helpfulness of these consultations. The authors determined that teachers most wanted assistance with children who were disruptive, disrespectful, and aggressive. When encountering problematic behaviors, most teachers first attempted to solve problems on their own. However, if they continued to have difficulty, they would seek help from other teachers first, followed next by the principal. When asked about the effectiveness of solving problems within the classroom, they ranked themselves as most effective, followed by the principal, another teacher, the counselor, the special education teacher, and the school psychologist. The authors proposed that accessibility to consultants may influence the level at which teachers rank consultants to be effective. The teachers in this study also reported that consultants who listened and gave personal support were the most effective in consultation.

Behavioral consultation. Although professionals have developed varying types of consultation, behavioral consultation is the predominant type for which research exists in the school psychology literature. Wilkinson (1996) utilized Bergan's behavioral consultation model with schoolchildren assessed to have clinical levels of externalizing behaviors on the Teacher Report Form *(*TRF). Three elementary school children and their three teachers participated in the behavioral consultations provided by one school psychologist. The consultation process followed Bergan's four-step model of (a) problem identification, (b) problem analysis, (c) treatment implementation, and (d) treatment evaluation. Whereas the majority of the behavioral consultations followed a specific protocol, which required the use of behavioral contracts, the specifics of each contract depended upon the specific needs of the teacher and child. The psychologist completed direct observations within the classroom and administered the TRF at pre, post, and 4-week follow-up to assess for children's behavior change. Wilkinson utilized other assessments to assess treatment acceptability by the teachers and children, as well as teacher perceptions of consultant effectiveness. Results indicated that two of the three students demonstrated a significant decrease in externalizing behavior from pre- to post-testing on the TRF. The observational method of assessing behavior change revealed positive change for all three students, with a significant amount of decreased externalizing behavior for all children. All three teachers found the consultation intervention as highly acceptable and highly effective. Wilkinson concluded that behavioral consultation can be effective for children with behavioral problems. The results of this study support previous findings that a positive relationship between treatment acceptability and consultant effectiveness exists.

Busse, Kratochwill, and Elliott (1999) studied the verbal interactions of the consultant and the consultee during consultations, as well as the resulting treatment outcomes of children with emotional disabilities and/or children at-risk with academic or behavioral difficulties. School psychology graduate students provided individual and group forms of behavioral consultation with 26 teachers of 102 elementary and middle school students. The consultants utilized a modified version of Bergan's model of behavioral consultation, which required three standardized interviews. During these interviews, the consultants assisted in identifying the problem, developing a treatment plan, and evaluating the treatment plan. The authors reported that consultants exhibited more "control" or directiveness than consultees, but this consultant control did not account for a significant variance in treatment outcomes. In addition, the authors discovered that behavior and plan specifications on the part of the consultants did not account for significant variance in positive treatment outcomes.

Other types of consultation. Although Bergan's model of behavioral consultation is the most common model discussed in the literature, consultants utilize other approaches. Kampwirth (1987) offered a structured method of working with teachers in the consultation process. The author described a four-step process to assist in reducing children's behavior problems. This process involved (a) definition of the problem, (b) observation of the classroom, (c) providing feedback to the teacher regarding the observation, and (d) following-up with the teacher. Kampwirth encouraged consultants to act not as an "expert" but, rather, to collaborate with the teacher to come up with a solution that is acceptable for the teacher.

Hughes (1983) proposed some hypotheses regarding the connection between cognitive dissonance theory and theory consultation. The author suggested that when teachers are given choices and information, and when the teachers exert some effort and take some responsibility for consultation, consultation is more likely to have successful outcomes. Thus, Hughes reported that utilizing cognitive dissonance theory with teacher consultation can result in outcomes that are more effective.

Although in an older article, Fine and Tyler (1971) discussed their concerns about teacher consultations, many of their concerns remain today. Unlike the general direction of behavioral consultations today, Fine and Tyler encouraged the importance of developing the psychologist/teacher relationship. The authors recommended that school psychologists first achieve an understanding of areas in which teachers typically have trouble. The authors suggested that teachers can fall into one of four categories: (a) lack of understanding, (b) lack of skill, (c) lack of objectivity, and (d) lack of confidence and self-esteem. Depending upon the specific area of teacher difficulty, the authors recommended the consultant behave in a different manner toward the teacher. However, above anything else, Fine and Tyler (1971) believed in the importance of developing a robust helping relationship.

Whereas school psychologists seem to utilize behavioral consultation most often, school counselors provide Adlerian consultation. Marchant (1972) examined the effectiveness of counseling and consultation with 4th and 5th grade students referred for problematic behavior. Four groups were used for comparison: (a) children received counseling and their teachers received consultation, (b) teachers received consultation only, (c) children received counseling only, and (d) control group participants received

no treatment. All experimental groups received counseling and/or consultation two times per week for 5 weeks. The counselors utilized Adlerian stages in counseling sessions, and the consultants worked to develop a collaborative relationship in consultation. The analysis suggested that all three experimental groups were more effective than the control group; however, there were no significant differences between the groups. Thus, all three methods of intervention were equally effective in decreasing problematic behaviors as rated by the teachers in the study.

Palmo and Kuzniar (1972) studied the effectiveness of parent and teacher consultation used in conjunction with group counseling on the classroom behavior of elementary school students. The authors examined four groups in this study: (a) group counseling with parent/teacher consultations, (b) group counseling only, (c) parent/teacher consultation only, and (d) no treatment control group. Fifty-six elementary school children were involved in this study. Group counseling sessions took place for 30 minutes, twice a week for 12 sessions with a school counselor. Students in the consultation group had teacher consultation two times a week for six weeks, and the parents received three consultation sessions at their own homes. The authors utilized an Adlerian approach in group counseling and consultation sessions. Results indicated that all treatments were more effective than the control group; however, the authors found that students in the parent/teacher consultation only group had significantly improved behavior as compared to those in the other experimental groups. Therefore, the authors concluded that parent and teacher consultation was more effective than group counseling or a combination of consultation and counseling.

Ray (2007) introduced a person-centered teacher consultation model in her research in the elementary school setting. Specifically, Ray examined the effectiveness of CCPT and person-centered teacher consultation on teaching stress and student behavioral problems. Ninety-three elementary students, aged 4 to 11 years, and their 59 teachers participated in one of three treatment groups: CCPT only, teacher consultation only, or CCPT and teacher consultation. All students and teachers were randomly assigned to a group. The CCPT group received 16 thirty-minute sessions over eight weeks; for the consultation only group, teachers participated in 10-minute consultation sessions one time/week for eight weeks; and the CCPT and consultation group participated in both interventions. Consultants for this study strove to provide teachers empathy, congruence, and unconditional positive regard based on Carl Rogers' person-centered counseling theory. The consultants provided the teachers the opportunity to discuss their difficulties with the referred student or whatever else they may wish to discuss. As the teachers shared their thoughts and feelings, the counseling consultants reflected content and feelings, provided encouragement, confronted discrepancies, and enlarged the meaning of statements given. All participating teachers completed the Index of Teaching Stress at pre- and post-intervention phases. Ray reported that all three treatment groups demonstrated significant decreases in teaching stress. Additionally, Ray found a significant decrease in ADHD behaviors across all treatment groups. Ray concluded that all three types of interventions can be effective in decreasing teaching stress and positively affecting the teacher-student relationship.

Consultation for children with ADHD. Dunson, Hughes, and Jackson (1994) utilized behavioral consultation with 20 teachers of elementary children exhibiting

symptoms of ADHD. The authors examined the effectiveness of Bergan's four-step model of behavioral consultation in changing children's hyperactive, inattentive, and disruptive behaviors, which was rated based on Teacher Rating Scales and classroom observations. This study also examined teacher characteristics and the effect of those characteristics on the consultation outcome. All consultations were provided by a doctoral student with school consultation experience. The authors found that the treatment group improved significantly as compared to the control group in group members' expressions of disruptive, inattentive, and hyperactive behaviors. These results were significant only on the rating scale and not with the observational system utilized. The authors also reported that consultation outcome was not significantly correlated with teaching self-efficacy, the acceptability of the behavioral interventions, or the amount of consultee teaching experience. However, a moderate relationship was found between teachers with a lower self-efficacy and the consultation evaluation. Therefore, teachers who rated themselves with a lower self-efficacy, or lower confidence in themselves, were more likely to rate the consultation more favorably. Additionally, the authors reported a significant relationship between teachers' evaluations of the consultant and children's improvement, and significance between implementation of the behavioral intervention plan and children's behavioral improvement. Overall, the results of this study support the use of behavioral consultation with teachers of children with symptoms of ADHD.

Single-Case Research Design

As mentioned previously, researchers have utilized a single-case research design in studies of play therapy for children with ADHD (Blinn, 1999; Hannah, 1986).

Members of the APA have recommended that practitioners utilize single case design research to determine mental health interventions that are evidence-based. Although single case design is a widely accepted method to ascertain effective, evidence-based approaches to counseling, Sharpley (2007) found that only 1.02% of articles published in the *Journal of Counseling and Development* from 1982 to 2002 utilized a single case research design. Sharpley urged counselors to utilize single-case design methodology to prove the effectiveness of various counseling approaches, thereby competing with the current trend of evidence-based mental health. Morgan and Morgan (2003) stated that a single case design is the best type of research to use when trying to explain individual behavioral changes, which is useful in examining counseling interventions. Experimental single-case designs can demonstrate causal relationships and validity similar to group design research. Specifically, researchers can make inferences about treatment effectiveness in single-case design through comparison of different treatment conditions over time for the same individual participant (Kazdin, 2003). Although known as a “single-case” or *N*=1 design, this research can involve several participants.

According to Kazdin (2003), several features are necessary for a single case design: continuous assessment, baseline assessment, stability of performance, and the use of different treatment phases. A distinguishing feature of the single case is the use of repeated observations of a participant’s behavior over time. This continuous assessment process typically occurs before and during the intervention to allow the researcher to assess for change. Kazdin reported that these observations should occur multiple times each week at a minimum but might take place on a daily basis.

A second essential feature, the baseline assessment, is a phase during which the researcher does not utilize an intervention. The researcher uses this phase to observe and define a pre-intervention level of performance, which provides the researcher information about the extent of the identified problem and a source of data to compare with the treatment phase data (Kazdin, 2003). Without this baseline phase, the researcher would be unable to ascertain the effectiveness of a treatment.

The baseline phase is particularly important in the evaluation of its properties, during which the researcher can assess the third essential feature, the stability of performance. Specifically, the researcher can assess the variability and slope of the data during the baseline and treatment phases to determine the researcher's ability to make conclusions based on the data. Kazdin (2003) stated that a researcher is less able to report conclusions about a single case design when the data are more variable. The slope of the data within a phase is also known as a trend of the data, which is "the tendency for performance to decrease or increase systematically or consistently over time" (Kazdin, 2003, p. 277). The researcher compares the slope of each phase to determine the degree of change. Ideally, the baseline phase would present data with no slope, indicating a stable level of performance, or an increasing slope, indicating a worsening of performance. A baseline pattern of improved behavior is most problematic for the single case researcher, as the participant's behavior is already improving prior to the treatment phase, which would make an evaluation of the treatment less conclusive.

Types of single case designs. Kazdin (1982) discussed three primary types of single case designs: case studies, pre-experimental, and experimental designs. Specifically, Kazdin stated that a design qualifies as an experiment based on the extent

it can control for threats to internal validity. Some examples of threats to internal validity include history and maturation of the individual participant, change in instrumentation, and the effects of repeated testing (Kazdin, 1982). Kazdin stated that the results of case studies do not allow for valid conclusions to be reached, due to numerous threats to internal validity. Pre-experiments, on the other hand, demonstrate more interval validity, as the researcher utilizes more controls. Kazdin reported that researchers can classify their studies as pre-experimental or experimental when they gain objective information through assessment, when they assess an individual's performance over time, and when they can demonstrate stable levels of an individual's performance before and/or after the intervention. Although Kazdin reported that not all threats to internal validity can be completely ruled out, the true experimental single case design is one in which researchers attempt to consider and rule out all threats to internal validity through the unique nature of the design.

Analysis of single case design data. Researchers assess single case data primarily through visual analysis (Morgan & Morgan, 2003). In visual analysis, researchers graph and compare all of the data points for each of the specific phases. Specifically, Kennedy (2005) explained that the single case researcher should examine the level, trend, and variability of the data within each phase. As mentioned earlier, the level of each phase is its mean. The trend is the slope (incline) and magnitude (degree of the slope) of the data within each phase. Kennedy recommended two methods to determine the trend of the data: the least-squares regression line or the split-middle technique. The variability of the data is the degree of difference between the trend and each data point. Kennedy cited two methods for inspecting single-case design data

between the phases: immediacy of effect and overlap. The researcher can calculate the immediacy of effect by determining how quickly the data changed between phases. The overlap is the percentage of quantitative agreement between adjacent phases (Kennedy, 2005).

Beyond visual analysis, Morgan and Morgan stated that no agreement has been reached regarding a specific type of statistics that is most appropriate for single case design analysis. Kennedy (2005) argued that the use of inferential statistics for single case data is inappropriate because the statistical assumptions do not match those of single case designs. Thus, until statisticians develop appropriate statistics to use with this type of research, Kennedy recommended researchers utilize visual analysis.

Summary

ADHD is the most common diagnosis of childhood, with well-documented evidence that problematic long-term effects may result. Thus, interventions that occur in the early school years may reduce the impact of ADHD for children in the short and long-term. Although researchers have reported effective parent and teacher interventions with this population, researchers have not thoroughly examined counseling interventions for these children. Play therapy is one intervention for which researchers have conducted minimal research with this specific population, and the researchers for these few studies did not utilize rigorous research designs.

Purpose of Study

The purpose of this study was to use an APA-endorsed single case design to examine the effectiveness of play therapy and teacher consultation interventions for students exhibiting ADHD behaviors and their teachers. Because of the specific nature

of the research design, results of this study could contribute to the literature documenting the effectiveness of play therapy, thereby possibly facilitating members of APA to identify play therapy an evidence-based treatment intervention for children.

CHAPTER 2

METHODS AND PROCEDURES

The purpose of this study was to examine whether child-centered play therapy (CCPT) and person-centered teacher consultation (PCTC) was effective in (a) reducing teacher-identified attention-deficit hyperactivity disorder (ADHD) behavioral problems; (b) improving on-task, attentive, and hyperactive behaviors in the classroom as rated by an observer; (c) reducing parent-identified ADHD behavioral problems; and (d) improving the teacher-student and parent-child relationships. This study involved a single case experimental research design with five volunteer kindergarten through fifth-grade students who scored in the borderline or clinical range on two behavior-rating scales in the area of ADHD. Because the primary source of data for each individual participant was based on an observational measure, each student participant was blindly assigned to participate in a combination of interventions in order to prevent biased observational results. Each child participated in a combination of the following interventions based upon their blind assignment: (a) twice weekly CCPT sessions, (b) person-centered teacher consultation, and/or (c) reading mentoring. This chapter details more of the proposed methods and procedures employed in this study.

Research Questions

1. Does CCPT alone or CCPT and PCTC decrease the ADHD behaviors of five elementary students as rated by teachers, parents, and trained observers?
2. Does CCPT alone or CCPT and PCTC improve the student-teacher and parent-child relationships for students identified with ADHD behaviors?

Definition of Terms

ADHD behavioral problems: For this study, participants identified on both the Teacher Report Form *(*TRF*)* and the Conners' Teacher Rating Scale – Revised: Short Form (CTRS – R:S*)* as borderline or clinical in ADHD categories qualified as having ADHD behavioral problems. Both instruments characterize ADHD behaviors to be consistent with the *DSM-IV* diagnosis of ADHD, which is characterized by inattention, hyperactivity, and impulsivity. Specifically, items on the ADHD Index score of the CTRS-R:S are considered "the best set of items for identifying children 'at risk' for an ADHD diagnosis" (Conners, 2001, p. 47).

Child-centered play therapy (CCPT): Was utilized in this study based on Landreth's (2002) definition:

> …play therapy is defined as a dynamic interpersonal relationship between a child (or person of any age) and a therapist trained in play therapy procedures who provides selected play materials and facilitates the development of a safe relationship for the child (or person of any age) to fully express and explore self (feelings, thoughts, experiences, and behaviors) through play, the child's natural medium of communication, for optimal growth and development. (p. 16)

Additionally, Ray (2004) listed CCPT skills, which were employed in this study (see Appendix B).

Person-centered teacher consultation (PCTC): For the purpose of this study, person-centered teacher consultation was defined as an individualized consultation between a counselor trained in person-centered counseling techniques (see Appendix C) and a teacher who referred a student participant for play therapy services.

Reading mentoring: For this study, reading mentoring was defined as individualized time between an undergraduate student and a student participant in which the reading mentor reads to or with the student for a specified amount of time each week.

Participant Selection

This research study was a part of a larger experimental research project examining CCPT with children labeled with ADHD symptoms. Therefore, research participants were recruited from four elementary schools in the North Texas region for participation in the larger research project. I asked permission of all four elementary schools to be involved in this research. After approval from the schools, I asked for human subjects' approval from the Institutional Review Board (IRB). Once I gained IRB approval, I asked each school's counselor to solicit teacher referrals for the research project. All four schools had students in grades kindergarten through five, and teachers referred students for teacher- identified difficulties with ADHD behavioral problems in the classroom. Within the referred student participants for the larger study, six participants qualified for this study based upon their borderline or clinical scores on both the ADHD subscale of the Teacher Rating Form (TRF; Achenbach & Rescorla, 2001) and the borderline or clinical scores on the ADHD Index score of the Conner's Teacher Rating Scale – Revised: Short Form (CTRS-R:S; Conners, 2001). Students with clinical scores in other areas on the TRF were not included in this study to reduce the likelihood that comorbid factors contributed to their behaviors. I asked six students with these qualifications to be a part of this research study. More specifically, I met with the parents to discuss the project, explain what would be involved, and ask them to sign informed

consents (see Appendix A) to demonstrate their approval for their child's participation. Over the course of the study, one student participant moved to a new school district and was unable to continue in this study. Therefore, only five participants completed the study.

Instruments

Direct Observation Form

I utilized several instruments for this study. Trained observers used the Direct Observation Form (DOF; Achenbach & Rescorla, 2001) three times per week to assess student on-task behavior and to provide assessment of several areas related to ADHD behavioral problems. The DOF is a 10-minute observation in which a trained observer examines the behavior of an identified student within a group, classroom, or recess setting and rates the student at each minute interval for on- and off-task behavior. Additionally, while observing the child, the observer writes a description of all behavior of the child. After the observation period, the observer completes a checklist of 96 problem items rated on a scale of 0 (behavior not observed) to 3 (definite occurrence with severe intensity or occurrence lasting more than 3 minutes in duration). Achenbach and Rescorla (2001) recommended that three to six 10-minute observations be averaged together in order to obtain a more representative score of the child's on-task and behavioral problems. Additionally, the DOF allows for comparisons of the targeted child with the behavior of control children.

The DOF provides scores in internalizing and externalizing behavior, total problems, and six syndrome subscales: withdrawn/inattentive, nervous/obsessive, depressed, hyperactive, attention/demanding, and aggressive (McConaughy, Kay, &

Fitzgerald, 1998). These scales were developed based upon the analysis of 212 children (Ages 5-14) who were clinically-referred (Achenbach & Rescorla, 2001). The DOF scoring software allows for computation of a target child's average scores, which are then compared with the results of a sample of 287 children from Nebraska, Oregon, and Vermont who attended 45 different schools (Achenbach & Rescorla, 2001).

Achenbach and Rescorla (2001) reported that four studies have examined the reliability and validity of the DOF. For these four studies, the mean interrater reliability was calculated .90 for the Total Problems score and .84 for on-task/off-task score. Researchers have provided evidence for validity of the DOF, as well. Specifically, these researchers found significant differences between referred and nonreferred children, and between at-risk children who received different interventions at school. Achenbach and Rescorla also reported that studies have found a significant association between scores of the DOF and the Child Behavior Checklist (CBCL) and a correlation of .51 between scores of DOF and Teacher Report Form (TRF).

For this study, two observers were utilized throughout the study. One observer was the author, an advanced doctoral student in counselor education. The second observer was a counselor education faculty member with 18 years of professional experience working in the school and community settings. Both observers trained and practiced together regarding the appropriate use of the DOF. Additionally, several observations were utilized to assess the interrater reliability on the DOF between observer one and two. The interrater reliability was calculated using a frequency-ratio approach (also known as a total agreement approach). I averaged all of the observations between both observers and found 97% agreement on the on/off task

portion of the DOF. For the behavioral ratings (for which 96 items are rated), an interrater reliability of 91% was calculated. Kennedy (2003) stated that a minimum agreement of 80% is expected. Therefore, for purposes of this study, the observers achieved a high level of consistency.

Beyond the observational data collected for this study, several teacher-report and parent-report assessments were utilized. I utilized these six instruments: The Teacher Rating Scale (TRF), the Conners' Teacher Rating Scale – Revised: Short Form (CTRS - R:S), the Index of Teaching Stress (ITS), the Child Behavior Checklist (CBCL), the Conners' Parent Rating Scale Revised – Short Form (CPRS – R:S), and the Parenting Stress Index (PSI).

Index of Teaching Stress

The Index of Teaching Stress (ITS; Abidin, Greene, & Konold, 2004) is a 90-item teacher-report assessment designed to measure a teacher's level of stress in response to a specific student. The ITS was developed for use with teachers of students in grades preschool through 12th grade. Teachers rate specific behaviors of an individual student on a scale of 1 (never stressful or frustrating) to 5 (very often stressful or frustrating). These items translate to scores on three global scales: Attention-Deficit/Hyperactivity Disorder, Student Characteristics and Teacher Characteristics. The Attention-Deficit/Hyperactivity Disorder domain provides a score regarding the amount of stress the teacher perceives in response to ADHD behaviors of the identified student. The Student Characteristics domain measures the overall degree of stress the teacher experiences due to the student's behaviors and temperament. The Teacher Characteristics domain measures the amount of self-perceived distress and

expectations the teacher has in relation to the student. These three global scale scores generate a Total Stress score.

Although the ADHD domain is factored in one subscale, the Student and Teacher Characteristics factor into several subscales, which are defined here. The Student Characteristics domain contains five subscales: Emotional Lability/Low Adaptability (ELLA), Anxiety/Withdrawal (ANXW), Low Ability/Learning Disabled (LALD), and Aggressive/Conduct Disorder (AGCD). The ELLA subscale measures the extent that the student's moodiness and emotional reactions create stress for the teacher. The ANXW subscale examines the amount of student anxiety and teacher dependence. The LALD subscale provides a score representing the impact on the teacher of student's special learning needs and disabilities. The AGCD subscale measures the amount of stress the teacher experiences due to the student's antisocial behavior.

The Teacher Characteristics domain contains four subscales: Sense of Competence/Need for Support (SCNS), Loss of Satisfaction from Teaching (LSFT), Disruption of the Teaching Process (DTP), and Frustration Working with Parents (FWP). The SCNS subscale measures the degree to which the teacher feels ineffective or unsupported. The LSFT subscale provides a score representing the degree to which the teacher does not enjoy teaching and interacting with the identified student. The DTP subscale measures teacher stress that results from the amount of time devoted to the target student's behavior. The FWP subscale measures the stress associated with interacting with the target student's parents.

Abidin, Greene, and Konold (2004) described that scores on the ITS within the 15^{th} to 79^{th} percentiles are in the normal range, scores between the 80^{th} and 89^{th}

percentile range are “elevated” and scores in the 90th to 100th percentile range are “clinically significant” (p. 15). The authors reported that scores in the clinical range suggest possible dysfunction.

The ITS was normed with 814 teachers who rated a student picked at random from their classroom. Whereas the majority of teachers taught in regular education classrooms, some special education classroom teachers were also represented. The students that were a part of this normative sample ranged in age from 5 to 18 years and resided in one of six states primarily in the northeast and southern United States.

Validity for the ITS was established through several methods. Abidin, Greene, and Konold (2004) cited several studies to prove construct, discriminant, and predictive validity exists for the ITS. Several studies demonstrated that a relationship exists between student behavioral problems and teaching stress. Further, these authors found that the ITS had a moderate amount of correlation with the TRF (between .73 and .83).

The reliability of the ITS was established through test-retest and internal consistency measures. Abidin, Greene, and Konold (2004) reported the ITS demonstrates a high degree of internal consistency due to the alpha coefficients for the domain scores and the total stress score meeting or exceeding .90. Test-retest reliability was determined through the examination of the results of the ITS on two occasions one month apart. The results suggested that the coefficients are relatively stable, with coefficients ranging from .57 to .70. One exception is the Aggressiveness/Conduct Disorder scale, which had a test-retest coefficient of .30.

Parenting Stress Index

The Parenting Stress Index (PSI; Abidin, 1995) measures the degree of stress a parent experiences in raising his/her child. The PSI is a parent-report instrument utilized with parents of children between the ages of 1 month to 12 years. The PSI consists of 120 items that produce a Total Stress score, plus scale scores for both characteristics of the child and the parent. The Total Stress score combines all parent and child characteristics into one score. Abidin stated that this total stress score is the most important score to consider when trying to determine if intervention is necessary for a parent-child relationship. The total score is further broken down in the Child Domain and the Parent Domain. Both domains are summed totals of subscales within each category. There are six subscales for the child characteristics domain: Distractibility/Hyperactivity, Adaptability, Reinforces Parent, Demandingness, Mood, and Acceptability. The Distractibility/Hyperactivity subscale provides a score on the child behaviors associated with Attention-Deficit/Hyperactivity Disorder, such as overactivity, distractibility, and short attention span. The Adaptability subscale measures the extent to which a child is unable to adjust to physical and social environmental changes. The Reinforces Parent subscale examines the amount of positive reinforcement the parent perceives from parenting the identified child. The Demandingness subscale measures the amount of demand the child places on the parent. The Mood subscale is associated with the parent's perception of the child's affective expression, such as unhappiness or depression. The final subscale for the child domain, Acceptability, produces a high score when the parent's expectations for the child's attractiveness, intelligence, or temperament are not achieved.

The Parent Domain of the PSI provides a measure of the parent's functioning, which may be negatively influencing the parent-child relationship. Seven subscales are combined to provide the Parent Domain score. The seven subscales are Competence, Isolation, Attachment, Health, Role Restriction, Depression, and Spouse. The Competence subscale measures the extent to which the parent feels competent at parenting. The Isolation subscale is high when a parent feels social isolated from peers, family, or other sources of emotional support. High scores on the Attachment subscale may indicate a lack of emotional closeness between a parent and child or may indicate the inability of the parent to understand a child's needs. The Health subscale indicates the degree of physical health of the parent. Parents with high scores on the Role Restriction subscale often indicate their parental experience is marked with frustration due to a restriction in their role as parents. These parents may feel controlled by the needs of their children. The Depression subscale measures the level of depressive symptoms the parent experiences. The final parent domain subscale, the Spouse subscale, is a measure of the relationship between both parents. Often a high score on this subscale indicates the parent feels unsupported from the other parent in the area of childcare.

An additional measure on the PSI, the Life Stress domain, provides a score representing the amount of stress for which the parent has no control. This stress may include the loss of a job, a move to a new home, or the death of a family member. This domain examines the stress that is occurring outside of the parent-child relationship, but is significant in that this stress may exacerbate the stress within the relationship.

Abidin (1995) reported reliability and validity support for the PSI. The internal consistency of the PSI was demonstrated through the calculation of alpha reliability coefficients for each subscale and domain. The alpha coefficients for the Total Stress, Parent, and Child domains were at .90 or higher, which indicates a high level of internal consistency. The coefficients for the subscales were also adequate, as they ranged from .70 to .84. The test-retest reliability of the PSI was established through four different studies (Abidin, 1995). Each study reassessed after varying amounts of time; between 3 weeks and one year. All of these studies provided support for the stability of the measure. The reliability coefficients differed, depending on the length of time between administration of the PSI; the coefficients ranged from .55-.70 on the one-year study and between .63 and .96 on the other studies.

Validity of the PSI was demonstrated through multiple studies indicating increased parental stress with child behavioral problems, developmental delay, and parent psychological and marital distress. Additionally, the PSI was reported to correlate with many different measures, including the Child Behavior Scale and the Family Resources Scale.

Conner's Teacher/Parent Rating Scale-Revised: Short Form

The CTRS-R:S and the CPRS-R:S are assessments completed by parents and teachers to assess problematic behaviors of children and adolescents most commonly associated with ADHD. These assessments are normed to be used with children between the age of 3 and 17 years. Both the CTRS-R:S and the CPRS-R:S consist of 28 questions that are rated on a four-point frequency scale. These forms are shortened versions recommended for use when administration time is limited and when multiple

administrations are planned to be utilized (Conners, 2001, p. 13). Angello et al. (2003) recommended the short versions of the Conners' assessments for screening and treatment monitoring for children with ADHD. The teacher and parent versions of this form both provide four subscales: oppositional, cognitive problems/inattention, hyperactivity, and an ADHD Index score. Conners (2001) reported that t-scores below 56 are not concerning, but t-scores at or above 65 indicate a clinically significant problem. T-scores from 56-60 are in the Slightly Atypical range, and scores 61-65 are Mildly Atypical. The ADHD Index score is considered the best indicator of attention difficulties associated with a diagnosis of ADHD (Conners, 2001, p. 47). From 1992-1996, the Conners' scales were renormed with 8000 children and adolescents aged 3 to 17 whom represented 95% of the states and provinces in North America (Conners, 2001). Due to developmental and gender differences in expression of ADHD, the Conners scales obtained norms specific to these areas. The normative sample for the CTRS-R:S was 1,897 children and adolescents rated by a teacher. Eighty-one percent were identified as Caucasian/White, 7.2 % as African American/Black, 5.7% as Hispanic, 1.4% as Asian, 1.4 as Native American, and 2.9% as Other (p.99). The normative sample for the CPRS-R:S was 2,426 children and adolescents rated by a parent/guardian. Eighty-three percent of parents identified themselves as Caucasian/White, 4.3% as African American/Black, 3.8% as Hispanic, 2.1% as Asian, 1.0% as Native American, and 4.7% as Other (p. 97). Tests of internal consistency and test-retest reliability for the parent and teacher short form versions of the Conners' scales were high. The internal consistency coefficients for the CPRS-R:S and CTRS-R:S ranged from the mid .80s to the mid .90s. Test-retest reliability coefficients for both

parent and teacher versions ranged from the .60s to .90s (p. 117). The three factor-derived subscales of the CPRS-R:S and the CTRS-R:S are supported.

Child Behavior Checklist

The Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) is a parent-report measure used to assess children's behavioral problems. Two forms are available based on the child's age. The CBCL/6-18 is for children aged 6 to 18 and the CBCL/1 ½ -5 is for children aged 1 ½ to 5 years. Parents complete 118 problem items and 20 competence items regarding their behavior and activities over the past 6 months. These items are scored on a three-point scale (McConaughy, Kay, & Fitzgerald, 1998). Both forms of the CBCL have computerized scoring that provides competence, syndrome and DSM-oriented scores. Competence scores consider the strengths and skills target children have in activities, school, and social relationships in comparison to a normed sample. Syndrome scale scores are "sets of concurrent problems" that may be shaped by environmental or genetic factors (Achenbach & Rescorla, 2001, p. 81). The CBCL provides two broad scores of internalizing and externalizing behavior, as well as eleven scores in these areas: withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems. The internalizing syndrome score "reflects problems within the self, such as anxiety, depression, somatic complaints without known medical cause, and withdrawal from social contacts" (Achenbach & Rescorla, 2001, p.93). The specific scores that fall within the Internalizing domain are: Withdrawn/Depressed, Somatic Complaints, and Anxious/Depressed. Conversely, the externalizing syndrome score "represents conflicts with other people and with their expectations for children's behavior" (Achenbach & Rescorla, 2001, p. 93). Thus, the

Aggressive Behavior and Rule-Breaking Behavior scores fall within this externalizing domain. Achenbach and Rescorla (2001) have found that three remaining syndrome scores have loadings on both internalizing and externalizing domains: Social Problems, Thought Problems, and Attention Problems.

Scores fall into one of three ranges: normal, borderline, and clinical. The target child's scores are compared to a normed sample of children of the same age to determine if the child's behavior for a specific area is within the normal, borderline, or clinical range. Therefore, normal scores are considered reflective of areas that are not in need of concern. Borderline scores are those that reflect areas of concern, but may not be at the level of needing professional help (Achenbach & Rescorla, 2001). Clinical scores, therefore, indicate areas of clear need for intervention. For the competence scales, borderline scores are T=31-35 and clinical scores are T<31. For total problems, internalizing and externalizing scores, T=60-63, T>63 is clinical. For the syndrome and DSM scales, T=65-69 is borderline and T>69 is clinical (Achenbach & Rescorla, 2001).

Achenbach and Rescorla (2001) reported the internal consistency of the scales of the CBCL. Specifically, they calculated Cronbach's alpha for each scale. All of the scales demonstrated good internal consistency. The competence scores had alphas of .63 to .79; the problem scales had alphas of .78 to .97 and for the DSM-scales, the alphas ranged from .72 to .91. Test-retest reliability for the CBCL was high, with most correlations falling between .80 and. 90. Achenbach and Rescorla also reported the results of a longitudinal study with mothers to demonstrate the stability of the scale scores of the CBCL. Results indicated mean Pearson correlations of .70 on the competence scales, .74 on the problem scales, and .65 on the DSM scales for CBCLs

completed over 12 month intervals. For CBCLs completed over 24 month intervals, the correlations were .61 on the competence scales, .70 on problem scales, and .68 on the DSM scales (Achenbach & Rescorla, 2001). These results indicated no significant changes over time.

Achenbach and Rescorla (2001) also reported the content, criterion-related, and construct validity for the CBCL. Since the 1960s, when the CBCL was first developed, the items within the CBCL have been refined in order to prove its content validity. Over the years, various problem, competence, and adaptive functioning items have been revised in order to measure that which the specific area is intended to measure. Due to the vast amount of research and revisions that have been made to the CBCL, all of the items have been found to discriminate between referred and nonreferred children at a significant level (Achenbach & Rescorla, 2001).

When examining the amount of variance in the competence and adaptive scales on the CBCL based on referral status of the identified children, Achenbach and Rescorla (2001) found a large effect size for the three of four scales based on Cohen's criteria. When examining the amount of variance based on age, ethnicity, and socioeconomic status, results indicated a small effect size. Thus, referral status accounted for the majority of variance in the competence scales of the CBCL. Additionally, Achenbach and Rescorla examined the amount of variance with the problem scale scores. Similarly to the variance in the competence and adaptive scales, the referral status had more influence than the demographic characteristics of children. The mean effect size for the problem scales of the CBCL varied depending on the specific scales. Nine scales had large effect sizes, six scales had medium effect sizes,

and the Somatic Complaints and DSM Somatic Problems scales had small effect sizes (Achenbach & Rescorla, 2001).

For the DSM-oriented scale of ADHD, Achenbach and Rescorla (2001) reported a high correlation of .80 between DSM symptoms reported in clinical interviews and the CBCL ratings on the ADHD DSM-oriented scale. Correlations of the ADHD scale on the CBCL and the ADHD Index scale of the revised versions of the Conners Parent and Teacher Rating Scales were also very high, between .71 and .89.

Teacher Report Form

Like the CBCL, the Teacher Report Form (TRF; Achenbach & Rescorla, 2001) also has 118 problem items and items that require teachers to rate a student's academic performance and behavior to classmates. The student's behavior is rated on the previous two months on a three-point scale (McConaughy, Kay, & Fitzgerald, 1998). The TRF provides adaptive scores, similar to the competence scores of the CBCL, problems scores, and DSM-oriented scores. The TRF syndrome profiles are computed and represented in the same manner as the CBCL, however the norms are based upon teacher reports of nonreferred samples. The normed sample of TRF was based on teachers' reports of 976 nonreferred children aged 6 to 18. Although the CBCL and TRF are similar assessment instruments, the factor analysis of both instruments revealed an additional factor for the TRF beyond the eight factors that were determined to exist for the CBCL. This additional factor makes a clearer distinction between inattention and hyperactivity/impulsivity. Therefore, as the CBCL has one combined subscale of Attention Problems, the TRF has two separate subscales of Inattention and Hyperactivity/Impulsivity. Achenbach and Rescorla (2001) speculated that the additional

subscale is most likely due to the larger number of items on the TRF that focus on this area and because teachers may better differentiate between inattention and hyperactivity/impulsivity (p.86).

Achenbach and Rescorla (2001) reported adequate internal consistency for the TRF: an alpha of .90 for the Total Adaptive scale; for the problem scales, alphas of .72 to .95; and for the DSM-oriented scales, alphas ranging from .73 to .94. The test-retest reliability for the TRF was high, and scaled scores were stable, with the exception of the scores of disturbed children who received special education services. For these children, a regression toward the mean was significant. Like the CBCL, the content, criterion-related, and construct validity of the TRF is strongly supported.

Follow-Up Parent/Teacher Questionnaires

Beyond utilizing published assessment instruments for gathering information about each participant, I developed questionnaires to utilize in an interview format with each parent and teacher of the children participants at the end of the study. These questionnaires are listed in Appendices D and E. I received assistance in development of both questionnaires from my dissertation chair. I included these questionnaires to provide additional information that may aid in interpreting the results. Additionally, the questionnaires were a method to inquire about extraneous factors that may have contributed to the child participant's behaviors during the course of the study.

Description of Treatment

For this study, child participants received a different intervention depending on their blind assignment. The description of the varying interventions are described in this

section. A table below illustrates each participant's individualized treatment. The participants' names were changed to protect their identity.

Table 2

Participants' Treatment

Participant	Age at start of study	# of CCPT sessions	# of PCTC sessions	# of Reading Mentoring sessions
John	5	24	6	0
Jorge	6	14	0	14
Lee	6	24	6	0
Alicia	8	24	6	0
Carlos	10	14	0	12

Note. CCPT=child-centered play therapy, PCTC=person-centered teacher consultation

Child-Centered Play Therapy

As defined earlier, CCPT is a counseling intervention for children in which a trained play therapist provides an environment conducive to the development of a relationship in which the child feels safe to express his/her authentic self. Within this relationship, the genuine expression and reflections of the play therapist facilitate the child to move toward growth and healthy adjustment.

A child-centered play therapist believes in a child's tendency toward growth and self-actualization and, therefore, does not direct or interfere with that process. It is within the therapist-child relationship that children can gain insight into themselves. The child-centered play therapist must communicate that they are with the child through four basic messages: "I am here, I hear you, I understand, and I care" (Landreth, 2002). Child-centered play therapists utilize nonverbal and verbal skills in order to respond to a child

in play therapy in a manner that conveys this care and understanding. Ray (2004) stated that CCPT verbal responses must be short, interactive, and personalized, and must match the energy level of the child. Additional CCPT verbal skills of the therapist include: (a) tracking the child's play behavior; (b) reflecting the content of the child's verbalizations and play; (c) reflecting the child's feelings; (d) facilitating the child's decision-making and returning responsibility; (e) using esteem-building responses; and (f) incorporating relationship- facilitating responses (Ray, 2004). Nonverbal skills of the child-centered play therapist include: (a) maintaining an open posture and leaning forward; (b) appearing interested in the child; (c) appearing comfortable and relaxed; (d) matching the child's affect through tone and rate of speech; and (e) conveying a sense of genuineness by matching words and affect (Ray, 2004).

In this study, two child-centered play therapists provided the play therapy for all of the participants. One play therapist had her Ph.D. in counselor education with a specialty in play therapy. The second play therapist was an advanced doctoral student in counselor education earning her specialty in play therapy. Both play therapists had participated in and received supervision on their skills in a minimum of five child-centered play therapy courses and internships during their doctoral training. The two child-centered play therapists incorporated both nonverbal and verbal skills as identified by Ray (2004) in their play therapy sessions. For both play therapists, I observed 10-minute segments of two sessions that were chosen blindly of each child participant and rated the therapists using the Play Therapy Skills Checklist (Ray, 2004; see Appendix B). Results indicated that appropriate levels of non-verbal responses were utilized (such as appearing interested in the child, relaxed and comfortable in the playroom, and using

tone and expression congruent with the child's affect). Additionally, both therapists utilized appropriate verbal responses to communicate understanding to the child (such as tracking behavior, reflecting content and feeling, facilitating responsibility/creativity, and enlarging the meaning of the play).

Playroom toys. Child-centered play therapists utilize specific toys and materials to allow children the opportunity to express themselves in a manner that matches their developmental capabilities of expression. Landreth (2002) stated that toys are children's words; thus, the specific toys utilized in CCPT must be carefully selected to provide children a wide range of communication. Specifically, Landreth (2002) categorized the playroom toys into three categories: real-life toys, acting-out/aggressive-release toys, and toys that allow for creative expression and emotional release. Real-life toys can represent family members and other objects in a child's actual life, such as doll families, puppets, and cars and trucks. Acting-out/aggressive-release toys allow children an opportunity to express intense feelings such as anger and frustration. Toys that allow for this expression are the bop bag, aggressive puppets, and toy guns. Toys that allow for expression and release include sand, water, and paint. The toys utilized for this study followed Landreth's recommendations (2002, p. 144-145) and included the following:

Doll furniture	Blunt scissors, construction paper
Bendable doll family	Truck, car, airplane, tractor, boat
Dolls, doll bed, clothes	Paints, easel, brushes
Pacifier	Xylophone, cymbals, drum
Plastic nursing bottle	Toy soldiers, army equipment
Purse and jewelry	Firefighter's hat, and other hats

Chalkboard, chalk, eraser

Refrigerator

Stove

Dishes, pans, silverware

Pitcher

Dishpan

Plastic food

Empty fruit and vegetable cans

Egg cartons

Play money and cash register

Brush, comb

Crayons, pencils, paper

Transparent tape, glue

Lone Ranger-type mask

Pipe cleaners, popsicle sticks

Sandbox, sieve, pail

Zoo animals, farm animals

Rubber snake, alligator

Bop bag

Rubber knife, handcuffs

Dart gun, noise-making gun

Balls

Two telephones

Medical kit, Band-Aids

Broom, dust pan

Hand puppets

Rope

Play dough or clay

Building blocks

Playroom space. Although an ideal playroom space is of a specific size, with access to water, playrooms in the school setting depend on the space available. For purposes of this study, two separate playrooms were utilized at two different schools. Each playroom utilized the toys from the previously mentioned list recommended by Landreth (2002). One playroom was set up in an office space adjacent to the library, and the second playroom was in a portable classroom outside of the school building. All child participants who received play therapy left their classroom during the school day to participate in the 30-minute sessions. All play sessions occurred twice weekly, and child

participants left the classroom during times that worked with the teacher's instructional schedule.

Person-Centered Teacher Consultation

Teacher consultation is a common intervention that professionals utilize to assist teachers with problematic behaviors of students in the schools. Person-centered teacher consultation (PCTC) is a form of teacher consultation in which a counselor trained in person-centered counseling skills works with a teacher to impact an identified student. Ray (2007) was the first to research the effectiveness of this model. Specifically, Ray's PCTC model required the consultant to demonstrate with the teacher the core conditions required of person-centered counseling: unconditional positive regard, genuineness, and empathy. As in Ray's study, consultants in this study were trained in person-centered counseling skills of content and feeling reflection, encouragement, confrontation, and enlarging the meaning. Two advanced doctoral students trained in the PCTC model of consultation were utilized in this study. I provided consultation for one teacher at the school for which I was not observing students. The second consultant, a second year doctoral student, provided consultations for two teachers at the second school. For this study, three teachers participated in six 10-minute teacher consultation sessions. These consultation times occurred during a time in which the teacher had no other classroom responsibilities. At the beginning of the first consultation experience, each consultant shared this statement:

> We'll be meeting for 10 minutes each week. The purpose of this meeting is to provide support for you in whatever way you need. You can choose to talk about

the particular student referred for play therapy or any other issues that concern you. I will always begin our conversation with “How is it going with (child’s name)?” but you can choose to discuss any issues of concern for you. Our conversation is confidential and will not be shared in whole or in part with any school staff.

At the beginning of each subsequent teacher consultation session, the consultant would ask, “How are things going with (child’s name)?” After this question, the consultant would ask no further questions and would instead use the person-centered skills mentioned above.

Reading Mentoring

For purposes of this study, two children participated in individual reading mentoring sessions. Reading mentoring was utilized in this study to reduce the possibility of biased observational results: the observers were blind to the intervention the child received (reading mentoring or play therapy). Additionally, reading mentoring served as an intervention for these students for whom the teachers and administrators were concerned. Reading mentors were undergraduate students who met twice weekly with the identified child participants for 30 minutes each time. During these 30 minutes, one of two options would occur: reading mentors would read books of their choosing to the child participant, or the child would read to the mentor. Each reading mentor acquired the identified child from the classroom during times the teacher deemed appropriate and would read with the child in the hallway outside of the classroom.

Data Collection

A single-case experimental design was utilized in this study. As part of a larger research study examining effectiveness of CCPT with elementary school children, for whom parents and teachers had already given their permission, I examined teacher pre-testing for students who qualified for this single-case examination. Six students that met the borderline or clinical requirements on the ADHD subscales of the TRF and CTRS – R:S were invited to be a part of this research. After receiving parent informed consent for student participation, parent pre-testing was given and implementation of the baseline phase of the study began for all six students. During this baseline phase, two observers trained in administration of the DOF each began observing three students three times/week in the classroom. The student participants were observed for 10-minute intervals at each observational period, following the instructions of the DOF. For this study, two of the three weekly observation periods occurred prior to noon and one observation period occurred in the afternoon, as recommended by Achenbach and Rescorla (2001).

After I identified students for participation in this study, a doctoral student uninvolved with the study blindly assigned all six students to treatment conditions. To prevent biased observational ratings, both observers were blind to the treatment the students were receiving, whether reading mentoring, CCPT, or CCPT with teacher consultation.

The baseline observational period continued for a minimum of three weeks for each participant in order to provide a minimum of three averaged data points for the baseline. Kennedy (2005) stated that a baseline needs to exist long enough only to

establish a pattern of behavior, for which many researchers agree to be a minimum of three data points. Because a minimum of three data points are considered adequate for a baseline and because these students' teachers strongly requested an intervention to begin, for purposes of this study, the baseline data for all five participants consisted of three averaged data points based on three observations per week for three weeks.

Observational data using the DOF was gathered throughout the course of the baseline, intervention, and post-intervention phases. I collected additional assessment data from teachers (TRF*,* ITS*,* CTRS-R:S) and parents (CBCL*,* PSI, CPRS-R:S) at three times over the course of the study. These assessments were collected at baseline, mid-point (during which intervention changed) and at post-intervention (see Tables 3-7).

Individual Participant Treatment

For this study, child participants received a different treatment depending upon their particular needs over time. Kennedy (2005) reported that a strength of single-case design is its' flexibility; a "planned experimental sequence" does not need to be strictly followed (p. 145). Thus, as a pattern of behavior is revealed in the course of research, a shift in intervention may become necessary, and in single case design, is allowed. In the present study, my original intention was for half of the participants to participate in CCPT and PCTC and the other half participate in reading mentoring only. However, due to individual participant needs, the students in the reading mentoring condition participated in CCPT to assist with a rapid increase in inappropriate student behaviors in the classroom that were interfering with their learning. In this section, the treatment of each individual case will be described and all information is additionally represented in Tables 3-7.

John's Treatment

After qualifying for participation in this study due to the scores on the TRF and CTRS:R-S, John, a five-year old Caucasian male, was assessed by his mother with the PSI, CPRS-R:S, and CBCL. After all pre-assessments were received, observations of his behavior began in order to establish baseline data. After three weeks of three DOF observations/week were conducted, which produced nine points of data, the baseline ended and the first treatment phase began. However, the three observations/week continued throughout the duration of the study. Following John's baseline, six weeks of twice-weekly 30-minute play therapy sessions were conducted with an individual who had received her doctorate in counselor education. At the end of the six weeks (12 play therapy sessions), a mid-point evaluation was conducted in which the teacher completed the ITS*,* CTRS:R-S*,* and TRF, and the parent completed the CBCL*,* CPRS:R-S*,* and PSI.

After the sixth week of intervention and mid-point assessment, the second treatment phase began. In this second treatment phase, twice-weekly play therapy continued and once-weekly teacher consultation began with an advanced doctoral student unaffiliated with the play therapy component of the study. At the end of this six week phase, John participated in a total of 24 play therapy sessions and his teacher received 6 teacher consultation sessions in the second phase. At this point, John completed all interventions, his teacher completed the final assessments (ITS*,* CTRS:R-S*,* and TRF), and his parent completed the final assessments (PSI, CPRS:R-S*,* and CBCL). I conducted three final weeks of observation post-treatment. After all

observational data were collected, I conducted interviews with both teacher and parent in which qualitative data were collected.

Table 3

John's Treatment

Week	Parent Assessments	Teacher Assessments	DOF	CCPT	Reading Mentoring	PCTC
1	3	3	3			
2			3			
3			3			
4			3	2		
5			3	2		
6			3	2		
7			3	2		
8			3	2		
9	3	3	3	2		
10			3	2		1
11			3	2		1
12			3	2		1
13			3	2		1
14			3	2		1
15	3	3	3	2		1
16			3			
17			3			
18			3			

Note. DOF=Direct Observation Form, CCPT=child-centered play therapy, PCTC=person-centered teacher consultation

Jorge's Treatment

Jorge was a six-year-old Brazilian-American male in first grade. After receiving teacher assessments *(*ITS*,* CTRS:R-S*,* TRF) and the CPRS:R-S from the parent, baseline DOF observational data were collected for three weeks. Because Jorge's father had a limited amount of time available to complete the assessment instruments for this study, Jorge's father only completed the CPRS:R-S at each assessment phase. After baseline was achieved, Jorge was scheduled to participate in 12 weeks (24 sessions) of reading mentoring. However, due to frequent complaints from his teacher regarding his increasing behavioral difficulties in the classroom, the doctoral student who had originally blindly assigned each participant to treatment interventions switched Jorge from reading mentoring to play therapy. The DOF observer was blind to this change in interventions. Thus, Jorge participated in seven weeks of twice-weekly 30-minute reading mentoring sessions. After this first phase and before switching to the play therapy intervention, the teacher assessments (ITS*,* CTRS:R-S*,* TRF) and parent assessment (CPRS:R-S) were re-administered. Next, Jorge began seven weeks of twice-weekly play therapy sessions. After this phase, the teacher and parent assessments were administered for the final time, parent and teacher interviews took place, and three weeks of observational data continued to be collected post-treatment.

Table 4

Jorge's Treatment

Week	Parent Assessments	Teacher Assessments	DOF	CCPT	Reading Mentoring	PCTC
1	1	3	3			
2			3			
3			3			
4			3		2	
5			3		2	
6			3		2	
7			3		2	
8			3		2	
9			3		2	
10	1	3	3		2	
11			3	2*		
12			3	2		
13			3	2		
14			3	2		
15			3	2		
16			3	2		
17	1	3	3	2		
18			3			
19			3			
20			3			

Note. DOF=Direct Observation Form, CCPT=child-centered play therapy, PCTC=person-centered teacher consultation

*Not originally intended to participate in play therapy.

Lee's Treatment

Lee was a six-year-old Caucasian male in first grade. After receiving teacher assessments (ITS, CTRS:R-S, TRF) and parent assessments (CBCL, PSI, CPRS:R-S), baseline DOF observational data were collected for three weeks. After collecting baseline observational data for three weeks, Lee began treatment Phase 1: six weeks of twice-weekly thirty-minute play therapy sessions with an individual who had received her doctorate in counselor education. At the end of this first phase, teacher and parent assessments were collected. During the next six weeks, Lee participated in continued twice-weekly play therapy sessions with the same therapist and the teacher participated in weekly 10-minute teacher consultations with an advanced doctoral student unaffiliated with the play therapy for this child participant. At the end of this phase, Lee participated in 24 sessions of play therapy and 6 weeks of teacher consultation. At this point, I collected teacher and parent assessments for the final time and conducted qualitative interviews, and the observer gathered observational data for three final weeks.

Table 5

Lee's Treatment

Week	Parent Assessments	Teacher Assessments	DOF	CCPT	Reading Mentoring	PCTC
1	3	3	3			
2			3			
3			3			
4			3	2		
5			3	2		
6			3	2		
7			3	2		
8			3	2		
9	3	3	3	2		
10			3	2		1
11			3	2		1
12			3	2		1
13			3	2		1
14			3	2		1
15	3	3	3	2		1
16			3			
17			3			
18			3			

Note. DOF=Direct Observation Form, CCPT=child-centered play therapy,

PCTC=person-centered teacher consultation

Alicia's Treatment

Alicia was an eight-year-old Hispanic female in third grade. After receiving teacher assessments (CTRS:R-S, ITS, TRF) and parent assessments (CBCL, PSI, CPRS:R-S), baseline DOF observational data were collected for three weeks. After this baseline phase, the first treatment phase began: six weeks of twice-weekly, 30-minute play therapy sessions began with an advanced doctoral student. After this first treatment phase, teacher and parent assessments were collected. In the next treatment phase, Alicia continued to receive twice-weekly play therapy from the same therapist, and her teacher participated in weekly 10-minute teacher consultation sessions with an advanced doctoral student unaffiliated with the play therapy portion of this study. After this final six week phase, Alicia received 24 play therapy sessions and six teacher consultation sessions, and teacher and parent assessments were re-administered. Additionally, qualitative interview data were collected, and three weeks of observational data were collected.

Table 6

Alicia's Treatment

Week	Parent Assessments	Teacher Assessments	DOF	CCPT	Reading Mentoring	PCTC
1	3	3	3			
2			3			
3			3			
4			3	2		
5			3	2		
6			3	2		
7			3	2		
8			3	2		
9	3	3	3	2		
10			3	2		1
11			3	2		1
12			3	2		1
13			3	2		1
14			3	2		1
15	3	3	3	2		1
16			3			
17			3			
18			3			

Note. DOF=Direct Observation Form, CCPT=child-centered play therapy,

PCTC=person-centered teacher consultation

Carlos' Treatment

Carlos was a 10-year-old Hispanic male in fifth grade. After receiving teacher assessments (ITS, CTRS:R-S, TRF) and parent assessments (CBCL, CPRS:R-S), baseline DOF observational data were collected for three weeks. Because the parent of Carlos was Spanish-speaking, all parent assessment data were collected with a Spanish-speaking counseling doctoral student. This doctoral student was unaffiliated with the treatment phases of the study and was used for interpretative purposes only. This doctoral student interpreted the CPRS:R-S and read-aloud the questions of the Spanish version of the CBCL at each of the three data collection points for this study. Due to the time required to translate and read the assessment instruments, I utilized the CBCL and CPRS:R-S, but not the PSI. After the baseline phase, Carlos participated in six weeks of 30-minute twice-weekly reading mentoring sessions. At the end of Phase 1, parent and teacher assessments were re-administered, and the second treatment phase began. Although originally intended to continue with the reading mentoring, Carlos' teacher was very concerned with inattentive and disruptive behaviors in the classroom that were interfering with his learning. Therefore, Carlos received seven weeks of twice-weekly 30-minute play therapy sessions with an advanced doctoral student. After 14 CCPT sessions, treatment ended and post-assessment, and interviews with teachers and parents occurred. Three weeks of post-intervention observational data continued to be collected, as well.

Table 7

Carlos' Treatment

Week	Parent Assessments	Teacher Assessments	DOF	CCPT	Reading Mentoring	PCTC
1	2	3	3			
2			3			
3			3			
4			3		2	
5			3		2	
6			3		2	
7			3		2	
8			3		2	
9	2	3	3		2	
10			3	2*		
11			3	2		
12			3	2		
13			3	2		
14			3	2		
15			3	2		
16	2	3	3	2		
17			3			
18			3			
19			3			

Note. DOF=Direct Observation Form, CCPT=child-centered play therapy, PCTC=person-centered teacher consultation

*Not originally intended to participate in play therapy.

CHAPTER 3

RESULTS AND DISCUSSION

In this section, I present the findings of the observations, parent assessments, and teacher assessments for each individual participant in this study. The primary source of data for this single case design was the observation data from the Direct Observation Form (DOF). I examined each participant's results separately using visual analyses. I graphed each participant's weekly mean of on-task behavior, inattentive behavior, and hyperactive behavior gathered from the DOF. I examined changes between phases: non-intervention baseline, intervention, and non-intervention maintenance. Specifically, I examined the level, trend, and variability of the data across the phases (Kennedy, 2005). Levels were quantified by comparing mean scores across each phase. The trend was quantified by computing the least squares regression. The variability of the data was computed by comparing the data points of my results with the best-fit straight line.

Because visual analysis can be a subjective method of analyzing results, which can increase Type I error, researchers recommend that individuals who utilize single case design receive training in visual analysis (Kennedy, 2005). Additionally, researchers recommend that multiple individuals analyze one's results to determine if a functional relationship exists. For this study, I received instruction and practice analyzing graphs with a professor and another doctoral student familiar with single case analysis.

As mentioned earlier, the trend of the data was calculated with the least squares regression, or in other words, the correlation coefficient regarding the relationship

between on-task behavior and intervention. This least squares regression calculation provides an effect size statistic of R^2. From their research examining techniques for analyzing single-case data, Faith, Allison, and Gorman (1996) determined that "regression approaches are the best available" (p. 253). Cohen (1988) described several methods of interpreting the R^2 effect size, one of which being to examine the proportion of an individual's variance in score that is explained by differences between the phases. When examining the R^2 statistic, Cohen provided guidelines by which to describe the practical significance of the results. Cohen explained an R^2 statistic of .25 as demonstrating a "large" effect, an R^2 of .09 as demonstrating a "medium" effect, and an R^2 of .01 as a "small" effect.

Additionally, the data collected from parents and teachers via child-report measures were examined. This supportive data were graphed and examined through visual analysis comparing pre, mid, and post means. Statisticians agree that visual analysis is appropriate with single case design research, but the use of inferential statistics is questionable (Kennedy, 2005; Morgan & Morgan, 2003). Researchers have not reached a consensus regarding the statistical methods of analysis that are appropriate with single case data (Lundervold & Belwood, 2000). Because no agreement exists in the use of statistical analysis for single case design data, I utilized visual analysis. All data were described and presented according to the recommendations of Kennedy (2005).

Participant 1: John

Background

John was a five-year-old Caucasian kindergarten student identified as having difficulty completing tasks, sitting still, and paying attention by his classroom teacher. John qualified for this study because of his clinical levels of attention-deficit hyperactivity disorder (ADHD) behaviors on the Conners' Teacher Rating Scale – Revised: Short Form (CTRS-R:S) and the Teacher Report Form (TRF*)*. Although not used to determine qualification for this study, I asked John's teacher complete an additional instrument, the Index of Teaching Stress *(*ITS). The responses of John's teacher on the ITS indicated borderline scores on the ADHD subscale and the teaching subscale titled Disruption of the Teaching Process. This latter score indicated that John's teacher experienced John's behavior in the classroom to be disruptive in her teaching. Her scores on both subscales were in the borderline range, which indicated that these were areas of concern for her.

Besides gaining information about John's behavior from his classroom teacher, I also met with John's mother. John lived with both his biological parents and two older half siblings (father's children from previous marriage). When the study began, John's mother identified his primary behavioral difficulties as those regarding his interactions with others and hyperactive/inattentive behaviors at school. Regarding his behavior at home, John's mother expressed concern about his ability to follow directions. However, John's mother did not report behaviors that scored within the clinical or borderline ranges on the CPRS-R:S or CBCL. One score on the Parenting Stress Index (PSI) was found to be in the clinical range: Acceptability. This score indicated that her

expectations regarding how John would be are not being met (Abidin, 1995). Of additional significance is that John's mother scored in the significant range on the defensive responding portion of the PSI. Thus, John's mother may not have answered the questions in a completely honest manner in order to present her or John in a specific manner. This defensiveness may imply that the scores on the other assessments may not be completely accurate.

John's mother also provided information regarding John's strengths. She shared that she most enjoys John's imagination and humor. Additionally, she shared that John can be very sensitive and shy when he first meets others.

Visual Analysis of John's DOF Scores

Kennedy (2005) stated that visual analysis of single case data should include a comparison of the level, trend, and variability across the phases. Thus, for this section, I compared the averaged scores from observations across the phases. John participated in three weeks of baseline, six weeks of twice-weekly play therapy, six weeks of twice-weekly play therapy and once-weekly teacher consultation, and three weeks of a no-intervention follow-up (see Table 3). As mentioned earlier, the DOF provides scores in many domains: the on-task score, internalizing/externalizing behavior scores, total problems score, and six syndrome subscales. Figure 1 provides a graphical representation of the observed scores for John's on-task behavior across all phases of the study. As is evident from the graph, the level (mean) of each phase increased over time. In Phase 1, the level was 6.0; in Phase 2, the level was 6.42; in Phase 3, the level was 7.08; and in Phase 4, the level was 7.33. The increase in level indicated that over time, John's on-task behavior in the classroom increased. Although this increase in on-

task behavior indicated change, Kennedy (2005) recommended that the trend of the data also be calculated. The trend is the slope and magnitude of the data, which can be described qualitatively and can be computed using the least squares regression. The trend line was calculated and displayed in Figure 1. The trend line for John indicated a moderate upward trend through visual analysis. When calculating the least squares regression, a large relationship (R^2=.25, r=.50) between the treatment phases and time was interpreted using Cohen's (1988) guidelines.

When analyzing the data across all four phases, John's on-task behaviors indicated a moderate amount of variability. Kennedy (2005) defined variability as the extent to which the individual data points vary from the trend line. Therefore, not all of the data from John's observations fit cleanly to the trend line, which makes the data more difficult to interpret. However, the trend and level provide a clearer picture of the relationship between the intervention and time.

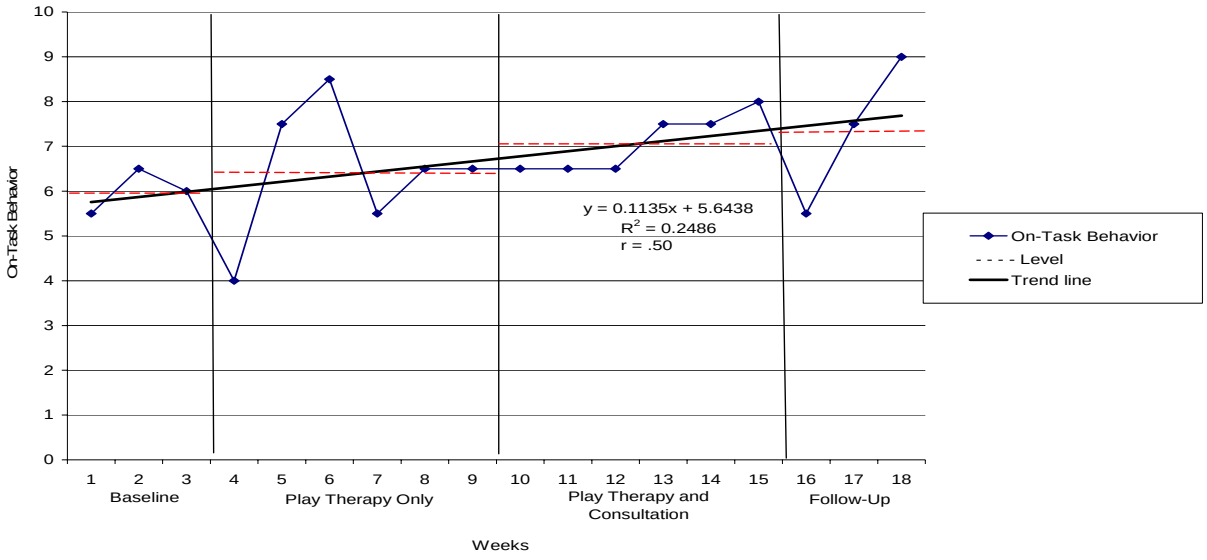

Figure 1. John's on-task behavior from DOF during the baseline, CCPT only, CCPT and consultation, and follow-up phases. (Increase indicates improved on-task behaviors.)

Individual phase analysis. Beyond analyzing the data of the DOF for John across all phases together, in this section, I analyzed the level, trend, and variability for each separate phase. Figure 2 graphically illustrates this analysis. The three data points of the baseline phase indicated low variability, a moderate upward trend, a mean of 6.0 (range 5.5-6.5), and a trend line with a large effect of R^2=.25 (r=.50). This trend line indicated that John's on-task behavior was improving without intervention over time. Because the baseline is indicating improvement in on-task behavior, it is difficult to make conclusions regarding the intervention phases.

In Phase 2, play therapy only, the data revealed moderate variability, a mean of 6.42 (range, 4.0-8.5), and a moderate upward trend with a trend line of R^2 of .05 (r=.22). Using Cohen's (1988) guidelines, this trend line indicated a medium effect size, indicating a moderate relationship between the play therapy intervention over time and John's on-task behavior. Figure 3 illustrates this phase.

The data of Phase 3, play therapy and consultation, revealed low variability, a mean of 7.08 (range, 6.5-8.0), a moderate upward trend, and a least squares regression line of R^2=.86 (r=.92). Cohen's guidelines indicated that this trend line has a large effect, meaning the relationship between the interventions of play therapy and consultation and John's on-task behavior is significant. Figure 4 illustrated this third phase.

In the final phase, the follow-up phase, John no longer participated in an intervention. This phase is represented in Figure 5. John's observed on-task behavior for this phase demonstrated moderate variability, a mean of 7.33 (range, 5.5-9.0), and a high upward trend. For this phase alone, John's trend line was calculated with an R^2 of .99 (r=1.00). During this phase, John's on-task behavior declined in Week 16, for which

John's mother explained that the previous week had been spring break, and thus his behavior was most likely more off-task due to his readjustment to school.

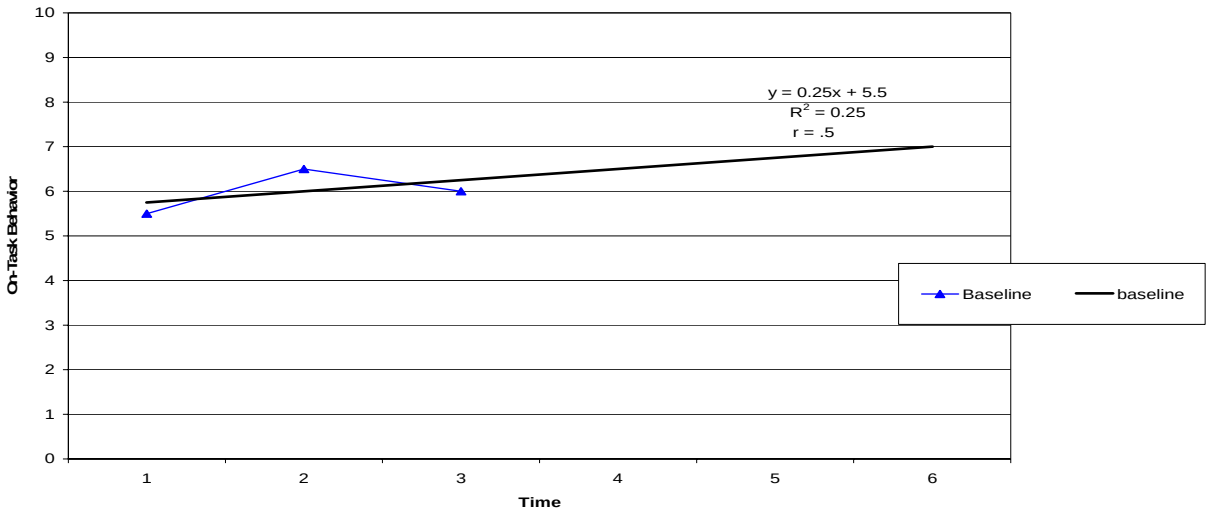

Figure 2. DOF data of John's baseline phase. (Increase indicates improved on-task behaviors.)

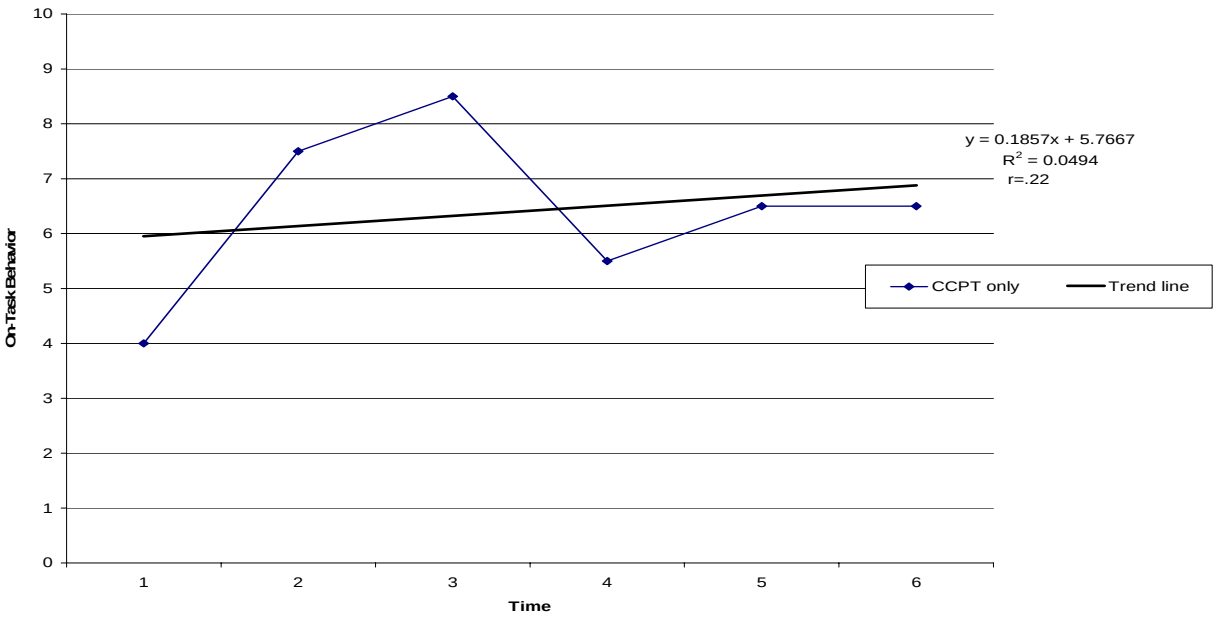

Figure 3. DOF data trend for CCPT only phase. (Increase indicates improved on-task behaviors.)

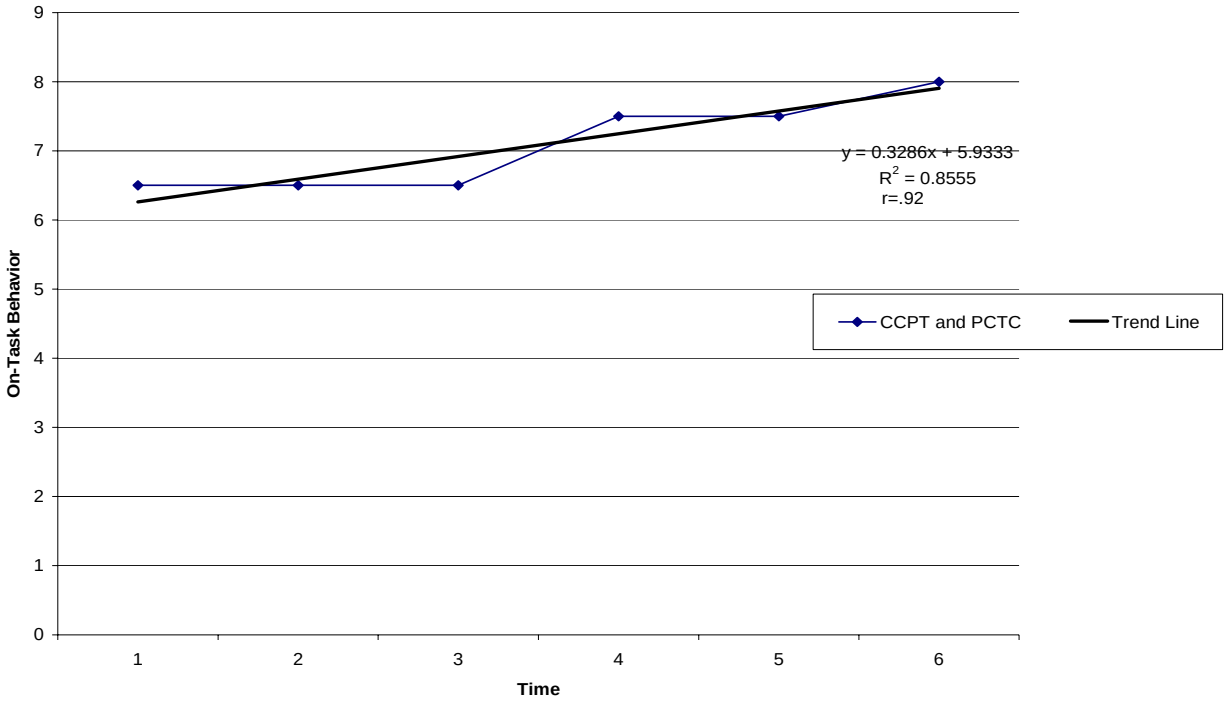

Figure 4. John's DOF data for CCPT and PCTC phase. (Increase indicates improved on-task behaviors.)

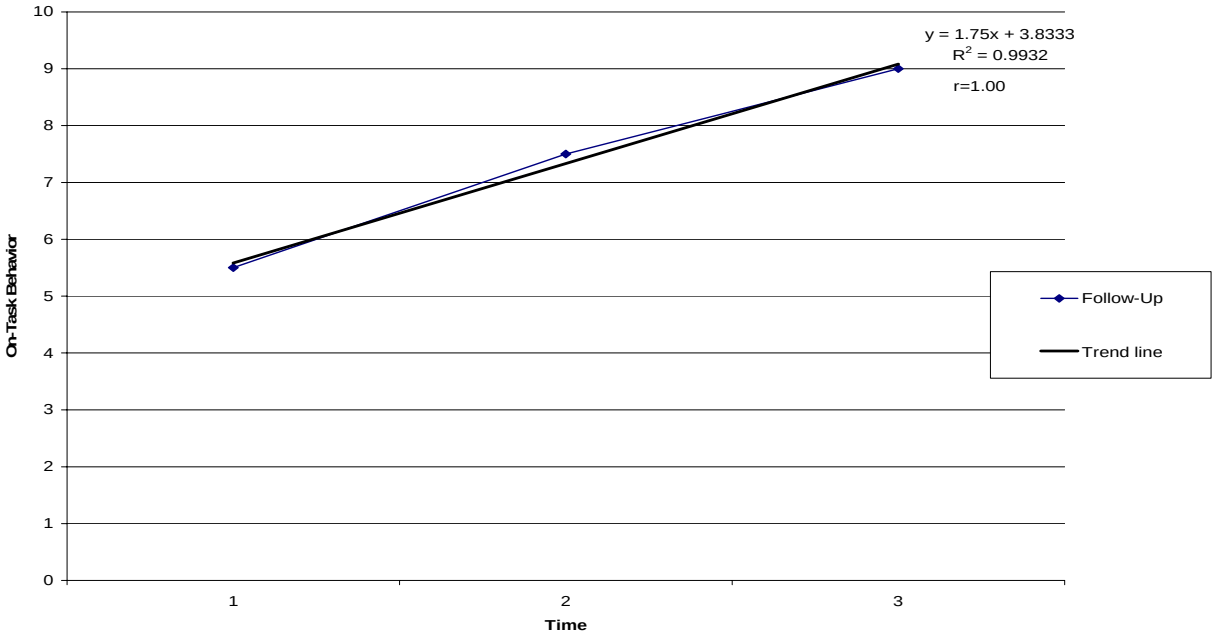

Figure 5. John's DOF follow-up data. (Increase indicates improved on-task behaviors.)

Visual Analysis of Parent Data

Child Behavior Checklist. Beyond the DOF as a measure of behavior change for John; pre-, mid-, and post-tests were given to John's primary caregiver to complete. John's mother completed three assessments at each assessment time: CBCL*,* CPRS-R:S*,* and PSI. Figure 6 provides a graphic representation of John's mother's scores for the Internalizing, Externalizing, and Total Problem scales of the CBCL. As is evident from this graph, John's mother rated John as having no scores within the clinical or borderline range at time one, and borderline scores in only the Internalizing Problem scale at the second testing period. At the final assessment period, John's mother continued to rate John at the same borderline score for Internalizing Problems. No other areas were rated in the borderline or clinical range.

The ratings of John's mother of his ADHD Behaviors on the CBCL are also graphed in Figure 7. As is evident in the graph, regardless of the testing period, John was rated as having no borderline or clinical scores on the ADHD Problems subscale. This indicated that John's mother did not rate John's behaviors to be at a significant level of concern for her.

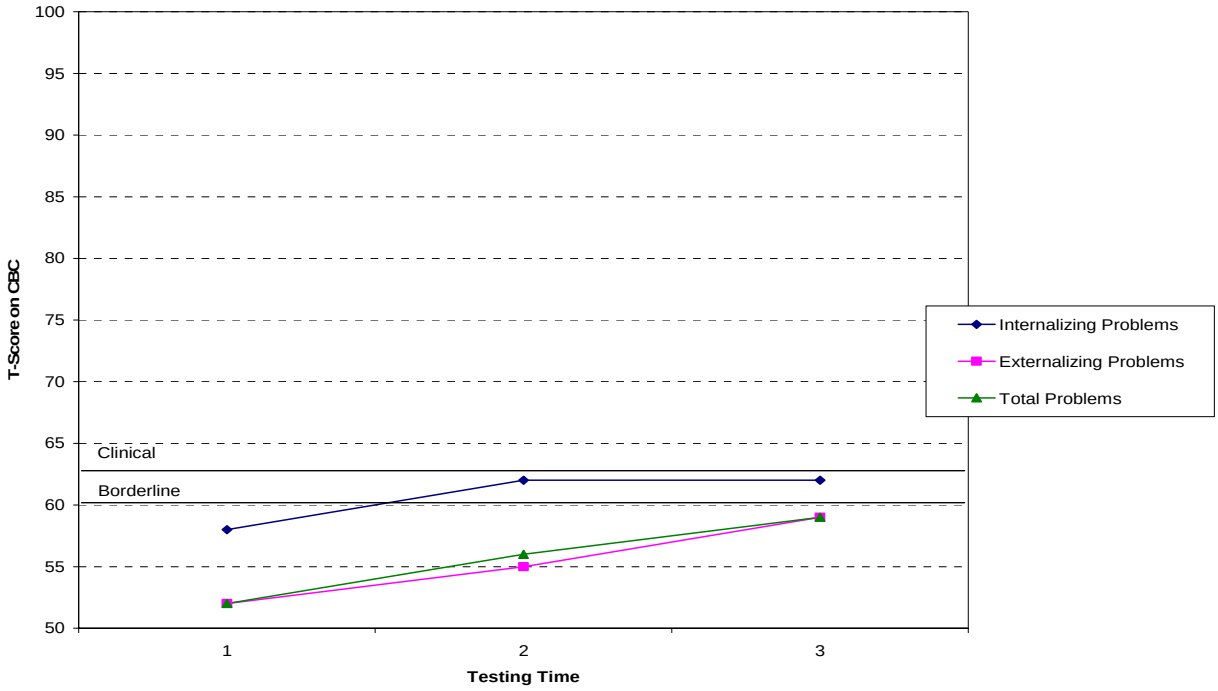

Figure 6. Ratings of John's mother on the CBCL at pre-, mid-, and post-testing. (Increase indicates worsening of behaviors.)

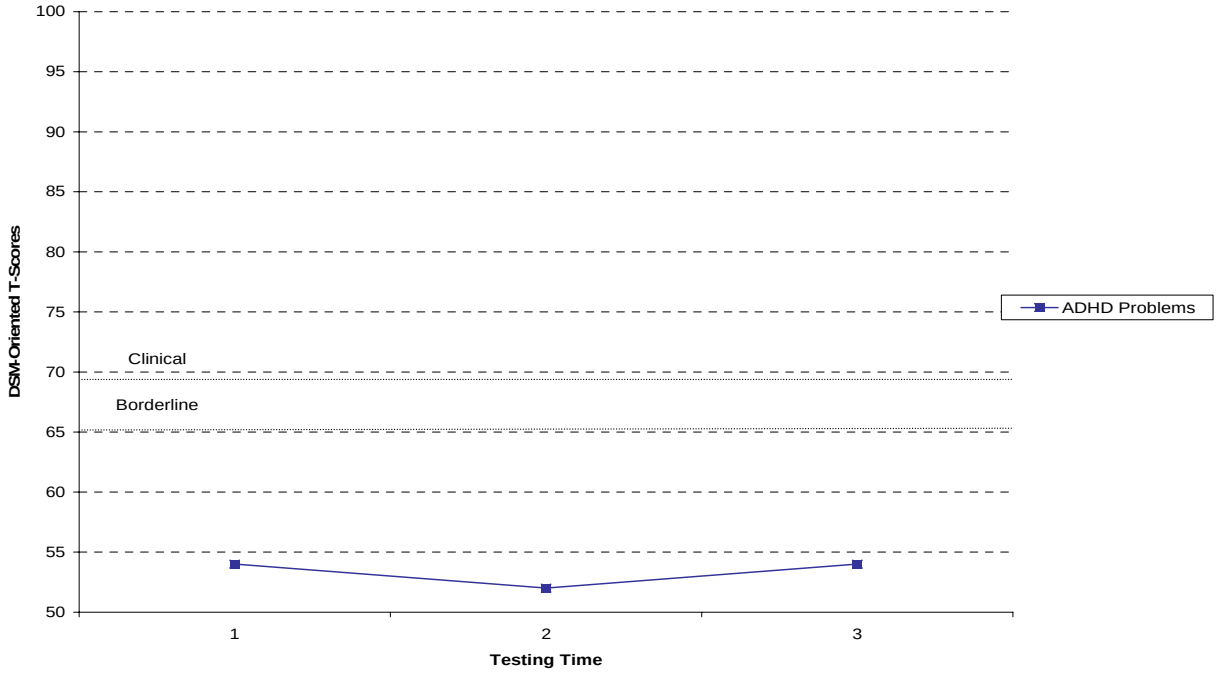

Figure 7. John's mother's ratings on CBCL at pre-, mid-, and post-testing on the ADHD Problems subscale. (Increase indicates worsening of behaviors.)

Parenting Stress Index. At the three testing points, John's mother additionally rated her relationship with John using the PSI. Figure 8 graphically represents three domain scores and one subscale within the child domain, Acceptability. Because John's mother rated Acceptability to be at a clinical level, the scores of this subscale were included in the graph at all three testing periods. As is evident in Figure 8, John's mother rated the Child Domain, Parent Domain, and Total Stress scores at non-clinical levels at all three testing periods. John's mother rated Acceptability to be at the clinical level at testing times one and three. Of additional importance was that John's mother met the criteria for defensive responding at testing period one, indicating that she may have misrepresented her relationship with John.

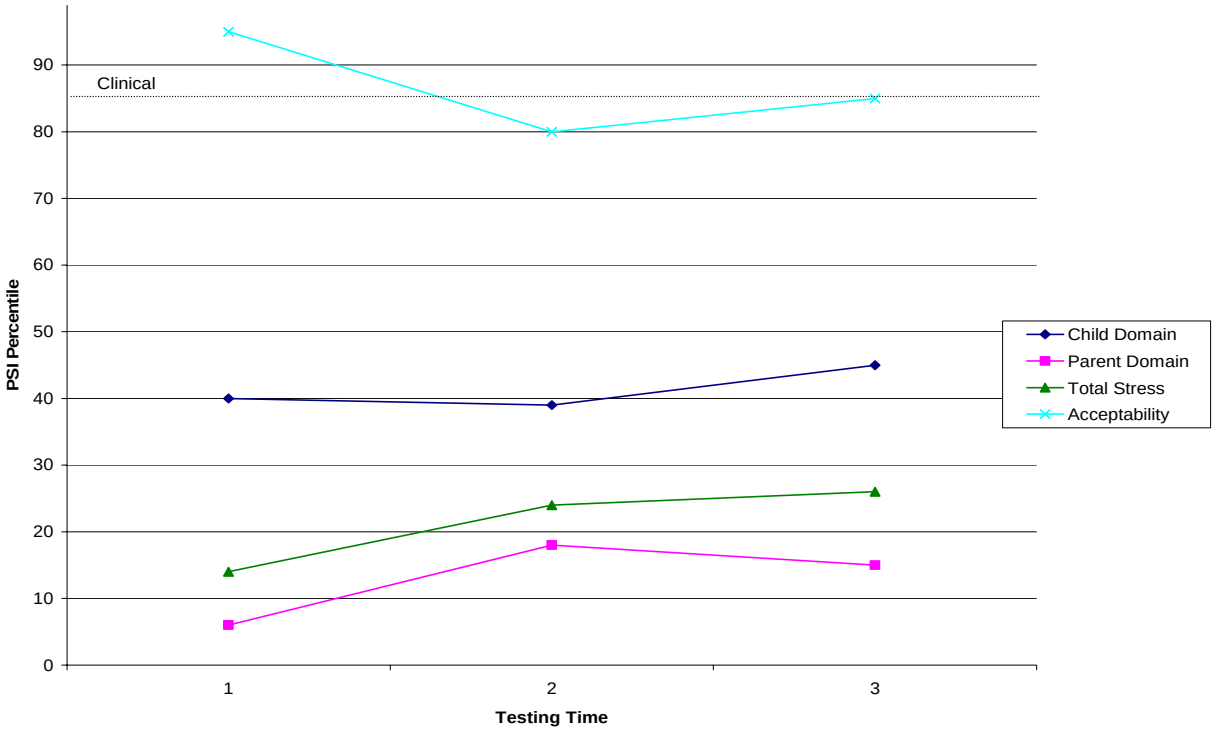

Figure 8. John's mother's ratings at all three testing periods on the Parenting Stress Index for the three domains and one subscale, Acceptability. (Increase indicates worsening of behaviors.)

Conners' Parent Rating Scale-Revised: Short Form. The results of the third assessment for which John's mother rated John's behaviors, the CPRS-R:S, are displayed in Figure 9. The results indicated that John's mother did not rate John's behaviors to be at a clinically significant level of concern for her at any testing period. However, she indicated an increased concern with John's cognitive problems/inattention as time progressed. This score indicated that John's ability to pay attention and complete his work at school was at a mildly atypical level.

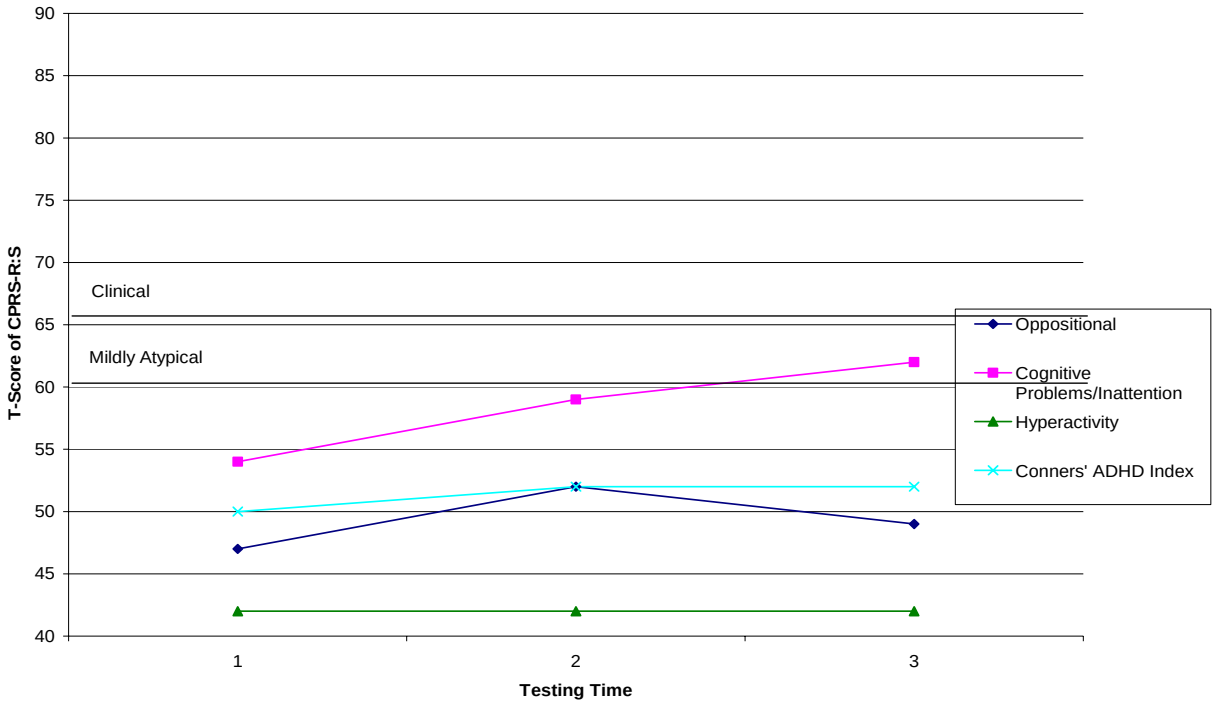

Figure 9. The CPRS-R:S ratings of John's mother. *(*Increase indicates worsening of behaviors.)

Visual Analysis of Teacher Data

Teacher Report Form. John's teacher completed the TRF at all three testing periods. The Internalizing, Externalizing, and Total Problems scores at each testing period are represented in Figure 10. These results indicated that John's teacher rated

John as slightly increasing in his internalizing and externalizing behaviors over time. More specifically, John's teacher rated John's Internalizing Problems to be in the non-significant level at time one and two, but of significant concern at the final testing period. John's Externalizing Problems at all times were rated to be of clinical concern, with slight increases in this score over time. John's Total Problems score was rated by his teacher in the borderline range at times one and two, but in the clinical level at time three. Figure 11 displays the ratings of John's teacher on the ADHD Problems subscale of the TRF. This graph indicated his teacher reported no change over time in his ADHD behaviors on the TRF; at all testing times John's teacher rated his ADHD behaviors to be at a clinically significant level of concern.

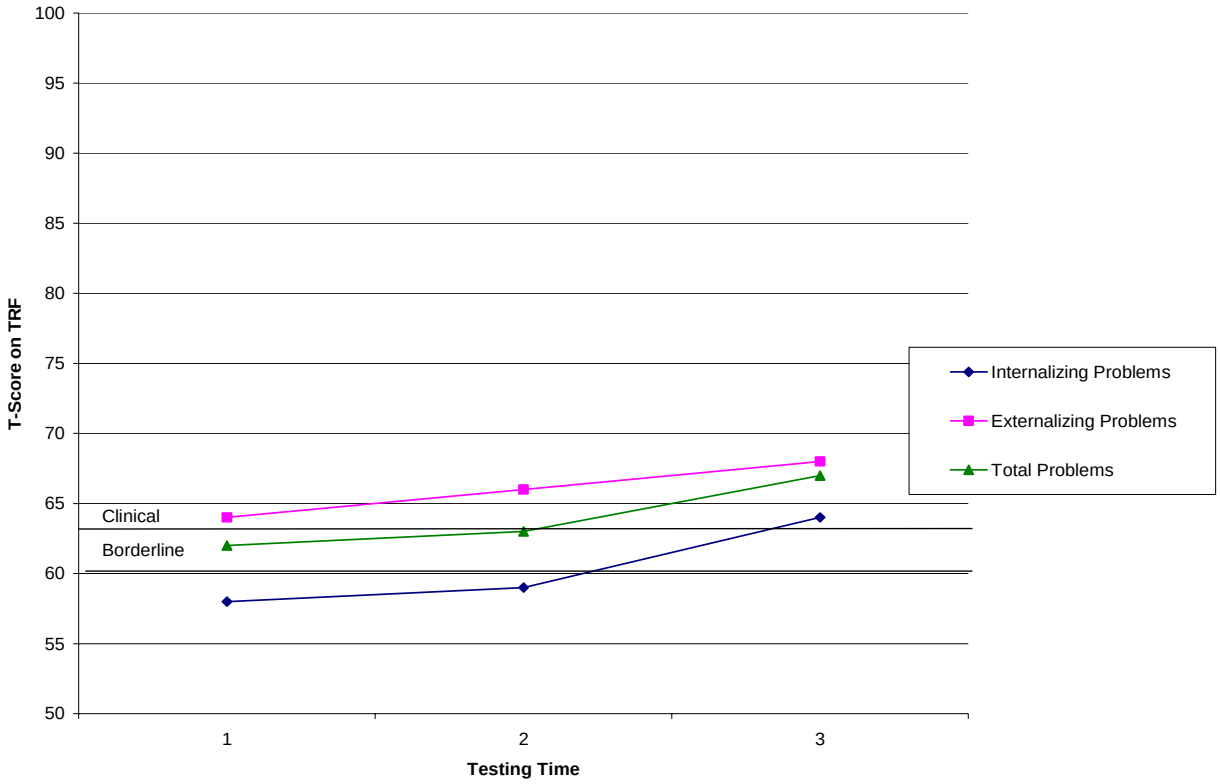

Figure 10. The ratings on the TRF of John's teacher. (Increase indicates worsening of behaviors.)

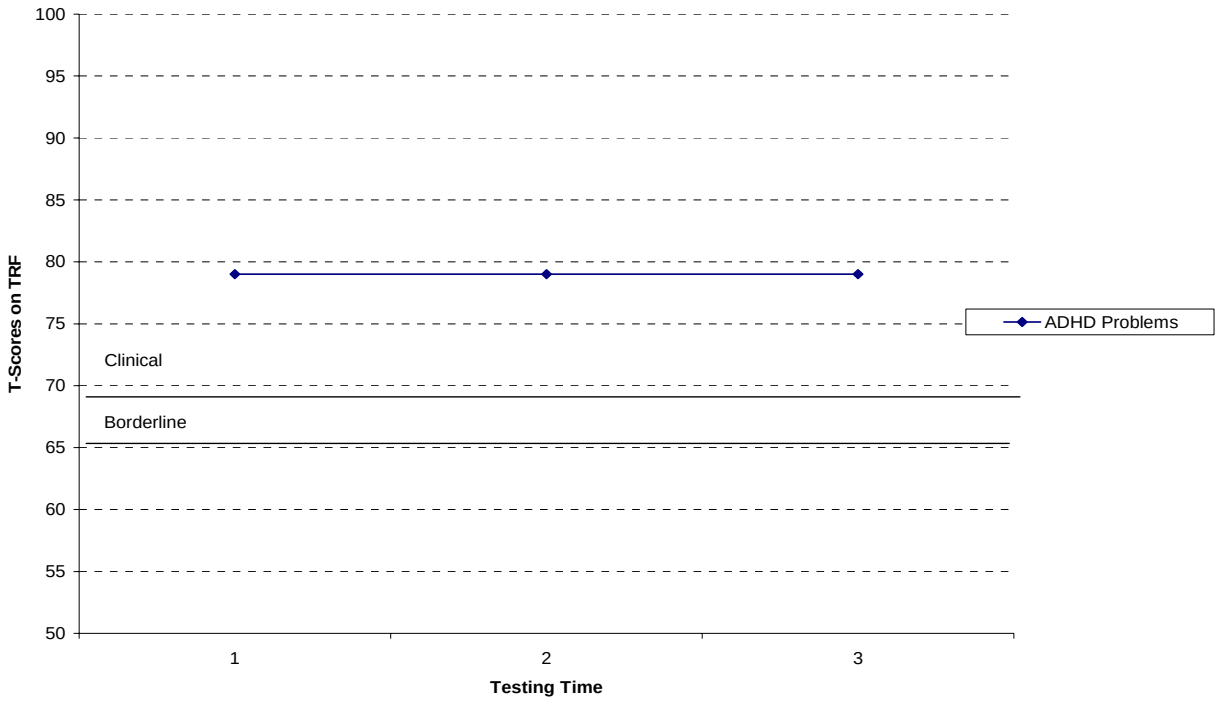

Figure 11. Ratings of John's teacher on the ADHD Problems subscale of the TRF. (Increase indicates worsening of behaviors.)

Index of Teaching Stress. Figure 12 graphically represents the ratings of John's teacher on the ITS in the ADHD, Student Characteristics, Teacher Characteristics, and Total Stress domains. All of the results indicated downward trends, which indicated a decrease in perceived stress in regards to John's behaviors and the teacher's characteristics. At times one and two, John's teacher rated elevated scores regarding the amount of stress she experienced when dealing with John's ADHD behaviors. At the final testing period, the ADHD domain score was no longer within the elevated category, indicating these ADHD behaviors of John were no longer significantly stressful for her.

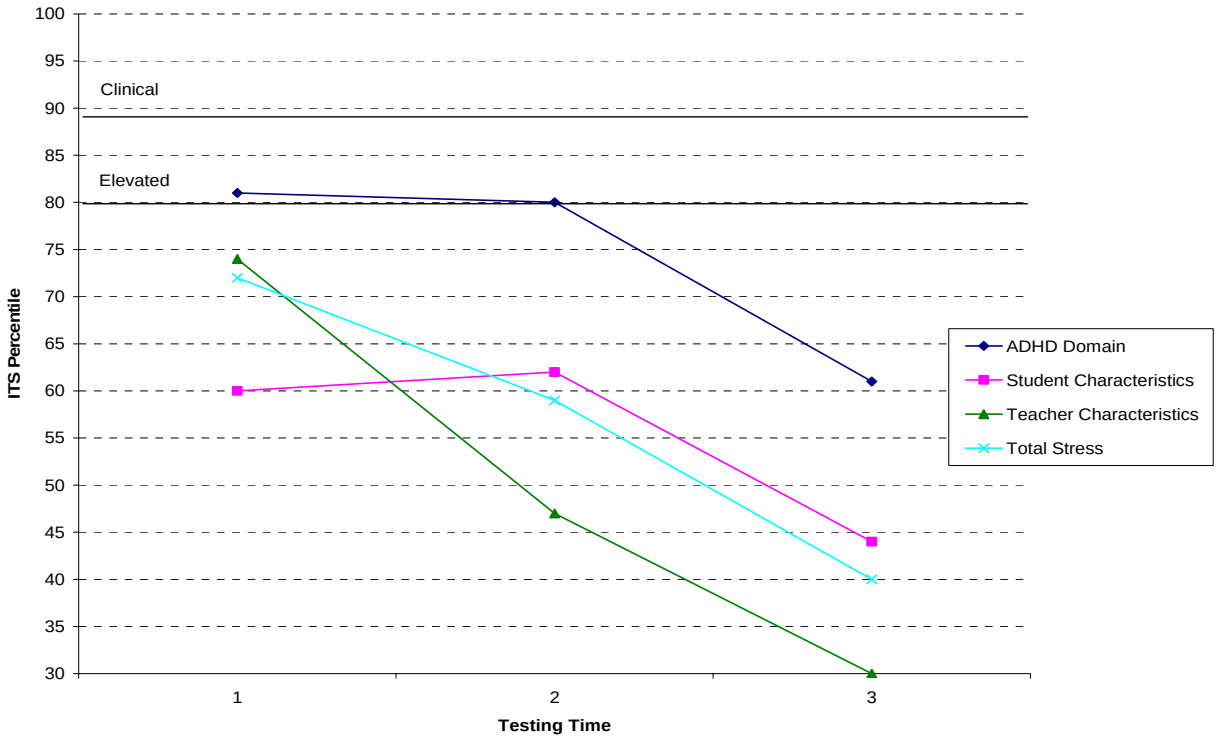

Figure 12. Ratings of John's teacher on the ITS. (Increase indicates worsening of behaviors.)

Conners' Teacher Rating Scale-Revised: Short Form. The ratings of the CTRS-R:S are graphed in Figure 13. John's teacher indicated clinically significant levels of concern with John's Cognitive Problems/Inattention, Hyperactivity, and ADHD Index. Although John's teacher was still significantly concerned with these areas, the scores in two areas; Cognitive Problems/Inattention and Hyperactivity, reduced over time. The scores of the ADHD Index remained the same at each testing period. The scores of the Oppositional subscale remained little changed, as well. At the first and final testing periods, John's teacher rated John to be at mildly atypical levels of oppositional behavior. At the mid-assessment, John's teacher rated John to be functioning slightly below the mildly atypical level for oppositional behavior.

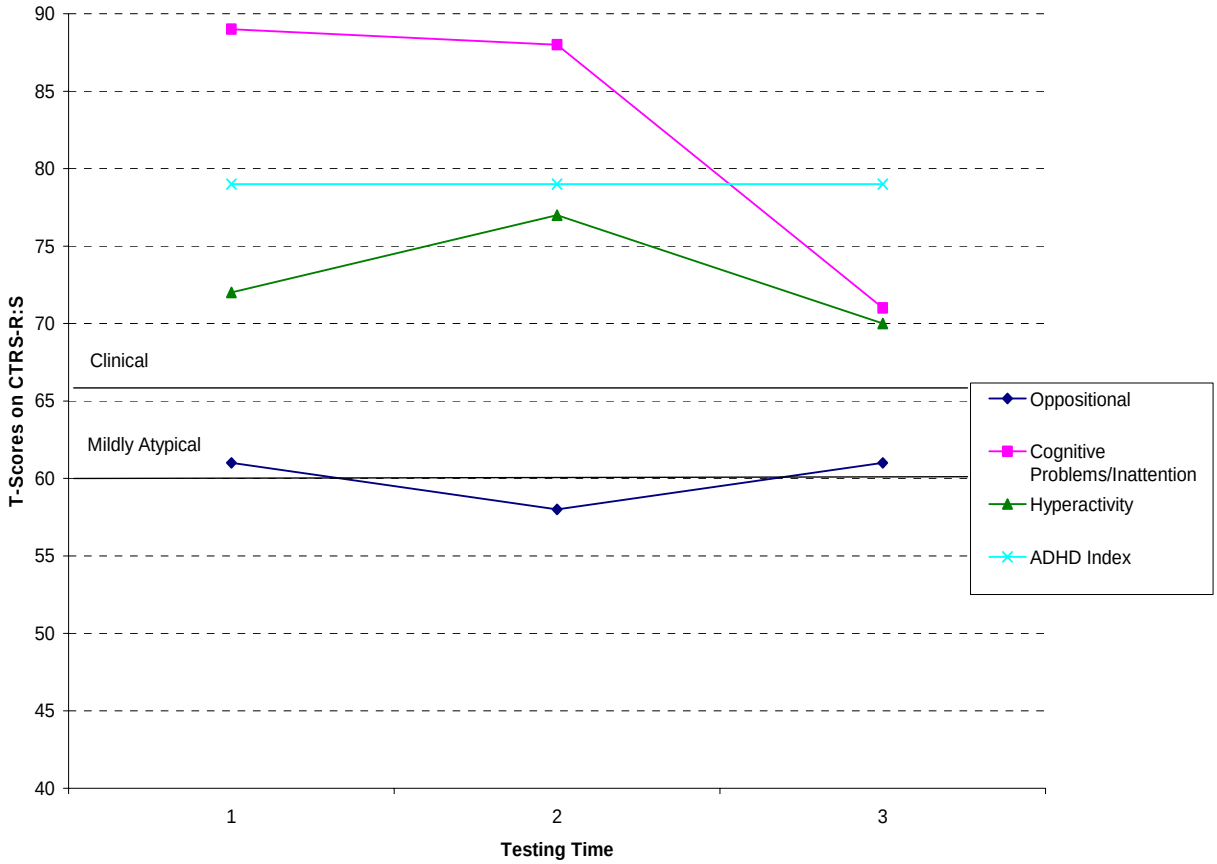

Figure 13. Ratings of John's teacher on CTRS-R:S. (Increase indicates worsening of behaviors.)

Participant 2: Jorge

Background

Jorge was a six-year-old Brazilian-American first grade student identified as having inattentive behaviors and immature behaviors- -such as thumb-sucking and hair twirling- -by his classroom teacher. Jorge qualified for this study based on his mildly atypical score on the ADHD Index of the CTRS-R:S and the borderline score on the ADHD Problems subscale of the TRF. Although not used to determine qualification for this study, the teacher also completed the ITS, which did not indicate significant scores on the ADHD domain, but did indicate a borderline score on the Loss of Satisfaction

from Teaching subscale. This score indicated that Jorge's teacher may not enjoy interacting or teaching Jorge.

Prior to beginning the study, I also met with Jorge's primary caregiver, his father. Jorge's father shared that Jorge lived with both of his biological parents and an older brother (9-years). Jorge's father indicated that all family members were born in Brazil, but moved to the United States two years ago. Jorge's father reported that Jorge was able to speak both English and Portuguese; speaking primarily Portuguese at home and English at school. At the beginning of the study, Jorge's father indicated no concerns with Jorge's behaviors: instead, he believed the teacher had unreasonable expectations for Jorge based on his age. Jorge's father reported that because of his young age, Jorge was appropriate in his ability to pay attention in the classroom. Jorge's father additionally reported his belief that Jorge was bored in the classroom because of the teacher's primary use of worksheets and few interactive activities to encourage learning. Jorge's father speculated that Jorge was indifferent about completing his assignments at school, which was different than his older brother. Although not concerned about Jorge's ADHD behaviors at school, Jorge's father was willing to have Jorge participate in this study.

Jorge's father had a difficult time completing the three assessments required of this study due to his busy schedule with work, so he instead only completed the CPRS-R:S at each testing period. Another note; I needed to provide additional encouragement and time in order for Jorge's father to complete the assessment. Although I speculated that language barriers may be part of the difficulty, upon observation of Jorge's father completing the assessments, comprehension of the assessment questions did not seem

to be difficult for him. The results of this first assessment indicated atypical or clinical scores in the four areas of the CPRS-R:S. More specifics about this first assessment will be discussed in a later section.

Visual Analysis of Jorge's DOF Scores

Jorge was observed using the DOF during three weeks of no-intervention baseline, seven weeks of twice-weekly reading mentoring, seven weeks of twice-weekly CCPT, and three weeks of a no-intervention follow-up (see Table 4). As mentioned earlier, Jorge was blindly assigned to reading mentoring unbeknownst to the observer. Thus, Jorge was intended to participate in reading mentoring throughout the length of the study for purposes of preventing biased observations. However, after many weeks of participating in the reading mentoring, Jorge's teacher was discouraged about Jorge's continued inattentive behaviors in the classroom. Jorge's teacher spoke with the school's counselor about finding Jorge an alternative intervention to reduce the ADHD behaviors that were interfering with his learning. The school counselor spoke with the doctoral research assistant that had assigned Jorge to the reading mentoring group, and the doctoral assistant switched him to the CCPT group. At this point, after week seven in reading mentoring, mid-assessments were completed and CCPT began with the same play therapist that was seeing the other students in the school for the same research study.

Figure 14 provides a graphical representation of the observed scores for Jorge's on-task behavior across all phases of the study. From the graph it is evident that the level (mean) of each phase did not increase from baseline to the second phase. The level did increase in Phases 3 and 4, however. In Phase 1, the level was 6.17; in Phase

2, the level was 6.14; in Phase 3, the level was 6.93; and in Phase 4, the level was 7.67. Thus, there was no change from baseline to reading, but there was a level increase during the play therapy and follow-up phases. When examining the trend line of all of the phases in Figure 14, a moderate upward trend is indicated. To quantify this trend line, the least squares regression was utilized. Using Cohen's (1988) guidelines, the trend line (R^2=.16, r=.40) indicated a medium effect size. In other words, a moderate relationship exists between the treatment phases and time.

When analyzing the data across all four phases, Jorge's on-task behaviors indicated a moderate amount of variability. Due to variability in Jorge's behavior, I was unable to interpret in a clear manner the effectiveness of the interventions. Thus, an examination of each specific phase will be explored in the next section.

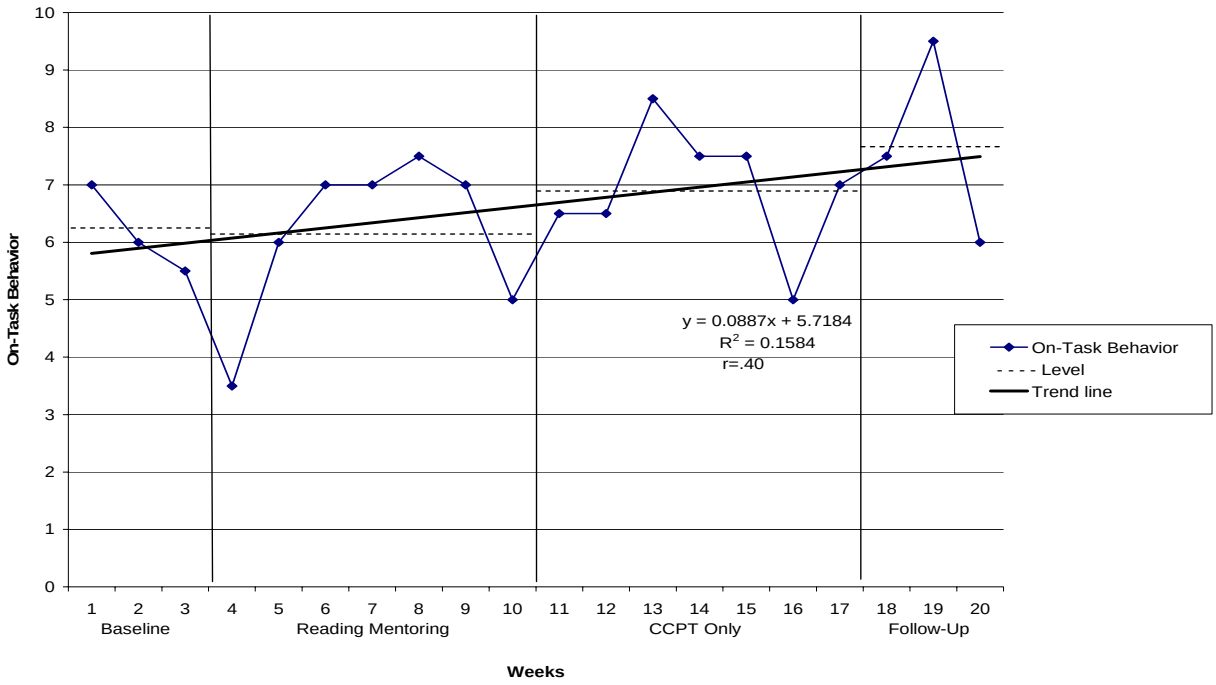

Figure 14. Jorge's on-task behavior as rated on the DOF during the baseline, reading mentoring, CCPT only, and follow-up phases. (Increase indicates improved on-task behaviors.)

Individual phase analysis. A closer examination of the observational data and the trend lines of each phase are graphically represented in Figures 15-18. In Phase 1, the baseline, no-intervention phase, the three data points indicated low variability, a high magnitude, downward trend, a mean of 6.17 (range, 5.5-7.0), and a trend line with an R^2 of .96 (r=.98) (see Figure 15). This trend line indicated that Jorge's on-task behavior was clearly decreasing over time. Because the baseline indicated a downward trend (behavior deteriorating) and had low variability, this baseline may be representative of Jorge's behavior. Thus, three points of data for his baseline appeared to be enough to provide an adequate control prior to introducing an intervention, which may indicate that any changes that occurred during the intervention phases can more clearly be attributed to the intervention.

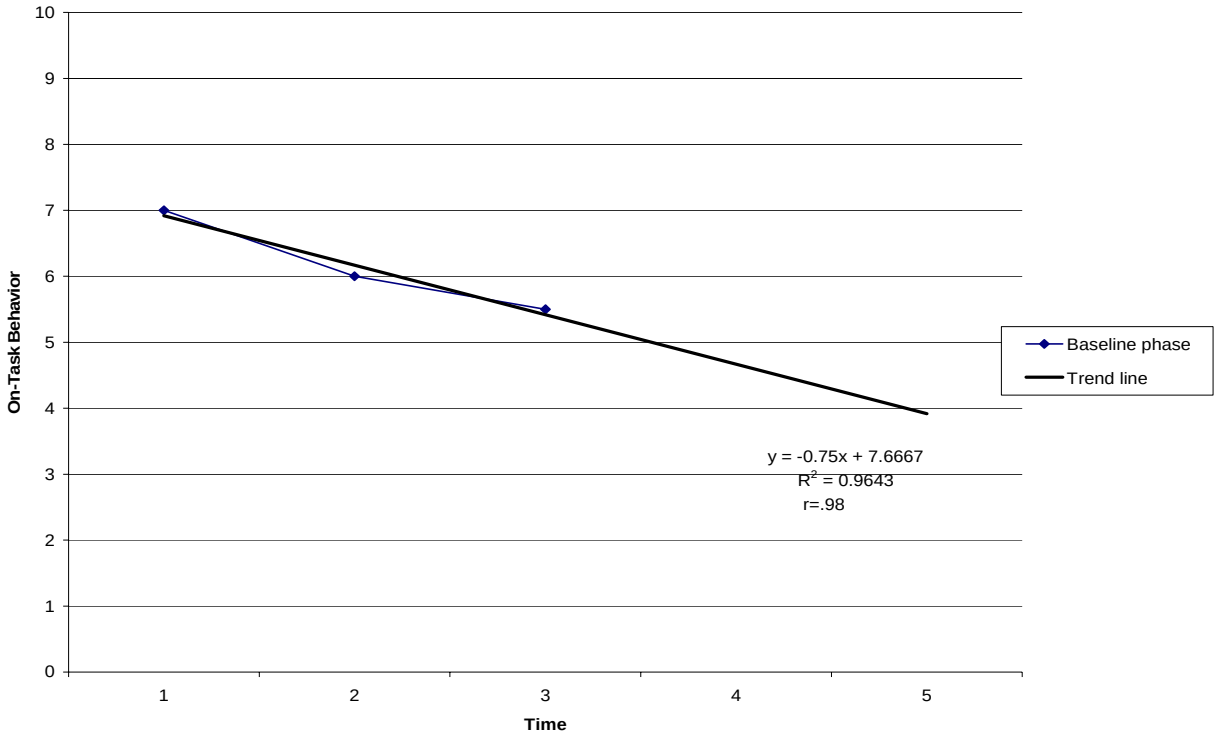

Figure 15. On-task behavior of Jorge's baseline phase. (Increase indicates improved on-task behaviors.)

In Phase 2, the reading mentoring phase, the data revealed moderate variability, a mean of 6.14 (range, 3.5-7.5), and a moderate upward trend with a trend line of R^2=.14 (r=.38) (see Figure 16). This trend line indicated a medium effect size, indicating a moderate relationship between the reading mentoring intervention over time and Jorge's on-task behavior.

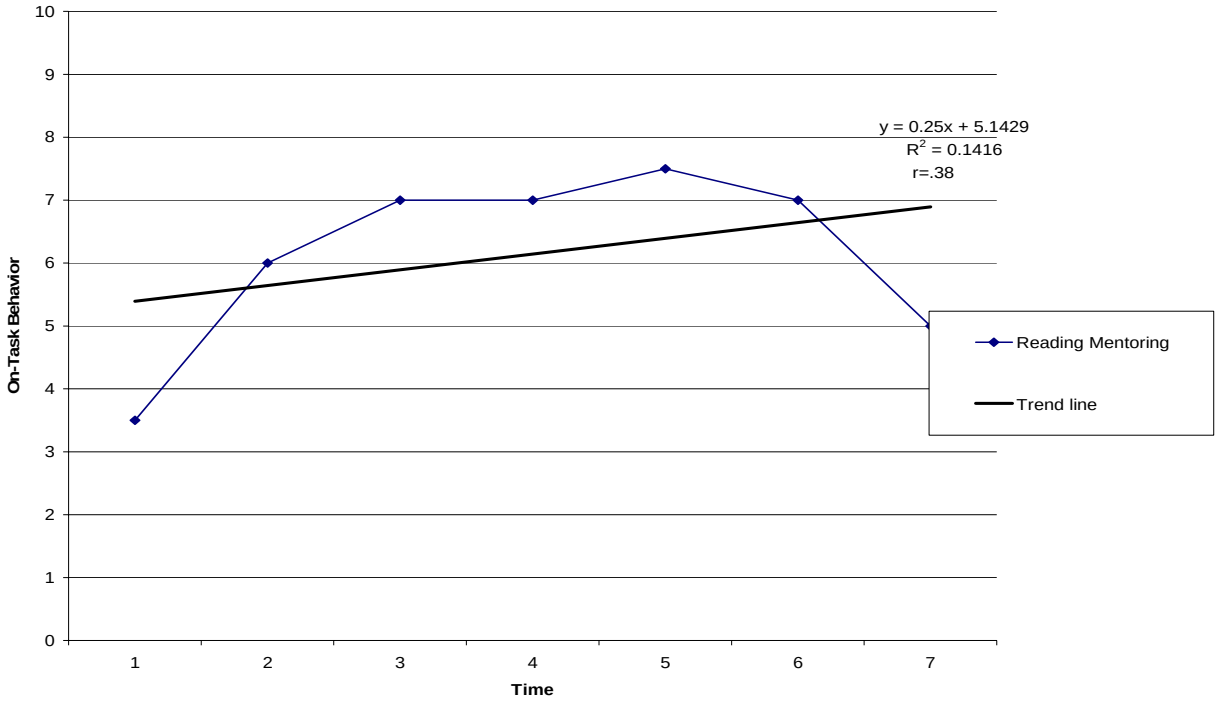

Figure 16. Jorge's on-task behavior from DOF for Phase 2: reading mentoring. (Increase indicates improved on-task behaviors.)

In Phase 3, Jorge participated in CCPT for 14 sessions. Figure 17 displays the data for this phase, which revealed moderate variability, a mean of 6.93 (range, 5-8.5), and a low magnitude trend with a generally flat slope (R^2=.03, r=.18). Cohen's guidelines indicated this slope had a small effect, indicating the relationship between the CCPT intervention and Jorge's on-task behavior was minimal. In a follow-up interview with Jorge's father, he reported that Week 16 was the week following spring break,

which could explain his change in on-task behavior. Jorge's father was uncertain about the change in behavior observed on Week 20.

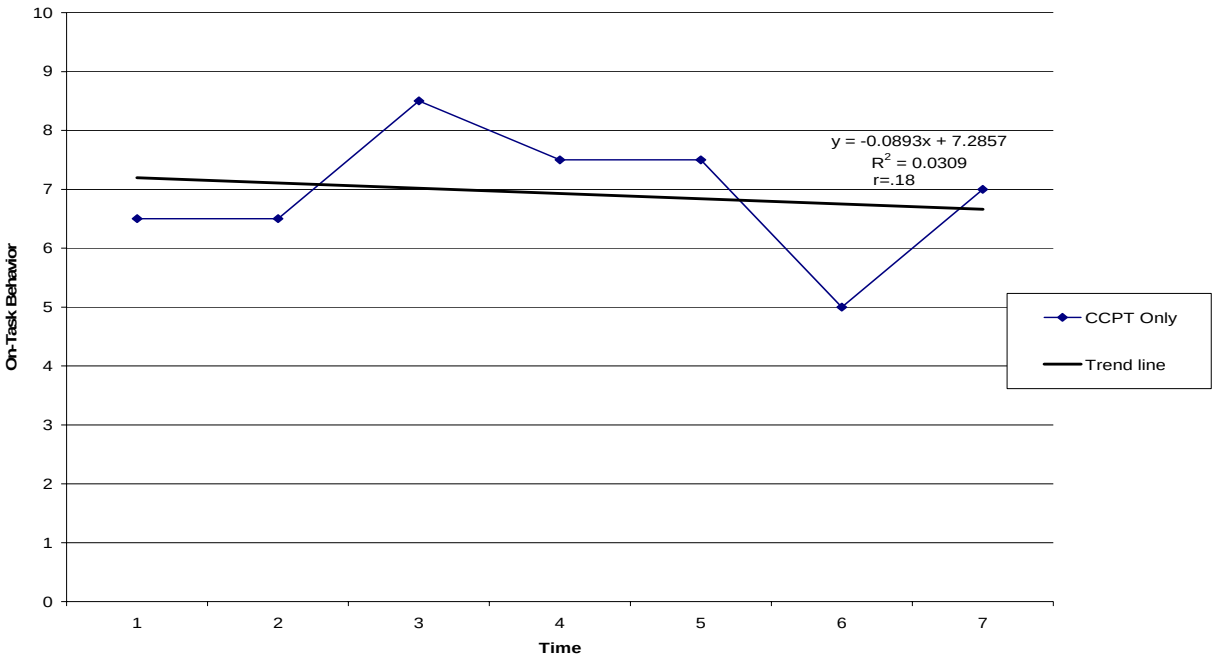

Figure 17. Jorge's on-task behavior on the DOF for the CCPT only phase. (Increase indicates improved on-task behaviors.)

In the final phase, the follow-up phase, Jorge did not participate in any intervention while three weeks of observation took place. This phase is represented in Figure 18. Jorge's observed on-task behavior for this phase demonstrated moderate variability, a mean of 7.67 (range, 6.0-9.5), and a moderate downward trend. For this phase, Jorge's trend line was calculated with an R^2 of .18 (r=.43), indicating a moderate relationship between no intervention and Jorge's on-task behavior.

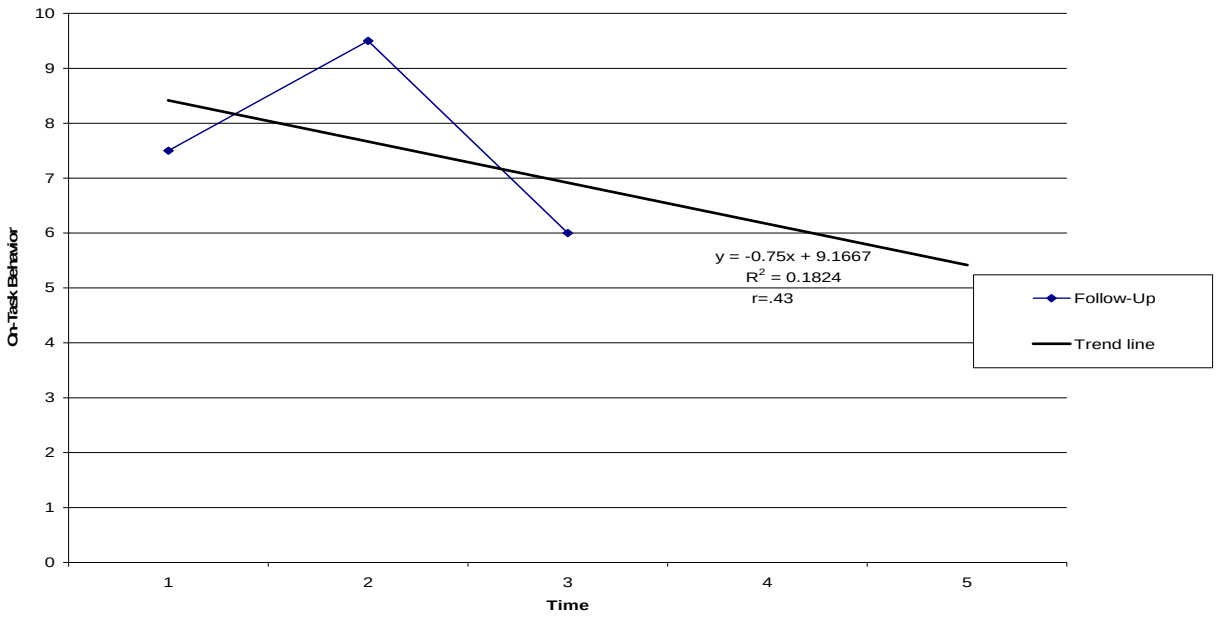

Figure 18. Jorge's follow-up on-task behavior. (Increase indicates improved on-task behaviors.)

Visual Analysis of Parent Data

Conners' Parent Rating Scale-Revised: Short Form. Jorge's father rated Jorge on the CPRS-R:S (see Figure 19). The results indicated that Jorge's father rated Jorge's hyperactive and cognitive problems/inattention to be in the clinical range at testing period one. At the mid-assessment, Jorge's father rated Jorge's cognitive problems/inattentive behaviors still within the clinical range. However, after the third phase, the CCPT intervention phase, Jorge's father no longer had significant levels of concern regarding Jorge's cognitive problems/inattentive behaviors. Jorge's hyperactive behaviors were a concern only at testing period one, after which Jorge's father rated Jorge in the normal range of behavior at the mid and final testing periods.

Jorge's father rated Jorge in the mildly atypical range for oppositional behaviors at testing period one, but in the normal range at the mid and final assessment. For the ADHD Index, Jorge's father rated Jorge within the mildly atypical range at the pre- and

mid-assessment times. However, at the final assessment, after the CCPT intervention phase, Jorge's father rated Jorge in the normal range for the ADHD Index score. All of these scores indicated a decrease over time.

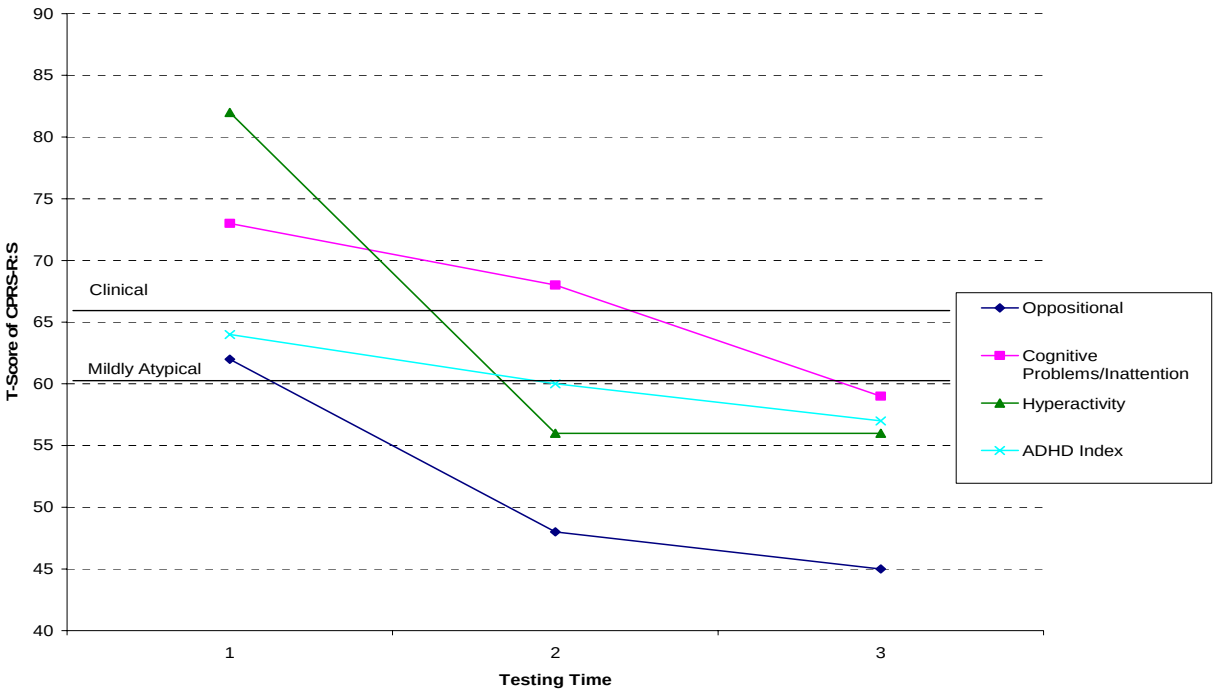

Figure 19. Ratings of Jorge's father on CPRS-R:S. (Increase indicates worsening of behaviors.)

Visual Analysis of Teacher Data

Teacher Report Form. Jorge's teacher completed the TRF at all three testing periods. The teacher's Internalizing, Externalizing, and Total Problems scores at each testing period are represented in Figure 20. At all testing times, Jorge's teacher reported Jorge's internalizing behaviors to be in the normal range. For externalizing problems, his teacher rated Jorge in the clinical range on the pre-test, in the normal range on the mid-test, and in the borderline range on the final test. Similarly, on the total problems domain, Jorge's teacher reported a borderline level of concern at pre-test, no concern at mid-test, and a clinical level of concern at the post-test. The variability in the range of

scores between each testing period was not large, so although the change may have vacillated between normal and clinical, the score did not differ by much.

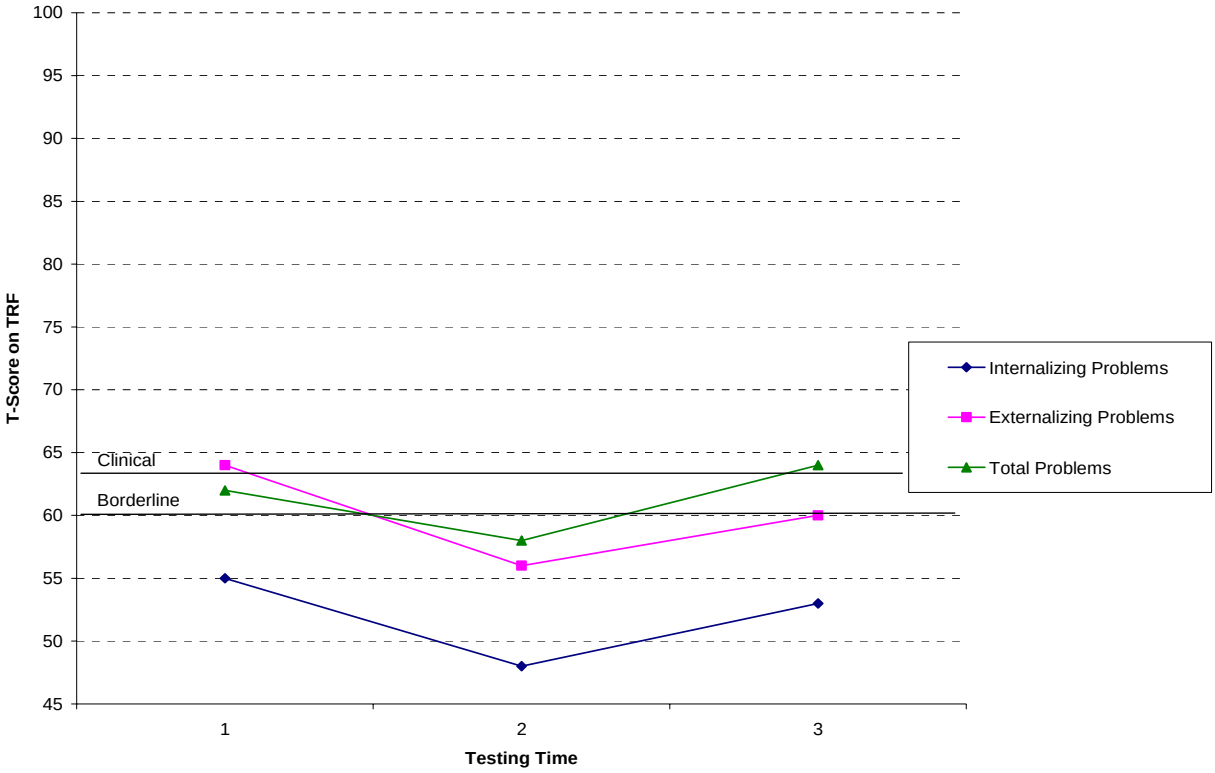

Figure 20. The ratings of Jorge's teacher on the TRF at each testing time. (Increase indicates worsening of behaviors.)

Figure 21 illustrates the ratings of Jorge's teacher regarding his ADHD behaviors on the TRF. As is evident in the graph, although a slight decrease was evident in the downward trend of the data, all of his scores remained in the borderline range at pre-, mid-, and post-testing.

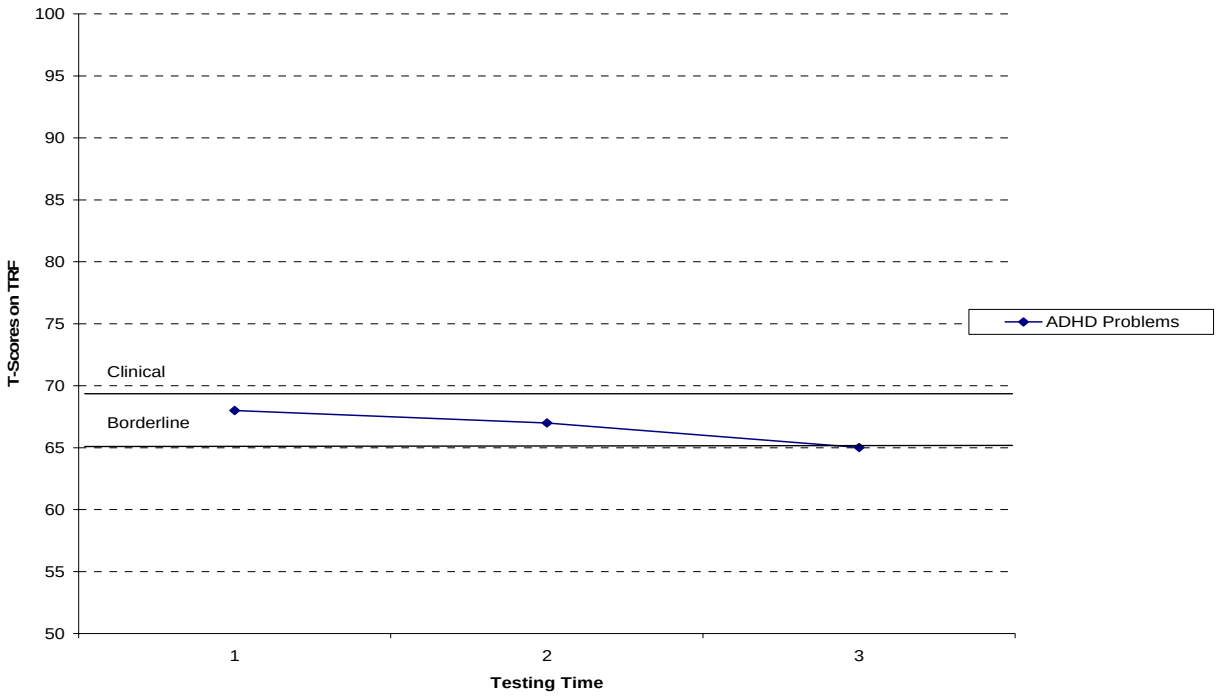

Figure 21. Teacher ratings of DSM-oriented ADHD Problems for Jorge. (Increase indicates worsening of behaviors.)

Index of Teaching Stress. At all rating periods for the four domains of the ITS, no scores fell within the clinical or elevated range, thus indicating no significant levels of stress within the student-teacher relationship with Jorge (see Figure 22). However, upon closer inspection of the subscales of the ITS, there were four scores that fell within the elevated or clinical range. At the pre-test period, as mentioned earlier, Jorge's teacher scored in the elevated level on the Loss of Satisfaction with Teaching subscale. This score indicated that interacting with or teaching Jorge may be stressful for Jorge's teacher. At mid-assessment, no subscale scores were rated in the elevated or clinical range. At post-assessment, one student subscale, Low Ability/Learning Disability, fell within the clinical range (92 percentile). This subscale indicated that Jorge's special learning needs created stress for Jorge's teacher. Additionally, the Disruption of the Teaching Process (DTP) and the Frustration Working with Parents (FWP) teacher

subscales were in the elevated range at post-test. The DTP subscale indicated that Jorge's teacher experienced stress due to the amount of time she must devote to Jorge's behavior. The elevated score on the FWP subscale indicated that Jorge's teacher experienced stress in interacting with Jorge's parents.

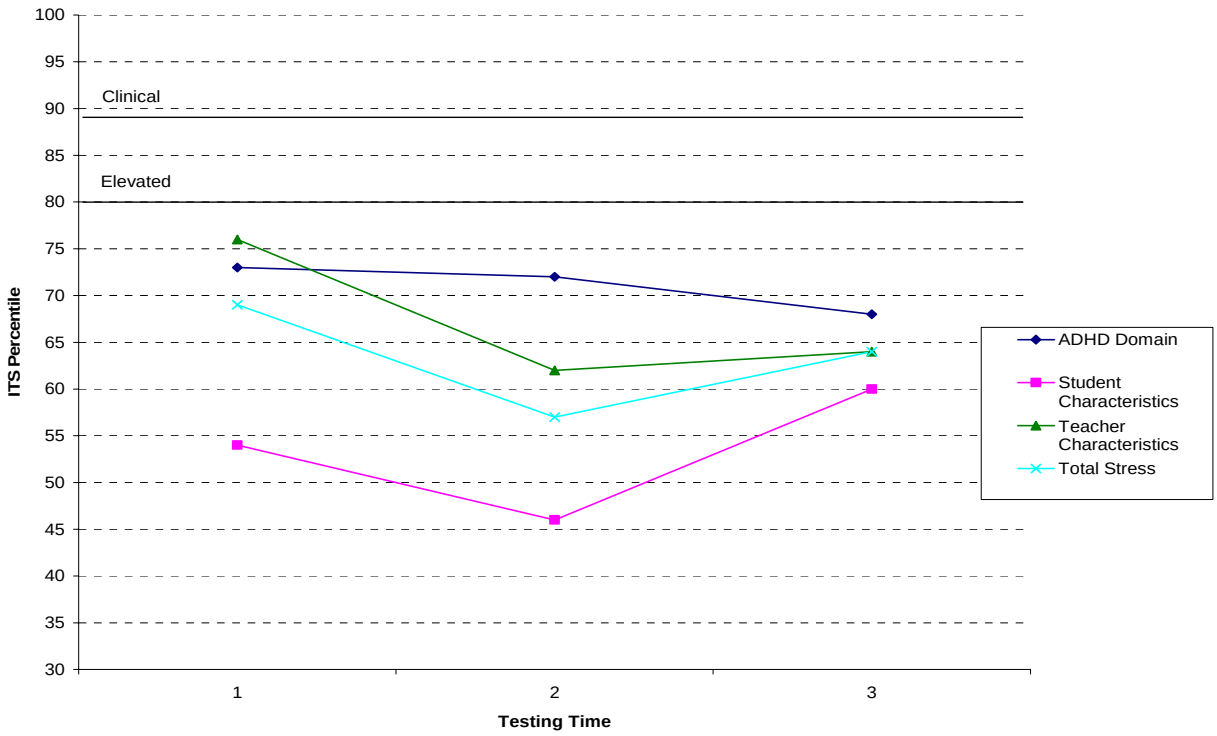

Figure 22. Ratings of Jorge's teacher on the ITS. (Increase indicates worsening of behaviors.)

Conners' Teacher Rating Scale-Revised: Short Form. At the pre-assessment period, Jorge's teacher rated Jorge at mildly atypical levels of hyperactivity and oppositional behavior on the CTRS-R:S. At mid- and post-assessment periods, however, these behaviors were rated by Jorge's teacher to fall within the normal range (see Figure 23). The cognitive problems/inattention subscale was rated by Jorge's teacher to fall within the normal range at pre- and mid-assessments, but to be in the mildly atypical range at post-assessment. The ADHD Index was rated in the mildly

atypical range at pre- and post-assessment, but in the normal range during the mid-assessment period.

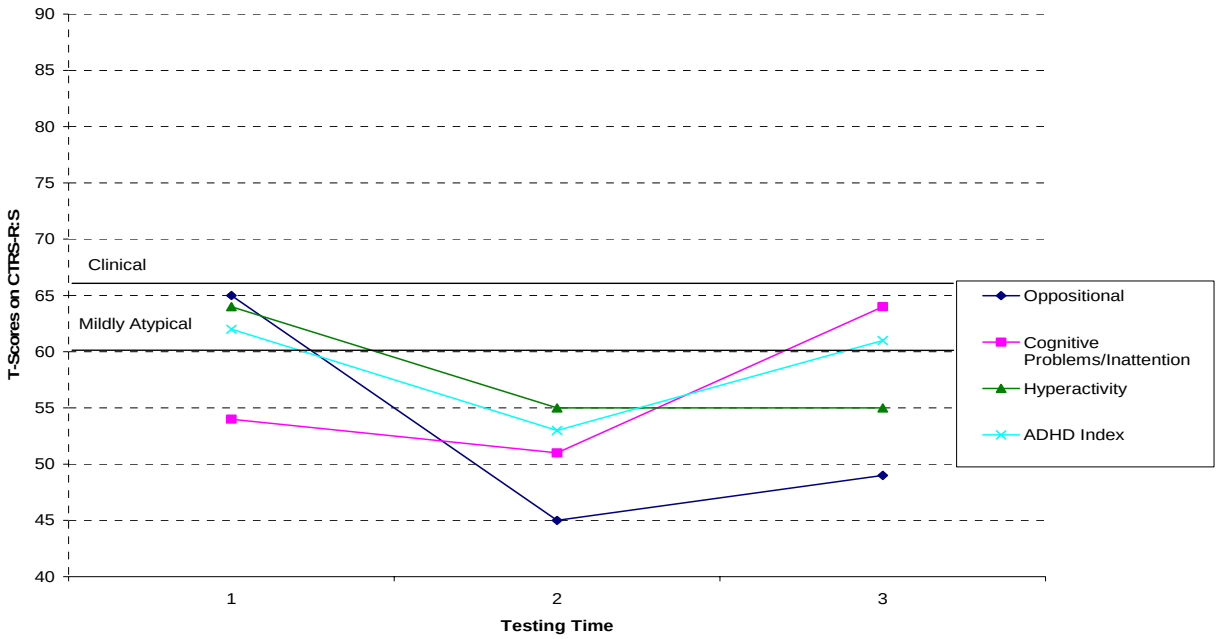

Figure 23. Ratings of Jorge's teacher on CTRS-R:S. (Increase indicates worsening of behaviors.)

Participant 3: Lee

Background

Lee was a six-year-old Caucasian first grade student identified by his teacher as disruptive in the classroom due to his shortened attention span and distractibility. Lee qualified for this study because of his clinical score on the ADHD Problems subscale of the TRF and mildly atypical score on the ADHD Index score of the CTRS-R:S. Although not used to determine qualification for this study, I asked Lee's teacher to complete the ITS, to better understand the teacher's stress in response to Lee. The responses of Lee's teacher on this pre-ITS indicated one clinical score and four elevated scores. Specifically, Lee's teacher rated the Loss of Satisfaction from Teaching (LSFT)

subscale at a clinically significant level. This score indicated that Lee's teacher experienced significant levels of stress when teaching and interacting with Lee. Additionally, Lee's teacher scored within the elevated range for the Sense of Competence/Need for Support (SCNS), Frustration Working with Parents (FWP), and the Teaching Characteristics domain. These elevated scores indicated that Lee's teacher experienced stress when interacting with Lee's parents and feels ineffective or unsupported in her work with him. One subscale within the student component of the ITS was in the elevated range: Aggressive/Conduct Disorder (AGCD). The AGCD subscale measures the amount of stress Lee's teacher experienced due to Lee's antisocial behavior.

Beyond gaining an understanding of Lee from his teacher's viewpoint, I also met with Lee's biological parents. At the time of this initial interview, both parents were living together and married. However, I was informed that they were in the process of getting a divorce, of which Lee was still unaware. Lee's parents planned to inform Lee of the divorce in a couple months when the divorce became official and at which time they planned to no longer live together. Regarding Lee's behavior, neither parent had specific concerns for home. However, they mentioned that the teacher seemed concerned about his ability to pay attention at school. Both parents believed that Lee was intelligent and creative. For this study, after this initial meeting regarding the study, I only communicated with Lee's father, who additionally was the only parent to complete the paperwork. On the pre-assessments that Lee's father submitted, no scores on any of the assessments (CBCL, PSI, CPRS-R:S) fell within the borderline or clinical ranges.

These results indicated that Lee's father had no significant concerns regarding Lee's behavior.

Visual Analysis of Lee's DOF Scores

For this study, Lee was blindly assigned to participate in CCPT; therefore, Lee participated in three weeks of baseline (no-intervention), six weeks of twice-weekly CCPT, six weeks of continued twice-weekly CCPT and once-weekly PCTC, and three weeks of a no-intervention follow-up (see Table 5). Figure 24 displays the observed on-task behaviors of Lee across all four phases. Upon examination of the graph, it is apparent that the level of each phase differs from the previous phase. In Phase 1, the level was 3.83; in Phase 2, the level was 6.0; in Phase 3, the level was 7.5; and in the final phase, the level was 7.0. The increase in the level from phases one to two and two to three indicated an increase in Lee's on-task behavior in the classroom.

Beyond examining the level change between phases, Kennedy (2005) recommended describing the trend of the data. The trend of Lee's on-task behaviors can be described qualitatively as having moderate variability and a moderate upward trend. The least squares regression line for Lee's observed on-task behavior was R^2 =.37 (r=.60), which indicated a large relationship between the treatment phases and time (Cohen, 1988).

Individual phase analysis. Each phase of Lee's intervention is described here in more detail. In the first three weeks, three observations/week of Lee's on-task behavior in the classroom was documented using the DOF. This baseline phase indicated Lee's on-task behavior was decreasing over time without an intervention (see Figure 25). The data of this phase indicated low variability, with a high magnitude, downward trend, and

a level of 3.83 (range, 3.0-5.0). The least squares regression line for this phase was R^2=.92 (*r*=.96), indicating a strong relationship between decreasing on-task behavior over time. The data for this phase indicated a clear trend, thus, providing a basis for comparison when intervention began.

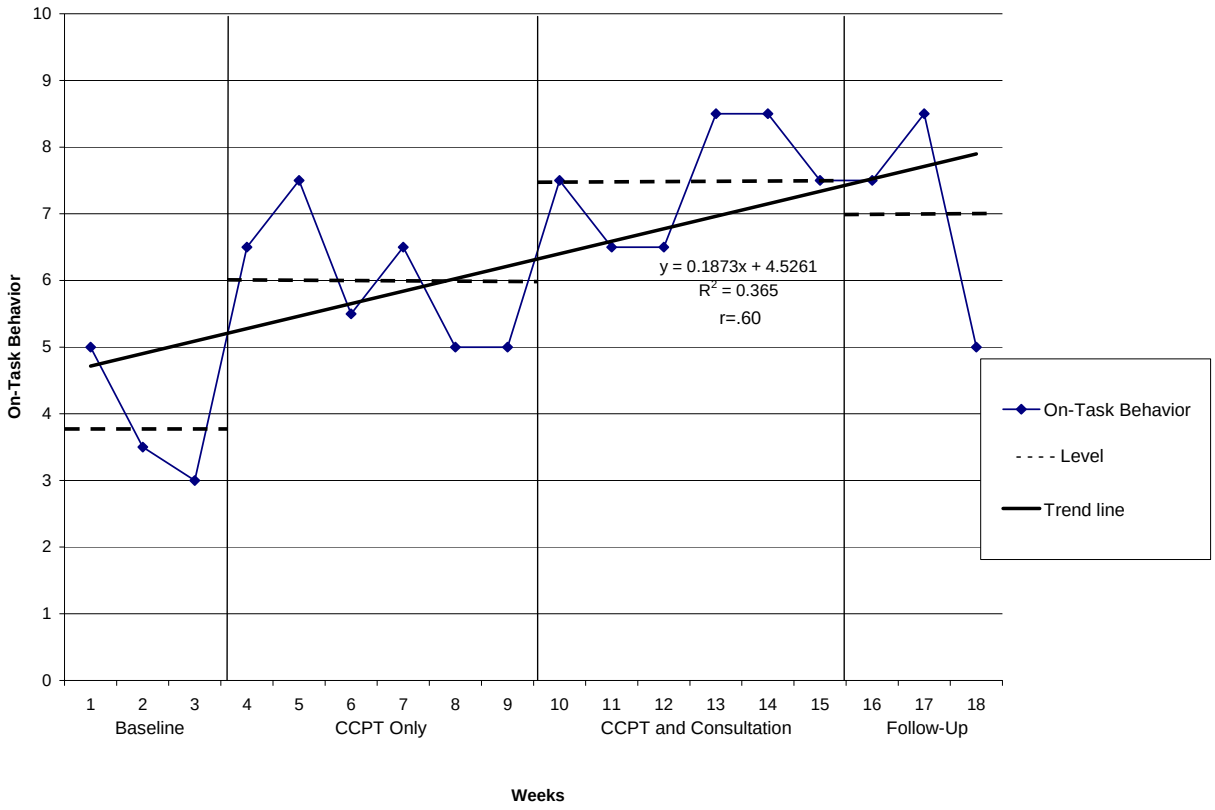

Figure 24. Lee's on-task behavior on DOF. (Increase indicates improved on-task behaviors.)

When examining the data of this second phase only, the data revealed moderate variability, a mean of 6.0 (range 5.0-7.5), and a high magnitude, downward trend with an R^2 of .56 (*r*=.75) (see Figure 26). This phase alone indicated that over the course of the six weeks (12 sessions), an immediate change was observed in on-task behavior when compared to the baseline phase. However, a gradual downward trend (decreasing on-task behavior) was observed over time.

In the third phase, continued CCPT and 6 weeks of PCTC, low variability, a mean of 7.5 (range 6.5-8.5), and a moderate upward trend were evident. The least squares regression line of R^2 =.23 (r=.47) indicated a large effect size, meaning the relationship between the interventions and time was significant. Figure 27 displays the results of this phase. At the follow-up interview, Lee's father reported that during Weeks 11 and 12 of this phase that his divorce was finalized and he moved out of the home into his own place during this time. Lee's father was uncertain about the change in on-task behavior at Week 18.

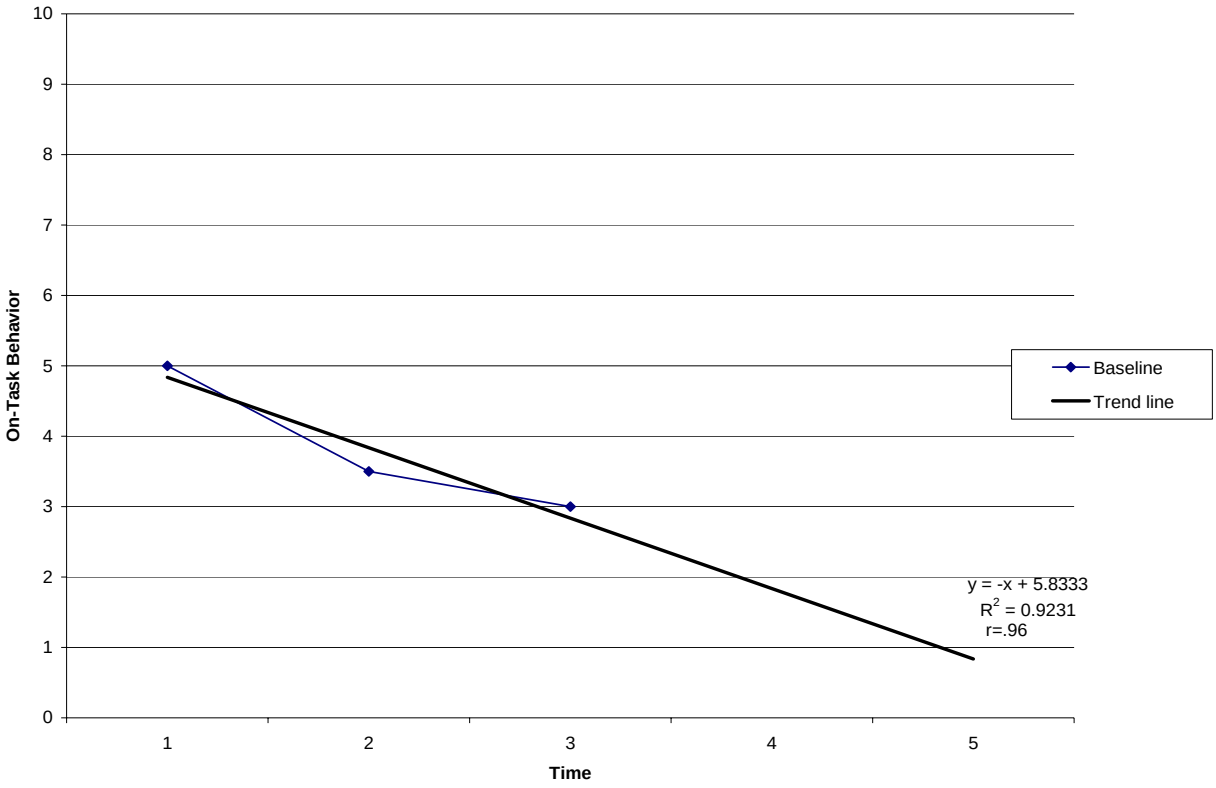

Figure 25. Lee's baseline on-task behavior. (Increase indicates improved on-task behaviors.)

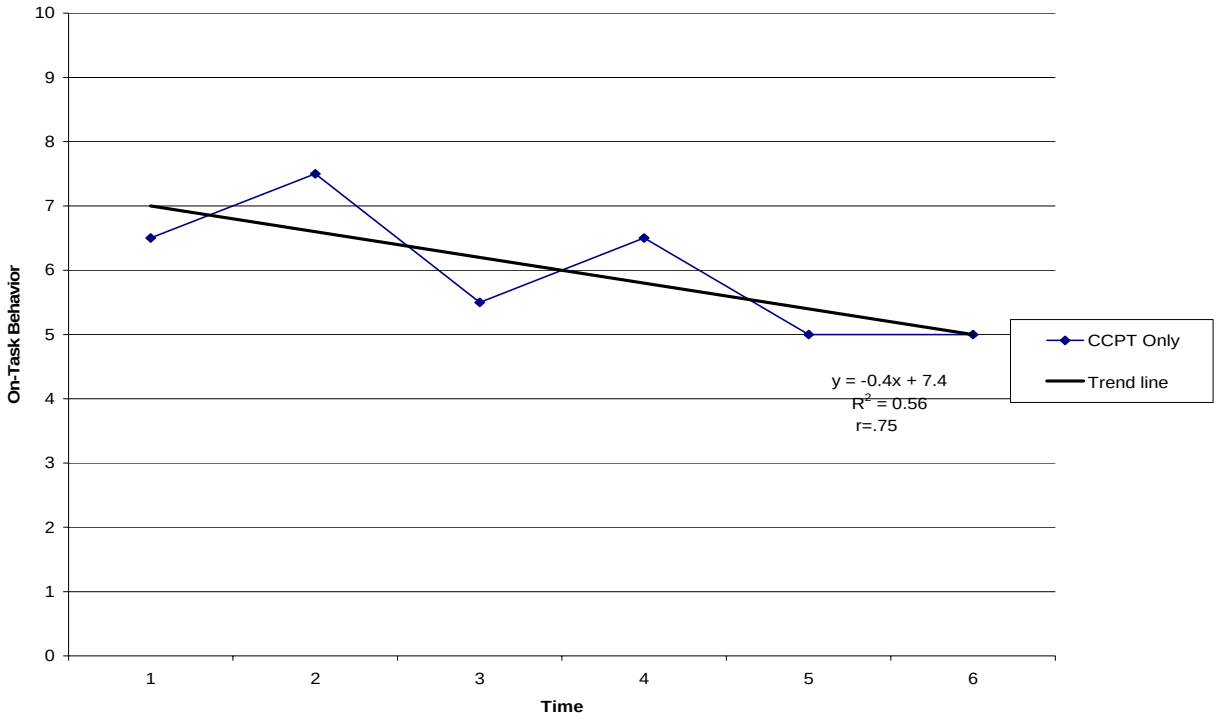

Figure 26. DOF data trend for Lee's CCPT phase. (Increase indicates improved on-task behaviors.)

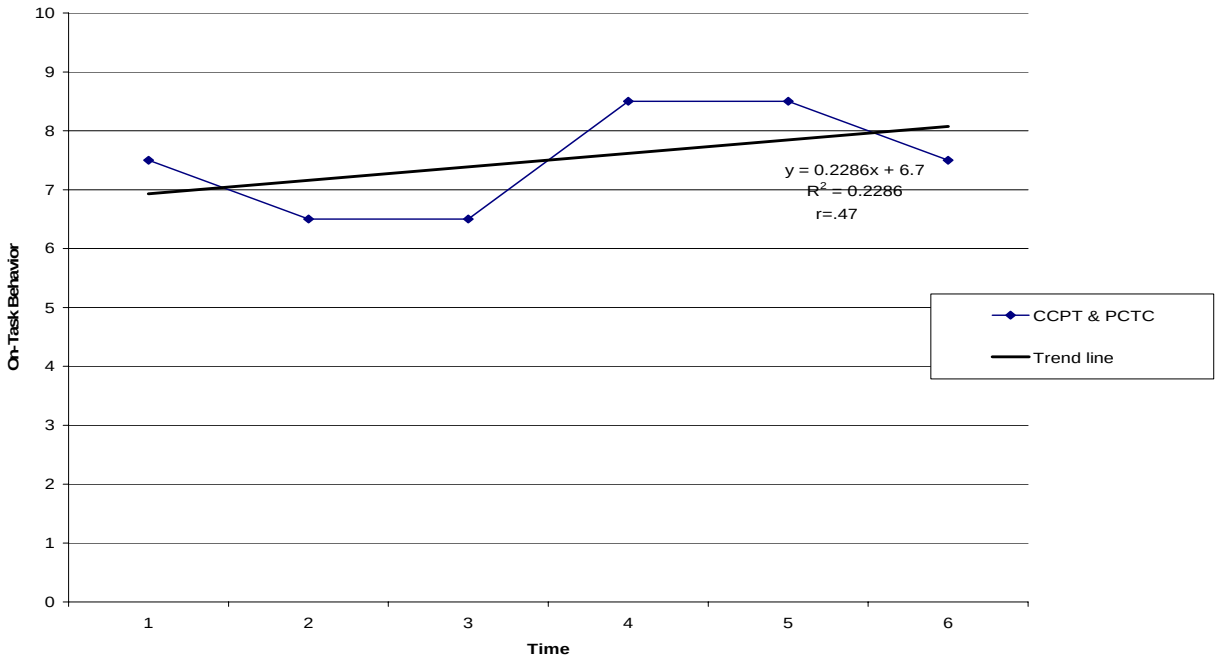

Figure 27. Lee's DOF data from CCPT and PCTC phase. (Increase indicates improved on-task behaviors.)

In the final phase, the follow-up phase, Lee had completed the 12 weeks of intervention. Lee's on-task behavior for this phase indicated moderate variability, a mean of 7.0 (range 5.0-8.5), and a moderate magnitude downward trend (see Figure 28). For this phase alone, Lee's trend line was calculated at R^2 =.48 (r=.69).

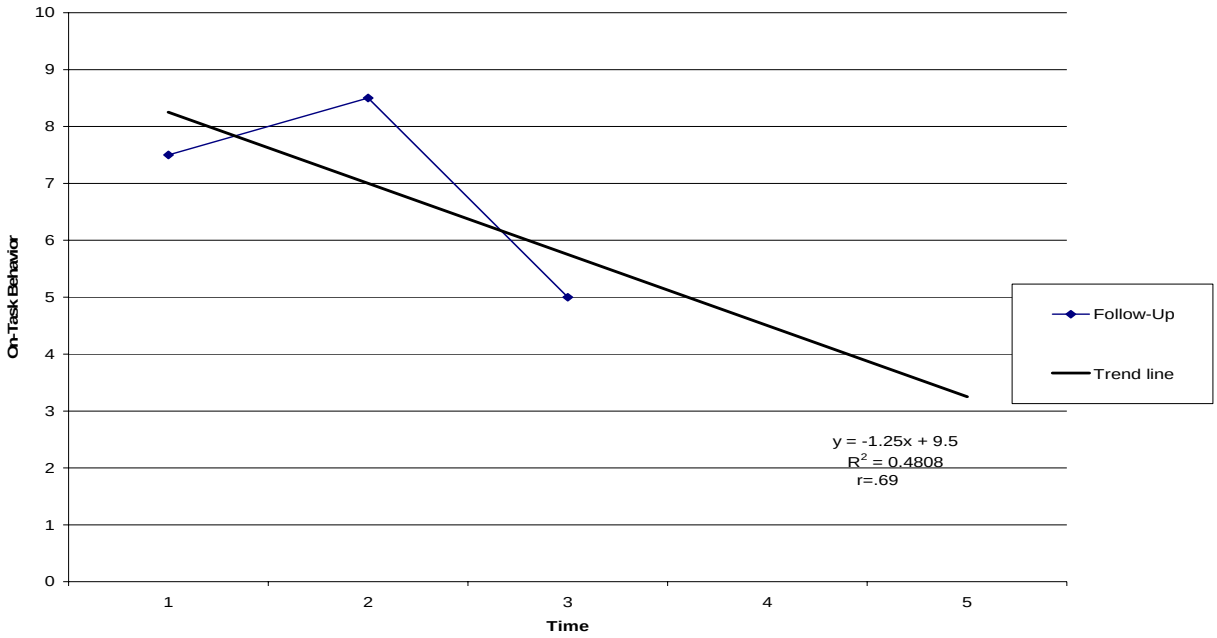

Figure 28. Lee's follow-up on-task behavior. (Increase indicates improved on-task behaviors.)

Visual Analysis of Parent Data

Child Behavior Checklist. Although the primary source of data for Lee was the DOF observational data, additional information was gained from Lee's father on the CBCL, PSI, and CPRS-R:S. Figure 29 displays the Internalizing, Externalizing, and Total Problem scores of Lee's father on the CBCL. As is evident on this graph, at no time did Lee's father rate Lee with clinical or borderline scores in these areas. These scores indicate that Lee's father perceived Lee to function at a normal level for his age.

Additionally, Figure 30 displays the scores of Lee's father on the ADHD Problems subscale of the CBCL. As is evident here, Lee's father did not rate Lee's behaviors to fall within the borderline or clinical range, thus indicating no concern with Lee's behaviors that are indicative of ADHD.

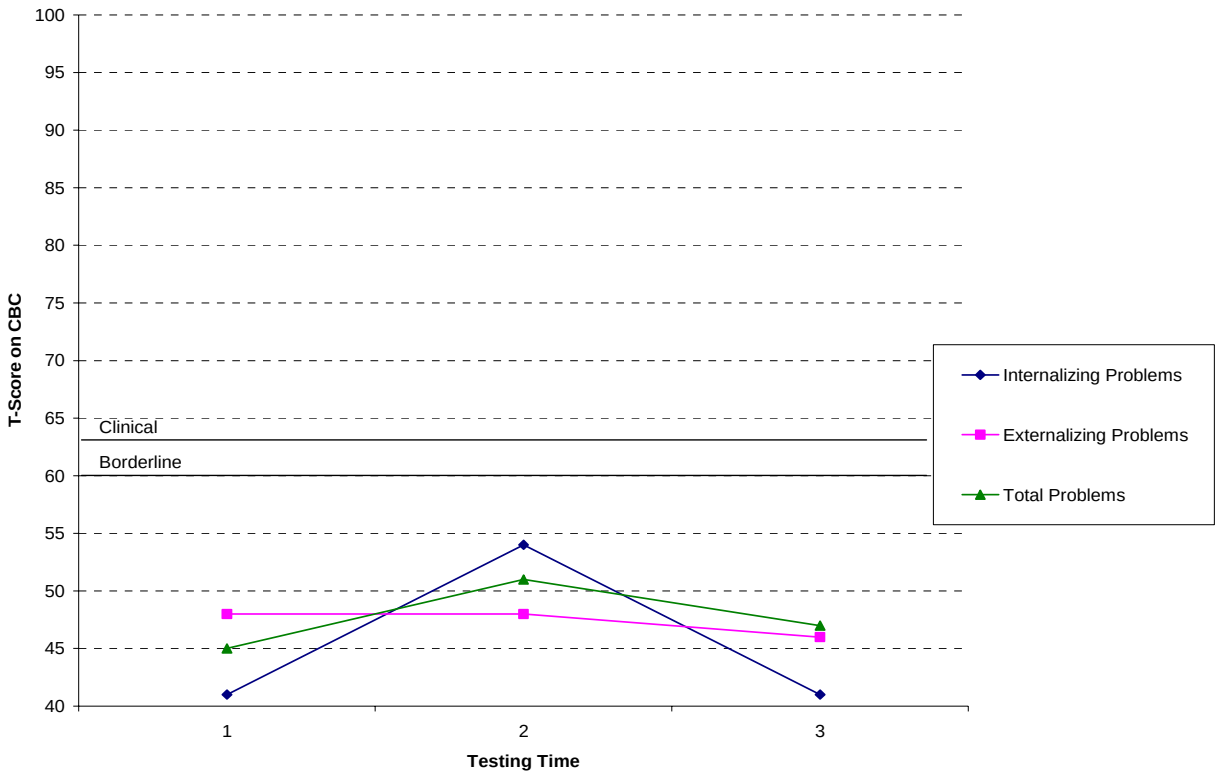

Figure 29. Ratings of Lee's father on CBCL at pre-, mid-, and post-assessment. (Increase indicates worsening of behaviors.)

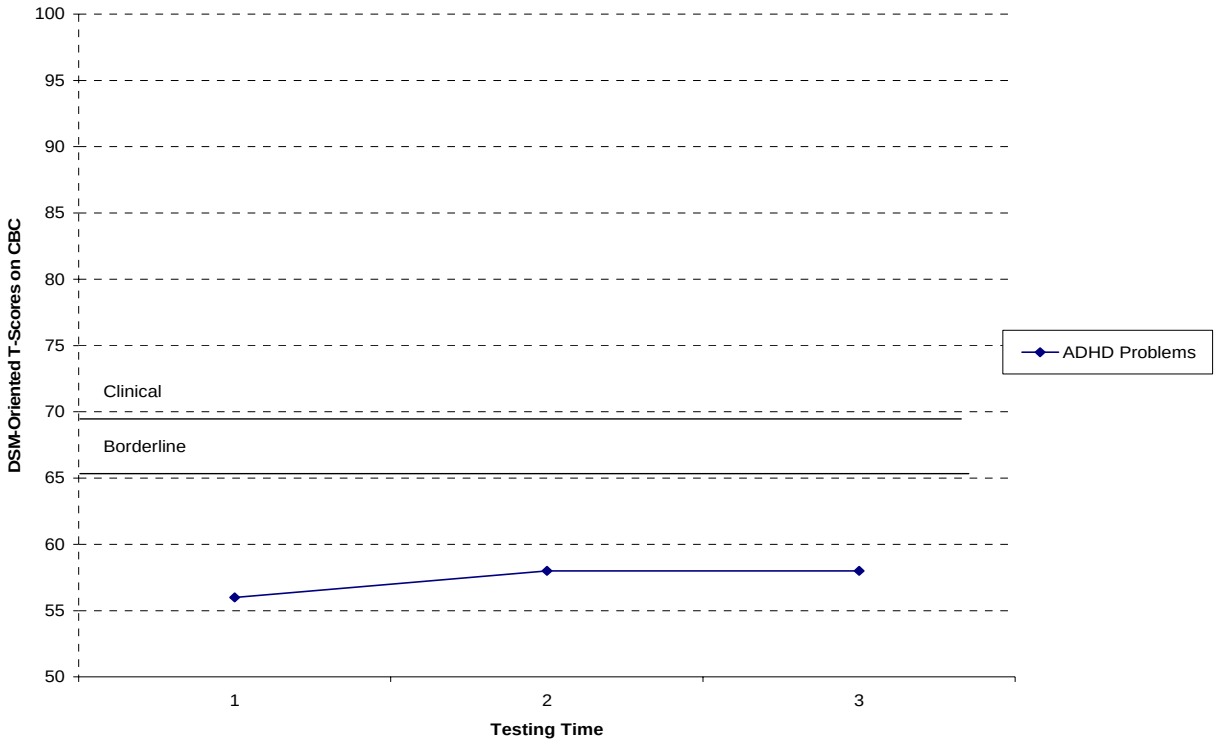

Figure 30. Ratings of Lee's father on CBCL at pre-, mid-, and post-assessment on the ADHD Problems subscale. (Increase indicates worsening of behaviors.)

Parenting Stress Index. At each testing period, Lee's father completed the PSI. Figure 31 graphically represents the three domain scores, and two additional subscale scores due to their significant scores. Lee's father scored within the normal range at all testing periods in all three domain scores, indicating that Lee's father was not stressed by Lee's behaviors and that a positive relationship exists with him. The Life Stress subscale was selected for placement in Figure 31 due to clinical scores on this subscale at testing periods two and three. This high score indicated that Lee's father experienced stress outside of the parent-child relationship, such as a move to a new home or a job change that might be negatively impacting their relationship. Additionally, the Isolation subscale was included on this graph because of the clinical score at the mid-

assessment period. This subscale indicated that Lee's father experienced feelings of social isolation and a lack of emotional support.

Conners' Parent Rating Scale-Revised: Short Form. The results of the final assessment for which Lee's father completed, the CPRS-R:S, indicated no areas of significant concern for Lee's father. The results are displayed in Figure 32.

Visual Analysis of Teacher Data

Teacher Report Form. Lee's teacher completed three assessments (TRF*,* CTRS-R:S*,* and ITS) at all testing periods. The Internalizing, Externalizing, and Total Problems scores are represented in Figure 33. At the pre- and mid-testing periods, Lee's teacher rated Lee's internalizing behaviors to fall within the normal range. However, at the post-testing period, Lee's teacher rated Lee to be in the borderline range for internalizing problems. For externalizing problems, Lee's teacher identified clinically significant levels of concern at the pre-testing period. At mid-testing, Lee's behavior fell within the normal range, and at post-testing, Lee's behavior was rated to be in the borderline range. Lee's teacher rated Lee's total problems score in the clinical range at pre-test, in the normal range at mid-test, and in the clinical range at post-test.

Although the findings of the TRF in Figure 33 indicated no apparent change in Lee's behaviors over time, on the ADHD Problems subscale, Lee's teacher reported a decrease on the pre-testing from a clinical level to a normal level of functioning at mid- and post-testing (see Figure 34).

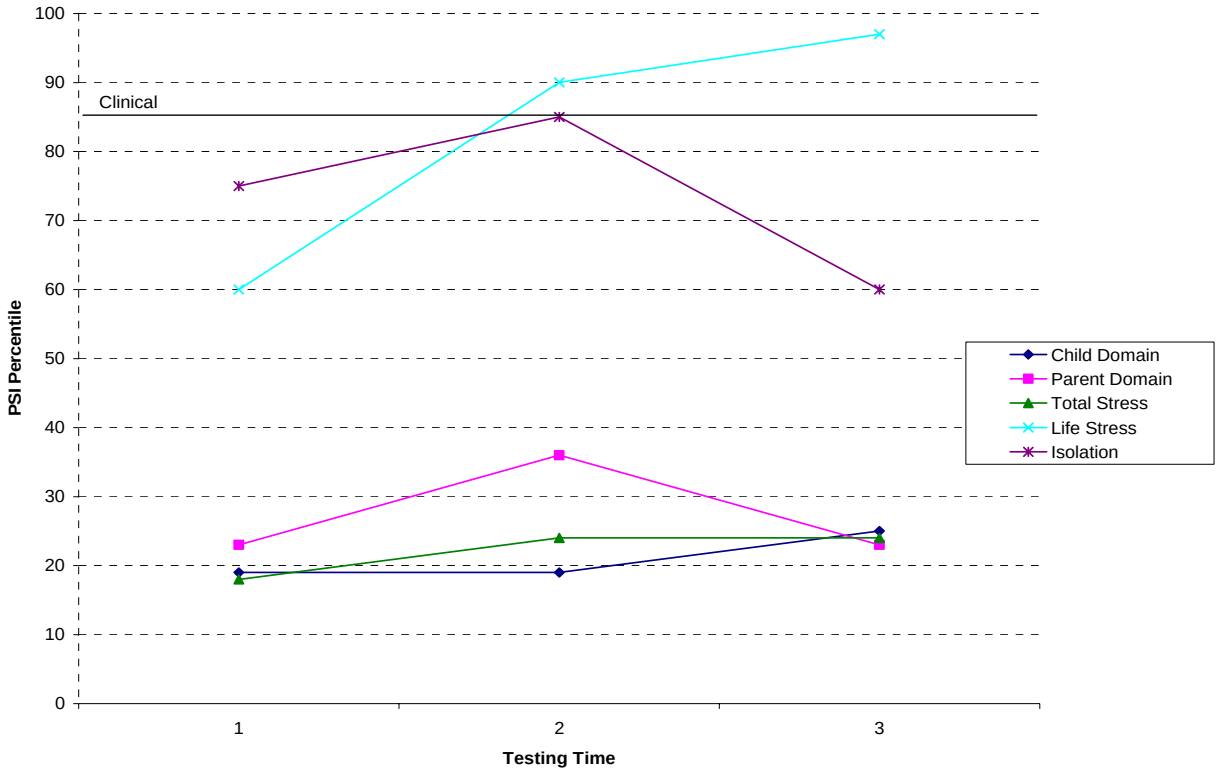

Figure 31. Ratings of Lee's father at all testing periods on the PSI. (Increase indicates worsening of behaviors.)

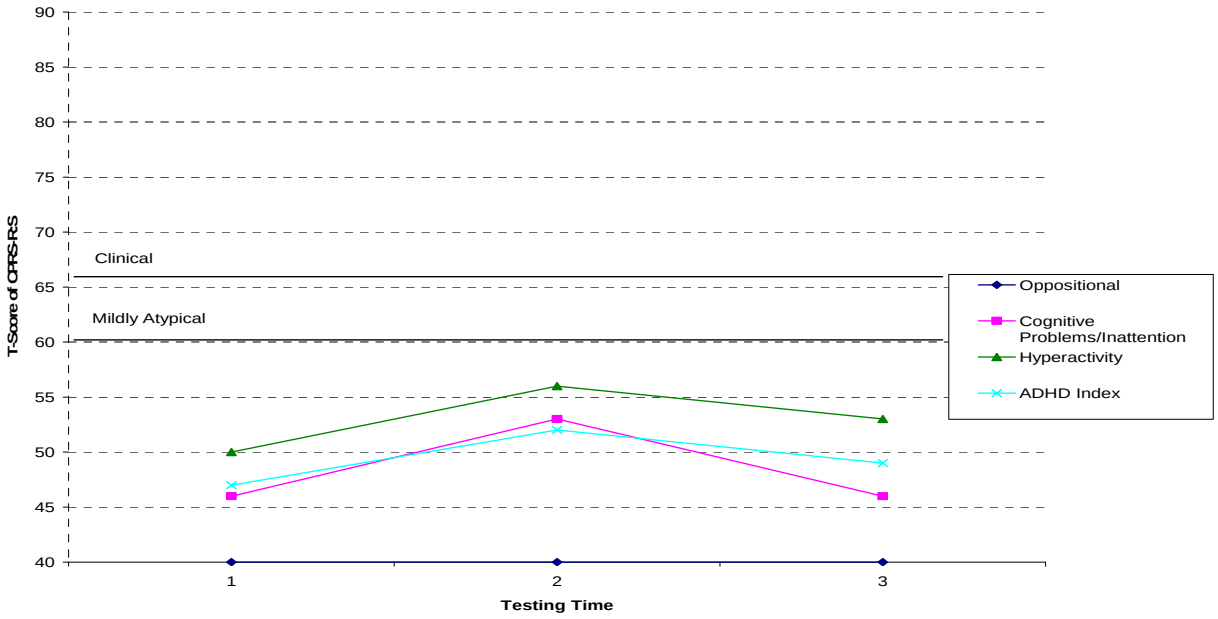

Figure 32. CPRS-R:S ratings for Lee's father. (Increase indicates worsening of behaviors.)

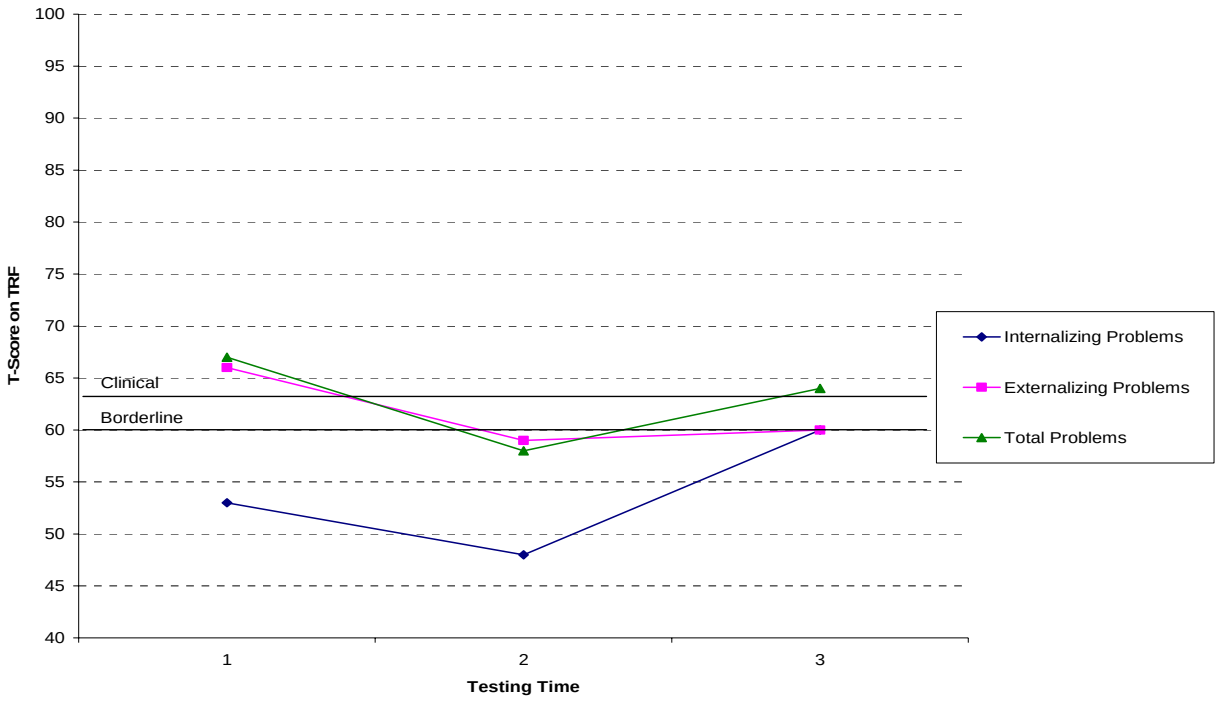

Figure 33. The ratings on the TRF of Lee's teacher. (Increase indicates worsening of behaviors.)

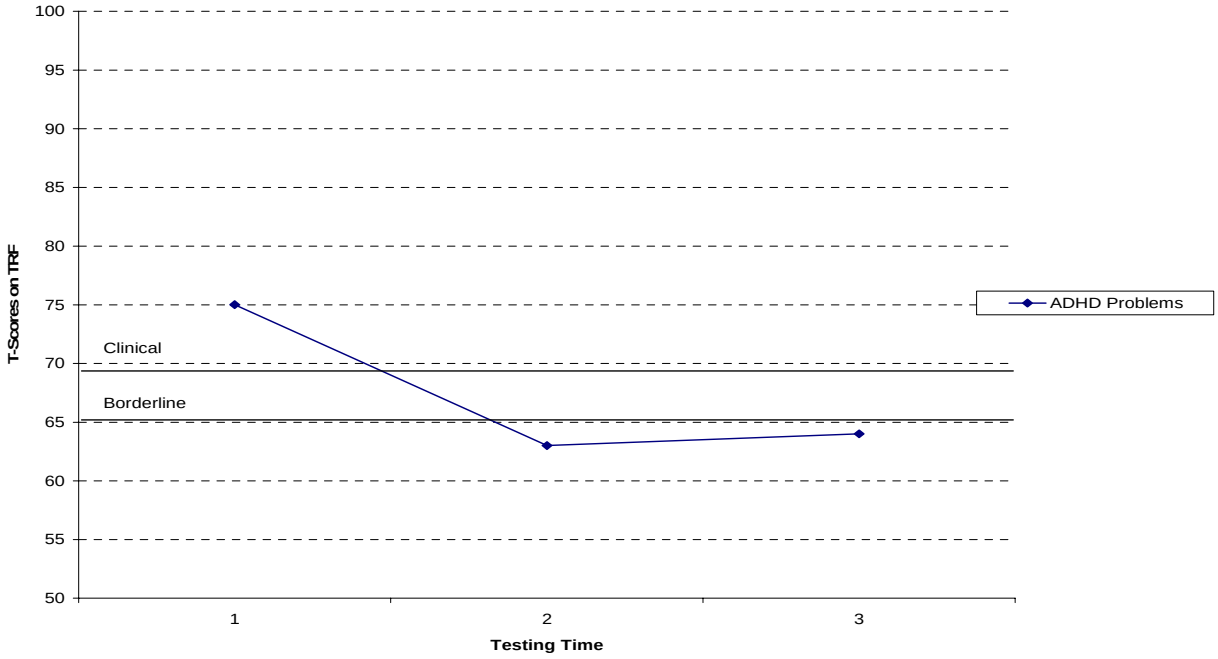

Figure 34. Ratings of Lee's teacher on the ADHD Problems subscale of the TRF. (Increase indicates worsening of behaviors.)

Index of Teaching Stress. Figure 35 displays the results of the four domain scores on the ITS for Lee's teacher. The results indicated that ADHD, Student Characteristics, and Total Stress domains were not significant areas of concern for Lee's teacher due to the scores falling within the normal range. However, Lee's teacher scored within the elevated range on the Teacher Characteristics domain at the pre-test period, which indicated that she experienced distress regarding the expectations she had for Lee. However, at testing times two and three, after Lee participated in CCPT and after she participated in PCTC, the Teacher Characteristics domain no longer was rated in the elevated range.

Because additional subscales beyond the four domain areas within the ITS were rated in the elevated or clinical range, an additional graph of these results was created. Figure 36 displays the scores from the subscales that are elevated or clinical. As is apparent from this graph, all scores appeared to decrease at the mid-testing period. At the pre-test period, Lee's teacher reported stress when dealing with Lee's antisocial behaviors. However, this stress was scored within the normal range at the mid- and post-testing periods. An additional student subscale, the Anxiety/Social Withdrawal (ANXW) subscale, changed from the pre-test to post-test period. The ANXW scale was rated by Lee's teacher as in the normal range for the pre- and mid-testing periods, but in the elevated range for the post-assessment. This change indicated that Lee's teacher experienced an increase in Lee's dependence on her, as well as an increase in anxiety.

Three of the teacher subscales were of particular significance on the ITS as Lee's teacher rated aspects within the elevated or clinical range. Specifically, the Sense of Competence/Need for Support (SCNS) subscale was rated in the elevated range by

Lee's teacher at the pre-test period, but was in the normal range at mid- and post-assessment. The pre-test score of the SCNS for Lee's teacher indicated that she experienced little support and felt ineffective as a teacher. The Loss of Satisfaction from Teaching (LSFT) subscale was rated at a clinical level at pre-test, in the normal range at mid-test, and in the elevated range at post-test. Elevations in this LSFT score indicated that Lee's teacher may not have enjoyed teaching and interacting with Lee. The Frustration Working with Parents (FWP) subscale was rated by Lee's teacher in the elevated level at pre-test, in the normal range at mid-test, and the clinical level at post-test. These FWP scores indicated that Lee's teacher experienced stress when interacting with Lee's parents.

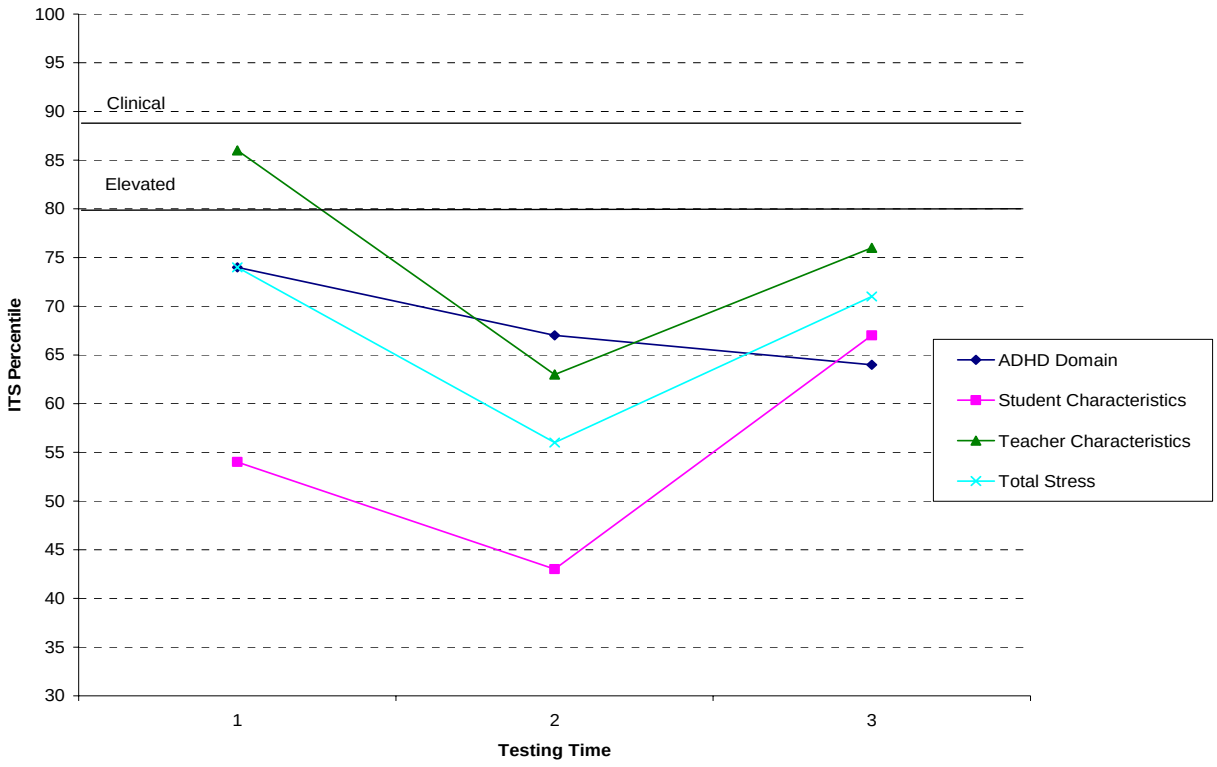

Figure 35. Ratings of Lee's teacher on ITS domains. (Increase indicates worsening of behaviors.)

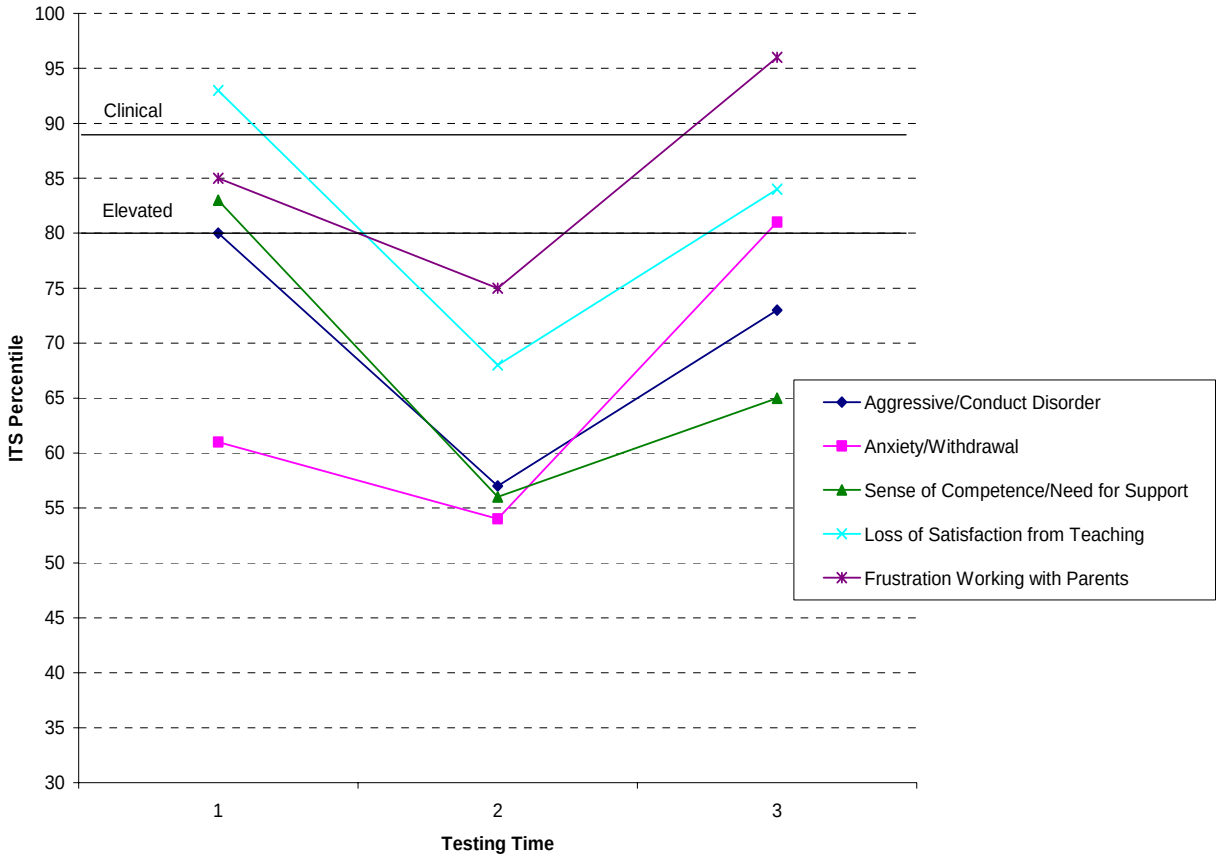

Figure 36. Ratings of Lee's teacher on selected subscales of the ITS. (Increase indicates worsening of behaviors.)

Conners' Teacher Rating Scale-Revised: Short Form. Lee's teacher rated Lee's oppositional behavior to be in the mildly atypical range at testing periods one and two, and in the clinical level at testing period three (see Figure 37). The other score in the mildly atypical range for the pre-test, the ADHD Index, Lee's teacher rated in the normal range at the mid- and final assessment periods. The hyperactivity and cognitive problems/inattention subscales were rated in the normal ranges at all testing periods for Lee.

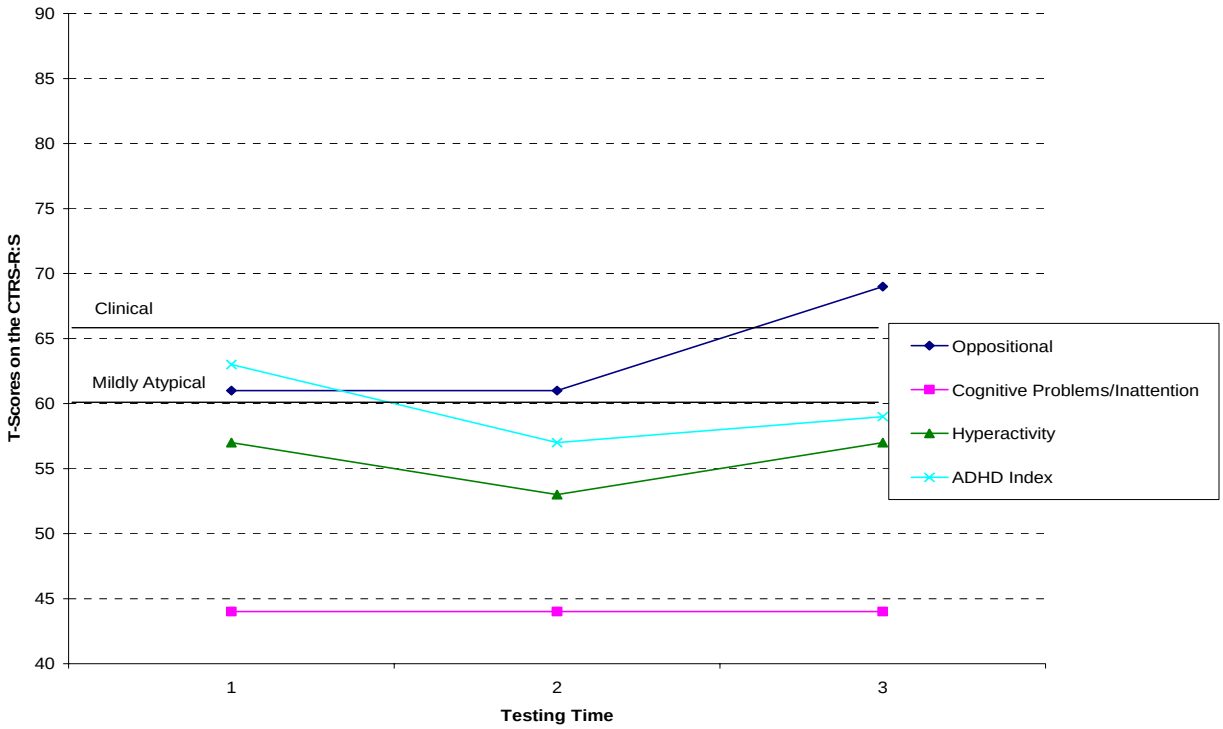

Figure 37. Ratings of Lee's teacher on the CTRS-R:S. (Increase indicates worsening of behaviors.)

Participant 4: Alicia

Background

Alicia was an eight-year-old Hispanic third grade student identified as having difficulty attending and remaining on-task in the classroom by her classroom teacher. Alicia qualified for this study because of her clinical score on the ADHD Problems on the TRF and clinical score on the ADHD Index of the CTRS-R:S. Although not used to determine qualification for this study, Alicia's teacher additionally completed the ITS, for which she rated no clinical or borderline scores.

At the outset of the study, I met with Alicia's primary caregiver, her mother. Alicia's mother shared that Alicia lived with both of her biological parents, as well as her one younger and two older siblings, as well as some extended family members. Alicia's

mother shared that Alicia spoke both Spanish and English at home and English at school. She did not express concerns with Alicia's ability to speak and understand English. Alicia's mother mentioned that Alicia's father had been involved in legal problems for which he went to prison for less than a year. Additionally, she mentioned that Alicia's father was never consistently involved in Alicia's life, which made her the primary caregiver. Alicia's mother disclosed that ADHD was diagnosed for several members of her family, including her. She was certain that Alicia also would be diagnosed with ADHD due to the similar behaviors she herself shared with Alicia. In fact, in the sixth week of the study, Alicia was diagnosed by a pediatrician with ADHD and began taking 30 mg of Adderall in the mornings before school.

Besides being concerned with Alicia's inattentiveness, Alicia's mother also expressed concern with Alicia's academics. Specifically, she mentioned that Alicia had received speech services in first grade, and currently was receiving extra assistance for her reading during and after school. Alicia's mother mentioned that she was not performing at a third grade reading level, but that she had never been retained. Alicia's mother also expressed concern with Alicia's self-esteem, which she attributed to be low. To illustrate this concern, Alicia's mother shared that Alicia thought she was overweight.

On the initial parent report assessment instruments, the CBCL*,* PSI*,* and CPRS-R:S, Alicia's mother reported clinical levels of concern with many of Alicia's behaviors, such as ADHD, oppositional, demanding, and affective behaviors. These assessments will be examined further in the following sections.

Although Alicia's mother had several concerns for Alicia's behavior and academic performance, she also reported that Alicia was very caring, loving, and thoughtful of others. Similarly, Alicia's teacher reported that Alicia was sweet, earnest, and loving.

Visual Analysis of Alicia's DOF Scores

Observations of Alicia's on-task behaviors utilizing the DOF occurred throughout all four phases of Alicia's intervention. Specifically, Alicia was observed for three weeks during which no-intervention took place (baseline phase), and continued to be observed during her participation in six weeks of twice-weekly CCPT (Phase 2), six additional weeks of twice-weekly CCPT and six weeks of once-weekly PCTC (Phase 3), and a no-intervention follow-up period of three weeks (see Table 6). Figure 38 displays the averaged on-task behavior of each week throughout all phases of the study.

As is evident in the graph of Alicia's DOF scores, the level of each phase increased over time. In Phase 1, the level was 4.83 (range, 4.5-5.5); in Phase 2, the level was 6.67 (range 1.5-9.5); in Phase 3, the level was 8 (range 6.5-9.5); in the final phase, the level was 9.33 (range 8.5-10). This increase in level over time indicated that over time, Alicia's on-task behavior in the classroom increased. The trend of the graphed data was also calculated with the least squares regression. This trend line indicated a high magnitude, upward trend over time with high variability. Specifically, the trend line demonstrated a large effect size, with an R^2 of .41 (r=.64) (Cohen, 1988).

Individual phase analysis. The three data points of the baseline phase indicated a high magnitude, downward trend with low variability, and a mean of 4.83 (range, 4.5-5.5; see Figure 39). The trend line for this phase was R^2 = .75 (r=.87), which indicated a strong relationship between decreasing on-task behavior over time. Any changes in

Alicia's on-task behavior in the subsequent phases may be due to the interventions utilized.

In Phase 2, the CCPT intervention phase, the data indicated a high magnitude, upward trend in on-task behavior (see Figure 40). The trend line for this phase was R^2=.28 (r=.53), which indicated a strong relationship between increasing on-task behavior over time. The level of this phase was 6.67 and the variability was high. Thus, Alicia's on-task behavior was varied over these six weeks. However, the trend was an increasing one, indicating that on-task behavior improved during the play therapy intervention phase.

In Phase 3, CCPT continued and teacher consultation began with Alicia's teacher. The data in this phase indicated a moderate upward trend, moderate variability, and a level of 8.0 (see Figure 41). The trend line for this phase was R^2=.16 (r=.40), indicating a moderate relationship between decreasing on-task behavior over time. The data of this phase were less variable, and the level was at a higher level than the Phase 2 level. In follow-up interviews with Alicia's teacher and mother, both reported that Alicia's decreased levels of on-task behavior during Weeks 12-14 could be explained by test anxiety. Alicia participated in state standardized testing immediately following those weeks, and during those weeks, Alicia's mother reported that Alicia had more homework than was usual in preparation for the testing.

In the final phase, the no-intervention, follow-up phase, the data demonstrated a high magnitude, downward trend with low variability and a level of 9.33 (see Figure 42). The trend line for this phase was R^2=.96 (r=.98), indicating a strong relationship

between decreasing on-task behavior over time. However, during this phase, Alicia had more on-task behavior than in previous phases, as indicated by the level.

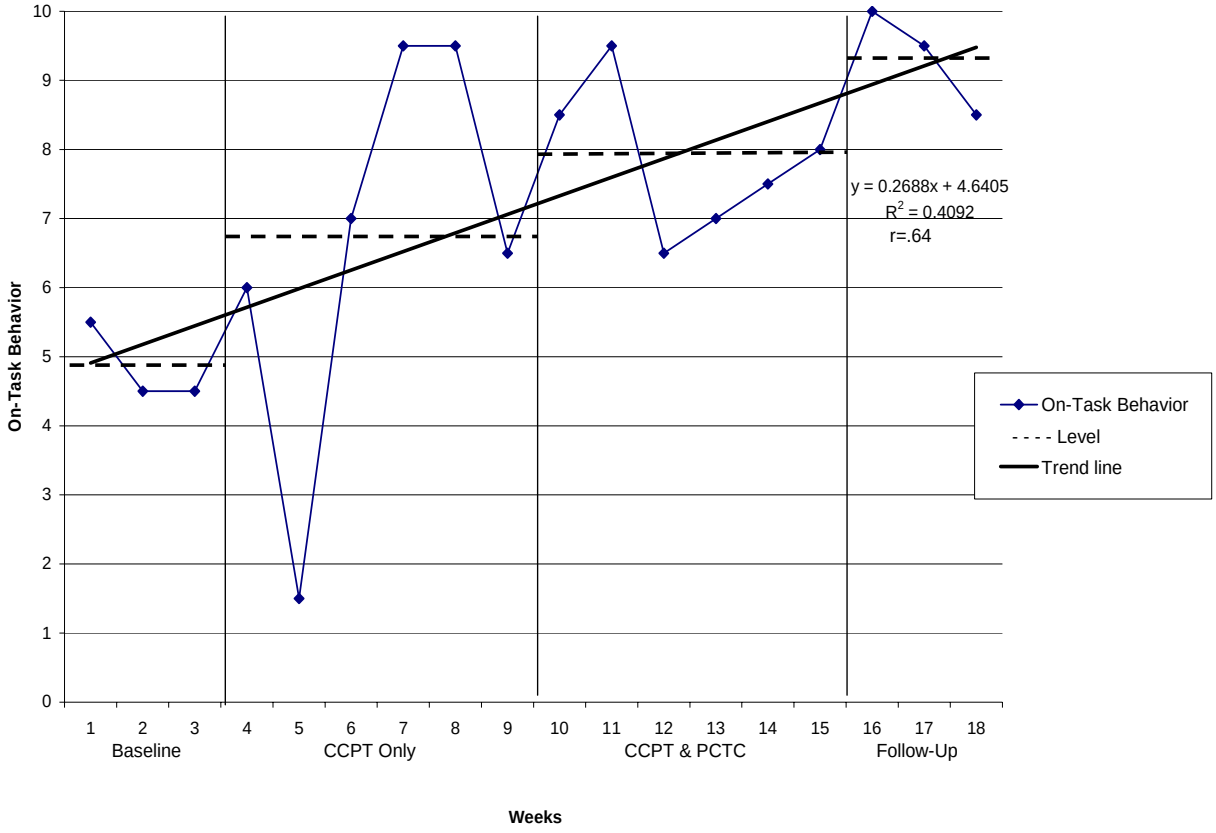

Figure 38. Alicia's on-task behavior on the DOF throughout all phases. (Increase indicates improved on-task behaviors.)

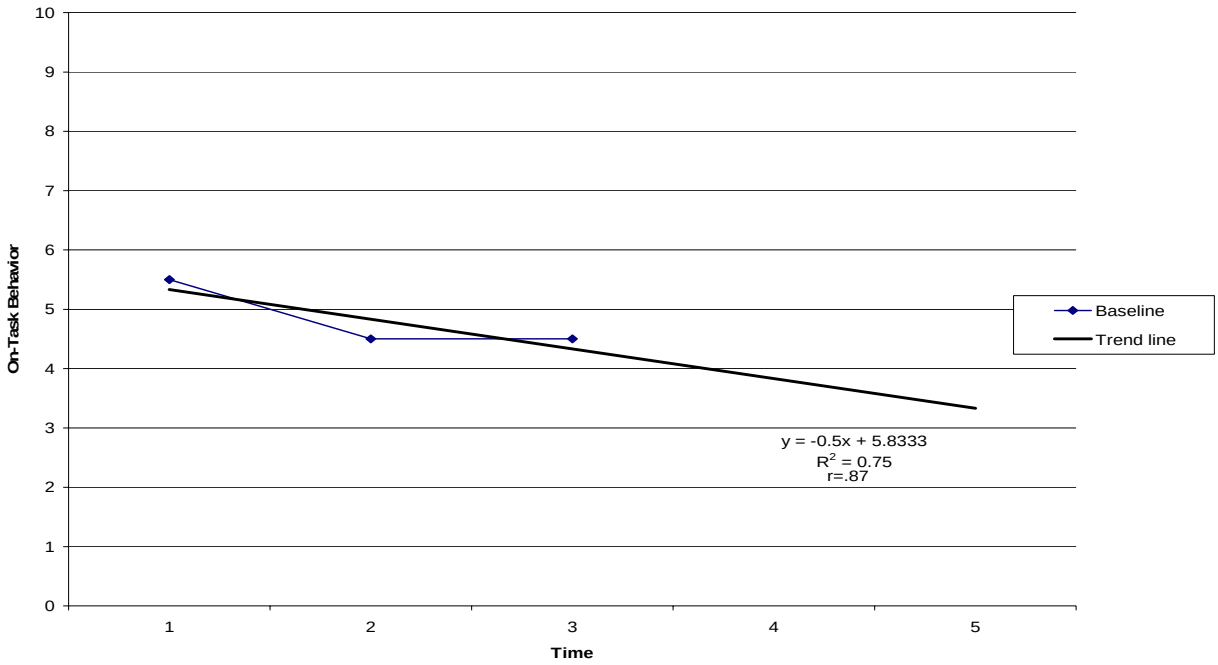

Figure 39. Alicia's on-task behavior during baseline phase. (Increase indicates improved on-task behaviors.)

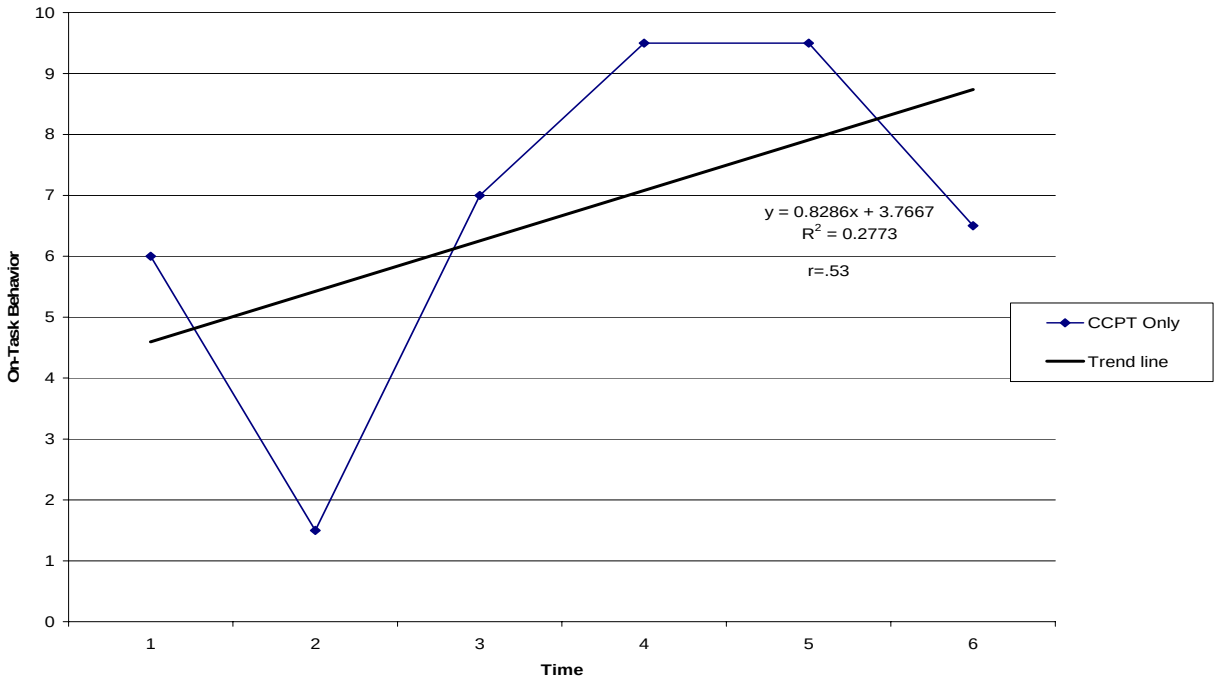

Figure 40. Alicia's on-task behavior during CCPT only phase. (Increase indicates improved on-task behaviors.)

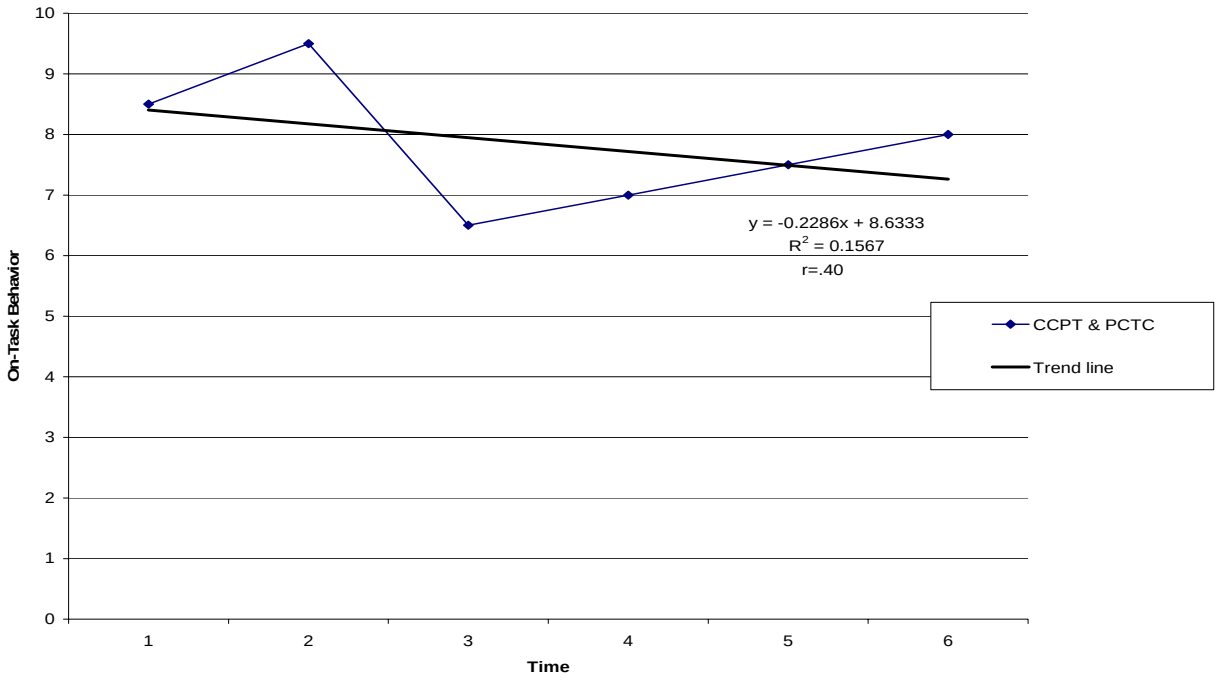

Figure 41. Alicia's on-task behavior during CCPT and PCTC phase. (Increase indicates improved on-task behaviors.)

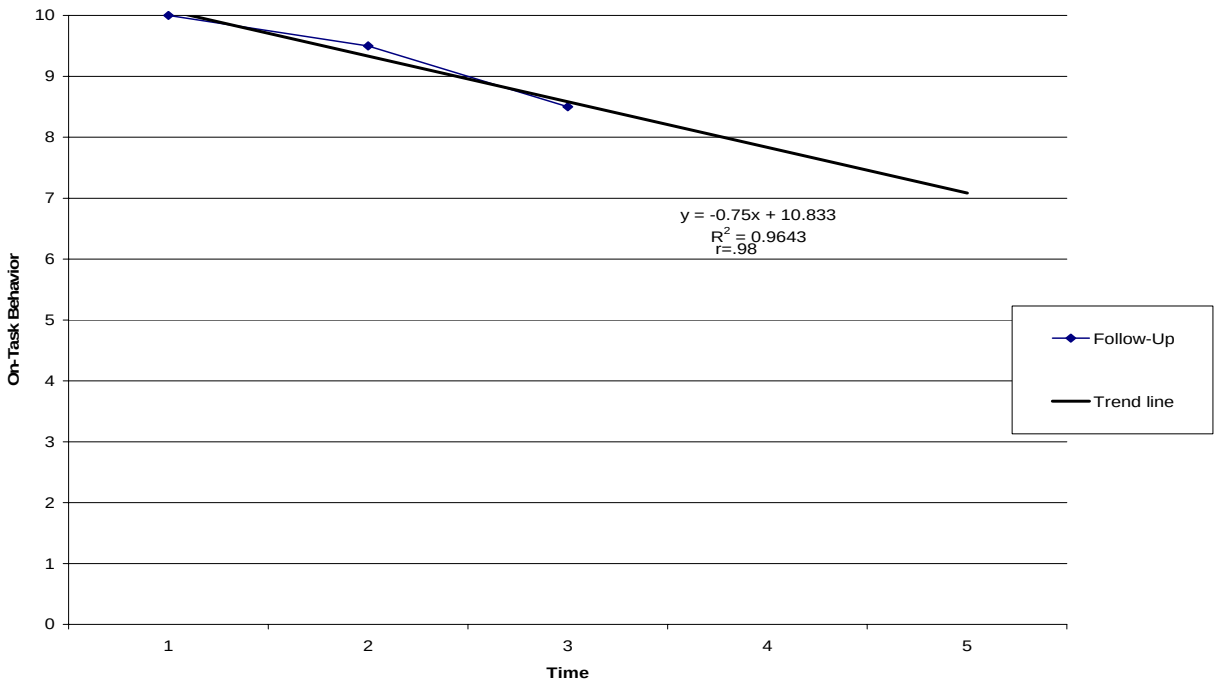

Figure 42. Alicia's on-task behavior during follow-up phase. (Increase indicates improved on-task behaviors.)

Visual Analysis of Parent Data

Child Behavior Checklist. Alicia's mother completed the CBCL at pre-, mid-, and post-assessment periods to provide an assessment of the perceptions of Alicia's mother. As is evident in Figure 43, Alicia's mother rated Alicia with clinical levels of Internalizing, Externalizing, and Total Problems. After the second phase, no scores were within the clinical range, but the Externalizing and Total Problems scores were in the borderline range. At the final assessment, after the third phase in which all together, Alicia had participated in 24 sessions of play therapy and her teacher had participated in 6 teacher consultations, Alicia's mother rated none of Alicia's behaviors to be of clinical or borderline levels of concern. Thus, the data of all domain scores demonstrated high magnitude, downward trends, indicating a change from significant levels of concern to behavior concerned to be in the normal range.

Beyond examination of the domain scores for the CBCL, two specific areas were identified by Alicia's mother as clinically significant areas of concern for her: ADHD Problems and Oppositional Defiant Problems. Figure 44 provides a visual representation of these scores at all testing times. At the pre-assessment period, both subscales were rated as clinically significant, however at times two and three, the Oppositional Defiant Problems subscale was no longer within the clinical or borderline range. The ADHD Problems subscale continued to fall within the borderline range at time two and in the clinical range at time three.

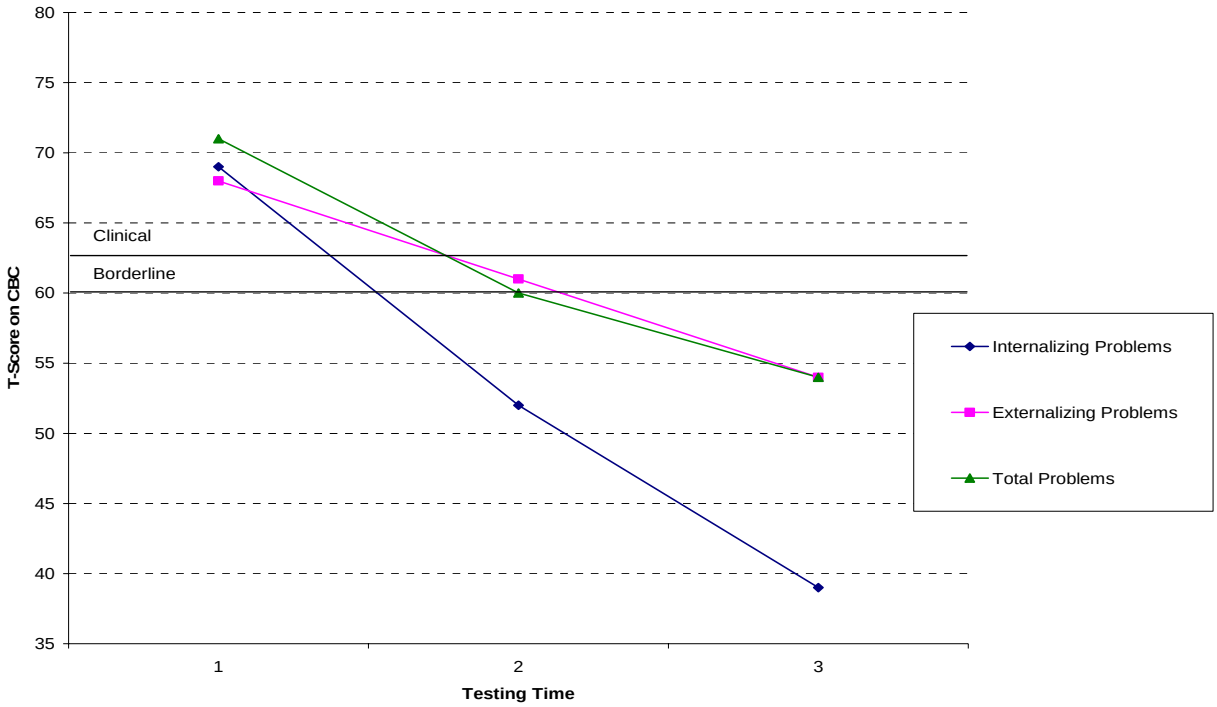

Figure 43. Ratings of Alicia' mother on CBCL at each testing time. *(*Increase indicates worsening of behaviors.)

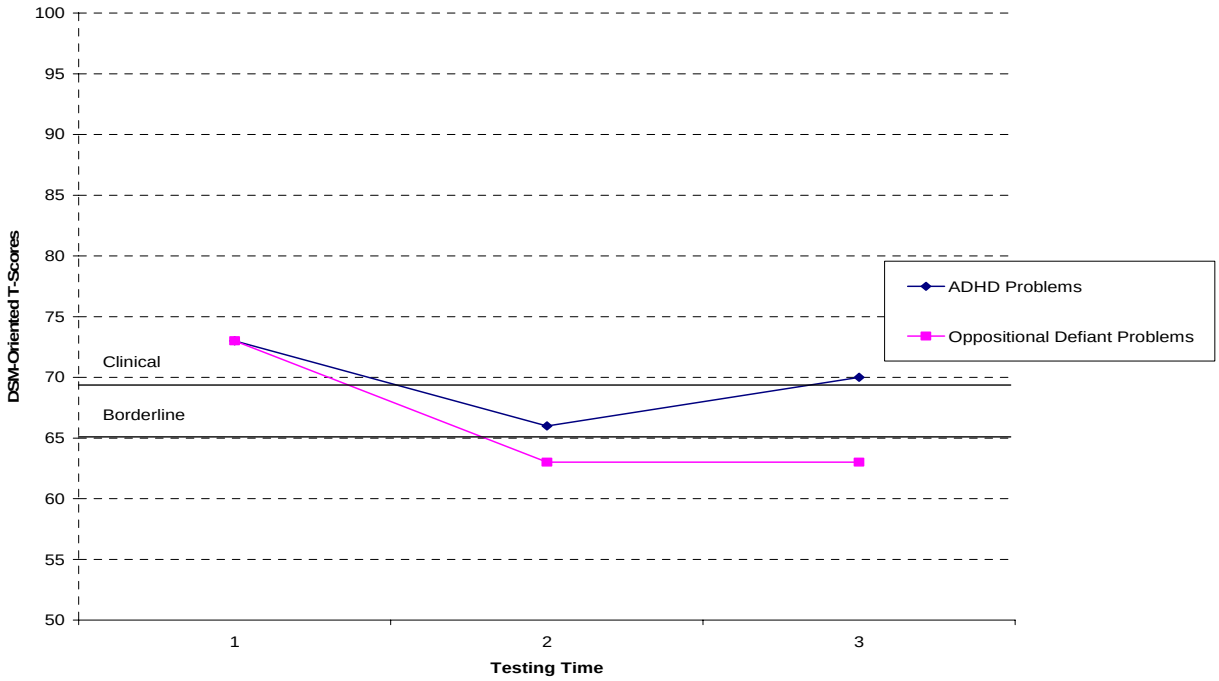

Figure 44. Ratings of Alicia's mother on CBCL for the ADHD Problems and Oppositional Defiant Problems subscales. (Increase indicates worsening of behaviors.)

Parenting Stress Index. Alicia's mother completed the PSI at each testing period. The PSI provides three domain scores, several subscale scores, and a life stress score. Figures 45 and 46 provide graphs representing these results. In Figure 45, it is evident at testing times one and two that Alicia's mother experienced a significant amount of life stress that could be impacting her relationship with Alicia. However, in the final testing period, Alicia's mother's life stress was no longer of a significant concern for her. At testing period one, Alicia's mother scored the Child Domain and the Total Stress Domain within the clinical range. However, both of these areas were rated in the normal range for the mid- and post-test times. The Parent Domain score was within the normal range at all periods, however, unlike the other scores, which had downward trends, the parent domain score had an inverted U pattern (Kennedy, 2005). This inverted U is evident with the lower scores at times one and three and a higher score at the mid-test.

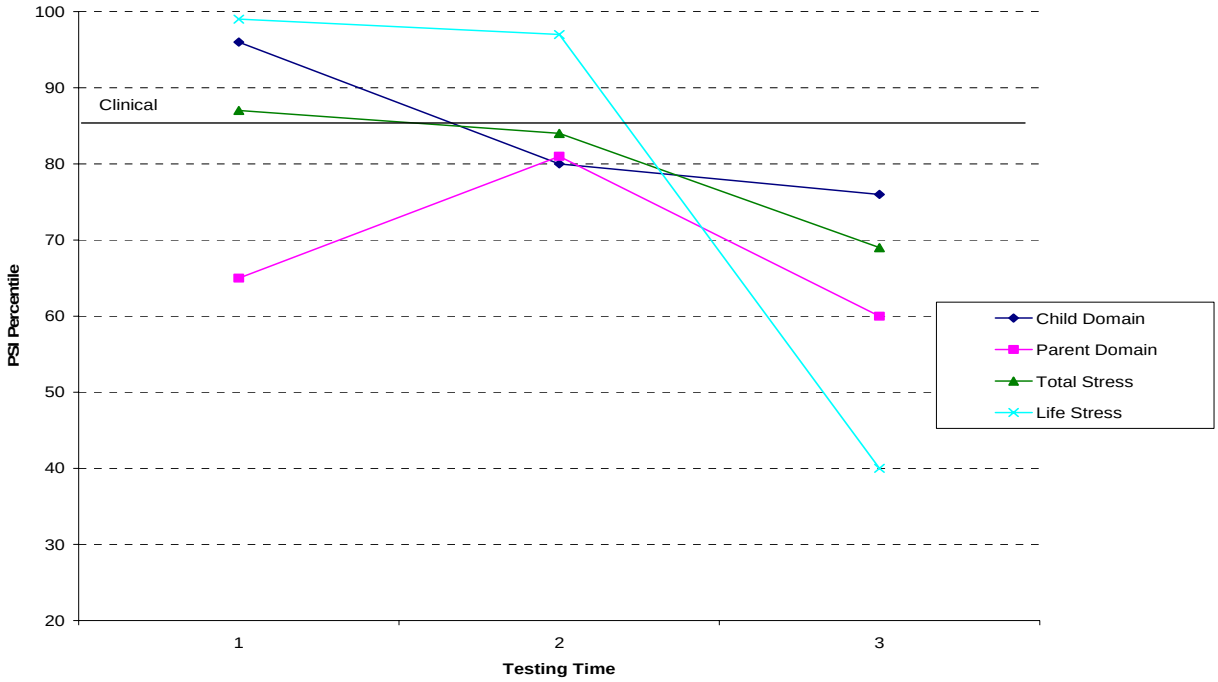

Figure 45. Ratings of Alicia's mother on PSI. (Increase indicates worsening of behaviors.)

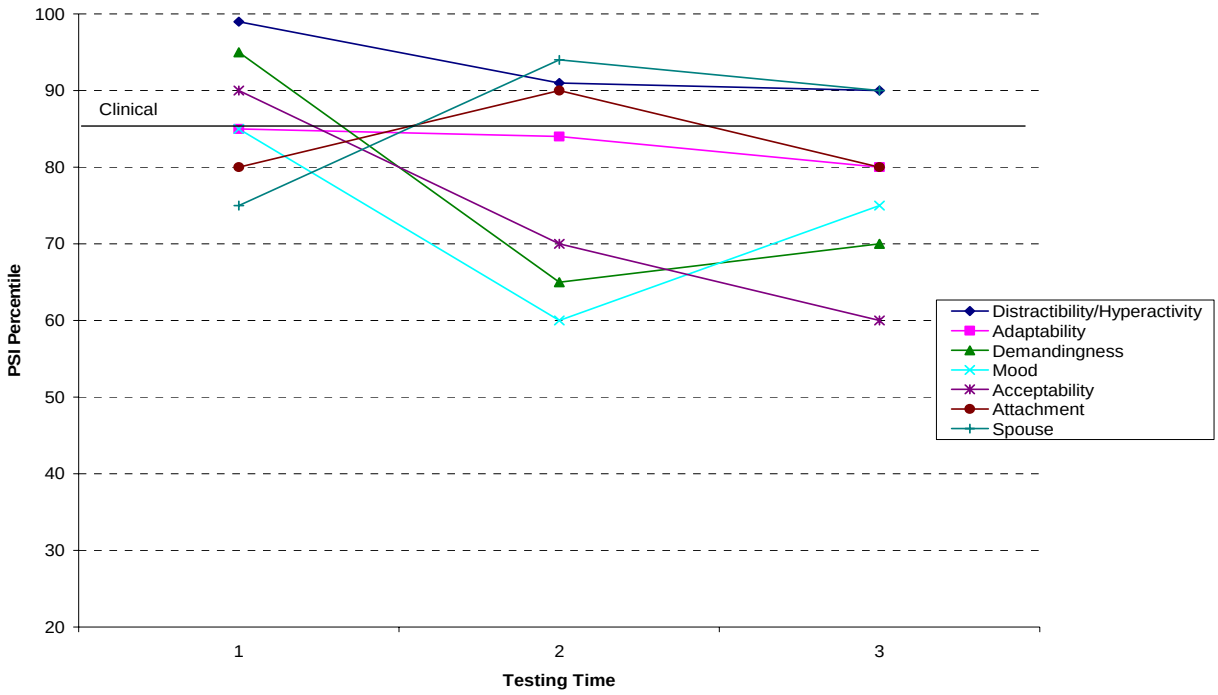

Figure 46. Ratings of Alicia's mother on selected subscales of PSI. (Increase indicates worsening of behaviors.)

Alicia's mother scored within the clinical range on specific subscales within the PSI, which are graphically represented in Figure 46. Only those scales within which Alicia's mother scored in the clinical range in a minimum of one testing period are included. Five of these subscales fall within the child domain: Distractibility/ Hyperactivity, Adaptability, Demandingness, Mood, and Acceptability. For all of these child domain subscales, the data indicated a downward trend over the testing periods. Thus, for these subscales, Alicia's mother rated Alicia's behavior as becoming less hyperactive, more adaptable to change, less demanding and moody, and Alicia's behaviors fell more within the range of behaviors for which Alicia's mother expected of Alicia. One subscale, the Distractibility/Hyperactivity subscale, continued to be rated in

the clinical category at testing periods two and three, however, these scores were rated at a decreased level of clinical significance than at the pre-assessment.

Conners' Parent Rating Scale-Revised: Short Form. At all three testing periods, Alicia's mother completed the CPRS-R:S, and as is evident in Figure 47, all data indicated downward trends. Thus, Alicia's mother's ratings of Alicia's hyperactive, oppositional, and inattentive behaviors decreased over time; however, all of the subscales remained within the clinical level at all testing periods except the oppositional scale. Therefore, the Oppositional subscale was rated in the clinical level at pre-assessment, but not at mid- and post-assessments. As stated previously, the other three subscales remained at the clinical level of functioning, although at a decreased level within the clinical scale. Thus, Alicia's mother remained concerned about Alicia's ADHD behaviors at the conclusion of the study.

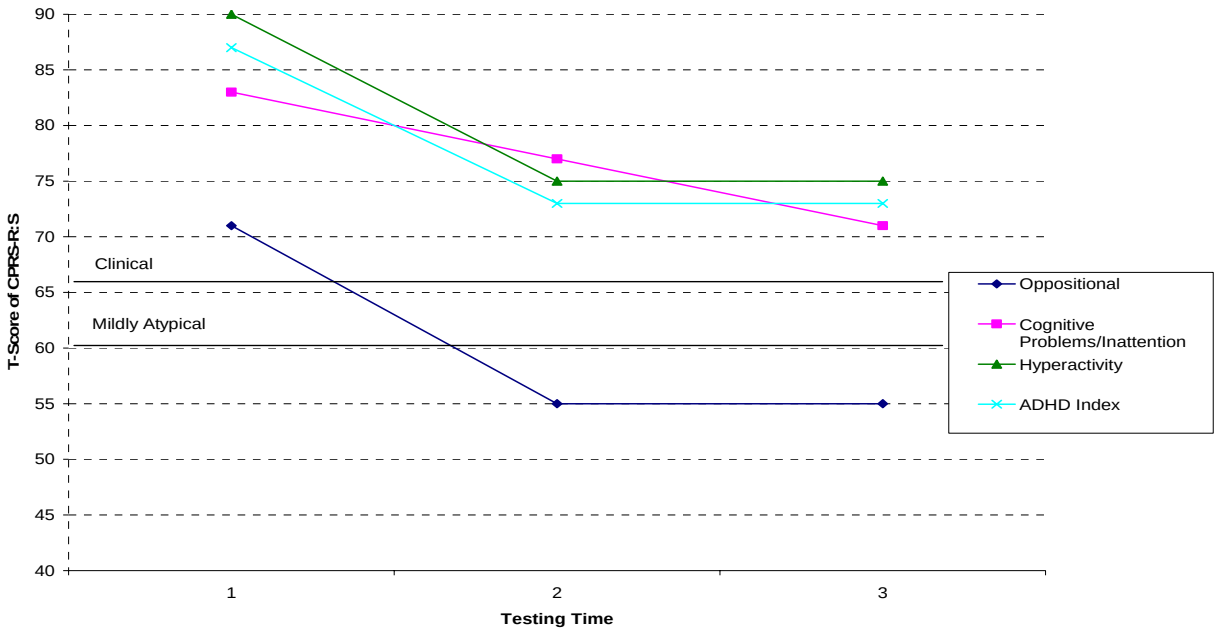

Figure 47. Ratings of Alicia's mother on CPRS-R:S. (Increase indicates worsening of behaviors.)

Visual Analysis of Teacher Data

Teacher Report Form. Alicia's teacher completed the TRF at each testing period. Figure 48 graphically represents the results of the Internalizing, Externalizing, and Total Problems scores at each assessment. The results indicated that Alicia's teacher rated all data to have downward trends; thus, over time, Alicia's teacher rated Alicia's behavioral problems to decrease. Specifically, Alicia's teacher rated Alicia's externalizing and total problems in the clinical level at time one, but in the normal range at Time 2 and 3. Also, Alicia's teacher rated Alicia's internalizing problems in the borderline range at pre-test, but in the normal range at mid- and post-assessments.

Figure 49 presents the ratings of Alicia's teacher on the ADHD Problems subscale of the TRF. At pre-assessment, Alicia's teacher rated Alicia to display behaviors associated with ADHD to be at a clinical level of concern. However, at mid- and post-assessment, Alicia's teacher rated Alicia to exhibit behaviors within the normal range. Thus, over time, Alicia's ADHD behaviors were no longer considered problematic as rated on the TRF.

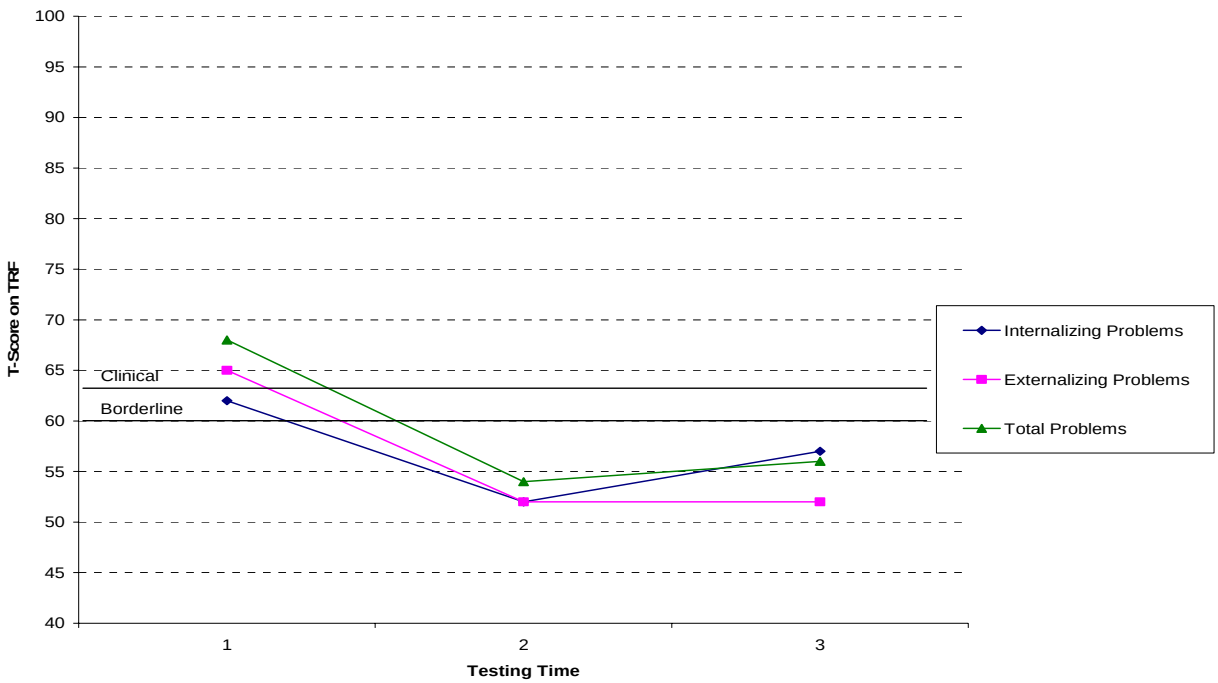

Figure 48. Ratings of Alicia's teacher on TRF.(Increase indicates worsening of behaviors.)

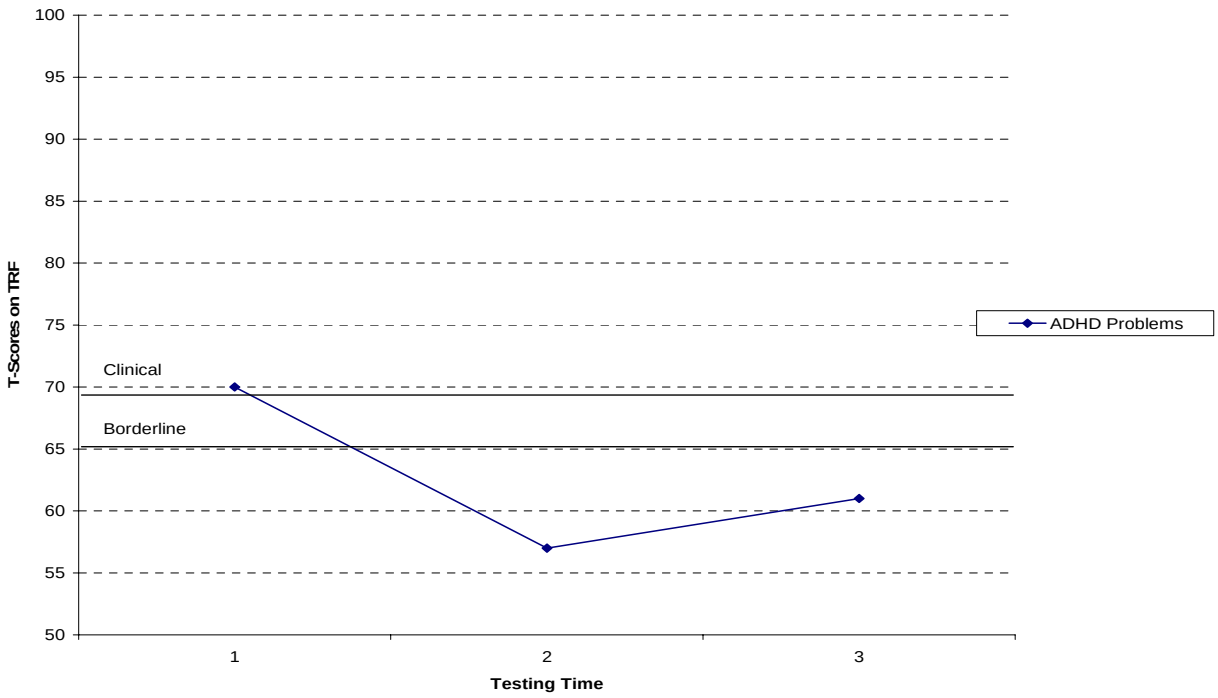

Figure 49. Ratings of Alicia's teacher on ADHD Problems subscale of TRF.(Increase indicates worsening of behaviors.)

Index of Teaching Stress. Figure 50 displays the results of each administration of the ITS for Alicia's teacher. The results indicated that at no time did Alicia's teacher exhibit elevated or clinical levels of stress in interacting with Alicia. Additionally, the data indicated downward trends for all domain scores, thus revealing that Alicia's teacher experienced decreasing levels of stress in interacting with Alicia over time.

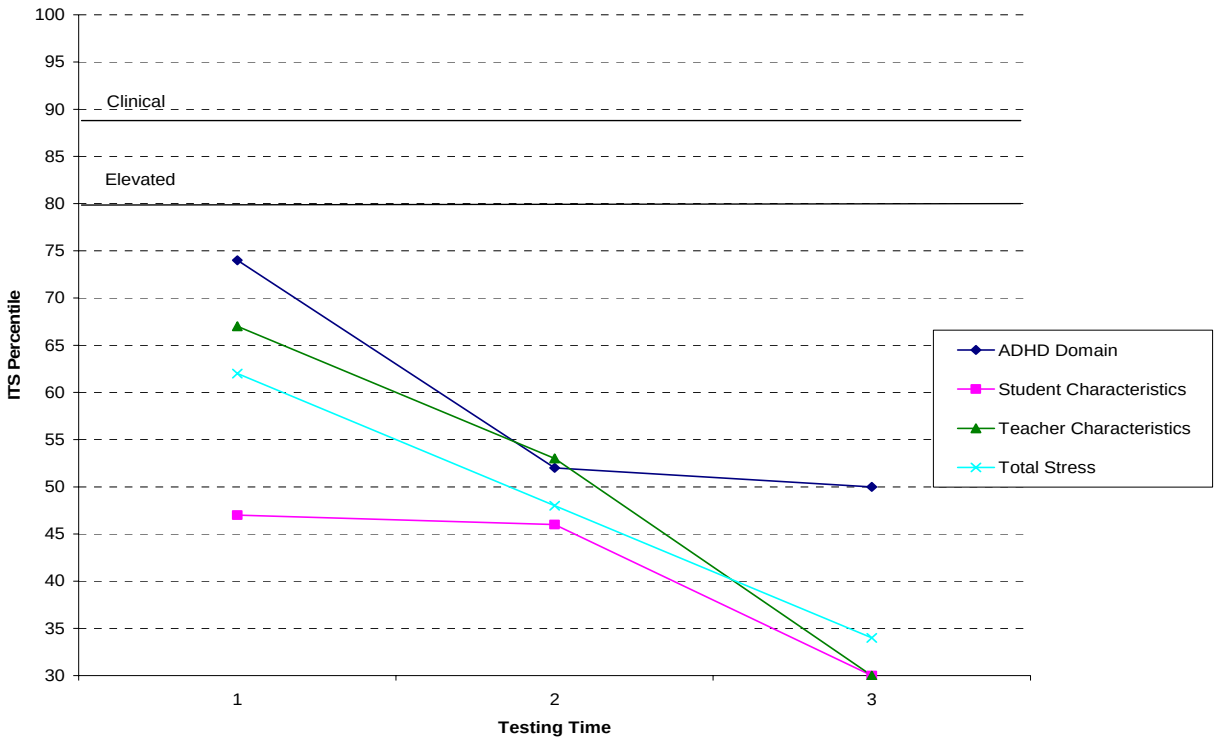

Figure 50. Ratings of Alicia's teacher on the ITS. (Increase indicates worsening of behaviors.)

Conners' Teacher Rating Scale – Revised: Short Form. As with the other assessment results of Alicia's teacher, downward trends in the data on the CTRS-R:S revealed a decreased concern about Alicia's ADHD behaviors over time (see Figure 51). Specifically, Alicia's teacher rated Alicia as having clinical levels of hyperactivity and cognitive problems/inattention on the pre-assessment, but no significant concern with her behavior at the post-assessment.

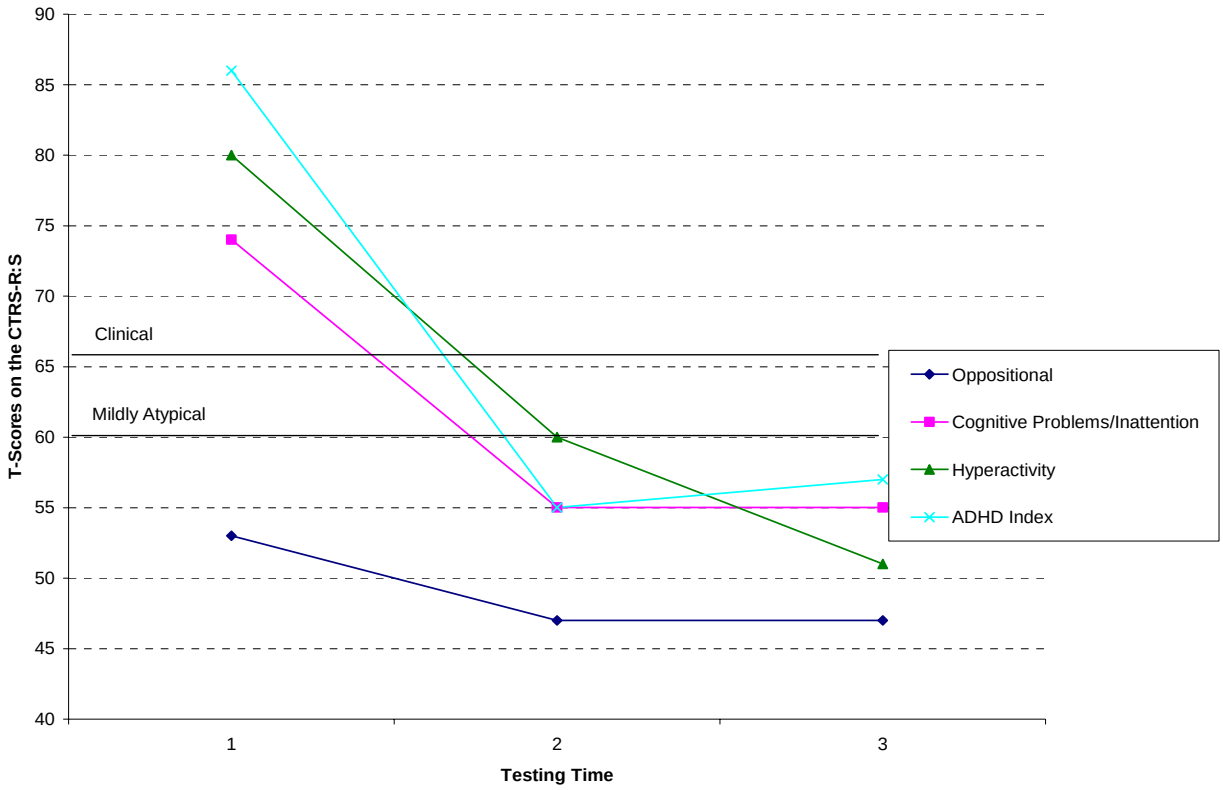

Figure 51. Ratings of Alicia's teacher on CTRS-R:S. (Increase indicates worsening of behaviors.)

Participant 5: Carlos

Background

Carlos was a 10-year-old Hispanic fifth grade student identified by his classroom teacher as having difficulty sitting still, focusing, and paying attention in the classroom. Carlos' teacher was concerned that his inattention was significantly interfering with Carlos' ability to learn in his classroom. Carlos qualified for participation in this study because of his clinical scores on the ADHD Index of the CTRS-R:S and the ADHD Problems of the TRF. Although not used for qualification purposes, Carlos' teacher also completed the ITS at the pre-intervention period. No domains or subscales were rated by Carlos' teacher as elevated or clinical on the ITS.

Because I am not fluent in Spanish, the pre-interview with Carlos' primary caregiver, his mother, took place with an advanced counseling doctoral student fluent in Spanish and English. Carlos' mother shared that Carlos lives with his biological parents, three older siblings, and some extended family. Carlos' mother reported that their family came to the United States when Carlos was 7-years-old. Carlos' mother shared that Carlos had experienced behavioral problems at school since he entered school at kindergarten. Specifically, Carlos' mother shared that his teachers have reported concerns with his hyperactive and inattentive behaviors, as well as his academic struggles (with completing homework and doing math). Carlos' mother reported that Carlos had difficulties with English, and thus, was in a Spanish-speaking classroom. Carlos had never been retained a grade in school and was not receiving special education services. Additionally, Carlos' mother reported that Carlos had never received a diagnosis or taken medication. Carlos' mother reported that Carlos is very happy, and she reported that his happiness is what she most enjoys about Carlos.

Because the primary language of Carlos' mother was Spanish, it was necessary to translate assessments through the use of the Spanish-speaking doctoral student. Although the interpreter utilized a Spanish version of the CBCL, Carlos' mother preferred for the Spanish-speaking interpreter to read the questions aloud to her. Due to the extensive amount of time that was necessary for the interpreter to translate all of the items of the assessments, only the CBCL and the CPRS-R:S were used with Carlos' mother at each test administration. At the pre-assessment period, the results of the CBCL and the CPRS-R:S indicated clinical scores on the ADHD Problems subscale of

the CBCL and the Cognitive Problems/Inattention, Hyperactivity, and ADHD Index subscales of the CPRS-R:S.

Visual Analysis of Carlos' DOF Scores

Carlos' on-task behavior was assessed each week of the study through the use of the DOF. Carlos participated in three weeks of baseline, six weeks of reading mentoring, seven weeks of CCPT, and three weeks of baseline (see Table 7). Carlos was blindly assigned to the reading mentoring condition to provide unbiased observations for the observers. Thus, Carlos was intended to participate in reading mentoring throughout the entire study. However, because Carlos' teacher expressed concern regarding Carlos' declining behavior to the school counselor mid-way through the study, the doctoral student who acted as coordinator of the research project placed Carlos in play therapy for seven weeks (14 sessions).

Figure 52 displays the data from all phases of Carlos' participation in this study. The graph makes evident that the level of each phase increases over time, particularly in Phase 3, the play therapy phase. More specifically, in Phase 1, the level was 3.83; in Phase 2, the level was 4.25; in Phase 3, the level was 8.14; and in the final phase, the level was 9.83. The phase change from the baseline to the reading mentoring phase is minimal; however a large shift in on-task behavior for Carlos occurred during the play therapy phase (Phase 3). An additional means to assess change was to examine the trend line of the data over all of the phases. The trend line indicated a high magnitude, upward trend over time with a least squares regression of R^2=.79 (r=.89). This trend line indicated a large effect over time. Thus, Carlos' behavior improved significantly over time.

An additional form of analysis of all four phases was to assess the data variability. In examining the trend line, it was evident that the variability across the phases differs, but overall there appeared to be a moderate amount of variability.

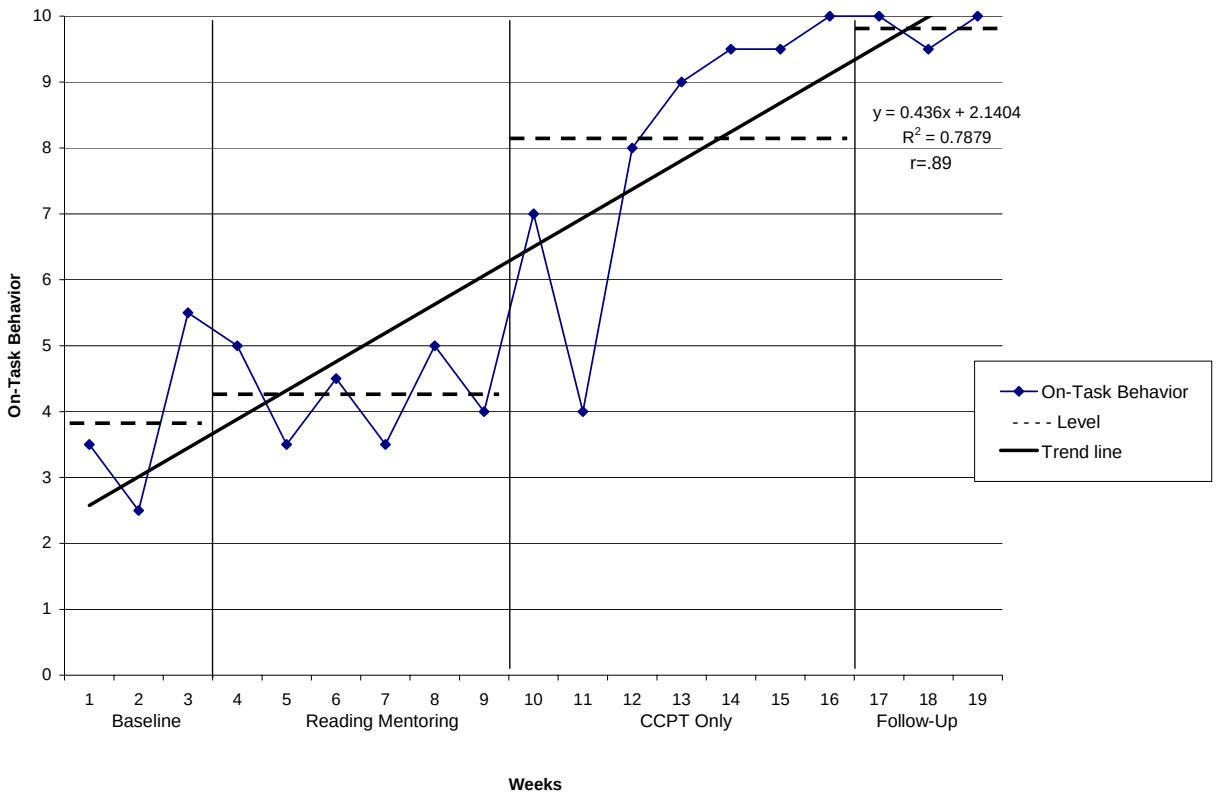

Figure 52. DOF ratings of Carlos' on-task behavior across all four phases. (Increase indicates improved on-task behaviors.)

Individual phase analysis. An examination of each individual phase provided additional assistance in determining the effectiveness of the interventions for Carlos' on-task behavior. In Phase 1, three weeks of no-intervention baseline data were gathered. The three data points indicated moderate variability, a high magnitude, upward trend, and a mean of 3.83 (range of 2.5-5.5). The least squares regression line was R^2 =.43 (r=.65) (see Figure 53). Because the baseline indicated improvement in on-task behavior over time, it makes it more difficult to prove function relations between the

intervention and the on-task behavior. However, because the level differs drastically between the phases, the level may be a stronger indicator of change for Carlos.

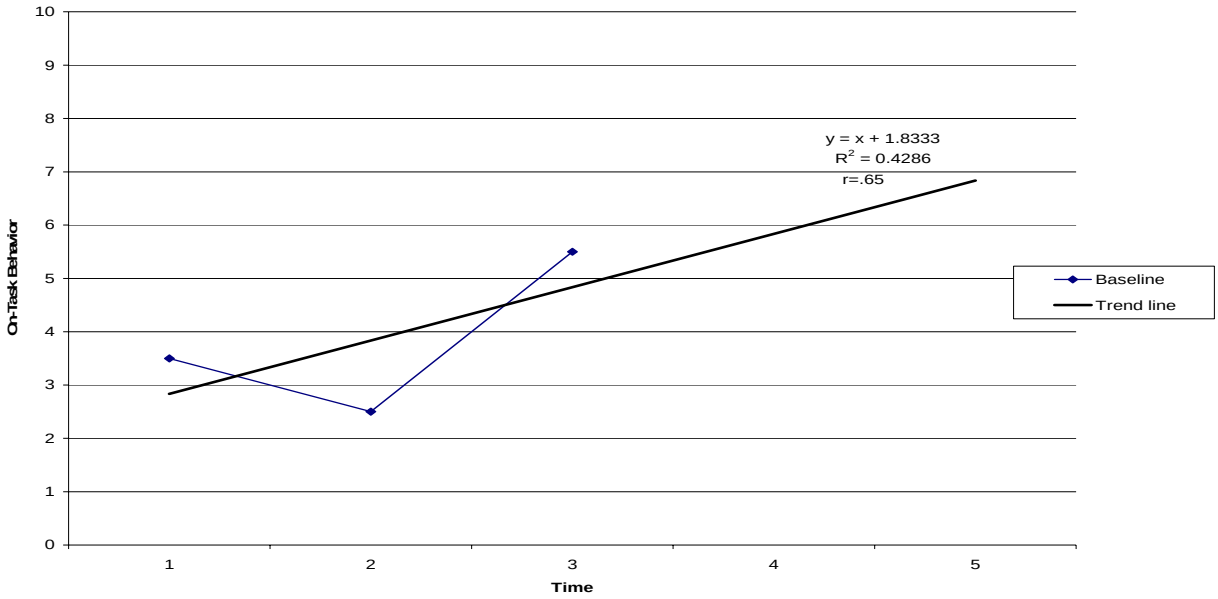

Figure 53. Carlos' on-task behavior during baseline phase. (Increase indicates improved on-task behaviors.)

In Phase 2, the reading mentoring phase, the data revealed low variability, a mean of 4.25 (range 3.5-5.0), and a flat trend line with an R^2 of .01 (r=.12). The trend line for this phase had a small effect size (see Figure 54). The data from this reading mentoring phase indicated little change from the baseline no-intervention phase.

In Phase 3, the CCPT phase, Carlos participated in 14 sessions of play therapy. In this phase, the data revealed moderate variability, a mean of 8.14 (range 4-10), a high magnitude, upward trend, and a trend line with an R^2 of .63 (r=.79) (see Figure 55). The trend of this data indicated a large relationship between the intervention and Carlos' on-task behavior.

In Phase 4, the follow-up phase, Carlos did not participate in an intervention. In this phase, the data revealed low variability, a mean of 9.83 (range 9.5-10.0), and a flat

trend (R^2<.01, r<.01) (see Figure 56). Carlos' on-task behavior at this level was nearly 100% on-task.

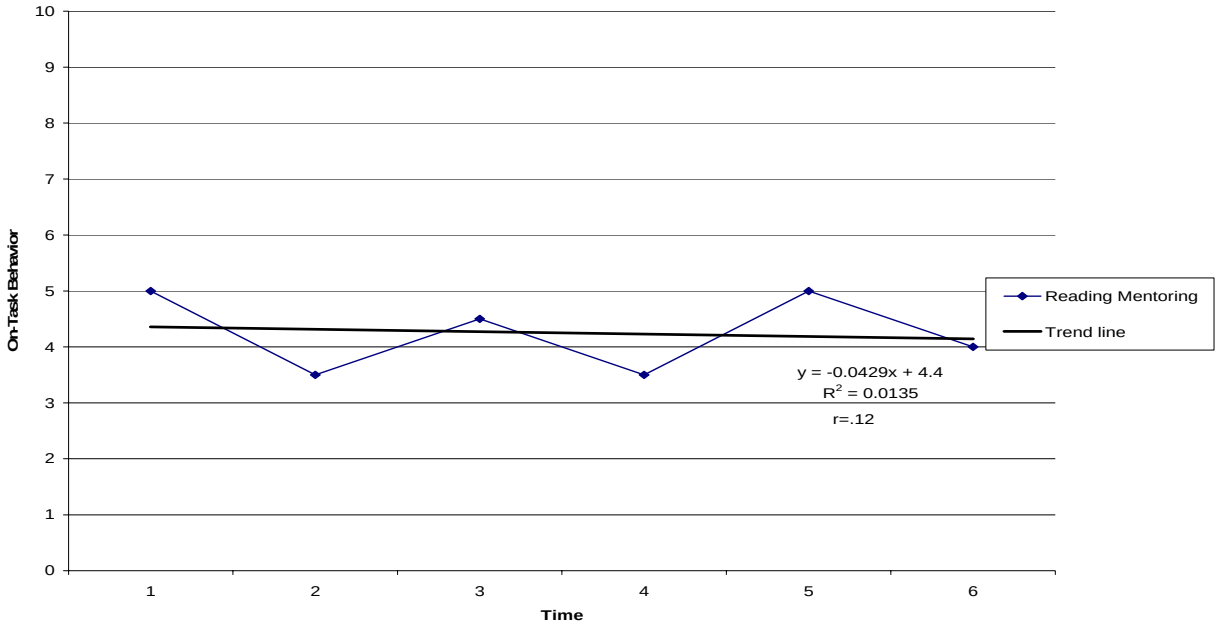

Figure 54. Carlos' on-task behavior during reading mentoring phase. (Increase indicates improved on-task behaviors.)

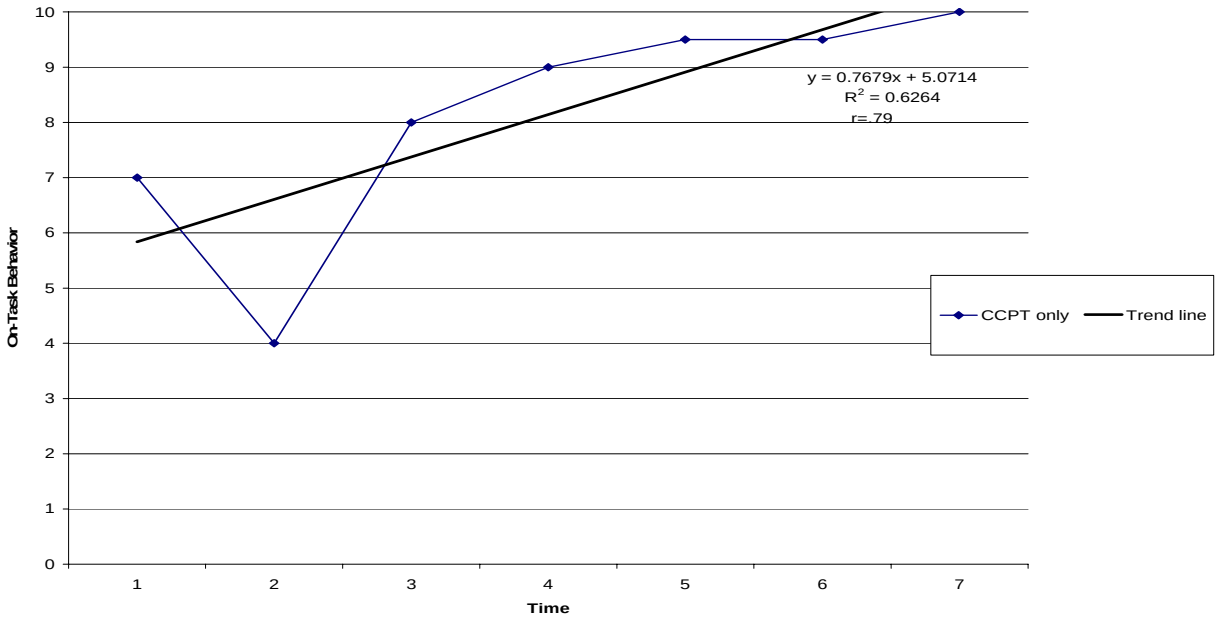

Figure 55. Carlos' on-task behavior during CCPT phase. (Increase indicates improved on-task behaviors.)

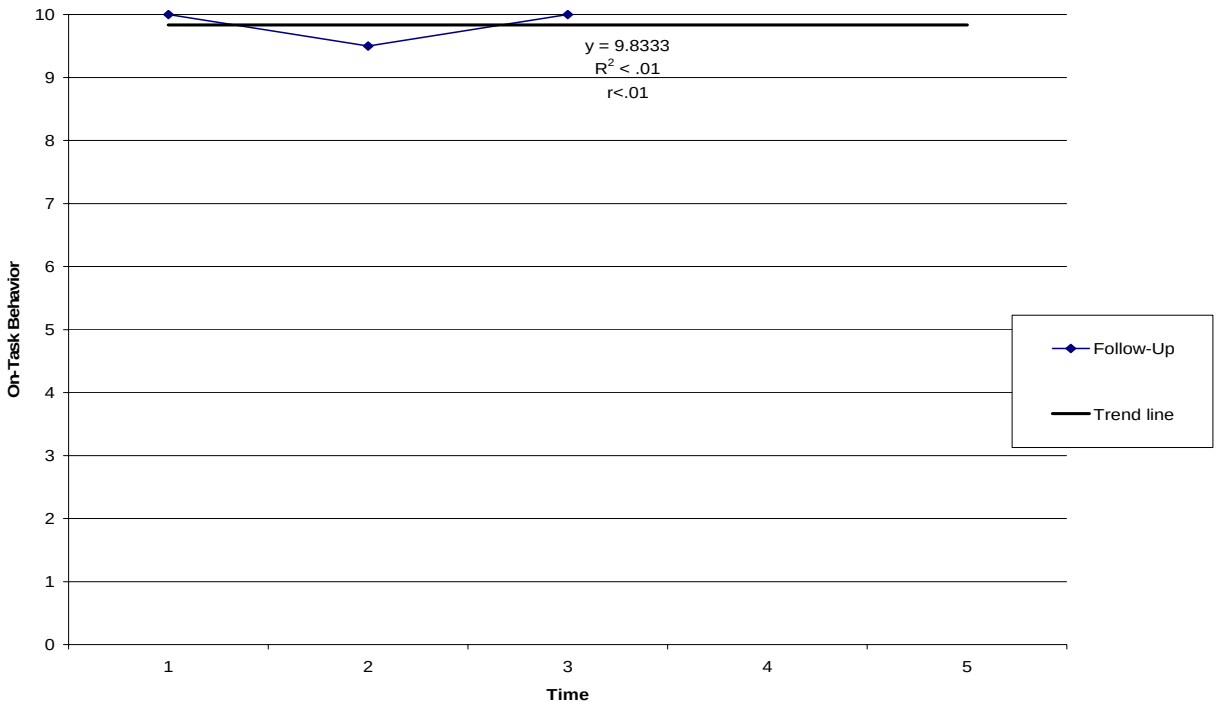

Figure 56. Carlos' on-task behavior during follow-up phase. (Increase indicates improved on-task behaviors.)

Visual Analysis of Parent Data

Child Behavior Checklist. Beyond the weekly observational data that were gathered regarding Carlos' behavior, Carlos' mother also completed assessments of his behavior at three points (pre-, mid-, and post-intervention). On the CBCL, Carlos' mother reported no significant concerns with the Internalizing, Externalizing, and Total Problems categories (see Figure 57). However, when examining each individual subscale, Carlos' mother reported concern with his ADHD Problems (see Figure 58). This subscale was the only one within the clinical or borderline range, and thus was the only score reported on here. As is evident in Figure 58, Carlos' mother reported clinically significant concerns with Carlos' ADHD behaviors at the pre-intervention period. At the mid-assessment period, after which Carlos had participated in reading

mentoring, Carlos' mother continued to have borderline levels of concern with his ADHD behaviors. At the final testing period, after which Carlos participated in 14 CCPT sessions, Carlos' mother no longer reported concern with his ADHD behaviors. Thus, this data indicated a downward trend, meaning Carlos' ADHD behaviors decreased over time, with a significant change in behaviors evidenced at the final assessment period.

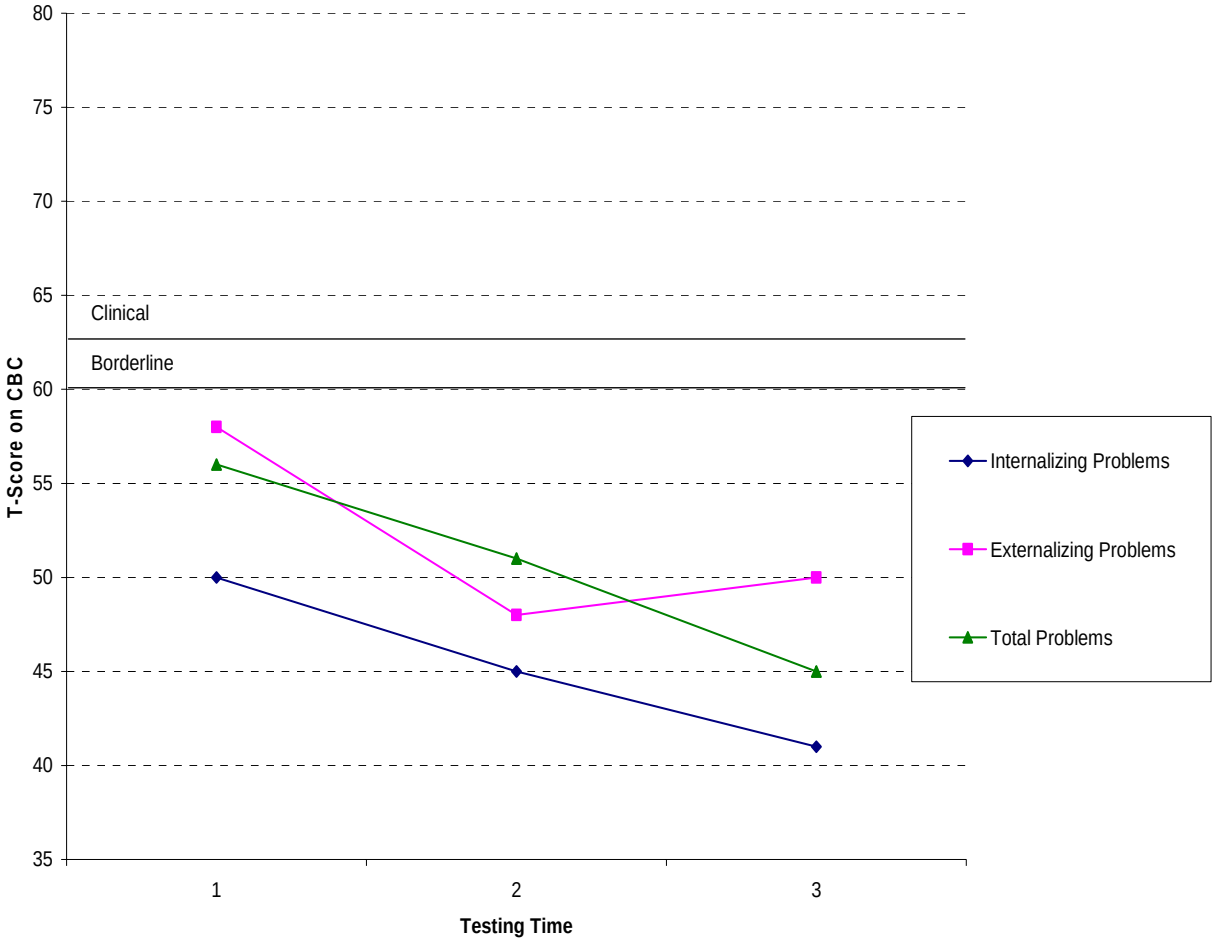

Figure 57. Ratings of Carlos' mother on the CBCL at each assessment period. (Increase indicates worsening of behaviors.)

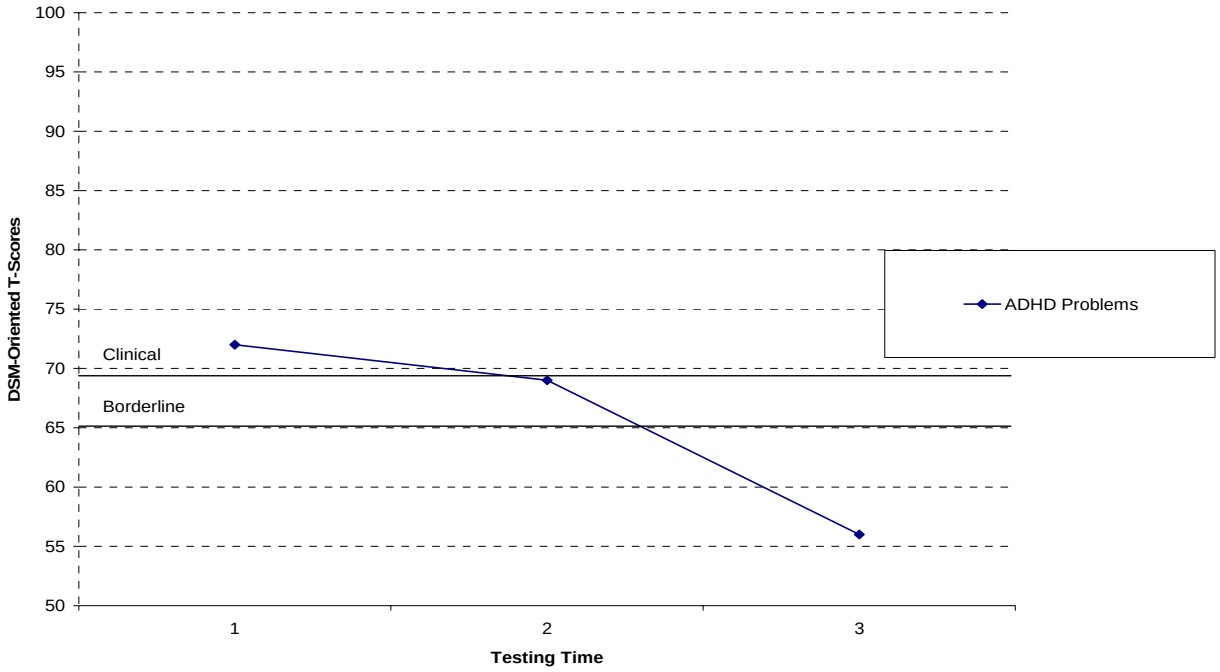

Figure 58. Ratings of Carlos' mother on ADHD Problems subscale of the CBCL. (Increase indicates worsening of behaviors.)

Conners' Parent Rating Scale – Revised: Short Form. Figure 59 displays the ratings of Carlos' mother on the CPRS-R:S. Carlos' mother rated Carlos as exhibiting clinical scores on the Cognitive Problems/ Inattention, Hyperactivity, and ADHD Index at the pre- and mid-assessment periods. All three areas were then rated within the mildly atypical range at the final assessment (after participation in CCPT). The data of the three areas for which Carlos' mother had initial clinically significant concerns demonstrated downward trends, and thus a decrease in exhibiting ADHD behaviors.

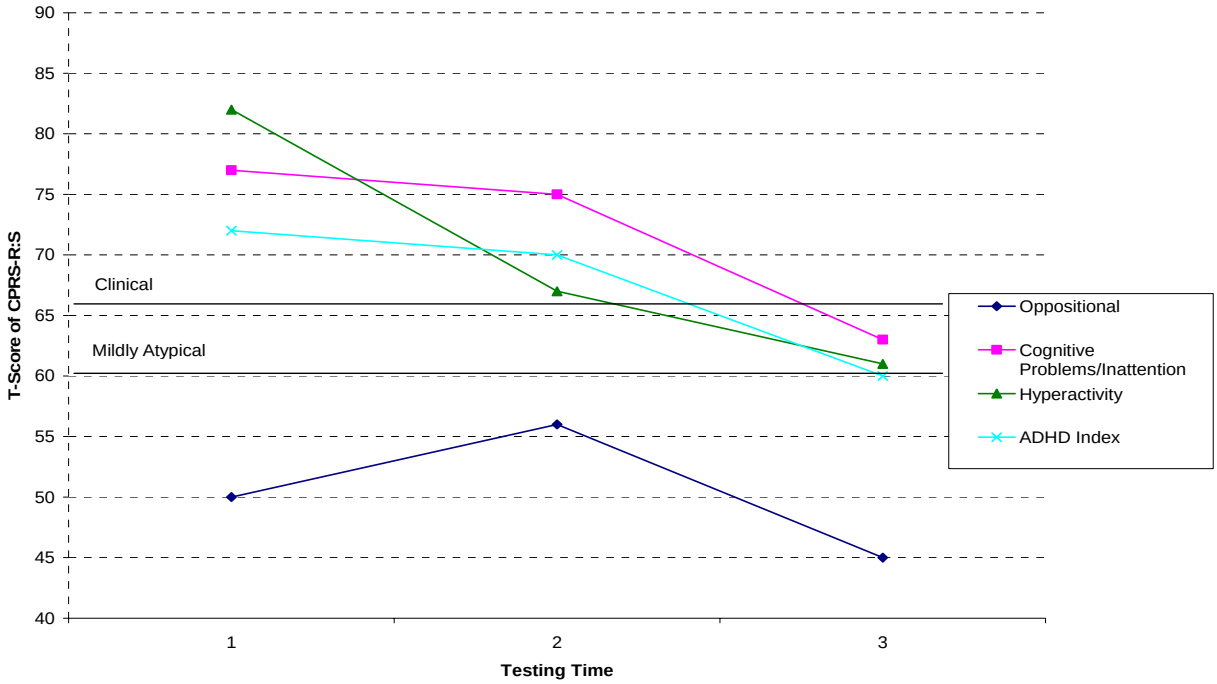

Figure 59. Ratings of Carlos' mother on CPRS-R:S. (Increase indicates worsening of behaviors.)

Visual Analysis of Teacher Data

Teacher Report Form. Carlos' teacher completed three assessments at pre-, mid- (after reading mentoring), and post-intervention (after play therapy) (see Figure 60). Carlos' teacher rated Carlos' behavior to be at clinical levels on the Externalizing and Total Problems domains at all phases of the study. The Internalizing Problems domain was rated by Carlos' teacher in the borderline range at pre-test and in the clinical range at the mid- and post-assessments. When examining all three domains, it was evident that Carlos' behavior was rated the most problematic after the second phase (reading mentoring). After the third phase (play therapy), Carlos' teacher rated Carlos as improving slightly in his behaviors, but not at a significant level.

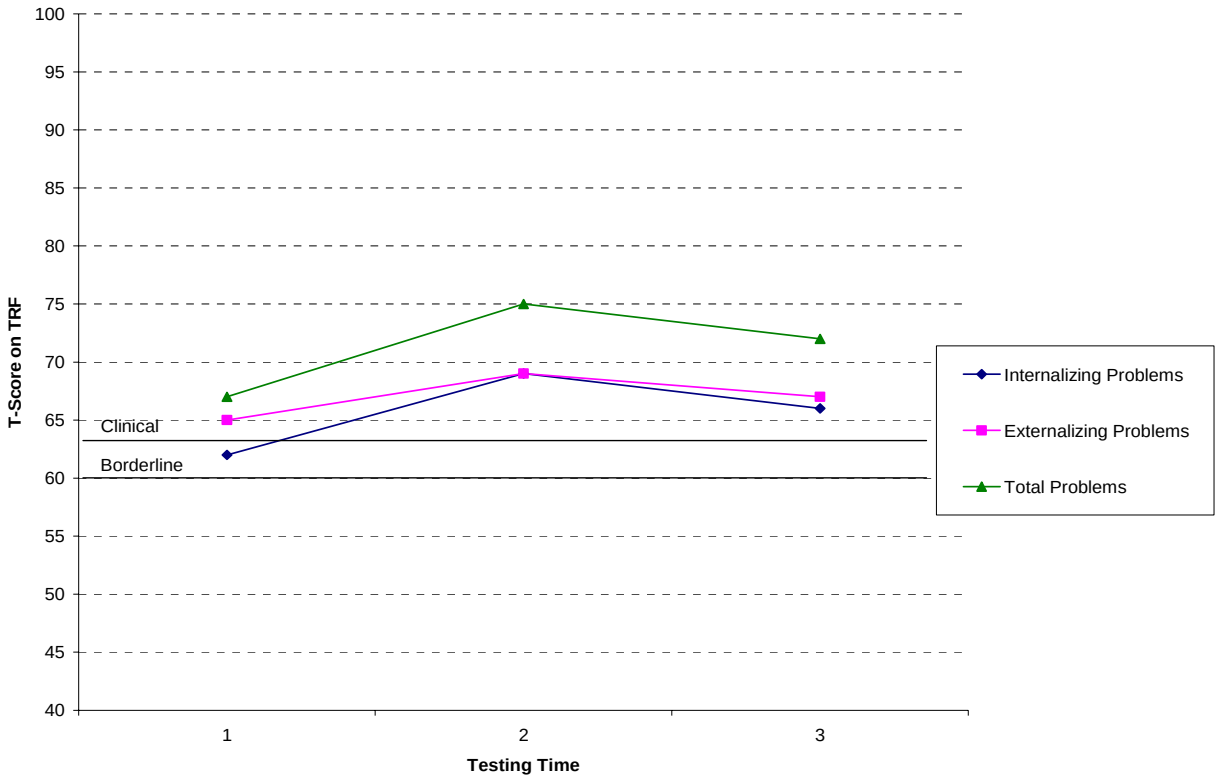

Figure 60. Ratings of Carlos' teacher on TRF. (Increase indicates worsening of behaviors.)

Figure 61 displays the ratings of Carlos' teacher on the ADHD Problems subscale of the TRF. Similarly to the results of the Externalizing Problems subscale, Carlos' teacher rated Carlos' ADHD behaviors to be in the clinical range at all three assessment periods. Thus, these results indicated that neither the reading mentoring nor the play therapy interventions made much impact on the perceptions of Carlos' teacher.

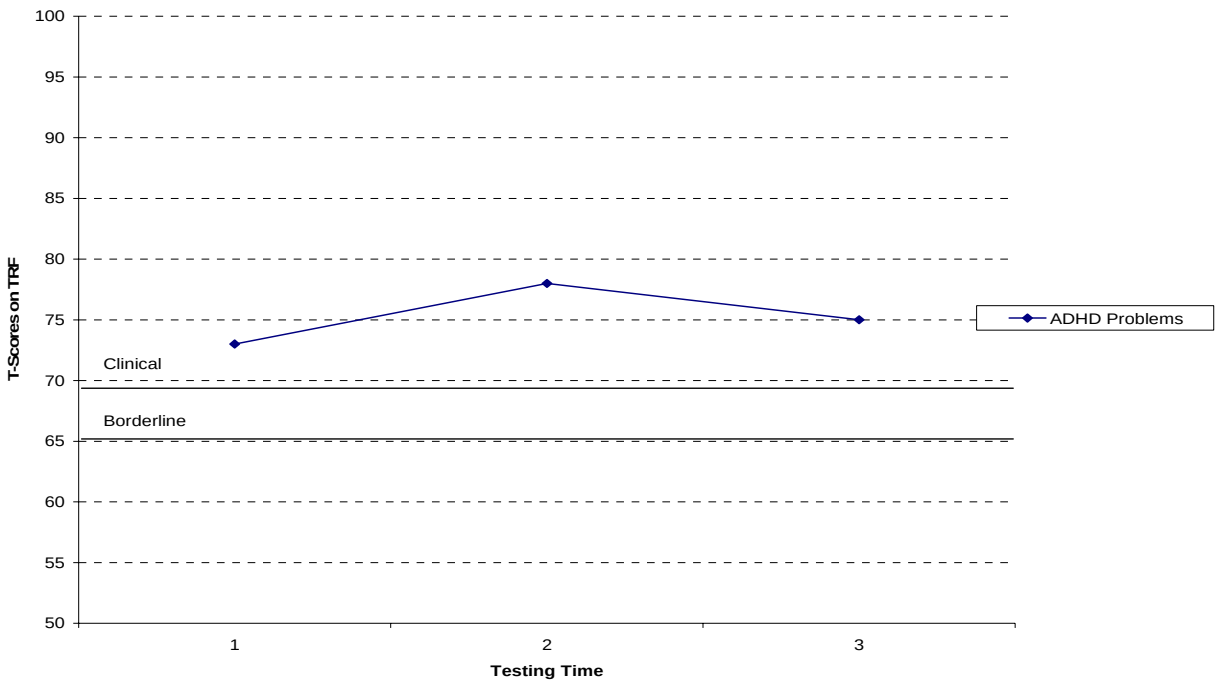

Figure 61. Ratings of Carlos' teacher on the ADHD Problems subscale of the TRF. (Increase indicates worsening of behaviors.)

Index of Teaching Stress. All of the four domains of the ITS and the subscales for which an elevated or clinical score was reported by Carlos' teacher were included in Figure 62. The graph of the results indicated that ADHD, anxious, and aggressive behaviors became more severe after the reading mentoring phase (scores fell in the elevated range), but after participation in play therapy, Carlos' scores in these areas returned to the normal range. Additionally, while most of Carlos' behaviors on the subscales became worse after the reading mentoring phase, they also improved after the play therapy phase. One exception to this finding is the score on the Low Ability/ Learning Disability (LALD) subscale, which was in the normal range at the pre- and mid-assessment periods, but changed to the elevated range at the final assessment. This LALD subscale represents the impact Carlos' teacher experienced when dealing with Carlos' special learning needs.

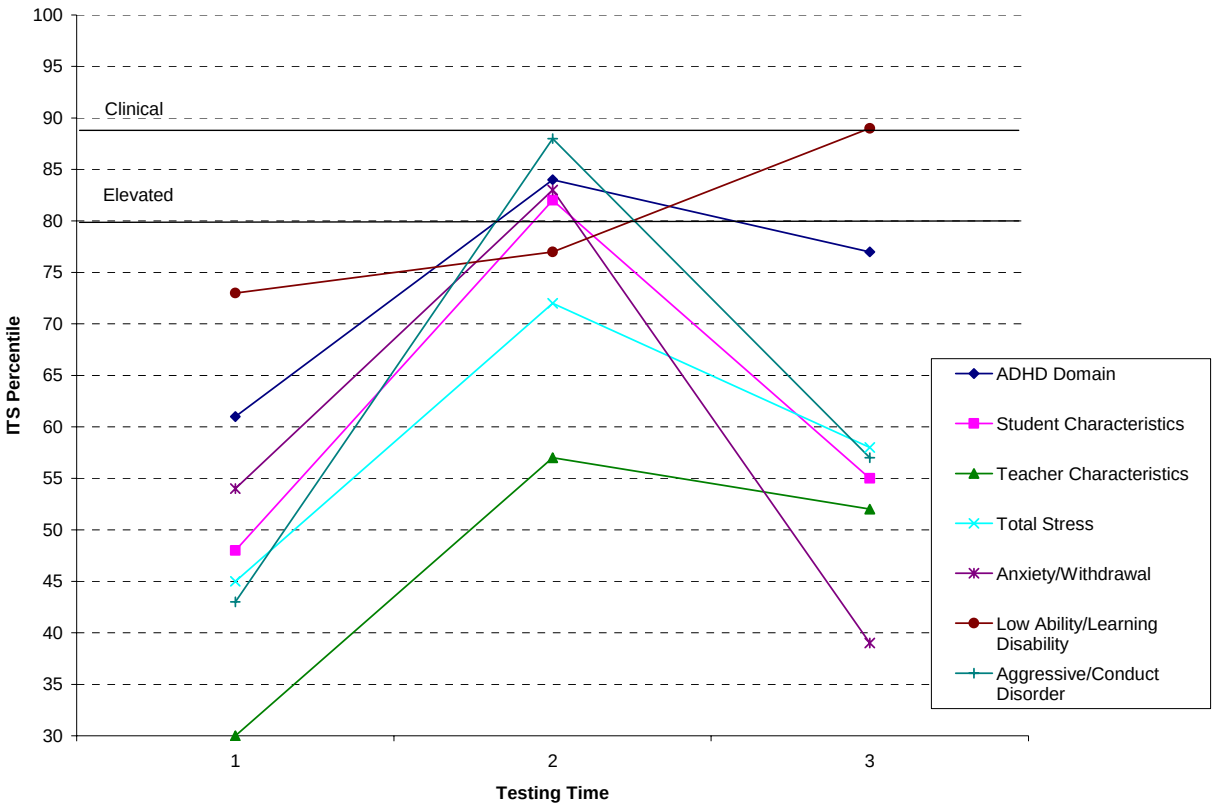

Figure 62. Ratings of Carlos' teacher on the ITS.(Increase indicates worsening of behaviors.)

Conners' Teacher Rating Scale-Revised: Short Form. Carlos' teacher rated Carlos' behavior on the CTRS-R:S at each testing period. Figure 63 displays the results graphically. The data indicated that Carlos' oppositional behavior demonstrated the most significant change over time. More specifically, Carlos' oppositional behavior was rated at a significant level of concern for Carlos' teacher at pre- and mid-assessment (after reading mentoring), but was rated in the normal range at the final assessment (after play therapy). The Hyperactivity and ADHD Index scores remained at the clinical level at each testing period, with slight variations (behaviors worsened after Phase 2 and improved slightly after Phase 3). The Cognitive Problems/Inattention score remained the same at the pre- and mid-assessment periods, but worsened at the final

assessment. This score indicated that Carlos' teacher rated Carlos to have more academic problems and inattentive behaviors than others his age.

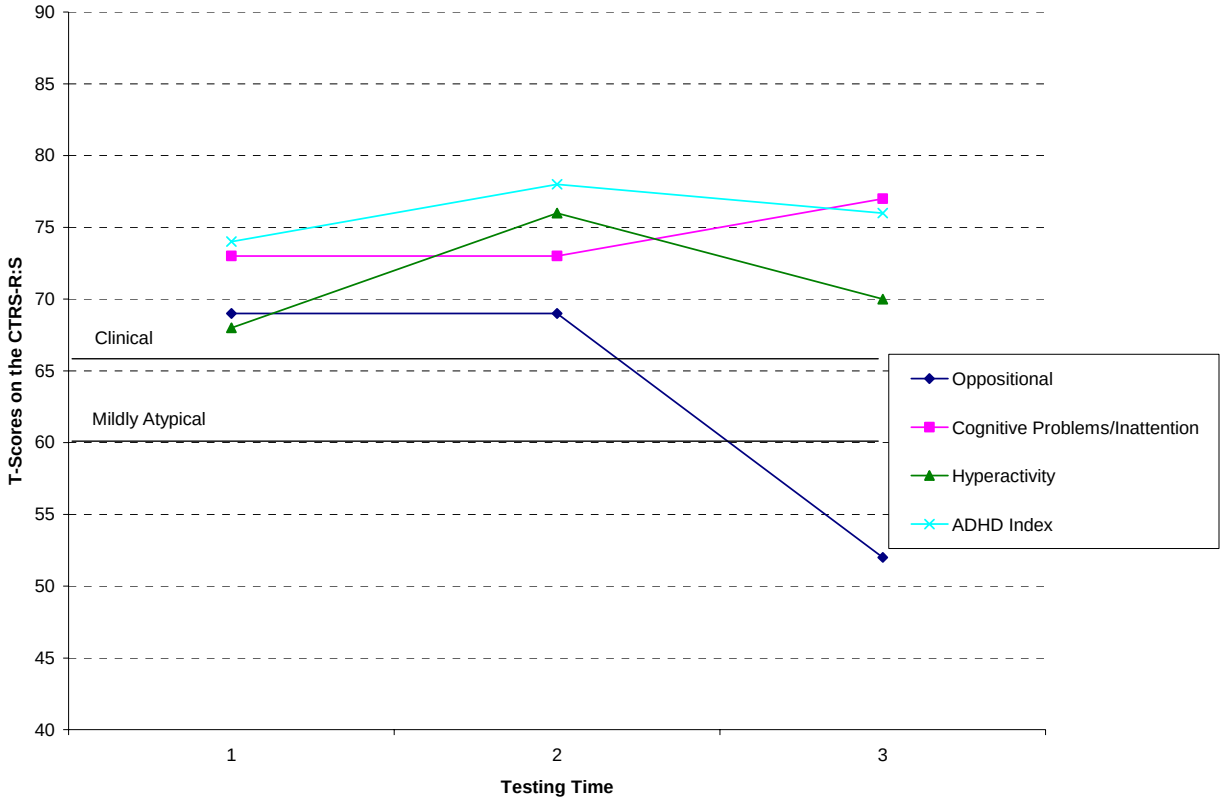

Figure 63. Ratings of Carlos' teacher on the CTRS-R:S. (Increase indicates worsening of behaviors.)

Discussion

John

The baseline trend for John's on-task behavior indicated a moderate positive trend (R^2=.25). Because this baseline was not stable, it is difficult to make conclusions about the results of John's participation in play therapy. It does appear that John's on-task behavior continued to improve over time, but this improvement may have occurred without the intervention of CCPT and consultation. Examination of the assessments completed by John's mother indicated little change over time. The teacher assessments indicated little change, as well, with slight increases in behavioral problems. Although the majority of the results for John seem unclear, the results of the ITS seem to show the most significant and apparent change. Specifically from testing period one to two, during which John participated in CCPT, little change in teaching stress occurred. However, between the mid and final assessment periods, John's teacher demonstrated significant decreases in her teaching stress in all areas (see Figure 12). This decrease in teaching stress may be indicative of the person-centered teacher consultation for which John's teacher participated during this time. This decrease in teaching stress due to participation in PCTC supports the findings of Ray (2007), in which teaching stress also decreased due to participation in PCTC.

Although the parent and teacher assessments revealed little change in John's behaviors, a follow-up interview with John's mother and teacher indicated some change. John's mother reported during the time John participated in play therapy that he was less aggressive and better able to work independently at school. John's teacher reported improvement in John's ability to verbalize his problems, deal with peer

conflicts, and cope with hurt feelings. Because John was absent due to illness quite often throughout the year, John's teacher speculated that making up missed sessions may have created more disruption in his behaviors. John's teacher also reported that consultation was helpful in that it provided her the opportunity to discuss with someone not affiliated with the school about what was going on in the classroom. Although she reported that it felt awkward at times, she appreciated the experience. Additionally, John's play therapist recommended continued play therapy for John. Thus, for John, it could be that additional play therapy sessions were needed for him to demonstrate a clear decrease in ADHD behaviors.

Jorge

The results of the graphed on-task behavioral data from the DOF indicated that the baseline and follow-up phases had large and moderate downward trends, respectively, while the CCPT phase had a flat slope (indicating little relationship between the intervention and on-task behavior), and the reading mentoring phase had a moderate upward trend. However, when comparing the level of each phase, it appears that there was almost no difference between the baseline and reading mentoring phases, and improvement in on-task behavior occurred during the CCPT only and follow-up phases. When the slope has a high magnitude (whether positive or negative), which demonstrates a strong relationship between constructs, Kennedy (2005) noted that the level (mean) is less meaningful in estimating the pattern of the data. Thus, in the case of Jorge, because the slopes of the intervention phases were not strong, a better estimate of Jorge's intervention effectiveness may be determined by comparing the levels. When comparing the levels across the phases, it is evident that the reading

intervention had no effect on the on-task behaviors of Jorge, whereas during the CCPT intervention phase, Jorge's on-task behavior improved slightly. The most improvement in on-task behavior was observed during the follow-up phase during which no intervention occurred. This improvement could be explained as a result of the play therapy intervention.

In examining Jorge's teacher assessment data, it appeared that she rated more concern with his cognitive/learning abilities than she had in the pre- and mid-assessment periods. Perhaps one might speculate that Jorge exhibited ADHD behaviors due to possible learning difficulties he had, of which were not evident to the teacher until working with him during the course of the school year. In fact, I learned from Jorge's teacher at the follow-up interview that Jorge had learning difficulties. She mentioned that Jorge was moving onto second grade the following school year, although she did not believe him to be academically prepared to do so.

Although Jorge's father had not expressed concern regarding Jorge's behavior at the pre-intervention interview, he did score Jorge within the clinical range at pre-assessment. However, over the course of the intervention periods, Jorge's father no longer rated Jorge's behaviors in the clinical or mildly atypical ranges.

Lee

When examining all of the observational data from Lee's DOF assessments throughout the study, it appears that Lee benefited in improved on-task behavior through his participation in CCPT. The trend line for all four phases indicated a large effect size; meaning that the play therapy intervention was effective in helping improve Lee's on-task behaviors over time. The level of each phase was compared to assess

any change in Lee's on-task behaviors. The level at baseline to the level at the first intervention phase demonstrated clear improvement. It would be implied, therefore, that CCPT was effective in improving Lee's on-task behaviors during this phase. In the third phase of continued CCPT, Lee's on-task behavior continued to improve, as is evidenced by the increase in the mean for this phase, as well. In the final phase in which no play therapy or consultation occurred, the level dropped slightly, mostly due to the final observation week, in which his behavior was less on-task than in the previous eight weeks.

When reviewing the results with Lee's father and teacher, both believed that the separation and divorce of Lee's parents had negatively impacted Lee's behavior at school. Lee's father explained that the divorce was announced to Lee in January, and during February, he moved to a new home. Thus, Lee's father seemed to believe that specific weeks during which Lee's behavior was more off-task seemed to correspond with specific weeks in which life changes occurred for Lee.

I discovered that Lee's teacher was frustrated with Lee's parents for not speaking with her about issues going on outside of the classroom that seemed to be interfering with Lee's performance at school. Lee's teacher also reported that the consultation aspect of the study was not very helpful. She reported that she would have preferred to learn specific strategies in how to help with Lee's behavioral difficulties in the classroom instead of having someone listen to her and reflect her feelings.

The parent and teacher assessment data that was gathered along with the observations indicate that Lee's father did not see Lee as experiencing behavioral problems. Additionally, Lee's father did not report that Lee's behaviors were stressful for

him. However, the results of the PSI indicated that Lee's father experienced increasing life stress and some isolation throughout the course of time Lee was involved in the study. At the follow-up interview with Lee's father, he explained that his divorce and the subsequent move to a new home were very stressful for him. He reported that he desired additional support for himself at that time, and thus, I recommended some counselors in the community from whom he could seek that support.

The teacher assessment data indicated that Lee's teacher initially had difficulties with ADHD behaviors (as reported on the TRF and CTRS-R:S), however, at the final assessment period, she no longer had significant concerns about these behaviors. Instead, Lee's teacher reported more concern with oppositional and anxious/dependent behaviors of Lee, as well as stress in interacting with Lee's parents. It could be explained that the divorce Lee's parents were going through during the school year made it more difficult for them to communicate with Lee's teacher. At the follow-up interview with Lee's teacher, she acknowledged that she only became aware of Lee's parents' divorce several months after it occurred, for which she expressed irritation.

Beyond the findings of behavior change for Lee as rated by Lee's teacher, of particular concern to Lee's teacher was her satisfaction, competence, and support in teaching. It was evident in the results of the ITS that Lee's teacher did not find much joy in teaching Lee, but did experience more support by the final assessment period. It could be that because Lee's teacher participated in teacher consultation, she received support that she was not able to find from others at the school, which allowed her to experience less stress in her interactions with Lee.

Alicia

The DOF data for Alicia indicated an improvement in on-task behavior during the intervention phases. However, because Alicia began taking medication at approximately the same time the play therapy intervention began, it is impossible to determine the effect of play therapy alone. However, it is apparent from the observations that Alicia's on-task behavior did improve. Alicia's mother and teacher attributed the many interventions for which Alicia participated in during this school year- -medication and play therapy- -as assisting with her behavior in the classroom. In fact, not only did Alicia's on-task behavior improve in the classroom, but she also was able to improve her academics; she tested at the developmentally appropriate level for reading for the first time since beginning school. Most likely, the combination of both interventions helped Alicia be more successful in school.

The parent assessment data for Alicia revealed that Alicia's mother assessed Alicia with fewer ADHD behaviors from pre- to post-assessment, however, still retained some significant concerns about these behaviors. Results of the PSI indicated additional stress with Alicia's father; Alicia's mother did not feel she received the support from him that she needed. This stressful relationship may have negatively impacted Alicia's behaviors.

The teacher assessment data for Alicia revealed clinical levels of concern with Alicia's ADHD behaviors prior to implementing the CCPT and PCTC interventions. Therefore, one could conclude that the play therapy intervention was effective in reducing her ADHD behaviors as rated by her teacher. However, it is difficult to make any clear statements regarding her behavior change due to the concurrent start of

medication. Additionally, teacher stress, although not at clinical levels of concern for Alicia's teacher noticeably decreased after the third phase, which could indicate stress relief from participation in teacher consultations.

From post-interviews with Alicia's teacher and mother, both reported seeing improvement in Alicia's on-task behaviors, social relationships with her peers, self-esteem, academic performance, and family interactions at home. Both Alicia's teacher and mother were pleased with Alicia's participation in the CCPT component of the study and attributed some of her change to her participation.

Alicia's teacher reported that her participation in teacher consultation was "great" and helpful in allowing her to "vent" about the stress in her life. She also reported appreciating the opportunity to get another person's perspective about her students. Specifically, Alicia's teacher shared that she became more cognizant of Alicia's behaviors, which she thought was helpful for Alicia's improvement.

Carlos

The behavioral observations of Carlos' on-task behavior in the classroom indicated improvement during the play therapy phase of the study. Because little change occurred during the reading mentoring phase, it is inferred that the reading intervention was not helpful in improving his on-task behaviors. Inversely, the play therapy intervention seemed to assist in his ability to remain on-task in the classroom. The follow-up period in which no intervention occurred seemed to imply that the play therapy intervention had a lasting impact on his on-task behaviors. Thus, the results of Carlos' observations indicated that play therapy was helpful in improving his on-task behaviors.

The parent assessments completed by Carlos' mother indicated that she did not have as many initial concerns about Carlos in comparison with his teacher. However, in all of the assessments Carlos' mother completed, it is evident that she witnessed improvement in his ADHD behaviors over time. In the follow-up interview with the Spanish-speaking translator, Carlos' mother attributed positive changes with Carlos' behavior at school and home to participation in play therapy. Specifically, Carlos' mother reported that that Carlos demonstrated increased concentration and less hyperactive behavior at home, that he was trying harder in school, followed rules at home more often, and was able to initiate homework without her asking him to start working on it.

The teacher assessments completed regarding Carlos' behavior indicated that Carlos' teacher did not perceive much change in his ADHD behaviors over the course of the study. Carlos' teacher's ratings in graphical analysis indicated that Carlos' behavior worsened after the reading mentoring phase and improved after the play therapy phase. One area of noteworthy improvement was Carlos' oppositional behavior after participation in play therapy (as rated by the CTRS-R:S). At the first and second testing periods, pre-intervention and post-reading mentoring, Carlos' teacher rated Carlos' oppositional behavior at clinical levels of functioning. However, after participation in play therapy, Carlos' teacher rated Carlos' oppositional behavior in the normal range on the CTRS-R:S. Thus, it appears that play therapy helped decrease Carlos' oppositional behaviors as rated by his teacher.

The one area that Carlos' teacher indicated as worsening over time was his academic abilities (as indicated by the Cognitive Problems/Inattention subscale of the

CTRS-R:S and the Low Ability/Learning Disability subscale of the ITS). This information taken together with a follow-up interview with Carlos' teacher indicated that he believed that Carlos had a learning disability that was undiagnosed. Carlos' teacher indicated that Carlos participated in a comprehensive assessment at the school at the end of the year, but that he did not qualify for any additional assistance but was labeled with a 504 for Other Health Impaired (for ADHD). Carlos' teacher reported dissatisfaction with this plan for Carlos as not providing him the assistance he needed in the classroom to be successful. When asked about changes in Carlos' behavior in the classroom in the follow-up interview, Carlos' teacher replied that Carlos seemed to have slightly matured in that he was not as apathetic about school. One example of change Carlos' teacher mentioned was that Carlos was now turning in some of his homework assignments. However, Carlos' teacher was not certain if this change was due to participation in play therapy or due to developmental growth over the school year.

Summary of All Participants

Overall, for only one of the five children (Alicia) were all three raters (parent, observer, and teacher) consistent in their ratings of the child participant's behavior. When reviewing the observational results of each child, it is evident that two children did not show clear change during participation in play therapy (John and Jorge). However, two children demonstrated a clear improvement in on-task behavior during participation in play therapy (Lee and Carlos). Alicia also demonstrated improvement in her on-task behaviors through the DOF assessment. However, the medication treatment she received throughout the study was a confounding factor that could not be ruled out.

For the students for whom behavior change was evident in the behavioral observations - Lee and Carlos - the parent and teacher assessments were not consistent. In the case of Lee, the teacher did not show an improvement in his ADHD behaviors over time, and Lee's father did not have any initial concern with his ADHD behaviors. In the case of Carlos, both the teacher and parent had clinical levels of concern with his ADHD behaviors initially; however, the parent demonstrated observed change through participation in play therapy. The teacher did not report any change in Carlos' ADHD behaviors during the study.

For two students in the study – John and Jorge – the observational data was not clear in providing considerable improvement in their ADHD behaviors. The observational data provided evidence that play therapy did not increase their off-task behaviors. The parent and teacher assessment data for John were fairly consistent, which seemed to also match the findings of the observational data: John's behaviors remained fairly unchanged over the course of the study. The parent and teacher assessment data for Jorge were less consistent: the ratings of Jorge's teacher demonstrated little change over time, and Jorge's father reported improvement in Jorge's ADHD behaviors across time.

Teacher Observations

Interestingly, whereas all of the parents reported a positive experience with the play therapy for which their children participated, the teachers did not necessarily report positive responses. From the follow-up interviews, it was evident that Alicia's teacher had the most positive response regarding play therapy, although she was not certain if the play therapy was the cause of Alicia's improved behavior. The teachers of John,

Jorge, Lee, and Carlos all reported uncertainty that play therapy was helpful for their students. All of the teachers reported that modifications that they made in the classroom were helpful for their students.

For the students whose teachers participated in teacher consultation, one seemed to enjoy her consultation experience and her ITS assessment indicated decreased stress that likely was due to participation in consultation. Thus, it is likely that this decreased stress improved the student-teacher relationship for John. The other teacher who participated in teacher consultation (the teacher of Jorge and Lee) did not enjoy her teacher consultation periods and in fact did not want to continue with them. Her ITS assessment did not demonstrate a decrease in teaching stress with either Jorge or Lee. It would not appear that her relationship with Jorge and Lee was enhanced in participation in PCTC. It may be concluded, therefore, that some teachers will appreciate and benefit from PCTC, whereas others may not find it helpful.

It may be speculated that the teachers who did not see much change in the behaviors of their students had personal feelings regarding the behaviors of their students that prevented them from seeing any positive or slight change in behavior. Researchers have demonstrated that externalizing behaviors, such as those associated with ADHD, are more irritating and stressful for teachers. Liljequist and Renk (2007) examined teachers' perceptions of their students' internalizing and externalizing behavioral problems and reported that teachers were more troubled by the externalizing behaviors than the internalizing behaviors. The authors found that teachers' personal teaching efficacies contributed to their perceptions of control they believed their students had over their externalizing problems. Also, a teacher's level of stress is

correlated with negative student-teacher relationships (Yoon, 2002). The student-teacher relationship is important in individual student's school adjustment, and therefore, the amount of stress a teacher experiences can possibly negatively affect a student's academic success. Yoon (2002) recommended that teacher consultation can be one method to help reduce teacher stress and therefore improve the student-teacher relationship. In the case of John, the combination of teacher consultation and play therapy did appear to decrease teaching stress for John's teacher. However, the teaching stress for the teacher of Lee and Jorge did not reduce with the assistance of play therapy and teacher consultation.

In a study investigating the effectiveness of CCPT on teaching stress, Ray, Schottelkorb, Brown, Muro, and Henson (in review) reported that teacher stress declined for students that participated in 16 play therapy sessions that began at the beginning of the school year. However, for students that began play therapy mid-year, their teachers did not report a significant decrease in teaching stress. Thus, the authors speculated that teacher perceptions regarding student behaviors may become more rigid over the course of the school year. In this study, for the two students that demonstrated clear change in ADHD behaviors as rated by the observers, I wondered if the teachers' personal life stressors contributed to the inability to see change (both Carlos' and Lee's teachers had health problems for which they had to be absent from school). Additionally, I wondered if the teachers perceived the play therapy and/or teacher consultation interventions as ineffective for assisting with ADHD behaviors. Or, perhaps these teachers were displeased that they were not involved in periodic consultation regarding their students' progress in therapy.

Also, in my role as a classroom observer, I concluded that the teacher of Jorge and Lee had unreasonable expectations for first grade students. Over the course of the study, I learned that this teacher was irritated with their “immature” behaviors. However, this teacher was a first year first grade teacher who was accustomed to teaching students of an older grade level. Therefore, it could be that she was expecting behaviors that were more typical of older students because of her prior experience.

This study makes evident the need to explore in more depth the reasons teachers may not perceive change when parents and objective observers do observe behavioral change. Perhaps future single case research could utilize not only three observations each week from an observer, but also have parents and teachers record their observations three times per week.

Parent Observations

In follow-up interviews, all parents reported that their children enjoyed participating in play therapy and all reported change in behavior, of which some directly linked to play therapy and some were not certain. The parent-child relationship in this study was assessed utilizing the Parenting Stress Index (PSI). Because two parents were unable to complete the PSI at each testing interval due to time constraints, only the parents of John, Lee, and Alicia completed the PSI at each assessment period. Although Alicia’s mother rated a decrease in parenting stress, it is difficult to explain what assisted that change due to Alicia beginning medication and play therapy at the same time. In both the case of John and Lee, no significant change in parenting stress was evident. Thus, it might be argued that the child intervention alone was not enough to decrease parenting stress. However, the findings of this study were different from

previous research by Ray (in press), in which she reported that parenting stress was reduced for parents of children participating in CCPT at a clinic setting. One difference between the two studies was the use of periodic parent consultation in Ray's study. Perhaps this parent consultation assisted in reducing parent stress.

Real-World Research Observations

This study provided real-world research in examining interventions with students identified with ADHD behaviors. The difficulties with conducting real-world research were evident in this study with the many confounding factors that were inherent outside of a controlled setting. Because of the difficulty teachers were experiencing with the behaviors of their students, I was unable to secure a baseline period with adequate control in many cases. Additionally, Alicia's mother decided to have her begin medication during the beginning of the second phase of the study, during which play therapy began. These are just two examples of the difficulties with real-world research that make functional relations less clear.

An additional factor to consider when examining the results of this study was the likelihood that the ADHD behaviors demonstrated by these students were not due to having a diagnosis of ADHD, but because of comorbid factors. Some conditions that have been linked to behaviors associated with ADHD are conduct disorder, oppositional-defiant disorder, learning disorders, and anxiety disorders (Kronenberger & Meyer, 2001). I attempted to control for this possibility by including in the study only those students that had clinical scores on the ADHD Problems DSM-subscale of the TRF. Students with clinical scores on other areas, such as Oppositional Defiant Problems or Anxiety Problems were not included. However, for both Carlos and Jorge,

teacher-identified problems with learning increased over the course of the school year. Thus, it may be inferred that the ADHD behaviors exhibited by these two students were not because of ADHD, but because of learning difficulties. Carlos' behavior was observed to improve during participation in play therapy, so perhaps play therapy allowed Carlos to gain support and acceptance that allowed him to have better focus in the classroom. Additionally, Carlos' behavior particularly seemed to improve in his oppositional behaviors after participation in play therapy as rated by his teacher on the CTRS: R-S. Jorge's behavior did not appear to improve significantly during play therapy, thus, it is unclear if play therapy was helpful for him. Alicia's mother rated Alicia's ADHD behavior and oppositional behavior at clinical levels at the start of the study. However, after participation in play therapy, Alicia's mother rated Alicia's oppositional behavior to function at a normal level. Thus, the oppositional behaviors for both Alicia and Carlos were decreased after participation in play therapy.

Implications

Several implications are posited in terms of the results of this study. First and foremost, it does appear that play therapy can be helpful for children with ADHD behaviors. Two students showed noteworthy improvement in their ADHD behaviors during play therapy and the results of two students was unclear. One student did improve, but it is unclear regarding the specific intervention that was helpful. Authors that have claimed that play therapy is ineffective with ADHD seem to be disproved in this study (DuPaul & Stoner, 2003; Pelham & Gnagy, 1999). It is unclear if the play therapy is most helpful, however, in assisting students with comorbid difficulties, rather

than ADHD alone. Further research is needed with this population to achieve more clarity regarding the specific conditions that may be assisted by play therapy.

In regards to comorbidity, the follow-up interviews and the assessment data from the parents provided information regarding possible stressors that could have contributed to inappropriate classroom behaviors of the students. For example, with Alicia, the information gained from her mother at the interview and the assessments revealed life stress in terms of family changes (father in jail, then moved back home, and then separation planned). Additionally, Lee's father indicated significant life stress with his divorce, which was finalized mid-way through the study. These familial life stressors may have contributed to inappropriate classroom behaviors for which play therapy may have assisted. As mentioned earlier, Drabick, Gadow, and Sprafkin (2006) found that a chaotic family environment and harsh/inconsistent parenting predicted depressive and conduct disorder symptoms. Thus, it may be implied that for students involved in this study in which family stress and change occurred (divorce, parental separation), that play therapy may have been helpful in preventing the symptoms of depression and conduct disorder.

An additional implication is the method by which researchers assess change for children. At this time, the majority of play therapy research has appeared to demonstrate behavioral change for children through the use of parent and/or teacher ratings. However, as was demonstrated in this study, ratings of behavior change were inconsistent between raters. Perhaps behavioral change should be assessed through multiple methods, with an objective rater, parent and teacher report. An additional method of behavior change may be assessed by examining the behavior of children

within the play therapy sessions themselves. Observers trained in assessing developmentally appropriate behaviors for children could assess the behaviors of children within sessions. As was mentioned earlier, I suggested that this area be examined through the use of additional single case design experiments. Specifically, gaining more awareness of specific raters through the use of multiple ratings each week by parents, teachers, and observers, may provide more clarity regarding the changes that are demonstrated by children.

Several implications regarding the use of single case design in counseling research may also be posited. The American Psychological Association (2007) recommended that single case design research be utilized to document interventions that are evidence-based. Additionally, single case research allows researchers the opportunity to discover more details about what contributes to individual change in counseling. One specific implication of this study is the importance of documenting a stable baseline. Although unable to provide a lengthy baseline in this study due to the needs of the school for which we were providing interventions, this study demonstrated the importance of securing a longer baseline with consistent behaviors. Kennedy (2005) cited the importance of the baseline in providing researchers a specific pattern of behavior for which to compare with the intervention phase. When a researcher can demonstrate a baseline with stable behavior, experimental control is demonstrated from which the researcher can then make conclusions regarding any behavior change in the intervention phase. Thus, this phase is essential in single case research. Therefore, in future single case research within the counseling field, I recommend establishing a baseline that is stable before implementing the intervention. One possible method of

securing a stable baseline may be to increase the number of observations to one/day or several/day instead of three/week as was utilized in this study. However, future researchers must follow the specifications of the specific instrument they utilize in measuring behaviors.

Another implication regarding the single case design is the use of various interventions and a follow-up period of assessment. Due to the likelihood of carry-over effects from one phase to the next in counseling research, authors discourage the use of a follow-up or additional intervention phase. In this study, it is impossible to rule out the cumulative effect of play therapy from Phase 2 to 3. Thus, when teacher consultation was utilized concomitantly with play therapy, it is difficult to determine what intervention is contributing to behavior change. Kennedy (2005) recommended that researchers utilize a multiple baseline single case design when the effects of the independent variable (in this study, play therapy) will most likely carryover to other phases, and therefore, cannot be reversed. Thus, the participants involved will only participate in a baseline and an intervention phase due the irreversibility of the intervention phase. Specifically, in this study, a multiple-baseline-across-participants could have been utilized. This design requires the researcher to have multiple participants (a minimum of two) in the study, and the length of the baseline condition must vary across participants (Kennedy, 2005). Whereas the baseline phase begins at the same time for all participants, the intervention phase begins at differing times across participants, only after a stable baseline is indicated. Any intervention effect can therefore be replicated across participants with this specific design. The difficulty in utilizing this method of single case design in this study was the length of the baseline

phase. As was mentioned earlier, the baseline phase was limited to three weeks due to the needs of the school. However, it appears that this specific type of design would be useful for future counseling research due to the irreversibility of the effects on clients over time.

Additionally, Ray (in press) stated that play therapy is often not effective in producing behavior change as rated by parents until after 11 sessions. Thus, it may be likely that behavior change may not occur until the second phase of the study for those students that participated in play therapy the majority of the study. For students that participated in play therapy in only one phase, it may be that more significant behavior change might have been indicated if they were able to participate in play therapy for a longer period of time.

Limitations of Study

In the assessment of ADHD in children, teacher's ratings are considered one of the most important and most utilized methods (Loughran, 2003). Because teachers' ratings are important in ADHD assessment, the researcher chose to identify children for participation in this study through teacher assessment of ADHD behavior. However, a stronger method of identifying students with attention and hyperactivity behavioral problems would be through utilization of an additional rater, such as parents, and perhaps an additional source of information, such as a structured interview. The manner of identifying children with ADHD behavioral problems solely with teacher report on two instruments was a limitation of the study.

The design of this study, a single case design, was an additional limitation. Results demonstrating effectiveness of play therapy and teacher consultation must be

viewed in terms of the individual cases involved. For this study, I had difficulty ruling out extraneous factors such as history, maturation, or other events that co-occurred with the intervention. Generalizability of the results to other children may be questionable.

Another limitation was the use of counselors trained in CCPT to observe student classroom behavior. Although both observers were unaware to which treatment group the student participants were assigned, through the course of the study, observers gained information through observation in the classroom and through interaction with teachers that insinuated the treatment assignment. Utilizing observers without a connection to the study may prevent biased observational data. For example, a doctoral counseling student that has a specialty area of adult counseling could be utilized as an observer. This person would know little about interventions for children and may therefore be less influenced by information one overhears when observing.

Additionally, teachers most likely became aware of the type of treatment the student participant received. Therefore, this knowledge could have biased the manner in which the teachers responded in their testing, which would have biased the assessment results.

Conclusion

Researchers have identified ADHD as one of the most common disorders of childhood (Woodard, 2002), and thus ADHD affects the lives of countless children, families, and teachers everyday. As of now, the American Psychological Association (2007) has identified five interventions that are “well-established” or “promising” for improving the behaviors associated with ADHD. Child-centered play therapy (CCPT), an intervention that has demonstrated effectiveness in reducing externalizing and

internalizing behavioral problems for children (Bratton, Ray, Rhine, & Jones, 2005), has not been studied systematically in its' effectiveness for children with ADHD. The impact of CCPT for children with ADHD on the parent-child and student-teacher relationships has not been examined. Additionally, person-centered teacher consultation has minimal research demonstrating its effectiveness in reducing teacher stress (Ray, 2007). The American Psychological Association (2007) and researchers in the counseling field (Morgan & Morgan, 2003; Sharpley, 2007) have encouraged counseling researchers to utilize single case design methodology in demonstrating effectiveness of specific interventions. Thus, in this study, a single case research design was utilized to examine the impact of CCPT and PCTC on the ADHD behaviors of children and the stress of the parent-child and student-teacher relationships.

Within the confines of a larger study that examined the effectiveness of CCPT for students with ADHD behaviors, the researcher for this study selected five students for which teachers' ratings of their behavior on the ADHD Problems subscale of the TRF and the ADHD Index score of the CTRS-R:S were in the borderline or clinical category. Once parental permission was attained, a doctoral student blindly assigned each child to an intervention of CCPT and PCTC or a reading mentoring intervention. Observers trained in the DOF were unaware of the intervention assignment of the children to prevent biased observational results. The observers assessed the on-task behaviors of all five children for a baseline period of three weeks, as well as throughout the duration of each single case experiment, which differed depending on the individual child participant. Three students (John, Lee, and Alicia) participated in three weeks of baseline, six weeks of CCPT, six weeks of CCPT with PCTC, and three weeks of follow-

up observation. Two students (Jorge and Carlos) were blindly assigned to the reading mentoring condition, however, due to continued problematic behaviors in the classroom during participation in reading mentoring, the teachers asked for the students to receive a different intervention. Thus, the doctoral student research assistant placed these two students into CCPT. I collected additional data from the parents and teachers at pre-, mid-, and post-intervention periods to supplement the findings of the DOF observations.

Results of the five participants were mixed. The observational data for three students (Lee, Alicia, and Carlos) demonstrated substantial improvement in the observed ADHD behaviors within the classroom. Because Alicia also started stimulant medication at the start of her interventions for this study, I was unable to state any conclusions from her improvement. For Lee and Carlos, observational data indicated improvement in on-task behaviors over time, thus indicating CCPT and PCTC may have been helpful in reducing ADHD behaviors. Assessment data gathered from the parents of Lee and Carlos were mixed; whereas Lee's father at no time had any clinical levels of concern with Lee's behaviors, Carlos' mother had initial clinical levels of concern with ADHD behaviors, but after participation in CCPT, Carlos' mother no longer had clinical levels of concern. The teachers of Lee and Carlos did not indicate substantial improvement in their ADHD behaviors through participation in CCPT.

For John and Jorge, clear improvement in on-task behaviors was not demonstrated on the DOF. The ratings of John's teacher and parent supported the findings of the DOF. However, the ratings of Jorge's parent showed behavioral improvement, while the teacher's assessment did not. Across the three parents that completed the PSI, no clear change in parenting stress as rated on the PSI was evident.

Teaching stress was reduced substantially for one teacher who participated in PCTC; however, a second teacher that participated in PCTC did not seem positively affected by participation in PCTC. Due to the inconsistency of the results across participants, future research investigating the effectiveness of CCPT with ADHD behaviors of students is needed. Implications for future research regarding the use of single case design, the measurement of student behavior change, and issues of comorbidity are indicated.

APPENDIX A

PARENT/TEACHER INFORMED CONSENT

University of North Texas Institutional Review Board

Parent Informed Consent (Form-2)

Before agreeing to you and your child's participation in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

Title of Study: ***Impact of Play Therapy Services on Behaviors and Relationships of Children with Attention Difficulties (Follow-Up Case Study)***

Principal Investigator: ***Dee Ray, Ph.D., LPC, NCC, RPT-S***

University of North Texas (UNT), Department of Counseling, Development, and Higher Education.

Purpose of the Study:

You have previously given permission for your child to participate in the above study. After receiving your written permission, we had your child's teacher complete three instruments that assessed your child's behavior. Based on scores from your child's teacher, your child appears to have significant attention or hyperactive behavioral problems. You and your child are being asked to participate in a research study which involves determining if play therapy is effective in helping children with attention difficulties improve the way they act and feel at school. The study will also look at whether play therapy for children with attention difficulties helps reduce teacher stress in the classroom.

Study Procedures:

Your child will be asked to participate in play therapy. Play therapy is a counseling intervention designed for children to express themselves in the developmentally appropriate way of playing with toys. Elementary-age children have difficulty working through problems with words, so play therapy facilitates the process by providing a play environment from which they can work through those issues that impede their academic progress. Your child decides what materials to play with and what to discuss in play therapy. Your child will not be asked invasive questions or forced to play.

For this study, your child will be placed in one of two groups:

Group 1: Children will begin play therapy immediately and will receive two 30-minute sessions of play therapy each week for 12 weeks.

OR

Group 2: Children will receive 30 minutes of individualized reading time with a school volunteer two times per week for 12 weeks. Following the 12 weeks of reading sessions, children in this group will receive play therapy one time per week for the remainder of the school year.

Your permission also allows your child's homeroom teacher to fill out the Teacher Report Form *(*TRF*)*, which asks the teacher to report on your child's behavior in the classroom, the Index of Teaching Stress *(*ITS*)*, which asks the teacher to report on the level of stress that your child's teacher experiences*,* and the Conners' Teacher Rating Scale-Revised (CTRS-R:S), which asks the teacher to identify inattentive/hyperactive behaviors demonstrated by the child. If your child is administered the Texas Primary Reading Inventory in their classroom, we will be collecting their scores for the fall and spring semester.

In addition, your participation in this study also requires that you complete the Child Behavior Checklist *(*CBCL*),* which asks you to report on your child's behavior, Parenting Stress Index (PSI)*,* which asks you to report on the level of stress that you experience in parenting your child, and the Conners' Parent Rating Scale-Revised (CPRS-R:S), which asks you to identify inattentive/hyperactive behaviors demonstrated by your child. You will be asked to complete these instruments at 4 different points over the year; the first at the beginning of the 12 week period, the second at the end of a 6 week period, the third at the end of the 12 week period, and the fourth administration will occur three weeks after play therapy or reading sessions have ended. The instruments will take approximately 45 minutes to complete at each administration.

Your permission also allows the researcher to conduct behavioral observations of your child in the classroom. This will take place without any disruption to your child's school day.

Foreseeable Risks:

There are no significant personal risks directly involved in this study. You and your child's participation is completely voluntary. You may withdraw your child at any time during the course of the study. However, your child might experience some discomfort, which may include one or more of the following:

1. Anything that is said or done during play therapy is considered confidential, meaning that the therapist will not reveal anything that happens in the session to another school official or adult. However, if your child discloses child abuse, neglect, exploitation or intent to harm another person, the therapist is required by law to report it to the appropriate authority.
2. When your child participates in play therapy, he or she will be pulled from another school activity upon the approval of the teachers. It is possible that your child might miss an academic or extracurricular experience. However, because your child's principal and teacher have agreed to their participation in this study, your child will not be placed at academic risk.

3. Because play therapy is a counseling method, your child will be expressing emotions that could be strong for him or her. The therapist will help your child talk through these emotions and will stop therapy if any harmful effects upon your child are noted. Harmful effects would include inability to maintain self-control or being in a distraught state of mind.

Benefits to the Subjects or Others:

We expect the project to benefit your child by possibly improving self-esteem, behavioral difficulties, emotional difficulties, social interaction and skills and academic progress. We further hope that this project reduces the level of stress that your child's teacher experiences so that the relationship between your child and child's teacher is marked with positive interactions. The results of this study will provide school counselors across the nation with knowledge that helps them improve child behavior and teacher child relationships so that children are happier and more successful in public school.

Compensation for Participants:

You will receive a $10.00 gift certificate to Target at the completion of each instrument administration, meaning that upon completion of the study you will have received 4 gift certificates totaling $40.00.

Procedures for Maintaining Confidentiality of Research Records:

All information will be kept confidential in a locked cabinet in the clinic of the Counseling Program at the University of North Texas. Names of parents and children will not be disclosed in any publication or discussion of this material. Information obtained from the instruments will be recorded with a code number. Only the research team will have a list of the participant's names. The play sessions will be videotaped. The research team will observe the videotapes to ensure the quality of the study. At the end of this study, the videotapes may possibly be shown in professional presentations for educational purposes. Identity information such as name, place of living, and other specific information will not be revealed when videotapes are shown in educational settings.

Questions about the Study

If you have any questions about the study, you may contact Dr. Dee Ray at (940) 565-2066 or dray@coe.unt.edu.

Review for the Protection of Participants:

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding your rights as a research subject.

Research Participants' Rights:

Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- Dr. Dee Ray has explained the study to you and answered all of your questions. You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to allow your child to take part in this study, and your refusal to allow your child to participate or your decision to withdraw him/her from the study will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your child's participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as the parent/guardian of a research participant and you voluntarily consent to your child's participation in this study.
- You have been told you will receive a copy of this form.

_____ _____

Signature of Parent or Guardian Date

For the Principal Investigator or Designee:

I certify that I have reviewed the contents of this form with the parent or guardian signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the parent or guardian understood the explanation.

_____ _____

Signature of Principal Investigator or Designee Date

University of North Texas Institutional Review Board

Teacher Informed Consent Form (Form – 2)

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

Title of Study: ***Impact of Play Therapy On Behaviors and Relationships of Children with Attention Difficulties***

Principal Investigator: ***Dee Ray, Ph.D., LPC, NCC, RPT-S***

University of North Texas (UNT), Department of Counseling, Development, and Higher Education.

Purpose of the Study:

You have previously given permission for you and your student's participation in the above research study, which involves determining if play therapy is effective in helping children with attention difficulties improve the way they act and feel at school. Based on scores from the three assessments we gathered from you, the student you have referred appears to have significant attention or hyperactive behavioral problems.

Study Procedures:

The child you have identified will be randomly assigned to participate in one of two groups:

Group 1: Children will participate in two 30-minute sessions of play therapy each week for 12 weeks. With your consent, you also agree to participate in 10 minutes of teacher consultation one time per week for 6 weeks.

OR

Group 2: Children will receive 30 minutes of individualized reading time with a school volunteer two times per week for 12 weeks. Following the 12 weeks of reading sessions, children in this group will receive play therapy for the remainder of the school year.

Play therapy is a counseling intervention designed for children to express themselves in the developmentally appropriate way of playing with toys. Elementary-age children have difficulty working through problems with words, so play therapy facilitates the process by providing a play environment from which they can work through those issues that impede their academic progress.

Your participation in this study also requires that you complete the Teacher Report Form *(*TRF*)*, which asks you to report on the child's behavior in the classroom, Index of Teaching Stress *(*ITS*)*, which asks you to report on the level of stress that you experience in teaching the referred child, and the Conners' Teacher Rating Scale-Revised (CTRS-R:S). You will be asked to complete these instruments at 4 different points over the year; the first at the beginning of the 12 week period, the second at the end of a 6 week period, the third at the end of the 12 week period, and the fourth administration will occur three weeks after play therapy or reading sessions have ended. The instruments will take approximately 45 minutes to complete at each administration.

Your consent also allows the researcher to conduct behavioral observations of the identified student in your classroom. This observation will take place without any disruption to the student and the classroom.

Foreseeable Risks:

There are no significant personal risks directly involved in this study. Your participation is completely voluntary. You may withdraw at any time during the course of the study.

However, you might experience some discomfort during the weekly teacher consultations, which may include one or more of the following:

1. Anything that is said or done during consultation is considered confidential, meaning that the therapist will not reveal anything that happens in the consultation to another school official or adult. However, if you disclose child abuse, neglect, exploitation or intent to harm another person, the therapist is required by law to report it to the appropriate authority.
2. Because consultation will allow you to express your emotions openly, you might experience feelings that are strong for you. The counselor will help you talk through these emotions and will stop consultation if any harmful effects are noted.

Benefits to the Subjects or Others:

We expect the project to benefit you by helping to increase your job satisfaction through the reduction of stress related to the referred child's behavior. The results of this study will provide school counselors across the nation with knowledge that helps them

improve child behavior and teacher child relationships so that teachers and children are happier and more successful in public school.

Compensation for Participants:

You will receive a $10.00 gift certificate to Target at the completion of each instrument administration, meaning that upon completion of the study, you will have received 4 gift certificates totaling $40.00.

Procedures for Maintaining Confidentiality of Research Records:

All information will be kept confidential in a locked cabinet in the clinic of the Counseling Program at the University of North Texas. Names of teachers, parents and children will not be disclosed in any publication or discussion of this material. Information obtained from the instruments will be recorded with a code number. Only the research team will have a list of the participant's names.

Questions about the Study

If you have any questions about the study, you may contact Dr. Dee Ray at (940) 565-2066 or dray@coe.unt.edu

Review for the Protection of Participants:

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights:

Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- Dr. Dee Ray has explained the study to you and answered all of your questions. You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.

- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You have been told you will receive a copy of this form.

_____ _____

Signature of Participant Date

For the Principal Investigator or Designee:

I certify that I have reviewed the contents of this form with the subject signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the participant understood the explanation.

_____ _____

Signature of Principal Investigator or Designee Date

APPENDIX B

PLAY THERAPY SKILLS CHECKLIST

Play Therapy Skills Checklist **Center for Play Therapy/University of North Texas**

Therapist:_____Child/Age: _____ Date: _____Observer: _____

Therapist Non-Verbal Communication:	Too Much	Appro-priate	Need More	None	Therapist Responses/ Examples	Other Possible Responses
Lean Forward/Open						
Appeared Interested						
Relaxed Comfortable						
Tone/Expression Congruent with Child's Affect						
Tone/Expression Congruent with Therapist's Responses						
Therapist Responses:	Too Much	Appro-priate	Need More	None	Therapist Responses/ Examples	Other Possible Responses
Tracking Behavior						
Reflecting Content						
Reflecting Feelings						
Facilitating Decision Making/Responsibility						
Facilitating Creativity/Spontaneity						

Creativity/Spontaneity						
Esteem Building/Encouraging						
Facilitating Relationship						
Enlarging the Meaning/Facilitating Understanding						
Succinct/Interactive						
Rate of Responses						

Limit Setting:

Child Made Contact/Connectedness:

Identified Themes:

Therapist's Strengths: Areas for Growth:

APPENDIX C

TEACHER CONSULTATION SCRIPT

Teacher Consultation Script and Guidelines

Guidelines:

1. Each session is 10 minutes, no longer and no shorter.

2. Begin each session with, “How are things going with (child’s name)?”

3. Try as hard as possible to meet with the teacher alone. It’s okay if they are distracted such as eating lunch or moving around the room. Just do your best to get them focused, but don’t force it.

4. Use only person-centered responses when holding session with teachers. These include content reflection, feeling reflection, encouragement, confrontation, and enlarging the meaning (which can be interpreted in several different ways so go with your gut on this one). Mostly the point is, just don’t be overly directive. It is likely that the teacher will attempt to engage you in problem-solving. If this is the case, facilitate this process in the least directive way possible. Think about how you are going to respond to questions such as, “What do you think I should do about John?”; “Why do you think he acts that way?”; “How should I handle him when he does that behavior?”

5. It is possible that some of the teachers might be less than thrilled about your consultation time each week. They have all been fully informed so they knew this was going to be happening. Just reassure them that this is meant to be a support to them, but stay on course and be directive in your persistence to at least participate in the 10 minutes each week, even if this means that they use the whole time to complain about having to have the time.

6. At the end of each session, you need to write a few notes for each consultation. No need to be specific in your notes, just make sure you include the focus of the consultation, addressing whether the teacher mostly spoke about feelings regarding the student, behavior of the student, teacher’s feelings about other subject areas, or other concerns of the teacher.

Script for first session:

We’ll be meeting for 10 minutes each week. The purpose of this meeting is to provide support for you in whatever way you need. You can choose to talk about the particular student referred for play therapy or any other issues that concern you. I will always begin our conversation with, “How is it going with (child’s name)?”, but you can choose to discuss any issues of concern for you. Our conversation is confidential and will not be shared in whole or in part with any school staff.

APPENDIX D

PARENT FOLLOW-UP QUESTIONNAIRE

Follow-Up Questions for Parents

1. Over the past school year, have any events occurred which you believe have had an impact upon the behavior of your child?

2. Have any changes occurred in your household in the past 5 months?

3. Please describe any changes in your child or any changes in your relationship with your child that you've seen in the past 2 months.

4. Have you received any feedback from the teacher regarding your child since the play project began? If so, what?

5. Have there been any changes in your child's physical growth/health, school performance, friendships? Educational diagnoses/testing?

6. Have any changes taken place in your life which could possibly affect the home/school environment?

7. Do you know of any changes at your child's school that have occurred in the past 5 months?

8. Has your child been to the doctor during the past school year? If so, any significant findings? New diagnoses/medications?

9. What has been your experience with the play therapy project? Any changes/recommendations for me?

APPENDIX E

TEACHER FOLLOW-UP QUESTIONNAIRE

Follow-Up Questions for Teachers

1. Over the past school year, have any events occurred which you believe have had an effect upon the behavior of _____?

2. Have any changes occurred in your classroom procedures in the past 5 months?

3. Have you noticed any changes in this student's physical growth/health, friendships, academic performance?

4. Have any changes taken place in your life which could possibly affect the classroom environment?

5. Have any administrative procedures changed during this school year?

6. Are you aware of any medical changes (i.e.-new diagnoses/medications) with your student? Educational diagnoses?

7. Can you describe any changes in the child between how you would have described him/her at the beginning of the year and now?

8. How would you characterize your experience with teacher consultation? In what way was it helpful/not helpful?

9. Please describe your impressions of the play project and its effect on you and/or the student who participated.

10. Suggestions/recommendations for me in regards to your experience with this project?

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