

The Treatment of Comorbid Attention-Deficit/Hyperactivity Disorder (ADHD) and Anxiety in
Children

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(ABSTRACT)

The current study evaluated a treatment designed specifically for children with attention-deficit/hyperactivity disorder (ADHD) and anxiety. The experimental treatment involved a combination of parent management training for ADHD and family-based treatment for anxiety. Sessions lasted approximately 90 minutes, and the treatment consisted of 10 weekly sessions. 8 children ages 8-12 with ADHD, Combined Type (ADHD-C) and at least one of three anxiety disorders (separation anxiety disorder, generalized anxiety disorder, social phobia) were selected for the study. Children were assessed with semi-structured diagnostic interviews and other standardized measures to determine study eligibility. The current study utilized a noncurrent multiple baseline design to evaluate treatment efficacy. Upon selection into the study, children were randomized to one of three baseline control conditions (i.e., 2, 3, or 4 weeks of waiting) in order to insure that change in behavior was associated with implementation of the treatment. Treatment commenced after the respective baseline periods. Families were assessed throughout treatment but more comprehensive assessments were conducted at pre-treatment, mid-treatment, and 1-week post-treatment. Results highlighted significant improvement in anxiety-related symptoms but more modest gains for ADHD-related symptoms.

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Introduction

Although evidence supports the clinical validity of attention-deficit/hyperactivity disorder (ADHD; Barkley, 2006; Faraone, Sergeant, Gillberg, & Biederman, 2003), ADHD remains a heterogeneous disorder with multiple etiologies (Nigg, 2006; Nigg & Casey, 2005). At the symptom level, an ADHD profile can involve various combinations of the core symptoms of the disorder: inattention, hyperactivity, and impulsivity. In addition to core symptom variability, ADHD is often highly comorbid with other psychiatric disorders including the internalizing (13% to 51%) and externalizing disorders (43% to 93%), suggesting that “pure” ADHD is often the exception rather than the rule (Jensen et al., 2001; Jensen, Martin, & Cantwell, 1997). Given the heterogeneity in symptomatology among children with ADHD, comorbidity has become an important ADHD research area in the last 10 to 15 years, leading some authors to advocate for the examination of distinct comorbid subtypes of ADHD (Barkley, 2006; Jensen et al., 2001; Jensen et al., 1997). Studies to date have focused primarily on the comorbidity of ADHD and externalizing disorders with fewer studies examining the comorbidity of ADHD and internalizing disorders such as the anxiety disorders. One reason for this lag in research is that ADHD is often comorbid with externalizing disorders at a rate higher than the anxiety disorders (Angold, Costello, & Erkanli, 1999; Biederman, Newcorn, & Sprich, 1991; Jensen et al., 1997). At the same time, the comorbidity of ADHD and anxiety is substantial with an average comorbidity rate of 25% found in both epidemiological and clinical samples (Biederman et al., 1991; Jensen et al., 1997; Tannock, 2000).

Although a small body of research has been devoted to studying the characteristics of children with ADHD and anxiety (see Jarrett & Ollendick, 2008, for a recent review), only a handful of studies have examined treatment response for this subgroup. Prior to exploring studies

that have utilized treatments designed specifically for both conditions, treatments for ADHD will be reviewed more generally followed by a review of treatments for anxiety, in as much as many of the youth in these early studies likely possessed both ADHD and one or more of the anxiety disorders (up to 25%). Finally, studies addressing the treatment of both disorders when they are comorbid with one another will be reviewed followed by the specific treatment developed for the current study.

Treatment of ADHD

Given the chronic nature of ADHD, a number of treatment approaches have been utilized over the years, including approaches such as one-to-one therapy, chiropractic treatments, diets, biofeedback, perceptual-motor training, pet therapy, play therapy, and treatment for inner ear problems. Unfortunately, many of these approaches have not yielded promising results in the treatment of ADHD. To date, less than a handful of treatments have been found to be effective in the short-term. These treatments include behavioral modification, central nervous system stimulants, and the combination of these treatments (Richters et al., 1995). Although these approaches have often yielded *improvement* in functioning, ADHD symptomatology typically remains outside of the normal range of functioning following treatment. In addition, when these treatments are discontinued, ADHD symptoms often return to pre-treatment levels. Among these three treatments, pharmacotherapy has been found to be the most effective short-term treatment for ADHD, although it should be noted that discontinuing medication often leads to a rapid return to pre-treatment symptom levels (Pelham, Wheeler, & Chronis, 1998). In addition, recent findings have shown that the advantages of medication over psychosocial treatment may only apply in the short-term (Molina et al., 2009).

Given the evidence for the efficacy of these treatments, one may wonder whether the treatments should be administered individually or in combination with each other. A number of studies have addressed this question, but the most comprehensive study to date has been the Multimodal Treatment Study of Children with ADHD (MTA Study; MTA Cooperative Group, 1999a). In the largest clinical trial ever conducted for the treatment of ADHD, the MTA Study compared behavioral treatment alone, stimulant medication alone, a combined treatment, and a community control treatment (in which families pursued a treatment of their choice in the community) in a sample of 579 children between 7 and 10 years of age. Overall, the study found that stimulant medication alone and the combined treatment were significantly more effective than the behavioral treatment alone and the community control condition. The combined treatment did not significantly differ from the stimulant medication alone condition. Following the publication of this study, some practitioners and researchers began to question the utility of behavioral treatment for children with ADHD, particularly given the intensive nature of the behavioral treatment in the MTA Study. For example, the behavioral treatment package utilized in the MTA Study consisted of 30 parent-training sessions, 20 school visits that included teacher-training sessions, a summer treatment program, and a part-time classroom aide. Fortunately, there have been some positive signs for advocates of psychosocial treatments as more detailed analyses have emerged from the MTA study. In particular, comorbidity has been an important factor in interpreting the short-term results from the study. In two subsequent papers (MTA Cooperative Group, 1999b; March et al., 2000), the behavioral treatment alone was found to be just as effective as the medication alone condition for children with parent-rated anxiety problems. This finding suggests that children with ADHD and anxiety may be a subgroup that responds particularly well to behavioral treatment, although it should be noted that this

differential response to treatment was not found in longer-term MTA Study outcomes (Jensen et al., 2007).

Although the efficacy of a treatment is often of primary interest, additional concerns must be considered when choosing an intervention. For example, many parents prefer that their child not take any type of psychotropic medication to treat ADHD. Further, even children who do take medication do not take it all times (e.g., evenings, weekends, the summer, etc.), suggesting that parents may need additional treatment options during times when the child is off of medication. Finally, there is some evidence that a subgroup of children (10% - 20%) with ADHD will not respond to stimulant medication (Greenhill, Halpern, & Abikoff, 1999), suggesting that alternative approaches must be considered for this population.

Treatment of Anxiety

Ollendick and King (1998) reviewed empirically-supported treatments for phobic and anxiety disorders in children. In relation to anxiety disorders, cognitive-behavioral procedures with and without family anxiety management were found to be probably efficacious. Among the treatments that have been designed for children with anxiety, the cognitive-behavioral treatment (CBT) designed by Kendall and colleagues (Kendall et al., 1992) has served as the pioneering work in this area. In the clinical trials conducted by Kendall and colleagues, cognitive-behavioral therapy has been found to be more effective than a wait-list control group. Treatment components include learning to recognize the components of anxiety (e.g., anxious feelings and physiological reactions), altering cognitions in anxiety-provoking situations, modifying self-talk to cope with anxiety, and evaluating performance in these situations. Although this individual treatment has been found to be effective, other research groups have examined the role that family factors might play in the maintenance of anxiety. In a controlled trial by Barrett, Dadds,

and Rapee (1996), the investigatory team evaluated a cognitive-behavioral treatment similar to that developed by Kendall and colleagues but also included a condition that had an added family component. The family component included parenting training in rewarding courageous behavior and extinguishing anxious behaviors (e.g., avoidance). Parents were taught such techniques as using verbal praise, privileges, and rewards to facilitate exposure in feared situations. Much like the research by Kendall and colleagues, the individual treatment was found to be more effective than a wait-list control group. More importantly, though, the augmented treatment including the family component was found to be more effective than the individual CBT treatment. More recently, Wood, Piacentini, Southam-Gerow, Chu, and Sigman (2006) examined a family-based treatment for anxiety in comparison to a child-only treatment. Overall, the family-based treatment resulted in greater improvement on independent evaluators' ratings than the child-only treatment. Interestingly, though, this improvement did not occur based on child report using the Multidimensional Anxiety Scale for Children (MASC; March, 1998). One of the recommendations that emerged from this study was that the specific mechanisms of treatment should be measured over time in order to better understand whether changes in family characteristics serve as an active ingredient in treatment. Overall, the limited data available on the effects of family-based or parent-augmented treatments suggest that individual CBT combined with family anxiety management may currently be the gold standard for child anxiety treatment, although it should be noted that a few studies have not found family involvement to augment treatment outcomes (Nauta, Scholing, Emmelkamp, & Minderaa, 2003; Spence, Donovan, & Brechman-Toussaint, 2000). In sum, although these studies have not found augmented family treatment to be superior to individual treatment, they have not found

individual treatment to be superior to family augmented treatment either. Both appear to be equally effective.

Treatment of ADHD and Anxiety

Given the recent focus on comorbid subtypes of ADHD, differential response to treatment has also been explored in children with ADHD. Jensen et al. (1997) reviewed treatment response in children with ADHD plus anxiety. At the time of the review, the evidence suggested differential response to medication treatment, as ADHD children comorbid with anxiety showed a poorer response to stimulant medication than children with ADHD without comorbid anxiety (Buitelaar, Van der Gaag, Swaab-Barneveld, & Kuiper, 1995; DuPaul, Barkley, & McMurray, 1994; Pliszka, 1989, 1992; Tannock, Ickowicz, & Schachar, 1995). In a more recent review, Jensen et al. (2001) reported on two additional studies to add to past findings. Diamond, Tannock, and Schachar (1999) compared children with ADHD and anxiety to children with ADHD but not anxiety and did not find a differential response to methylphenidate. In addition, the MTA Study (MTA Cooperative Group, 1999b) did not find a differential response to stimulant medication treatment based on the presence of anxiety. Overall, the evidence seems to suggest that stimulant medication has short-term efficacy in treating ADHD symptoms in children with ADHD regardless of anxiety, although some studies do point toward the exacerbation of ADHD symptoms. In relation to anxiety symptoms, though, recent studies have found that stimulant medication either does not improve anxiety symptoms or it serves to exacerbate them (Abikoff et al., 2005; Vance, Luk, Costin, Tonge, & Pantelis, 1999), suggesting that an alternative treatment may be needed to address anxiety symptoms in these comorbid youth. It should be noted, though, that some recent studies examining atomoxetine

(i.e., Strattera) have shown some evidence for efficacy in the treatment of both ADHD and anxiety symptoms in children (Geller et al., 2007; Kratochvil et al., 2005).

In relation to behavioral treatments, it was noted earlier that the MTA Study findings showed a differential response to behavioral treatment but not medication treatment. For example, no differences on ADHD symptoms were found between children with and without anxiety for the stimulant medication condition. At the same time, children with anxiety responded equally well to the stimulant medication alone and behavioral treatment alone conditions, while children without anxiety responded better to the stimulant medication condition than the behavioral intervention condition (MTA Cooperative Group, 1999a, b). More importantly, children with ADHD and anxiety in the behavioral therapy condition responded positively to treatment for both parent-reported ADHD symptoms *and* internalizing symptoms (as measured by the Social Skills Rating System Internalizing Scale; Gresham & Elliot, 1990), suggesting that behavioral treatment may offer improvements in internalizing symptoms for children with ADHD and anxiety. At the same time, child-reported anxiety did not moderate treatment outcome, suggesting that these differential effects were only found for the parental informant.

In interpreting these findings, an important issue to consider is the nature of parent-reported anxiety. March et al. (2000) note that it is important to distinguish between negative affectivity and fearfulness as components of anxiety. Negative affectivity is a general dimension of distress that includes a variety of aversive mood states (e.g., anger, disgust), while fear represents an emotion experienced in anticipation of some specific pain or danger. In the initial paper presenting the MTA Study moderational findings (MTA Cooperative Group, 1999b), questions left unanswered included the nature of parent-reported anxiety, the impact of comorbid

conduct problems, and the clinical significance of parent-reported anxiety as a moderator of treatment outcome. March et al. (2000) note that the presence of conduct problems could mean that the parental report of anxiety is more related to the negative affectivity that is often associated with conduct problems (e.g., frustration, irritability). March et al. (2000) re-analyzed data from the MTA study to explore these remaining questions and found that the moderating effect of parent-reported anxiety was still present irrespective of the presence of conduct problems. In addition, the effect was still found to be clinically meaningful. It is important to note, though, that these findings again only occurred for parent-reported anxiety and not child-reported anxiety. In an examination of the nature of parent-reported anxiety, it was also found that parent-reported anxiety covaried with negative social interactions but not separation/social anxiety. March et al. (2000) concluded that children with parent-reported anxiety in this study may not have been “anxious” in the same sense as would be found in a sample of children being treated for anxiety problems. For example, parent-reported anxiety might have reflected negative social interactions characterized by aspects of negative affectivity (e.g., easily angered or frustrated) rather than fearfulness. Given these findings, the authors recommended that future studies differentiate between negative affectivity and fearfulness given that negative affectivity (e.g., frustration, irritability) would be addressed by traditional parent training/behavior management, while fearfulness would be better addressed by cognitive-restructuring and exposure-based interventions. In order to better differentiate these constructs, the authors recommended using a diagnostic measure oriented towards diagnosing anxiety disorders such as the Anxiety Disorders Interview Schedule for Children (ADIS; Silverman & Nelles, 1988), since the measure used in the study, the Diagnostic Interview Schedule for Children (DISC), tends to overreport anxiety disorders (Cantwell, Lewinsohn, Rohde, & Seeley, 1997; Silverman, 1991).

Moving beyond studies that have examined anxiety as a moderator of treatment, only two studies have reported on interventions designed *specifically* for children with both ADHD and anxiety. Costin, Vance, Barnett, O'Shea, and Luk (2002) reported results of a pilot study designed for children with ADHD, oppositional defiant disorder (ODD), and anxiety. Their study utilized a cognitive-behavioral family-based intervention. The results of the study showed high levels of parent and child satisfaction but no change in level of symptoms. More recently, Verreault, Berthiaume, Turgeon, Lageix, and Guay (2007) specifically designed a treatment for children with ADHD and anxiety. The intervention involved parental education about ADHD and anxiety as well as the treatment of child anxiety symptoms using an evidence-based CBT protocol (Turgeon & Brousseau, 1999). Although significant changes were found for anxiety symptoms as reported by both parents and children, no changes were found for ADHD symptoms. It is clear that additional research is needed to develop treatments that specifically target and effectively treat symptoms in both domains.

Since the limited evidence to date suggests that stimulant medications do not improve comorbid anxiety in youth with ADHD and could possibly make anxiety worse, behavioral treatments may prove to be valuable in the treatment of children with both disorders. Overall, a review of treatments for both ADHD and anxiety suggests that there is much overlap in the approaches utilized for the treatment of the two disorders. For example, parent training and education is now considered to be important in the treatment of both disorders. In addition, both treatments emphasize the role of parental contingency management in helping to yield changes in child behavior. Unfortunately, the treatment approaches in the anxiety literature and ADHD literature have developed somewhat independently. For example, the treatments that have been designed to specifically address ADHD *and* anxiety have involved primarily parental

management of anxiety but not other behavioral problems (e.g., teaching parents to manage ADHD-related behaviors). In turn, it seems that a treatment that addresses both ADHD and anxiety could include the management of both ADHD-related symptoms and anxiety-related symptoms via the same strategy (i.e., contingency management).

Before pursuing such a combined treatment, it is important to consider whether anxiety treatments can be effective for children with ADHD, particularly given factors such as inattention, impulsivity, and hyperactivity that may interfere with psychoeducation and the more cognitive-oriented components of treatment. Overall, treatment outcomes for anxiety have not generally been affected by the presence of comorbid disorders. For example, Kendall, Brady, and Verduin (2001) have found that comorbidity did not affect treatment outcome in their studies of individual child CBT even with 14% of their sample having ADHD. In addition, studies utilizing family-based CBT have also not found the presence of ADHD to moderate treatment outcome. In the study by Wood et al. (2006), the presence of ADHD (occurring in 12.5% of the sample) did not affect treatment outcome, suggesting that the family-based treatment was not less effective for children with ADHD (J. J. Wood, personal communication, September, 18, 2007).

Although anxiety treatments have been found to be effective for children with ADHD, it may be important to consider possible modifications to maximize treatment effectiveness for this subgroup of children. Case study evidence suggests that some adaptations to anxiety treatments have been found to be effective for children with ADHD. For example, Hudson, Krain, and Kendall (2001) discuss how manual-based treatments for anxious children may need to be adapted for children with ADHD. Recommendations included the following: starting the session with a fun game, shortening the length of the child session to 30 minutes, frequent breaks, rewards for on-task behavior during sessions and removal of privileges for off-task behavior,

one-step instructions, child repeat of instructions, presenting material in several formats, modifying homework assignments to minimize child writing, greater use of interactive activities to teach skills, and using a game at the end of the session as a reward for good behavior during the session. In relation to the parent component, the authors suggested that the therapist should work with parents to help them differentiate oppositionality from anxiety, as refusal behavior in anxiety-provoking situations can often be interpreted as oppositionality.

Although the studies described above have shown some evidence that the treatment of anxiety is not affected by the presence of ADHD, one question left unanswered is whether the treatment of anxiety results in a decline in ADHD symptoms in children with ADHD and anxiety (e.g., less inattentiveness with reduced anxiety). In a recent study by Levy, Hunt, and Heriot (2007), the authors evaluated a treatment for children with comorbid anxiety and aggression. The authors compared a cognitive-behavioral treatment for anxiety with a treatment designed to address both aggression and anxiety. Interestingly, in the anxiety treatment only condition, 5 of 7 children (71.4%) no longer met criteria for ADHD on the Schedule for Affective Disorders and Schizophrenia for School-Age Children - Present and Lifetime Version (K-SADS-PL; Kaufman, Birmaher, Brent, Rao, & Ryan, 1996) after treatment. At the same time, the studies by Costin et al. (2002) and Verreault et al. (2007) did not show changes in ADHD symptomatology.

Although some limited evidence suggests that the treatment of anxiety may improve ADHD symptomatology, it is unclear as to whether the concurrent treatment of ADHD could result in an even greater reduction in anxiety symptoms (e.g., less worry due to fewer behavioral and academic problems). In the MTA Study, parent training addressing ADHD symptoms resulted in a reduction in both ADHD and internalizing symptoms in children with ADHD and anxiety. In turn, it may be reasonable to assume that the concurrent treatment of anxiety symptoms could

result in even greater treatment gains. Since some research suggests that children with ADHD and anxiety do not respond as well to stimulant medication, a highly effective psychosocial treatment for children with both disorders could serve to fill a current treatment gap. It should be noted that a handful of treatments for children have recently started to be adapted and evaluated for children with both internalizing and externalizing problems (see Pincus, Eyberg, & Choate, 2005 and Levy et al., 2007), but no treatment has currently been established as efficacious in the treatment of ADHD and anxiety.

Treatment Development

The goal of the current study was to develop and evaluate a treatment for children with both ADHD and anxiety. Following a review of relevant treatment manuals, a manual was assembled based on empirically-supported techniques used in the treatment of both ADHD and anxiety. Two sources were used primarily for the current study. The first source was “The Defiant Child,” a treatment developed by Barkley (1997). This treatment is a 10-week program for noncompliant children who typically present with ADHD and/or ODD. The program involves principles of parent management training (i.e., reward, punishment, time out). In addition, the program also devotes time to improving the relationship between the parent and child via positive attention and “special time” sessions. This positive attending time allows for an improvement of the parent-child relationship heading into the behavioral management phase. This treatment has been found to be effective for managing behavior problems in ADHD youth between the ages of 2 and 12 years (Anastopoulos, Shelton, DuPaul, & Guevremont, 1993; Erhardt & Baker, 1990; Pisterman et al., 1992; Pisterman, McGrath, Firestone, & Goodman, 1989; Pollard, Ward, & Barkley, 1983).

In order to address anxiety symptoms, the treatment by Barkley (1997) was augmented by a family-based treatment for child anxiety. The main source that was utilized for anxiety treatment was the Integrated Psychotherapy Consortium: Anxiety Symptoms Intervention Manual. This manual was based on The Cool Kids Program developed by Rapee and Wignall at the Macquarie University Anxiety Research Program (Rapee, Wignall, Hudson, & Schniering 2000). In addition, this manual was designed to be delivered in approximately 10 sessions. One reason for using this manual was that its reduced length mirrored the length of the Barkley (1997) treatment protocol. Overall, the intervention is a family-focused intervention for childhood anxiety disorders designed to be administered in either a group or individual family format. The elements of the program include parental and child education about anxiety, parent education about factors that maintain anxiety (e.g., parental modeling), cognitive restructuring, and graduated exposure through the use of a fear hierarchy. In addition to these two treatment protocols, the current treatment included many of the modifications suggested by Hudson et al. (2001) for children with ADHD and anxiety (e.g., reducing the child session length to 30 minutes).

The final treatment protocol involved 10 weekly sessions which were approximately 90 minutes in length. In order to taper off treatment, session 10 was delivered two weeks after session 9 and was conceptualized as a booster session. Treatment was delivered in a relatively structured albeit flexible format. The manual included an explicit description of the goals and content for each session, and standard handouts for sessions were included (see Appendix B). All participants were treated by a masters-level graduate clinician in an American Psychological Association (APA)-approved program in clinical psychology. The clinician had significant experience in the treatment of ADHD and anxiety and was supervised by a licensed clinical

psychologist with over 35 years of experience in the treatment of these disorders. The protocols themselves were implemented in a clinically sensitive and flexible manner (Kendall & Ollendick, 2004).

Current Study

As stated previously, the aim of the current study was to evaluate a treatment for children with ADHD and anxiety. The current study had five primary goals. The first goal was to examine whether the intervention would reduce symptoms of ADHD. The second goal was to determine whether the intervention would reduce symptoms of anxiety. The third goal was to explore mechanisms associated with treatment outcomes (e.g., changes in neuropsychological functioning, family functioning, the temporal relationship between ADHD and anxiety). The fourth goal was to examine treatment effects on areas other than ADHD and anxiety (e.g., global functioning, social functioning). The fifth and final goal was to assess the feasibility and acceptability of the treatment.

Method

Participants

Participants included 8 children and their parent(s). Inclusion criteria were as follows: a) 8 to 12 years of age, b) current *DSM-IV* diagnosis of ADHD, Combined Type (ADHD-C), and c) a comorbid *DSM-IV* diagnosis of generalized anxiety disorder (GAD), social phobia (SOP), or separation anxiety disorder (SAD). ADHD-C was chosen for the current study given that the MTA Study involved the treatment of children with ADHD-C. In addition, controversy still exists in relation to whether the ADHD-I profile is best conceptualized as ADHD (see Milich, Balentine, & Lynam, 2001). Finally, the inclusion diagnoses for anxiety were chosen based on the inclusion criteria commonly used for child anxiety trials. Exclusion criteria included: a)

meeting full diagnostic criteria for an autism spectrum disorder, b) meeting full diagnostic criteria for bipolar disorder, c) current and acute psychotic symptoms, d) current psychosocial or medication treatment (if < 3 months on stable dosage) for ADHD or anxiety symptoms, e) estimated IQ less than 80, or f) the presence of any other conditions that required treatment prior to the treatment of ADHD and anxiety. It should be noted that comorbid ODD was allowed for the current study, given that a large portion of children with ADHD and anxiety also exhibit ODD (i.e., approximately 50%). Given the gold standard of using multiple informants in the assessment of child psychopathology (Ollendick & Hersen, 1993), a discriminative approach was utilized in the assessment of children. Jensen (2003) notes a number of approaches have been utilized in diagnosing children such as disjunctive (the OR rule), conjunctive (the AND rule), and compensatory (ADDITIVE rule), but the best strategy may be a discriminative strategy. As Jensen (2003) notes, the clinician must consider when to rely on one, another, or multiple informants. In the case of anxiety, it is well-accepted that teachers have been shown to be less valid reporters of anxiety while parent and child reports have proven crucial in evaluating anxiety. In addition, the child report can be particularly valuable in evaluating anxiety (Silverman & Ollendick, 2005). In relation to ADHD, it is also well-accepted that teacher and parent reports are considered valid in assessing ADHD, while child reports are often less valid (Pelham, Fabiano, & Massetti, 2005), although some evidence suggests that children with ADHD and internalizing symptoms may be better aware of their difficulties with ADHD symptoms (Jarrett, Wolff, & Ollendick, 2007). Given these common informant discrepancies, a consensus diagnosis meeting was utilized to determine diagnoses. A disorder was considered present if the child was assigned a clinical diagnosis during a consensus meeting utilizing the findings from the ADIS (see Grills & Ollendick, 2003 for details). The consensus meeting was

chaired by a clinical child psychologist with 35 years of clinical experience, as well as the child and parent clinicians who conducted the ADIS-C/P interviews.

Participants were recruited from the Southwestern Virginia community by contacting mental health professionals, centers providing assessment and treatment services to youth, and area school districts. A two-stage ascertainment procedure was used. First, parents of children expressing interest in the study underwent a telephone interview to screen for ADHD and anxiety as well as for conditions that would preclude the child's participation in the study. Parents whose children appeared to meet eligibility criteria based on the telephone screen were then scheduled for a comprehensive assessment to confirm diagnoses and suitability for the treatment protocol.

As described above, those cases that seemed suitable for the study based on the screening procedure were scheduled for the clinical interview, at which time written informed consent was obtained from the parent or caregiver and assent was obtained from the child. Final eligibility was based on parent and child reports of symptoms and diagnoses reached during the consensus diagnosis meeting: 8 of 11 families that were assessed qualified for the study. For the three families that did not qualify, reasons for study exclusion included the probable presence of an autism spectrum disorder, the possible presence of post-traumatic stress disorder, and a family decision to pursue medication treatment rather than psychosocial treatment.

Thus, the final sample included 8 children (mean age = 8.88; SD = 1.13; range = 8-11 years) and their parent(s). Four of the children were boys (50%) and 4 were girls (50%). All children classified themselves as Caucasian. Mean Full Scale IQ for the sample was 96.5 (SD = 9.62; range = 81-115) estimated from the Vocabulary and Block Design subtests of the Wechsler Intelligence Scale for Children - Fourth Edition (Wechsler, 2003). Two of the 8 children (25%) were receiving one psychiatric medication at the time of assessment. In both cases, children were

receiving stimulant medication treatment (i.e., Adderall, Dexedrine) and both children had been stabilized at the present dosage for at least 3 months and agreed to not make medication changes over the course of the study. In relation to family characteristics, mean family income was \$58,571 (SD = \$36,596). Seven of the 8 (87.5%) children were living with both parents. The majority of mothers had completed college (62.5%), while the majority of fathers had only partially completed college (37.5%).

Finally, it should be noted that teacher endorsement of ADHD was not required for study participation. However, information from teachers is important in better understanding the level of impairment in the school setting. Two measures in the current study provided some information in relation to ADHD-related symptoms in school: the Teacher Report Form (TRF) and the Disruptive Behavior Disorders Rating Scale, Teacher Version (DBDRS-T). Mean scores were the following: TRF Attention Problems T-score = 56.8 (clinical cutoff = 65), TRF ADHD T-Score = 58.2 (clinical cutoff = 65), DBDRS-T Total = 11.67 for boys (93rd percentile = 50 for ages 8-10, 93rd percentile = 42 for ages 11-13; Barkley, 1997) and 12.33 for girls (93rd percentile = 42.1 for ages 8-10, 93rd percentile = 37.7 for ages 11-13; Barkley, 1997). Given that these scores fell below clinical cutoffs, it may be that the current sample included children with milder ADHD symptomatology or symptomatology that was not as consistent across settings. At the same time, parents often reported difficulties with ADHD-related behaviors in school and a few children in the study (i.e., 3 of 8) already had individual education plans (IEPs) based on school diagnoses of ADHD. Sample characteristics (including clinical consensus diagnoses) are presented in Table 1.

Measures

ADHD, Anxiety Symptoms, and Related Problems

Anxiety Disorders Interview Schedule for DSM-IV, Child and Parent Versions (ADIS-C/P; Silverman & Albano, 1996). The ADIS-C/P versions are semi-structured interviews designed for the diagnosis of most psychiatric disorders seen in childhood and adolescence. During the interview, the clinician assesses symptoms and obtains frequency, intensity, and interference ratings (0-8 scale). These symptoms and ratings are used by the clinician to identify diagnostic criteria and develop a clinician's severity rating (CSR). A CSR of 4 or above (0-8) indicates a diagnosable condition. It should be noted that the ADIS assesses for conduct disorder (CD) and ODD in the parent interview only.

Recent examination of the ADIS-C/P (for *DSM-IV*) has yielded acceptable to excellent 7 to 14-day test-retest reliability estimates regarding child (ages 7-16; $\kappa = .61-.80$) and parent ($\kappa = .65-1.00$) diagnoses (Silverman, Saavedra, & Pina, 2001). Interrater agreement analyses of earlier versions of the ADIS-C/P have shown some variability in video ($\kappa = .45-.82$; Rapee, Barrett, Dadds, & Evans, 1994) and live observer paradigms ($\kappa = .35-1.00$; Silverman & Nelles, 1988), but in general, acceptable interrater agreement has been established. Trained graduate-student clinicians with who were enrolled in an APA-approved doctoral program in clinical psychology conducted the diagnostic interviews. Our laboratory procedures were recently evaluated in relation to ADIS reliability. 20% of the videotaped interviews were randomly selected and reviewed by independent trained assessors. Using Cohen's kappa, agreements on diagnoses were .93 and .88 on primary and secondary diagnoses (see Ollendick et al., 2009). None of the interviewers served as therapists in this study, and they were kept blind to treatment purposes.

Child Behavior Checklist (CBCL; Achenbach, 2001a). The CBCL is a 113-item paper and pencil questionnaire completed by parents. Parents are asked to indicate how often the behavior described in each item is true of their child using a three-point scale (often/always true, sometimes true, and not true). Achenbach (2001a) reports test-retest reliability over a 1-week interval to be .95 for the problem items. The validity of the CBCL/4–18 has been established through repeated factor analyses and associations with other variables of interest (see Achenbach, 2001a).

Disruptive Behavior Disorders Rating Scale (DBDRS; Barkley, 1997; Pelham, Gnagy, Greenslade, & Milich, 1992), The DBDRS is comprised of the *DSM-IV* symptom lists for ADHD, ODD, and CD and uses a 4-point response scale ranging from 0 (not at all) to 3 (very much). The DBDRS has been shown to have excellent psychometric properties (see Pelham et al., 1992, for normative data).

Multidimensional Anxiety Scale for Children (MASC; March, 1998; March, Parker, Sullivan, Stallings, & Conners, 1997). The MASC is a 45-item self-report questionnaire designed for children between 8 and 16 years of age. For each item, the child is asked to endorse one of four responses (i.e., never true, rarely true, sometimes true, often true). This is a psychometrically sound instrument with high test-retest reliability, high internal consistency, and acceptable convergent and discriminant validity (March et al., 1997; March & Sullivan, 1999). Main and subfactor scores include (1) Physical Symptoms (Tense/Restless and Somatic/Autonomic), (2) Social Anxiety (Humiliation/Rejection and Public Performance Fears), (3) Harm Avoidance (Perfectionism and Anxious Coping), and (4) Separation Anxiety. A Total Anxiety Score, an Anxiety Disorders Index, and an Inconsistency Index are also obtained. The current study only used MASC reports with a valid Inconsistency Index.

Spence Child Anxiety Scale (SCAS-C; Spence, 1998). The SCAS-C is a 44-item child self-report scale that measures symptoms of childhood anxiety using a 4-point scale (0 = never to 3 = always). The measure includes both a total score and subscale scores that correspond to the *DSM-IV* anxiety disorders. Subscales include Panic/Agoraphobia, Separation Anxiety, Social Phobia, Generalized Anxiety, Obsessive Compulsive Disorder, and Physical Injury Fears. The questionnaire has shown good convergent and divergent validity, high internal consistency, and good test-retest reliability (Spence, 1998). A parallel version of this measure designed for parents (SCAS-P; Nauta et al., 2004) was also utilized.

Teacher Report Form (TRF; Achenbach, 2001b). The TRF is a questionnaire that includes 113 items to which the teacher is asked to indicate if each behavior/characteristic is often/always true, not true, or sometimes true of the student being assessed. Test-retest reliability over a 15-day period is .90 for the adaptive behavior scales and .95 for the problem behavior scales (see Achenbach, 2001b).

Global Assessment and Improvement

Children's Global Assessment Scale (CGAS; Green, Shirk, Hanze, & Wanstrath, 1994; Shaffer et al., 1983). The CGAS is a 100-point rating scale measuring psychological, social, and school functioning in children ages 6-17. This measure has been found to be a reliable and valid tool in rating a child's general functioning on a health-illness continuum (Green et al., 1994).

Clinical Global Impression (CGI; Guy, 1976). The CGI includes, on a 7-point Likert scale, a rating of the current severity of the child's symptoms, the degree to which the child's symptoms improved since the beginning of treatment, and the degree to which parents are adhering to treatment plans. The CGI was completed by the therapist on a weekly basis during treatment.

Parental Psychopathology and Family Environment

Alabama Parenting Questionnaire (APQ; Shelton, Frick, & Wootton, 1996). The APQ is a 42-item measure of parenting practices using a 5-point scale (1 = never to 5 = always). Subscales include Positive Parenting (6 items), Involvement, (10 items), Poor Monitoring/Supervision (10 items), Inconsistent Discipline (6 items), and Corporal Punishment (3 items). Shelton et al. (1996) reported acceptable internal consistency (.63-.80) and convergent validity across interview and rating methods. The scale has also established discriminative validity by showing that children with disruptive behavior disorders show elevated ratings on the negative parenting scales in comparison to normal children (Shelton et al., 1996).

Brief Symptom Inventory (BSI; Derogatis, 1975). The BSI is a 53-item parent self-report measure that assesses psychological functioning in adults. The measure includes nine symptom dimensions and a global severity index (GSI). The BSI has adequate reliability and validity (Derogatis, 1975).

Family Environment Scale (FES; Moos & Moos, 1981). The FES is a 90-item, true/false, self-report measure that assesses various characteristics of family relationships. This measure contains ten subscales (9 items each) that are divided into three dimensions designed to assess socio-environmental aspects of family functioning. The reliability and validity of the FES are well-established (Moos & Moos, 1981). Internal consistency reliability estimates for the FES subscales range from .61 to .78. Test-retest reliabilities for the subscales for 2-month, 3-month, and 12-month intervals range from .52 to .91, suggesting that the scale is reasonably stable across time. For the current study, the following scales were evaluated: Cohesion, Conflict, and Expressiveness.

Parent-Child Relationship Questionnaire (PCRQ; Furman & Giberson, 1995). The PCRQ is a 40-item measure that assesses the perceptions of the quality of the parent-child relationship using a 5-point Likert scale (1 = hardly at all, 2 = not too much, 3 = somewhat, 4 = very much, and 5 = extremely much). The measure is designed to be completed by the parent(s) and child. Scales include Possessiveness, Warmth, Power Assertion, Personal Closeness, and Disciplinary Warmth. The internal consistency of this scale has been found to be adequate ($\alpha > .7$; Pfiffner & McBurnett, 2006).

Neuropsychological and Cognitive Functioning

Behavior Rating Inventory of Executive Function (BRIEF; Gioia, Isquith, Guy, & Kenworthy, 2000). The BRIEF is an 86-item parent and teacher rating scale of executive functioning skills in children ages 5 to 18. The measure produces two global scales (Behavior Regulation Index, Metacognitive Index) and a composite score (Global Executive Composite). The scale also includes subfactors of Inhibit, Shift, Emotional Control, Initiate, Working Memory, Plan/Organize, Organization of Materials, and Monitor. Gioia et al. (2000) report test-retest reliability of .79 to .88 over a 2-week period. Internal consistency is reported to range from .80 to .98. The scale also has demonstrated good convergent validity and clinical utility in the diagnosis of ADHD (McCandless & O'Laughlin, 2007). The BRIEF also includes an Inconsistency Scale. Data were only analyzed if this scale was not elevated.

CNS Vital Signs (CNSVS; Gualtieri, & Johnson, 2006). CNSVS is a computerized neurocognitive screening battery that consists of seven common neuropsychological tests: verbal and visual memory, finger tapping, symbol-digit coding, the Stroop test, the shifting attention test, and a continuous performance test. The test takes approximately 20 minutes to complete. The tests in the battery have been found to be highly reliable (test-retest, $r = .63$ to $.88$; Gualtieri,

Johnson, & Benedict, 2004c). A normative data sample consisting of 556 participants from ages 8 to 89 indicated performance differences by age and gender (Gualtieri, Johnson, & Benedict, 2004b). Concurrent validity has been assessed by comparing performance on the computerized tests to conventional neuropsychological tests (Benedict & Benson, 2004; Gualtieri, Johnson, & Benedict, 2004a).

Treatment Satisfaction and Therapeutic Alliance

Consumer Satisfaction Questionnaire (CSQ; McMahon & Forehand, 2003). The CSQ was designed to assess parental and child satisfaction with the treatment and the strategies used in terms of both difficulty and usefulness. Parents and children were asked to rate each of the items along a seven-point scale. Five of the items were open-ended questions regarding the family's experiences with the program. The CSQ used in the current study was adapted based on the CSQ designed by McMahon and Forehand (2003).

Therapeutic Alliance Scale - Child and Parent Versions (TASC-C, TASC-P; Hawley & Weisz, 2005; Shirk & Saiz, 1992). The TASC is a twelve-item scale designed to examine youth-therapist alliance. Items are rated on a 4-point scale ranging from 1 (not like me) to 4 (very much like me). The measure has demonstrated reliability and validity in past studies (DeVet, Kim, Carlot-Swilley, & Ireys, 2003; Hawley & Weisz, 2005; Shirk & Saiz, 1992). A parallel parent-report version (TASC-P) developed in a previous study (Hawley & Weisz, 2005) was also used to examine parent-therapist alliance in treatment. This measure has also shown good internal consistency and test-retest reliability (Hawley & Weisz, 2005).

Procedures

The current treatment was evaluated via a nonconcurrent multiple baseline design. This design is essentially a series of A-B replications in which the length of the baseline phase differs

in a pre-arranged but random way (Carr, 2005). The experimental control demonstrated by the multiple baseline design across participants can be described using three elements of single-case design logic (Cooper, Heron, & Heward, 1987; Johnston & Pennypacker, 1993). First, repeated measures can establish the prediction of a baseline's data path into the subsequent treatment phase, allowing the detection of a difference between the actual data path in treatment and the path predicted from baseline. Second, the effects of the independent variable are verified by demonstrating that the intervention changed the participant's behavior. Finally, the effects of the independent variable are replicated across different participants.

In the present study, children and their parents were randomly assigned to baseline phases lasting two, three, or four weeks. During each week of baseline, children and their parents were asked to complete questionnaires over the phone on a weekly basis to establish data trends prior to intervention. Following the baseline period, the intervention phase began. Repeated observations occurred as during baseline to measure changes during the treatment phase (Harvey, May, & Kennedy, 2004). At the conclusion of treatment, families completed an assessment battery almost identical to the one administered at pre-treatment.

Results

Statistical Analyses

Results were analyzed using a combination of statistical approaches used in the single-case design and clinical replication literature. The first set of analytic approaches was reserved for measures administered only at pre-treatment, mid-treatment, and 1-week post-treatment assessment points. Given the small sample size and lack of a normal distribution, non-parametric tests were utilized. Friedman tests were used for measures with more than two time points. Wilcoxon tests were used for measures with two time points and for post-hoc tests when

Friedman tests were significant. In addition, a method for calculating “clinical significance” was also utilized for ADIS results (Jacobson & Truax, 1991). Jacobson and Truax recommend a change of two standard deviations from the pre-treatment group mean as the cutoff for “Improvement” at post-treatment. In addition, the authors recommend the calculation of a Reliable Change Index (RCI) in order to determine the amount of change and whether change reflects more than the just the fluctuation of an imprecise measurement tool. Jacobson and Truax (1991) recommend a cutoff of 1.96 for meaningful change on the RCI.

The second set of analytic approaches was relevant to the single-case design methodology. Two primary approaches were utilized. Firstly, a Clinical Outcomes approach proposed by Parker and Hagan-Burke (2007) was utilized to examine a set of alternative outcomes that are commonly used in the field of medicine. The translation of this approach from the medical field to single-case research involves the baseline phase becoming the control condition and the intervention phase becoming the treatment condition with improvement defined as non-overlapping data points between phases (see Parker & Hagan-Burke for details).

The second approach used for single-case analysis was Simulation Modeling Analysis (SMA; Borckardt et al., 2008). SMA (version 8.3.3), a freely available software program for analyzing time series data (www.clinicalresearcher.org), was used to analyze single-case data. Although visual inspection has often been used to analyze single case data, visual inspection is often prone to overestimation of effect size. For example, Matyas and Greenwood (1990) found that visual inspection led to Type I error rates or false positives from 16% to 84%. In addition, visual inspection cannot account for the fact that single-case data are autocorrelated (see Borckardt et al., 2008). SMA allows the user to examine changes in the level of symptoms and the slope of symptom change (in terms of the correlation between the data stream and a specified

slope vector) and evaluates the significance of the effect using bootstrapping methods that take the phase lengths (i.e., baseline and treatment) and autocorrelation of the data stream into account. In turn, this method offers a more reliable method than visual inspection and generates much lower Type I and Type II errors (Borckardt et al., 2008). SMA also allows the user to examine multivariate process change or the temporal relationship between two variables throughout the course of therapy (e.g., do ADHD symptoms change before anxiety symptoms?).

Therapy Retention

Of the 8 families participating in the study, 7 of the 8 (87.5%) families completed the entire 10-session treatment sequence. In the one case that did not complete treatment, treatment consisted of only 9 sessions due to the inability to meet over the holidays. In another case, session 10 was delivered one week after session 9 rather than two weeks (again due to the inability to meet over the holiday period). It should be noted that treatment session 10 served as a booster session in the study, so the family that only completed 9 sessions did not miss any new therapeutic content. In relation to treatment attendance, only 4 cancellations occurred among all 8 families in the study. In addition, all 4 of these cancellations were followed-up with a session during the following week. Overall, attendance and retention was very high.

Parent Treatment Adherence

It should first be noted that not all fathers attended treatment; however, in 5 of 8 families (62.5%), fathers attended at least half of the treatment sessions. All mothers attended at least half of the treatment sessions. In order to examine parental adherence to treatment, the CGI was used. In cases where one parent did not attend treatment, the clinician attempted to determine how much the other parent was involved in treatment at home over the last week. The parent adherence item on the CGI asks the clinician to rate parent adherence on a 5-point scale (1 = not

at all, 2 = very little, 3 = somewhat, 4 = fairly well, 5 = very well). The mean adherence level was calculated across treatment sessions separately for mothers and fathers. The mean was 3.29 (somewhat, SD = .23) for mothers and 2.02 (very little, SD = .96) for fathers.

Therapist Treatment Competency

To assess treatment competence, all sessions were videotaped. One tape was selected from the first half of therapy (i.e., sessions 1-4) and one tape was selected from the second half of therapy (i.e., sessions 6-10) for each participant. Session 2 and Session 6 were selected for coding purposes. One coder, a graduate student in an APA-approved clinical psychology program with significant experience with therapy coding, coded these two sessions for each of the 8 study participants (16 sessions in total). The tapes were rated on the degree to which the various elements of each treatment approach were used competently on a treatment competence checklist. All coded sessions were rated on a 3-point scale (0 to 2) with higher scores indicating greater competency. The coder endorsed a mean rating of 1.89 for Session 2 and 1.93 for Session 6, suggesting a high level of treatment competence.

Therapist Treatment Adherence

The procedure described above was also used to assess the degree of treatment adherence. Adherence was defined on a 3-point scale (0 = absent, 1 = partial, 2 = full). The coder indicated a mean adherence score of 1.91 for Session 2 and 1.94 for Session 6, reflecting a high degree of treatment adherence.

Therapeutic Alliance

In order to evaluate therapeutic alliance, mean therapeutic alliance scores (range = 12-48) were calculated across the course of treatment. The therapeutic alliance scale was administered at the end of each session with the therapist out of the room. Parents and children were instructed to

place the measures into a sealed envelope and were told that the ratings would not be examined until the end of the study. Mothers reported an average therapeutic alliance score of 45.90 (SD = 2.45) and fathers reported an average therapeutic alliance score of 41.44 (SD = 3.48). Children reported an average therapeutic alliance score of 42.53 (SD = 5.86). Finally, the primary therapist reported average therapeutic alliance scores of 40.79 (SD = 2.52) with mothers, 36.02 (SD = 3.78) with fathers, and 36.98 (SD = 3.51) with children in the study. Overall, therapeutic alliance scores were high, suggesting strong therapist-family working relationships in the study.

ADHD and Anxiety Symptoms

Table 2 presents findings from pre-treatment and 1-week post-treatment consensus clinical severity ratings (CSRs) from the Anxiety Disorders Interview Schedule. Six CSRs were calculated for analytic purposes. These CSRs included the CSR for ADHD, the CSR for GAD, the CSR for SAD, the CSR for SOP, the mean CSR for the three inclusion anxiety diagnoses (i.e., Anxiety-Inclusion = SAD, GAD, SOP), and the mean CSR for all anxiety disorders (Anxiety-All = the three inclusion diagnoses plus specific phobias). It should be noted that CSRs were only calculated for cases that had the diagnosis present at pre-treatment (e.g., the CSR for SAD was only calculated if SAD was in the diagnostic picture at pre-treatment).

An inspection of Table 2 reveals that Reliable Change (see Table 2 for RCI formula) occurred for all ADIS measures; however, Improvement (defined as 2 SDs from the pre-treatment mean) only occurred for the anxiety-related variables (except for SOP). At the individual level for the ADHD CSR, 6 of 8 (75%) children showed Reliable Change, 2 of 8 (25%) showed Improvement, and 0 were in the subclinical range at post-treatment (i.e., CSR < 4). On Anxiety-Inclusion, 8 of 8 children showed Reliable Change, 8 of 8 showed Improvement, and 5 of 8 (63%) were in the subclinical range at post-treatment (i.e., CSR < 4). On Anxiety-All,

8 of 8 children showed Reliable Change, 8 of 8 showed Improvement, and 7 of 8 (87.5%) were in the subclinical range at post-treatment (i.e., CSR < 4). On GAD, 8 of 8 children showed Reliable Change, 5 of 8 (63%) showed Improvement, and 5 of 8 (63%) were in the subclinical range at post-treatment (i.e., CSR < 4). On SOP, 4 of 7 children showed Reliable Change, 1 of 7 (14.29%) showed Improvement, and 1 of 7 (14.29%) were in the subclinical range at post-treatment (i.e., CSR < 4). Finally, the small number of cases with SAD diagnosed (n = 2) precluded the examination of clinical significance estimates, but it should be noted that 0 of 2 (0%) cases were in the subclinical range at post-treatment.

Parents were also administered questionnaires relevant to ADHD and anxiety. On the CBCL, Wilcoxon tests revealed significantly lower scores for mothers on Anxiety/Depression ($\chi^2 = .03$), Social Problems ($\chi^2 = .03$), Aggressive ($\chi^2 = .04$), Internalizing Problems ($\chi^2 = .03$), Externalizing Problems ($\chi^2 = .04$), and Total Problems ($\chi^2 = .04$). On the *DSM-IV*-related scales, mothers reported significantly lower scores for Anxiety ($\chi^2 = .03$), ADHD ($\chi^2 = .03$), and Conduct Disorder ($\chi^2 = .04$). Fathers did not report any significant differences from pre-treatment to 1-week post-treatment on the CBCL.

On the SCAS-C and SCAS-P measures of anxiety, Wilcoxon tests revealed significantly lower scores for mothers ($\chi^2 = .02$) between pre-treatment and 1-week post-treatment assessment points but not for children or fathers.

On the DBDRS-P measure of ADHD symptomatology, Wilcoxon tests revealed significantly lower scores for mothers ($\chi^2 = .03$) between pre-treatment and 1-week post-treatment assessment points but not for fathers.

In relation to functional impairments of ADHD and anxiety, target behaviors were identified at the start of treatment. Parents were asked to rate three problems that were related to

ADHD (e.g., failing to complete homework) and three problems related to anxiety (e.g., being afraid of meeting new people). Parents rated the severity of the problem on a 9-point scale (0 - 8; 0 = not at all, 2 = a little bit, 4 = some, 6 = a lot, 8 = very, very much). Wilcoxon tests revealed a significant improvement for the primary ADHD-related problem ($\chi^2 = .04$). Wilcoxon tests also revealed significant improvement for the primary ($\chi^2 = .02$), secondary ($\chi^2 = .02$), and tertiary ($\chi^2 = .03$) problems identified for anxiety. It should be noted that in most cases, the primary problem in relation to ADHD was homework completion (5 of 8 cases, 62.5 %).

Finally, parents were asked how confident they felt in managing current and future ADHD and anxiety symptoms at mid-treatment and 1-week post-treatment. The CSQ asked parents to provide an answer for the following prompts: “How confident are you in managing *current* ADHD and anxiety problems in the home on your own?” and “How confident are you in your ability to manage *future* ADHD and anxiety problems in the home using what you have learned from this program?” These items ranged from 1 - 7 (1 = very unconfident, 2 = unconfident, 3 = somewhat unconfident, 4 = neutral, 5 = somewhat confident, 6 = confident, 7 = very confident). Mothers reported mean scores of 5.25 (SD = 1.49) and 5.50 (SD = .53) at mid-treatment and 1-week post-treatment for managing current problems. Mothers also reported mean scores of 5.63 (SD = .74) and 5.63 (SD = .52) at mid-treatment and 1-week post-treatment for managing future problems. Fathers reported mean scores of 5.33 (SD = .52) and 6.17 (SD = .75) at mid-treatment and 1-week post-treatment for managing current problems. Fathers also reported mean scores of 5.17 (SD = .75) and 5.17 (SD = 2.14) at mid-treatment and 1-week post-treatment for managing future problems. Children reported mean scores of 6.00 (SD = 1.83) and 5.29 (SD = 2.14) at mid-treatment and 1-week post-treatment for managing current problems. Children also reported mean scores of 5.63 (SD = 1.85) and 4.88 (SD = 1.81) at mid-treatment

and 1-week post-treatment for managing future problems. Overall, scores fell primarily in the somewhat confident to confident range, suggesting good levels of confidence in managing current and future ADHD and anxiety problems.

In relation to baseline to treatment changes, Tables 3 and 4 present findings using the Clinical Outcomes approach (see Parker & Hagan-Burke, 2007, for details). In this application of Clinical Outcomes, each individual data point is treated statistically as an individual client in medical research. Data points are sorted in such a way that the highest scores (i.e., higher scores reflecting greater impairment) are assumed to appear in the baseline period and lower scores are assumed to appear in the treatment period. For example, if a given case has 5 baseline data points, the approach assumes that the 5 highest points (i.e., higher scores reflecting greater impairment) in the entire individual data stream should appear in the baseline phase. A point is considered successful if it appears in the appropriate phase. For example, if a particular case has 5 baseline data points, and a treatment data point is one of the 5 highest scores in the stream (i.e., higher scores reflecting greater impairment), the data point is considered unsuccessful. Using this same example, if the particular treatment data point is not one of the 5 highest scores (e.g., the 10th highest score), it is considered to be a successful data point (i.e., it appropriately appears in the treatment phase). This categorization approach allows for the generation of a 2 x 2 table (treatment/control x success/no success). Crosstabulating these data allows for the calculation of a Pearson's Phi statistic, which serves to complement the Clinical Outcomes reported in Tables 3 and 4. Finally, Odds Ratio Generator, a module of Grant Devilly's Clin Tools Software, Version 4 (Devilly, 2005), was used to calculate 95% confidence intervals. Given that the current study utilized less than 20 data points/subject (i.e., the minimum requirement recommended for such analysis), the Clinical Outcomes approach was not used for the individual data series.

Table 3 presents Clinical Outcomes for the weekly measure of ADHD symptomatology, the DBDRS-P. For ADHD symptomatology, the Treatment Success Rate was 77.5% and the Control Success Rate was 54.55 %. The Success Rate Difference was 22.95%. An examination of the 95% CI reveals a lower limit of 4% for the Success Rate Difference, suggesting somewhat limited confidence in a true Success Rate Difference. Table 4 presents Clinical Outcomes for the weekly measure of anxiety symptomatology, the SCAS-P. For anxiety symptomatology, the Treatment Success Rate was 80% and the Control Success Rate was 48.48%. The Success Rate Difference was 31.52%. An examination of the 95% CI reveals a lower limit of 12% for the Success Rate Difference, suggesting greater confidence in a true difference but again somewhat limited evidence.

The second analytic approach for the baseline to treatment changes involved Simulation Modeling Analysis (SMA; see Statistical Analyses section for details). Although the Clinical Outcomes approach offers easily interpretable rates such as the Treatment Success Rate, the approach is somewhat limited by its binary nature (i.e., successful vs. unsuccessful) and does not account for autocorrelation. Borckardt et al. (2008) recommend between 5 and 15 data points per phase to conduct SMA. Given that baseline lengths ranged from 3-5 points in the current study, SMA results should be interpreted with caution.

Table 5 presents mean level symptom changes for SMA. In addition, Figures 1 and 2 present visual depictions of time series data for each subject. Figure 1 presents these data for the DBDRS-P Total Score and Figure 2 presents these data for the SCAS-P Total Score. SMA analyses involved 3 measures of ADHD symptoms (DBDRS-P Total Score (ADHD-Tot), DBDRS-P Inattention (ADHD-I), DBDRS-P Hyperactivity/Impulsivity (ADHD-H)) and 3 measures of anxiety (SCAS-P Anxiety Total Score (Anx Tot-P), SCAS-C Anxiety Total Score

(Anx Tot-C), and the mean of the SCAS-P inclusion diagnostic areas (Anx Inc-P). Overall, few significant mean level differences were noted between the baseline and treatment phases using the SMA approach. 3 of 8 (37.5%; IDs 2, 6, and 8) children showed significant changes (i.e., $p < .05$) on one of the three measures of ADHD symptomatology (i.e., inattentive symptoms, hyperactive-impulsive symptoms, or total symptoms). All significant level changes were in the expected direction. As for anxiety, 3 of 8 (37.5%; IDs 4, 6, and 8) children showed significant changes on one of the three indices of anxiety change (i.e., Anx Tot-P, Anx Tot-C, and Anx Inc-P). All findings were in the expected direction except for one child (case ID 4) where there was a positive correlation between baseline and treatment for Anx Tot-P (i.e., an increase in anxiety). This finding will be commented upon further in the Discussion section.

Although only a few significant changes were noted for level change, a number of significant changes were noted for slope analyses. SMA allows the user to test the data stream against 5 different slope vectors: (1) increasing baseline, decreasing treatment; (2) flat baseline, increasing treatment; (3) increasing baseline, flat treatment; (4) increasing from baseline through treatment (i.e., a linear increase from the beginning of baseline to the end of treatment; and (5) increasing during baseline with return to pre-treatment level at the start of treatment and increasing throughout treatment). Figure 3 presents the 5 slopes that were evaluated. These vectors can also be represented mathematically as the following based on 5 baseline data points and 10 treatment data points: (1) 1 2 3 4 5 5 4 3 2 1 0 -1 -2 -3 -4; (2) 0 0 0 0 0 1 2 3 4 5 6 7 8 9 10; (3) 1 2 3 4 5 5 5 5 5 5 5 5 5 5 5; (4) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15; (5) 1 2 3 4 5 1 2 3 4 5 6 7 8 9 10. When the data stream is tested against a given slope, a significant correlation indicates that the slope of the data appears to match the slope of the particular vector. In some

cases, multiple slopes were significant ($p < .05$). When multiple slopes were significant, the slope with the highest correlation was selected for presentation in Table 6.

Table 6 presents the best-fitting slope for each case for each index. An examination of the slopes for the measure of ADHD, the DBDRS-P, reveals that the most common slopes were Slopes 3 (7 measures) and 5 (5 measures). Slope 3 with a negative correlation reflects a decline during the baseline period followed by a flat treatment period. Slope 5 with a negative correlation reflects a decline during baseline, a return to pre-treatment levels during the start of treatment, and a subsequent decline throughout the treatment period. Slope 4 (2 measures) with a negative correlation was also relevant for one case, ID 2, suggesting a declining baseline that continued to decline during the treatment period. In only one case, ID 1, did the baseline period involve an increase followed by a decrease during the treatment period (Slope 1, 2 measures, positive correlation). Given the problem with declining baselines in a number of cases, it is difficult to draw strong conclusions regarding the effect of treatment relative to baseline.

In relation to anxiety, the most common slopes were Slope 3 (7 measures), Slope 4 (5 measures), Slope 1 (2 measures), and Slope 5 (1 measure). As noted earlier, Slopes 3, 4, and 5 (with a negative correlation) all present problems in relation to declining baselines. Once again, in only one case, ID 1, was there an increasing baseline (positive correlation, Slope 1). Also, in one case, ID 4, there was an increasing slope throughout treatment (positive correlation, Slope 3 and Slope 4), suggesting an increase in anxiety. As noted earlier, this case will be commented upon in the Discussion section. Again, given the problems with declining baselines, it is difficult to draw strong conclusions regarding the effect of treatment relative to baseline.

Multivariate process analysis was also used in SMA. This approach allows for the examination of cross-lagged correlations between two variables of interest. In order to examine

the temporal relationship between ADHD and anxiety, multivariate process analyses were utilized. Fortunately, the multivariate process analyses only utilized data from treatment, so the problem of declining baselines was not relevant to these analyses. Table 7 presents significant lags for ADHD and anxiety symptoms, as reported by the parent informant. In 3 of the 8 cases (IDs 1, 6, and 8), a positive correlation at Lag 0 indicated three possibilities: (1) ADHD and anxiety symptoms increased concurrently at some lag, (2) ADHD and anxiety symptoms decreased concurrently at some lag, or (3) both occurred. In 1 of the 8 cases (ID 2), a positive correlation at Lag +1 indicated three possibilities: (1) an increase in ADHD symptoms preceded an increase in anxiety symptoms by 1 week at some lag, (2) a decrease in ADHD symptoms preceded a decrease in anxiety symptoms by 1 week at some lag, or (3) both occurred. In 1 of the 8 cases (ID 7), a negative correlation at Lag -2 and -3 indicated three possibilities: (1) an increase in anxiety symptoms preceded a decrease in ADHD symptoms by 2 to 3 weeks at some lag, (2) a decrease in anxiety symptoms preceded an increase in ADHD symptoms by 2 to 3 weeks at some lag, or (3) both occurred. Only one significant finding occurred for the comparison of parent-reported and child-reported anxiety symptoms. In 1 of the 8 cases (ID 3), a negative correlation at Lag -5 indicated three possibilities: (1) an increase in parent-reported anxiety symptoms preceded a decrease in child-reported anxiety symptoms by 5 weeks at some lag, (2) a decrease in parent-reported anxiety symptoms preceded an increase in child-reported anxiety symptoms by 5 weeks at some lag, or (3) both occurred. Overall, the results largely suggest that ADHD and anxiety symptoms changed concurrently or by a delay of 1 week with ADHD symptom change preceding anxiety symptom change. One of these two patterns occurred for 4 of the 8 cases.

Global Functioning and Improvement

On the CGAS, a significant difference emerged between the pre-treatment consensus CGAS rating and the 1-week post-treatment rating ($\chi^2 = .04$) with significant improvement occurring between pre-treatment and 1-week post-treatment (see Table 2). The CGI was also used to examine session-by-session improvement and illness severity. The CGI uses a 7-point scale for improvement (0 = not applicable, 1 = very much improved, 2 = much improved, 3 = minimally improved, 4 = no change, 5 = minimally worse, 6 = much worse, 7 = very much worse) and a 7-point scale for severity (1 = normal, not impaired, 2 = minimally impaired, 3 = mildly impaired, 4 = moderately impaired, 5 = markedly impaired, 6 = severely impaired, 7 = very seriously impaired). The mean clinician rating for improvement at the end of treatment was 2.29 (much improved; SD = .49), and the mean clinician rating for impairment at the end of treatment was 3.3 (mildly impaired; SD = .76). A Wilcoxon test was also used to compare pre-treatment and 1-week post-treatment level of illness severity. A significant improvement was noted for illness severity ($\chi^2 = .04$).

Finally, an item on the CSQ was utilized to assess global improvement from the perspective of parents and children. The item states, “The major problem(s) that originally prompted me to begin treatment for my child is (are) at this point.” This item ranged from 1 - 7 (1 = considerably worse, 2 = worse, 3 = slightly worse, 4 = same, 5 = slightly improved, 6 = improved, 7 = greatly improved). Mothers reported mean scores of 5.25 (SD = 1.04) and 6.00 (SD = .76) at mid-treatment and 1-week post-treatment, respectively. Fathers reported mean scores of 5.33 (SD = .52) and 6.17 (SD = .41) at mid-treatment and 1-week post-treatment, respectively. Children reported mean scores of 5.88 (SD = 1.89) and 6.25 (SD = .89) at mid-

treatment and 1-week post-treatment, respectively. Overall, scores fell primarily in the improved to greatly improved range.

Parental Psychopathology and Family Environment

In relation to parental psychopathology, pre-treatment levels on the BSI were in the nonclinical range for the Global Symptom Inventory (mother's mean T-score = 50, father's mean T-score = 62). Friedman tests between pre-treatment, mid-treatment, and 1-week post-treatment did not reveal any significant differences for mothers (n = 6) but did for fathers (n = 5) on the Positive Symptom Distress Index ($\chi^2 = .04$). Post-hoc analyses for the fathers' scores, using Wilcoxon tests, revealed significant differences between pre-treatment and mid-treatment ($\chi^2 = .04$) and pre-treatment and 1-week post-treatment scores ($\chi^2 = .04$), but not mid-treatment and 1-week post-treatment scores. Both significant differences reflected a reduction in symptom distress.

Changes in parenting behavior and parent-child relationships were also explored among pre-treatment, mid-treatment, and 1-week post-treatment assessment points. On the APQ, no significant differences were found for mother (n = 6) or father (n = 5) reports using a Friedman test. Differences did emerge on the PCRQ. Wilcoxon tests revealed that children reported significantly less parental dominance on the Dominance subscale ($\chi^2 = .04$) between pre-treatment and 1-week post-treatment. Children did not complete the PCRQ at mid-treatment. Friedman tests revealed no significant differences for mothers (n = 6) or fathers (n = 5).

Family environmental changes were assessed via the FES for the Cohesion, Conflict, and Expressiveness scales. Friedman tests revealed a significant difference for the maternal report (n = 5) of Cohesion. Post-hoc tests, using Wilcoxon tests, revealed a significant difference between pre-treatment and mid-treatment ($\chi^2 = .03$), and pre-treatment and 1-week post-treatment

assessment points ($\chi^2 = .04$). Cohesion was rated lower at mid-treatment and 1-week post-treatment. The Cohesion subscale measures the degree of commitment and support family members provide for one another. Fathers ($n = 5$) did not report any significant differences on the FES.

Neuropsychological Functioning

On the BRIEF, a Friedman test ($n = 6$) was conducted on pre-treatment, mid-treatment, and 1-week post-treatment maternal ratings. Significant changes were not found on any subscale. In addition, CNS Vital Signs, a battery of computerized neuropsychological tests, was used to assess more objective changes in neuropsychological functioning. Wilcoxon tests revealed no significant changes between pre-treatment and 1-week post-treatment. Table 1 presents neuropsychological characteristics of the sample at pre-treatment.

Treatment Satisfaction

Parents and children were also asked to complete the CSQ at mid-treatment and at 1-week post-treatment. On both occasions, parents and children completed the measure with the therapist out of the room. In addition, parents and children were instructed to place the questionnaires in a sealed envelope and were told that the measures would not be examined until the end of the study. On the CSQ, parents reported their level of satisfaction on an item stating, “My overall feeling about the treatment program for my child and family is.” This item ranged from 1 – 7 (1 = very negative, 2 = negative, 3 = somewhat negative, 4 = neutral, 5 = somewhat positive, 6 = positive, 7 = very positive). Mothers reported mean scores of 6.57 (SD = .79) and 6.50 (SD = .54) at mid-treatment and 1-week post-treatment, respectively. Fathers reported mean scores of 6.33 (SD = .52) and 6.33 (SD = .52) at mid-treatment and 1-week post-treatment, respectively. Children reported mean scores of 6.50 (SD = 1.07) and 5.88 (SD = 1.13) at mid-

treatment and 1-week post-treatment, respectively. Overall, scores fell primarily in the positive to very positive range.

Discussion

As noted earlier, the current study had five primary goals. The first and second goals were to determine whether the proposed intervention reduced symptoms of ADHD and anxiety, respectively. The third goal was to explore mechanisms of treatment outcome (e.g., changes in neuropsychological functioning, family functioning, the temporal relationship between ADHD and anxiety). The fourth goal was to examine treatment effects on areas other than ADHD and anxiety symptomatology (e.g., global functioning, academic and social functioning). The fifth and final goal was to assess the feasibility and acceptability of the treatment.

In relation to the first goal, results generally suggest that improvement occurred in relation to ADHD. Evidence for this claim comes from results showing Reliable Change in 6 of 8 cases and Improvement (defined as moving 2 SDs from the pre-treatment mean) in 2 of 8 cases. Additional evidence includes significant changes on the maternal report of Attention Problems and *DSM-IV*-related ADHD on the CBCL and the maternal report of ADHD on the DBDRS-P. With respect to single-cases analyses, Clinical Outcomes analyses showed treatment success rates of 77.5% for the treatment phase and 54.55% for the control phase and a significant Treatment Success Rate Difference percentage. In addition, SMA analyses showed mean level symptom reduction in 3 of 8 cases and slope level reduction in 6 of 8 cases. Significant changes also occurred on the primary target behavior for ADHD (in most cases this was homework completion) and parents reported being “somewhat confident” to “confident” in managing current and future problems. At the same time, 0 of 8 cases were in the subclinical range on the ADIS at 1-week post-treatment and mothers reported a mean T-score of 65 for Attention

Problems on the CBCL, suggesting ADHD-related problems remained in the clinical range. Overall, the results seem to suggest improvement in functioning in relation to ADHD on a number of indices but not movement into the normal range at 1-week post-treatment.

In relation to the second goal, results generally suggest that significant improvement occurred in relation to anxiety problems. Evidence for this claim comes from results showing Reliable Change in 8 of 8 cases and Improvement (defined as moving 2 SDs from the pre-treatment mean) in 8 of 8 cases for two of the ADIS-related indices (Anxiety-All and Anxiety-Inclusion). For Anxiety-Inclusion, 5 of 8 (62.5%) cases were in the subclinical range (i.e., CSR < 4). 7 of 8 (87.5%) cases were in the subclinical range for Anxiety-All. In relation to specific anxiety disorders, Reliable Change occurred for 8 of 8 cases and Improvement occurred for 5 of 8 (62.5%) cases for GAD with 5 of 8 (62.5%) in the subclinical range. Results were less positive for SOP and SAD. Reliable change occurred for 4 of 7 (57.1%) cases and Improvement occurred for 1 of 7 (14.3%) cases for SOP with 1 of 7 in the subclinical range (14.3%). Reliable Change and Improvement were not calculated for SAD, given that only two cases met criteria for SAD. At the same time, 0 of 2 (0%) were in the subclinical range at 1-week post-treatment, suggesting less success with the treatment of this anxiety-related problem. In examining the two anxiety indices (Anxiety-All and Anxiety-Inclusion), between 62.5% and 87.5% of cases were in the subclinical range. Additional evidence for treatment success includes significant pre-post changes on the maternal report of the CBCL on Anxiety/Depression and *DSM-IV*-related Anxiety and the maternal report of anxiety on the SCAS-P. With respect to single-case analyses, Clinical Outcomes analyses showed treatment success rates of 80% for the treatment phase and 48.48% for the control phase and a significant Treatment Success Rate Difference percentage. In addition, SMA analyses showed mean level changes in 2 of 8 cases and slope level change in 5

of 8 cases in the direction of symptom reduction. In addition, significant changes occurred on the primary, secondary, and tertiary target behaviors for anxiety problems and parents reported being “somewhat confident” to “confident” in managing current and future problems. At the same time, 1 of 8 cases showed significantly increasing levels of anxiety on SMA analyses of the SCAS-P and the least amount of Reliable Change on ADIS anxiety-related indices (although improvement did occur on the ADIS and child report measures). Interestingly, an examination of factors associated with this one child revealed that this child had the lowest level of neuropsychological functioning among all children in the study (Neurocognition Index Score = 57; study mean = 91.63). Although this child had intelligence in the average range, the cognitive impairments noted in the assessment may have limited the success of the cognitive-behavioral treatment that was utilized for anxiety reduction. Overall, the results suggest significant improvement in anxiety for most study participants and movement into the normal range for anxiety. In addition, the percentage of children in the subclinical range is consistent with other anxiety trials using a similar anxiety treatment protocol (Barrett et al., 1996; Wood et al., 2006).

At the same time, some specific anxiety disorders showed lower rates of success than others. Although GAD resulted in a subclinical percentage of 62.5%, lower rates of success were noted for SOP (14.3%) and SAD (0%). Given the relatively short length of the study and the predominant focus on the treatment of generalized anxiety/worry, it may be that the treatment was not long enough or specific enough for adequate practice of exposure activities in treatment that are more relevant to SOP and SAD (e.g., exposure activities for social and separation anxiety). Although the treatment program included the use of exposure activities via a fear hierarchy, this tool was not introduced until Session 6, allowing for only a few sessions of practice. At the same time, Reliable Change was noted on SOP for 4 of 7 (57.1%) of the children

in the study and both children with SAD showed a reduced CSR at 1-week post-treatment (average CSR reduction of 1.5).

In relation to the idiographic component of the study, a significant problem was noted with declining baselines in a number of cases. One reason for the declining baselines may have been that the baselines were relatively short (i.e., 2, 3, or 4 weeks) with few baseline data points (i.e., 3, 4, or 5 points). In turn, the commonly observed reactive effects of assessment (i.e., a decline in symptoms prior to the start of treatment) may have occurred without sufficient time to return to more typical levels prior to the start of treatment (Ollendick & Hersen, 1984). At the same time, Clinical Outcomes analyses showed a differentiation in success rate between the treatment and control periods, suggested greater improvement occurring during the treatment phase relative to baseline. Finally, the temporal relationship between ADHD and anxiety was also examined via multivariate process analyses through SMA. These analyses revealed that ADHD and anxiety symptoms tended to change concurrently for most study participants (4 of 8, 50%). Although the current study lacks the number of subjects needed to make more definitive conclusions regarding the temporal relationship between ADHD and anxiety, it is the first study (to our knowledge) that has examined the temporal relationship between ADHD and anxiety symptoms within a psychotherapeutic treatment.

The third goal of the study was to examine possible mechanisms of change in therapy. In relation to parent-child relationships and family environment characteristics, few changes were noted over the course of treatment. Fathers did report significantly less symptom distress on the BSI at mid-treatment and 1-week post-treatment in comparison to pre-treatment, and children reported less parental Dominance on the PCRQ. Surprisingly, mothers reported less Cohesion on the FES at mid-treatment and 1-week post-treatment in comparison to pre-treatment. This

finding was somewhat unexpected, but it may be that the challenges of addressing family issues in therapy led to a diminished feeling of family Cohesion on the part of mothers. In relation to neuropsychological functioning, no changes were noted on the BRIEF or on the CNS Vital Signs battery. At the same time, it should be noted that deficits in neuropsychological functioning may have contributed to the limited success of cognitive-behavioral treatment for anxiety in at least one case (as noted earlier for ID 4).

The fourth goal of the study was to examine functioning in areas other than ADHD and anxiety. In relation to social functioning, mothers reported significant improvement in Social Problems on the CBCL, suggesting at least some improvement in the social domain. At the same time, similar changes were not reported by fathers. The current study also examined global functioning following treatment. Significant changes were noted on the CGAS, clinician-rated illness severity, and parents' reports on the CSQ, suggesting significant improvement in global functioning over the course of treatment.

The fifth and final goal of the study was to examine the feasibility and acceptability of the treatment protocol. Overall, parents reported high levels of satisfaction with treatment and reported that they felt "somewhat confident" to "confident" in managing future behavior problems. In addition, attendance and retention were extremely high for a clinical trial. Finally, parents, children, and the primary therapist all reported high levels of therapeutic alliance.

Although the current study provides some preliminary evidence for the efficacy of the treatment protocol, some limitations must be noted. First of all, the problem of declining baselines limits the ability to draw conclusions regarding causation with respect to the effect of treatment. Future studies of this treatment protocol might include a control group or longer baselines to better account for the reactive effects of assessment. A second limitation is the

concurrent treatment of ADHD and anxiety did not allow for the examination of the utility of adding an anxiety treatment protocol to an evidence-based treatment for ADHD as would be possible with a multiple-treatment design (Kazdin, 1982). A third limitation of the study is the homogeneous makeup of the sample in relation to ethnicity. As a result, the findings from the current study may not generalize to other ethnic groups. Finally, although single-case designs and clinical replication designs allow an initial glimpse of the efficacy for a treatment, they do not provide the causal clarity found in randomized-controlled trials. Although the current study provides some initial evidence for the efficacy of the treatment protocol, a future study using a nomothetic design may offer more definitive evidence.

Overall, the current study provided an initial examination of a treatment protocol designed for children with ADHD and anxiety. Similar to other anxiety treatment studies, the presence of ADHD did not result in reduced levels of success in terms of anxiety treatment outcomes (in comparison to outcome rates in other studies). In relation to ADHD, treatment outcomes were more modest, but the data do suggest that improvement occurred and that parents felt more equipped to better manage a condition that often does not return to normal levels following psychosocial treatment. In addition, parents reported high levels of satisfaction with treatment, high levels of therapeutic alliance, and high levels of global improvement following treatment. Future studies will be needed to better understand the effects of behavioral and cognitive-behavioral for children with ADHD and anxiety, particularly in relation to longer-term treatment outcomes.

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Table 1. Demographic and Clinical Characteristics

Demographics	N(%)/M(SD)
Male	4 (50%)
Age	8.88 (1.13)
Diagnosis (Pre-Treatment)	N(%)
Generalized Anxiety Disorder	8 (100%)
Separation Anxiety Disorder	2 (25%)
Social Phobia	7 (87.5%)
Specific Phobia	5 (62.5%)
Oppositional Defiant Disorder	3 (37.5%)
Comorbid with 2 or more anxiety disorders	8 (100%)
Comorbid with 3 or more anxiety disorders	4 (50%)
CNS Vital Signs (Pre-treatment)	M(SD)
Neurocognition Index	91.63 (17.34)
Memory	86.63 (37.32)
Psychomotor Speed	92.88 (11.81)
Reaction Time	84.13 (30.40)
Complex Attention	98.13 (16.63)
Cognitive Flexibility	96.13 (14.36)

Table 2. ADIS and CGAS Outcomes

Measure	Pre-treatment		Post-treatment		r	S _{diff}	Cutoff Score	
	M	SD	M	SD			Improved	RCI (> 1.96)
Primary								
ADIS ADHD	6.25	.71	5.25	.89	.68	.4		2.50
ADIS Anx (Inclusion)	5.40	.35	3.60	1.06	.84	.1	≤ 4.71	13.24
ADIS Anx (All)	4.99	.47	3.06	.63	.84	.19	≤ 4.05	10.28
ADIS GAD	5.43	1.13	2.71	1.50	.84	.5	≤ 3.16	5.99
ADIS SAD*	5.50	1.07	4.00	.00	-	-		
ADIS SOP	5.43	1.13	4.43	.98	.41	.4		2.50
CGAS	56.88	4.58	62.50	5.98	.80	2.1		2.72

Note. ADIS = Anxiety Disorders Interview Schedule for Children; Anx (Inclusion) = mean of GAD, SAD, and SOP; Anx (All) = GAD, SAD, SOP, and Specific Phobias; CGAS = Children’s Global Assessment Scale; *r* = test-retest reliability of the measure; *S*_{diff} = the standard error of the difference between pre and post; Improved ≤ pre-treatment mean - 2 SD; RCI = $(M_{\text{post}} - M_{\text{pre}})/S_{\text{diff}}$.

* ADIS SAD was unable to be calculated, since only 2 cases were diagnosed with SAD.

Table 3. Clinical Outcomes, Phi, and BESD indices for DBDRS-P ADHD Total Score

Success Rate	Odds	BESD	Phi
Treatment	Treatment	Percent of Non-overlapping data	
77.50%	3.44	68.14%	
Control	Control	Success Rates	
54.55%	1.2	68.14%, 31.86%	
Difference	Ratio	Success Rate Difference	Phi
22.95%	2.87	.36	.23
95% CI	95% CI		
.04<.23<.42	1.21<3.44<6.8		
Relative			
142.08%			
95% CI			
1.02<1.42<1.98			
Relative Improve			
42.08%			

Table 4. Clinical Outcomes, Phi, and BESD indices for SCAS-P Anxiety Total Score

Success Rate	Odds	BESD	Phi
Treatment	Treatment	Percent of Non-overlapping data	
80%	4	71.68%	
Control	Control	Success Rates	
48.48%	.94	71.68%, 28.32%	
Difference	Ratio	Success Rate Difference	Phi
31.52%	4.25	.43	.32
95% CI	95% CI		
.12<.32<.51	1.77<4.25<10.2		
Relative			
165%			
95% CI			
1.14<1.65<2.38			
Relative Improve			
65%			

Table 5. Mean level changes between Baseline and Treatment using SMA

ID	ADHD Tot	ADHD-I	ADHD-H	Anx Tot-P	Anx Tot-C	Anx Inc-P
1 (5)	-0.26	-0.18	-0.26	-0.11	-0.49	-0.46
2 (3)	-0.63	-0.49	-0.80*	-0.77	0	-0.76
3 (5)	-0.03	-0.26	0.15	0.19	0.21	0.30
4 (5)	-0.47	-0.43	-0.42	0.50*	-0.66	0.39
5 (4)	0.18	0.02	0.27	-0.57	0.16	-0.54
6 (3)	-0.74*	-0.81*	-0.62	-0.49	-0.76*	-0.51
7 (5)	-0.26	-0.16	-0.32	0.35	0.29	0.34
8 (3)	-0.82*	-0.49	-0.86*	-0.81*	0.27	-0.76*

Note: The numbers in parentheses indicate the number of baseline points.

* = $p < .05$

Table 6. Best-fitting Slopes for ADHD and Anxiety Symptoms

ID	ADHD Tot	ADHD-I	ADHD-H	Anx Tot-P	Anx Tot-C	Anx Inc-P
1	.77 (1)	-.65 (5)	.76 (1)	.77 (1)	-.90 (5)	.78 (1)
2	-.84 (4)	-.78 (4)	-.89 (3)	-.90 (4)	-	-.95 (4)
3	-	-.42 (3)	-	-	-	-
4	-	-	-	.57 (3)	-.87 (3)	.53 (4)
5	-	-	-	-.81 (3)	-	-.77 (3)
6	-.92 (3)	-.93 (3)	-.85 (3)	-.71 (3)	-.88 (3)	-.69 (3)
7	-.88 (5)	-.75 (5)	-.90 (5)	-	-	-
8	-.90 (3)	-.71 (5)	-.93 (3)	-.85 (4)	-	-.86 (4)

Note: Number in parentheses indicates the best-fitting slope vector based on being significant at $p < .05$ and having the largest correlation when multiple slopes were significant.

Table 7. Multivariate Process Analysis for ADHD and Anxiety Symptoms (Parent Informant)

ID	ADHD Tot, Anx-P	ADHD-I, Anx-P	ADHD-H, Anx-P	Anx-C, Anx-P
1	.73 (0)*	.53 (-2)	.74 (0)*	.53 (+1)
2	.76 (+1)*	.65 (+1)	.82 (+1)*	-
3	.52 (0)	.45 (+ 4)	.51 (0)	-.63 (-5)*
4	-.46 (-3)	-.38 (-3)	-.44 (-3)	-.44 (-1)
5	-.63 (-1)	.50 (-3)	-.53 (-1)	-.62 (-1)
6	.71 (0)*	.67 (0)	.73 (0)*	.57 (0)
7	-.69 (-3)*	-.73 (-2)*	-.60 (-3)	-.74 (-3)
8	.89 (0)*	.63 (0)	.86 (0)*	.41 (-5)

Note: All correlations in table are significant at $p < .05$. * = significant at $p < .05$ with Bonferroni correction. Number in parentheses indicates significant Lag.

Figure 1. Baseline and Treatment Data Series for IDs 1-8 (Left to Right) for DBDRS-P Total

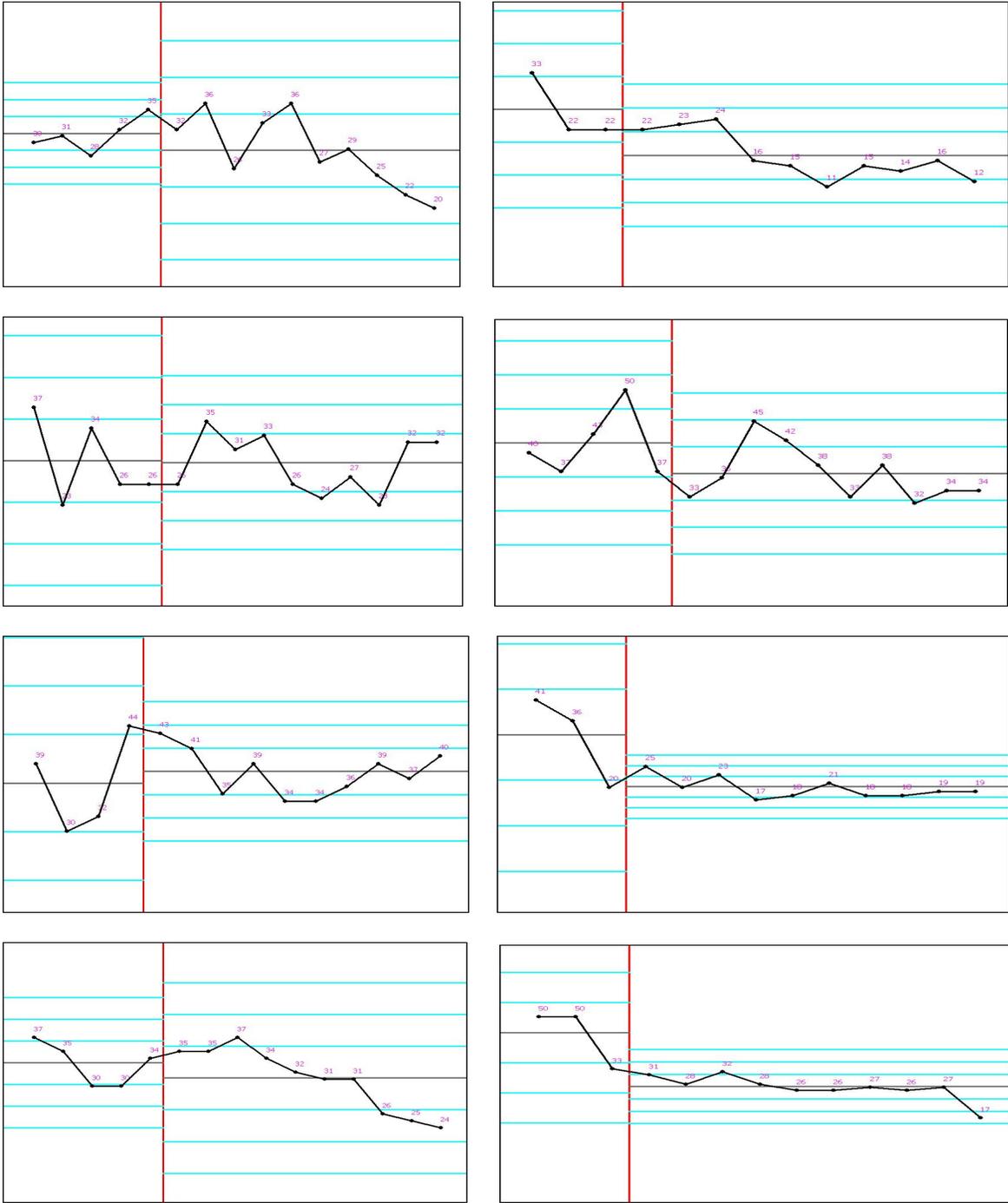


Figure 2. Baseline and Treatment Data Series for Subjects 1-8 (Left to Right) for SCAS-P Total

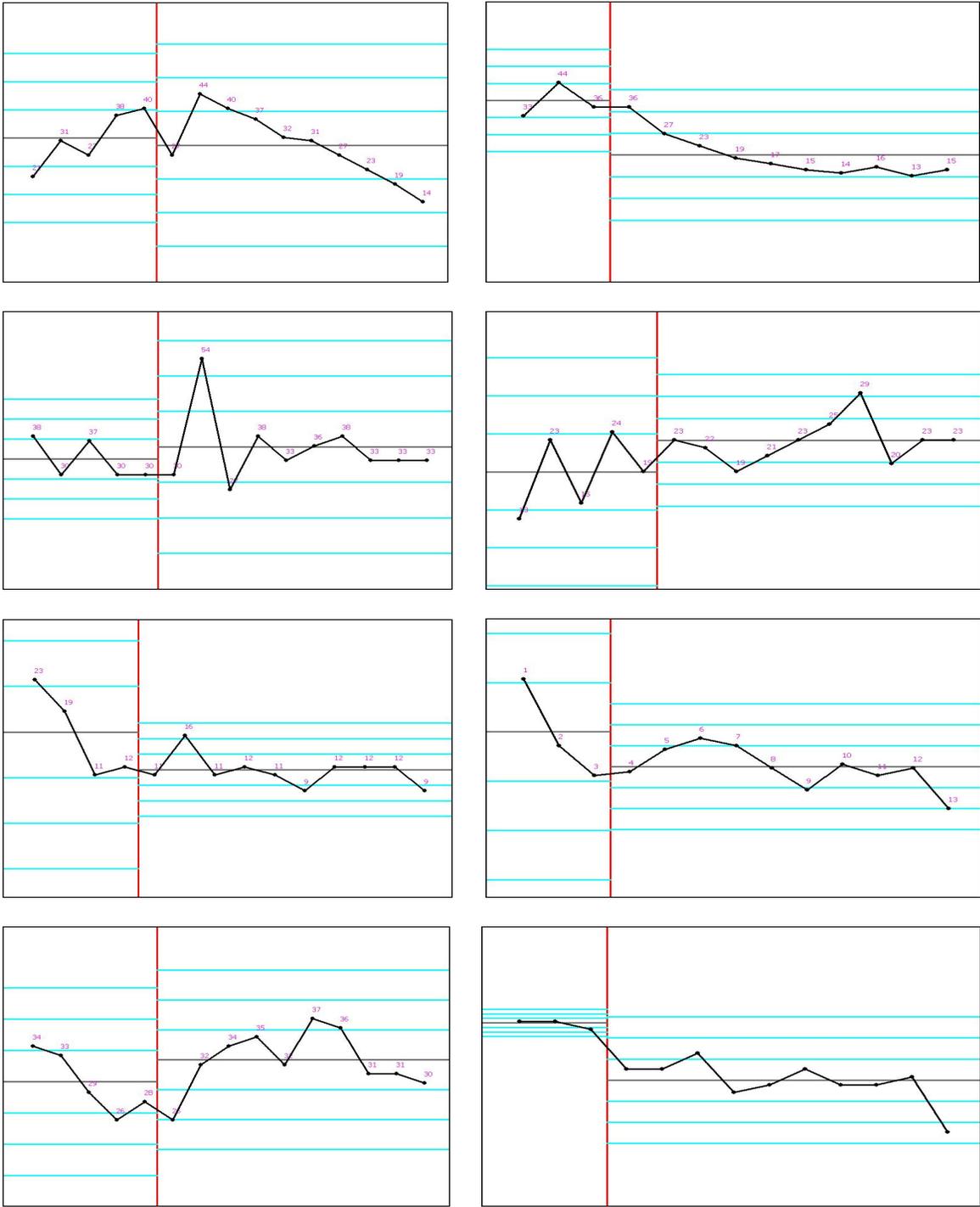
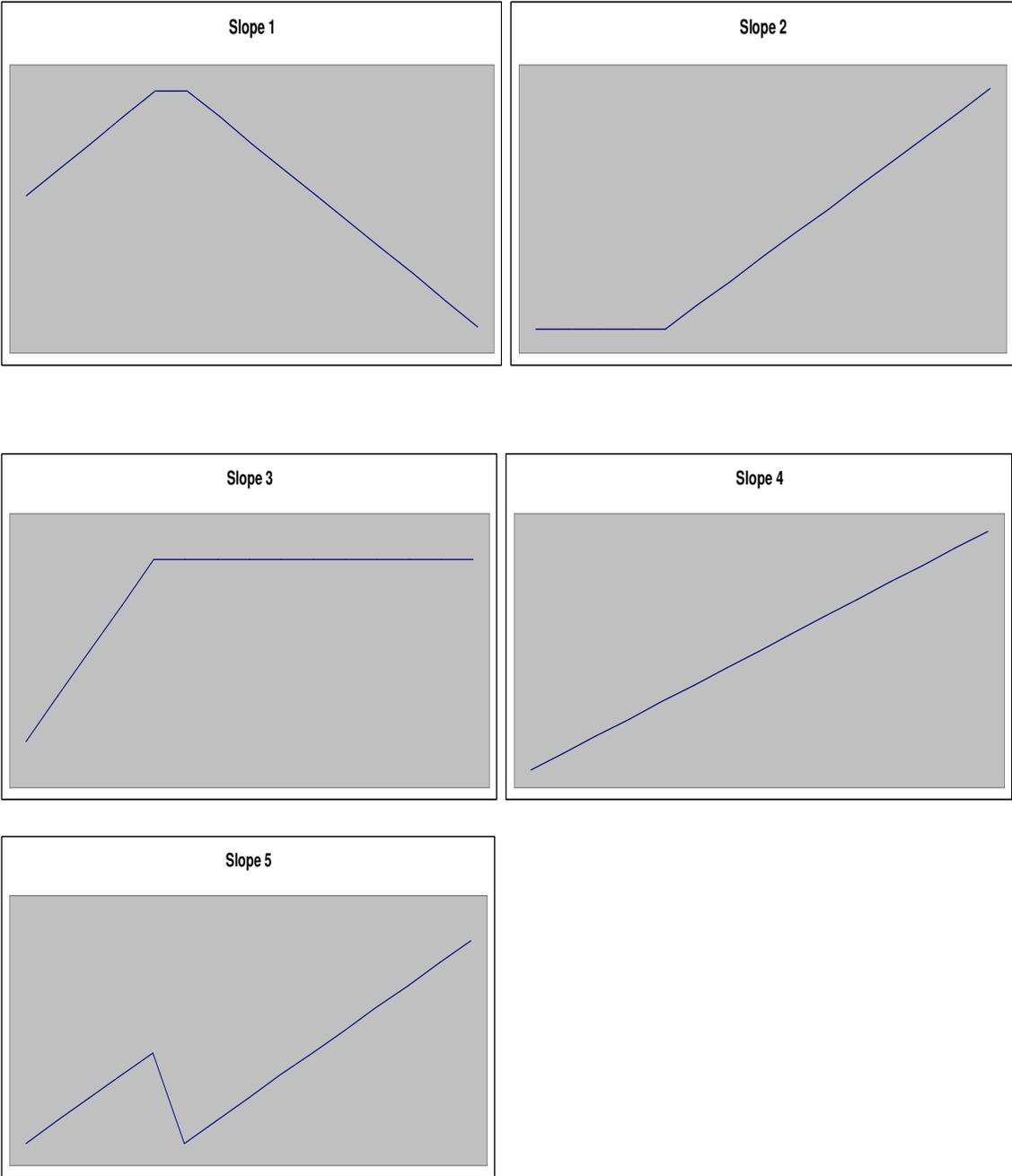


Figure 3. Simulation Modeling Analysis Slopes



Note: Positive correlations correspond to the slopes presented here, while negative correlations reflect the mirror images of these slopes.

ADHD and Anxiety Research Project

Therapist Manual for Treatment

Acknowledgements

The strategies utilized in this manual are based on well-established treatments for attention-deficit/hyperactivity disorder (ADHD) and treatments for childhood anxiety disorders. These treatments included elements from *The Defiant Child* (Barkley, 1997) and *The Integrated Psychotherapy Consortium: Anxiety Symptoms Intervention Manual*, a manual based off of the Cool Kids program developed by Rapee (2000). This manual was written by Matthew Jarrett. Thomas Ollendick served as an additional contributor in the manual development.

Session-by-Session Outline

Session 1: The first session of treatment focuses on building rapport with the family, identifying target behaviors and treatment goals, and introducing the family to the treatment process. The therapist meets with the parent(s) individually for approximately 50 minutes to identify behaviors to target in treatment and explain the treatment format. The therapist then spends approximately 30 minutes meeting with the child to build rapport and find out what the child would like to get out of treatment.

Session 2: The second session of treatment is designed to educate the parent(s) and child about the nature, causes, and treatment of anxiety and begin the process of managing ADHD-related behaviors. The therapist meets with the parent(s) for approximately 50 minutes to explain the nature, causes, and treatment of anxiety and introduce Step 1 in managing ADHD-related behaviors (i.e., positive attention). The therapist then meets with the child for approximately 30 minutes to discuss the various components of anxiety. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 3: The therapist meets with the parent(s) for approximately 50 minutes to discuss detective thinking and Step 2 of managing ADHD-related behaviors (i.e., effective commands). The therapist then meets with the child for approximately 30 minutes to continue to show how thoughts, feelings, and behaviors are interrelated. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 4: The therapist meets with the parent(s) for approximately 50 minutes to introduce Step 3 of managing ADHD-related behaviors (i.e., time out (if applicable) and the behavior chart). The therapist then meets with the child for approximately 30 minutes to introduce the concept of detective thinking. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 5: The therapist meets with the parent(s) for approximately 50 minutes to discuss parental management of anxious behaviors. The therapist then meets with the child for approximately 30 minutes to continue to practice detective thinking and discuss self-rewards. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 6: The therapist meets with the parent(s) for approximately 50 minutes to discuss rewarding brave behaviors and using stepladders. The therapist then meets with the child for approximately 30 minutes to discuss graded exposure and develop a stepladder. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 7: The therapist meets with the parent(s) for approximately 50 minutes to work on revising stepladders and starting the daily report card. The therapist then meets with the child for approximately 30 minutes to discuss stepladder exposures and the STOP technique. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 8: The therapist meets with the parent(s) for approximately 50 minutes to identify problems and difficulties. The therapist then meets with the child for approximately 30 minutes to identify problems and difficulties. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 9: The therapist meets with the parent(s) for approximately 50 minutes to prepare for the future. The therapist then meets with the child for approximately 30 minutes to discuss how to keep fear from coming back. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 10: Session 10 is conducted two weeks after Session 9 and serves as a booster session. The therapist meets with the parent(s) for approximately 50 minutes to discuss the maintenance of gains. The therapist then meets with the child for approximately 30 minutes to discuss the maintenance of gains. The family meets together with the therapist for the final 10 minutes to discuss what was learned in the session.

Session 1 – Introduction and Rapport

Topics to be covered:

- 1.1 Review of assessment information and goals for treatment
- 1.2 The plan for treatment
- 1.3 Structure of the program
- 1.4 Theories regarding behavior
- 1.5 Review and answering of questions

Parent(s) - 50 Minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for approximately 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

1.1 Review of assessment information and goals for treatment (20 minutes)

Briefly discuss the **results of the assessment** with the parents. Probe for greater detail regarding specific behaviors that interfere on a daily basis. **Identify 2 - 3 ADHD-related behaviors and 2 - 3 anxiety-related behaviors** that the parents would like to target in treatment. Use the ADIS rating scale to have the parent rate the severity of the behavior problem.

ADHD-related behaviors:

Pre-Treatment Diagnoses

- | | | | |
|----|------------------|-------|-----------------|
| 1. | Severity = _____ | Name: | Severity: _____ |
| 2. | Severity = _____ | Name: | Severity: _____ |
| 3. | Severity = _____ | Name: | Severity: _____ |

Anxiety-related behaviors:

- | | | | |
|----|------------------|-------|-----------------|
| 1. | Severity = _____ | Name: | Severity: _____ |
| 2. | Severity = _____ | Name: | Severity: _____ |
| 3. | Severity = _____ | Name: | Severity: _____ |

Conduct a **brief functional analysis** regarding ADHD and anxious behaviors. In what settings do the behaviors occur? How does the parent deal with the behavior? What often precedes the behavior?

Notes:

Spend some time discussing **parental goals for treatment**. What does the parent hope to gain from program?

1.2 The plan for treatment (10 minutes)

Explain the **nature of the program**. Explain to the parents that the current treatment combines elements of behavioral treatments designed for children with ADHD-related behavior problems as well as treatments designed for children with anxiety. Emphasize that the treatment is designed to increase compliance and reduce oppositional behavior. In addition, the treatment is also designed to help the child reduce anxiety and equip the family with skills to help better manage both ADHD-related and anxious behaviors.

Briefly discuss the **origins of the program**. Indicate that some research has shown that children with ADHD and anxiety respond particularly well to behavioral interventions designed to increase compliance. Indicate that the current study is combining that type of treatment with a treatment approach that is commonly used to reduce anxiety in children.

Indicate that the **role of parents** will be crucial in treating both ADHD and anxiety. Explain that parents are going to be serving as **coaches** in trying to help their child to better deal with these areas.

Discuss **realistic expectations** for treatment. Indicate that the treatment will serve as an opportunity for both parents and children to gain greater knowledge about ADHD and anxiety and skills to help manage these areas. Indicate the importance of continuing to **practice after treatment**. Treatment should be seen as a start. Indicate that the goal of treatment is not to completely remove all ADHD and anxiety symptoms but to learn to better manage these areas.

Emphasize the importance of **regular attendance** for **both parents** and **home practice**. Explain to the parents that weekly attendance is crucial in maintaining gains. Indicate that sessions are designed to impart knowledge and help develop skills. Although some practice will occur in the session, practice will have to occur outside of therapy to make significant gains.

1.3 Structure of program (5 minutes)

Explain the **structure of the sessions**. Indicate that the therapist will meet with the parents for 50 minutes at the start of the session. Explain that therapist will then meet with the child for 30 minutes. The final 10 minutes will be devoted to a group meeting.

Explain the **activities** within the sessions. Indicate that **setting goals** will be particularly important in order to evaluate progress. Indicate that **homework will be assigned weekly** and reviewed at the subsequent session.

Briefly discuss the concept of **in-session rewards**. Do the parents have ideas about an in-session reward? Is a favorite candy ok?

1.4 Theories regarding behavior (10 minutes)

Ask parent to explain their view of the **causes of noncompliance and anxious behaviors**. Be sure to record parental responses to obtain a better understanding of their view of the causes of child behavior (e.g., "He just wants attention").

Notes:

Emphasize a model for understanding child behavior as involving three elements: **child characteristics, parent characteristics, and situational characteristics**. Explain to parents that we often downplay situational characteristics and focus more on the characteristics of the person. Emphasize the interaction of these elements and provide examples. Ask the parent to think about child characteristics, parent characteristics, and situational characteristics. It is often helpful to explain the concept of **parent-child fit**. For example, ask the parent if their parenting strategy works well for a sibling but not their child in treatment. Introduce **the goal of therapy** as engineering a “**best fit**” between parent and child and building both the parent and child’s confidence in managing ADHD and anxious behaviors.

1.5 Review and answering of questions (5 minutes)

For the remainder of the parent session, allow the parents to ask any questions about treatment and review any necessary material to prepare parents for treatment.

Child - 30 Minutes

1.6 Building rapport

1.7 Goals for treatment

1.8 Structure of the program

1.6 Building rapport (10 minutes)

Spend some time building rapport with the child by playing a short game and discussing activities that they enjoy.

1.7 Goals for treatment (10 minutes)

After a brief rapport-building session, find out more about what is difficult for the child and why they feel that they are coming in for treatment. What does the child think therapy may do? Indicate to the child that the family is going to be learning ways to get along better and also ways to feel less anxious.

Notes:

1.8 Structure of the program (10 minutes)

Explain the **structure of the sessions**. Indicate that the therapist will meet with the child’s parent(s) for 50 minutes at the start of the session. Explain that therapist will then meet with the child for 30 minutes. The final 10 minutes will be devoted to a group meeting.

Explain the activities within the sessions. Indicate that **setting goals** will be particularly important in order to evaluate progress. Indicate that **homework** will be assigned weekly and reviewed at the subsequent session.

Explain the **in-session reward system**. Indicate that the child will have the opportunity to earn in-session rewards in the form of their favorite candy (be sure to get approval from parents first). Also, be sure to explain the **reward system for attending therapy** on a regular basis (i.e., \$1 each session towards a \$10 gift certificate to a store of their choice). Inquire about what gift certificate the child would want for completing treatment.

Type of certificate:

Parent(s) and Child - 5 Minutes

1.9 Review of session material and group discussion of treatment goals

Spend time discussing what both the child and parents identified as goals for treatment. Do the two parties agree on what needs to be worked on? What areas show discrepancy? Explain that the treatment is designed for the entire family to get along better, so it is important for us all to work together towards common goals.

Notes:

Session 2

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

2.1 Review of events since last session

2.2 Set the agenda

2.3 The nature, causes, and treatment of anxiety

2.4 Thoughts and detective thinking

2.5 Anxiety behavior change

2.6 ADHD-related problems – Pay Attention!

2.7 Homework

2.1 Review of events since last session (10 minutes)

Ask the parent if they have **any thoughts about what was talked about last week** or if **any problems came up over the last week**.

Spend some time reviewing what was discussed last week. If the parenting partner was not in session last week, spend some time discussing material from the first session. In addition, be sure to get the parenting partner's view on **ADHD and anxiety-related behaviors that should be targeted in treatment**.

2.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to discussing the nature, causes, and treatment of anxiety and Step 1 of managing ADHD-related behaviors.

2.3 The nature, causes, and treatment of anxiety (15 minutes)

Ask parent to think about when **anxiety can be a good thing**. If the parents have difficulty thinking of situations in which this would be the case, provide some examples (e.g., looking both ways before crossing the street).

When does anxiety become problematic? Ask the parents to think of examples when anxiety is problematic with their child. Point out that anxiety often becomes problematic when it interferes with the enjoyment of life and/or it is inappropriate for the situation.

Emphasize to the parents that **we do not want to completely eliminate all anxiety**, but we want to bring it down to a manageable level.

What is anxiety? Discuss the 3-component model of anxiety: **thoughts, feelings, behaviors**.

Provide the parent with the **3-component model of anxiety handout**. Present the example to the parents and then have them **complete a blank model** for one of their child's anxiety-related reactions.

Emphasize that we will focus primarily on thoughts and behaviors, particularly since physiology is primarily helpful in just recognizing anxiety cues.

2.4 Thoughts and detective thinking (2 minutes)

Explain to the parents that we often tend to think the “worst” when we feel anxious. Have the parents provide an example of catastrophic thinking.

Introduce the concept of “detective thinking” as a way to evaluate the evidence and to replace “worst case scenario” thoughts with more realistic thoughts.

2.5 Anxiety behavior change (2 minutes)

Explain that children with anxiety often behave in ways that keep the anxiety going. Can parents think of examples of this?

Emphasize the concept of **avoidance** and how avoidance maintains anxiety. Have the parents think through examples of how avoidance contributes to their child’s anxiety.

Finally, explain that some anxiety problems require more work in the “behavior” area while other require more work with “thought” area (e.g., managing worry vs. getting a child to sleep in his own bed).

2.6 ADHD-related problems – Pay Attention! (15 minutes)

Discuss how the **quality of attention** affects us. Point out examples of negative and positive attention. Ask the parents to think of times when they may experience positive or negative attention at work or with others (e.g., worst supervisor, best supervisor). How does the **type of attention affect motivation**?

Apply these ideas to the relationship between the parent(s) and the child. Is most attention positive or negative? Probe for examples and use examples to prove the point (e.g., paying attention when the child is interfering with a phone call but not noticing when the child is playing quietly during a phone call).

Goal of working towards **differential attention**. Explain that we want to pay attention to compliant behaviors and ignore noncompliant behaviors. Emphasize that we want to “catch the child being good.”

Emphasize that “paying attention” is like putting in the **foundation of the house**. It is one step in reaching our final goal. In turn, parents should not expect major changes right away.

2.7 Homework (4 minutes)

Explain that the parents and the child will be learning similar material each week, and it will be important for parents to help the child to practice at home through homework assignments and applying the material to everyday life. Finally, mention that it is ok if their child wants to **dictate the homework** to them.

Anxiety homework:

1. Have the child complete **Handout 2.6 (Top Ten List)** and **rate their worry on three occasions using the scale from Handout 2.5.**

ADHD-related homework:

1. Practice catching their child being good via positive attention.

Child Session – 30 Minutes

Topics to be covered:

2.8 Review of events since last session

2.9 Review of previous meeting

2.10 Set the agenda

2.11 Review child anxiety handouts

2.12 Homework

2.8 Review of events since last session (5 minutes)

Spend some time continuing to build rapport with the child and ask him/her what they thought about their first therapy session.

2.9 Review of previous meeting (5 minutes)

Explain to child that this time will be used to remember what was discussed last week and to discuss homework

2.10 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**. Also explain the in-session reward to the child.

“The agenda for today’s meeting includes learning about anxiety and beginning to understand our anxious reactions and what we can do about them.”

2.11 Review handouts with child regarding child anxiety (handouts 2.1 – 2.5) (15 minutes)

Explain to the child that he/she and the therapist are going to work together to learn more about how anxiety works and how we can learn to manage anxiety. Review the handouts in order and be sure to provide reinforcement using the in-session reinforcer.

2.12 Homework (3 minutes)

Have the child complete **Handout 2.6 (Top Ten List)** and **rate their worry on three occasions using the scale from Handout 2.5.**

Parent(s) and Child - 10 Minutes

2.13 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. Give the session handouts to the parent to take home and make sure the parents are clear on the homework assignment.

Session 3

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

3.1 Review of events since last session

3.2 Set the agenda

3.3 Detective thinking

3.4 Commands

3.5 Review and homework

3.1 Review of events since last session (10 minutes)

Ask the parent if any problems came up over the last week. Spend some time reviewing what was discussed last week and address any questions about the material covered. In addition, ask about homework completion. If the homework was not completed, explore reasons for this issue and plan for dealing with the issue over the next week.

Optional: If parents report difficulty with using positive attention, “special time” can be introduced to the family and assigned for homework.

Explain that in order to get better at differential attention, it will be important to practice “**special time**” or attending periods. Emphasize the important points of special time (e.g., limiting questions, relaxing, narrating, etc.).

3.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to discussing detective thinking and Step 2 of managing ADHD-related behaviors.

3.3 Detective thinking (15 minutes)

Explain the concept of detective thinking to the parents. Explain that the homework assignment for the week will involve learning to challenge negative automatic thoughts. Emphasize parental modeling of adaptive thinking and practice this technique with the parents via discussion and/or role play.

3.4 Commands (20 minutes)

Examine how paying attention to positive behaviors went over the last week. How did the child respond to this approach? Was this difficult for the parents?

After examining the attempt at positive attention, explain that commands will now be introduced for this week. Explain to parents how to give effective commands and to use “test sessions” for compliance in relation to commands. Model this technique for the parents and have the parents practice with you.

3.5 Review and homework (3 minutes)

Review the material covered in the session and answer any of the parents' questions. Explain that the homework assignment will be described at the end of the session.

Child Session – 30 Minutes

Topics to be covered:

3.6 Review of events since last session

3.7 Review of previous meeting and homework

3.8 Set the agenda

3.9 Review child anxiety handouts

3.6 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

3.7 Review of previous meeting and homework (5 minutes)

Discuss material covered in the last session. Emphasize that the child will get the most out of the treatment if he/she thinks about and remembers what is covered in each meeting. Review the homework assignment to use the Worry Scale and create the Top 10 List.

3.8 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today’s meeting is to learn more about how the way we think affects the way we feel.”

3.9 Review child anxiety handouts

Review handouts 3.1 – 3.7 (20 minutes)

Parent(s) and Child - 10 Minutes

3.10 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. The homework assignment for this week is to complete **Handout 3.3**. Give the session handout to the parent(s) to take home and make sure the parent(s) are clear on the homework assignment.

Session 4

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

4.1 Review of events since last session

4.2 Set the agenda

4.3 Time Out

4.4 Behavior Chart

4.5 Review and homework

4.1 Review of events since last session (10 minutes)

Ask the parent if any problems came up over the last week. Spend some time reviewing what was discussed last week and address any questions about the material covered. In addition, ask about homework completion. If the homework was not completed, explore reasons for this issue and plan for dealing with the issue over the next week.

Spend some time reviewing how **Step 2** of managing ADHD-related behaviors went (i.e., **commands**). If the parents encountered any problems, offer suggestions for issuing more effective commands. Also, ask about the **anxiety-related homework** and if the parents encountered any problems in helping their child complete the handout.

4.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to **Time Out (optional)** and developing the **Behavior Chart**.

4.3 Step 3 – Time Out (**Optional**) (15 minutes)

Depending on the age of the child and the level of noncompliance, “time out” may be a useful technique for some families. Explain to parents that “time out” serves as a consistent, unpleasant price for noncompliance. Spend some time discussing the level of noncompliance to determine if training in time out would be appropriate.

If the parents indicate that significant noncompliance occurs, explain the following steps that should be used for “time out”:

Rules:

1. Explain to the child that not following directions will result in a time-out and explain the time-out procedure (i.e., sitting in a chair in the corner for an amount of time in minutes equal to their age).
2. Timeout should occur in a boring place.
3. Explain that time out requires the child to be quiet while in the corner and that the child must be quiet for the final 30 seconds to come out. Your voice signals the end of time out.
4. Do not talk to your child while they are in time out.

5. After time out is completed, repeat the direction that put them in time out in the first place.
6. If the child does not complete the task after a time out, repeat the time out following the rules presented above.

Procedure:

1. Issue a command.
2. Give the child 5 seconds to respond to the command.
3. Repeat the direction and give the child 5 seconds to respond to the command.
4. Give a warning about time out if the child is noncompliant.
5. Indicate to the child that they will have to go to time out for not completing the task (Note: do not ask the child if they want to go to time out and be very specific about why the child is going to time out).
6. Do not lecture or scold. Gently but firmly take the child to the time-out chair.
7. If the child leaves the time out chair, indicate to the child that time out is not yet over and return them to the chair. Indicate that the time period will start over. If the child leaves a second time, take away an important privilege. If the child continues to avoid time out, put the child in their room for the time out period.

4.4 Step 3 – Behavior Chart (20 minutes)

Explain to the parents that up until now they have been using a positive attention and compliance training sessions to help prepare them for what will be covered today.

Indicate that following directions is only one of several important behaviors that will now be monitored. Instead of earning verbal praise only, the child will **now be able to earn points**. The point system will be used to reward the child for good behavior but will also serve to help the child know when they are having a good or bad day.

The following steps will be used to develop the behavior chart:

- 1) Several behaviors will be selected to target (e.g., 3 or 4).
- 2) An incentive that your child values highly will be selected.
- 3) The number of points needed to earn the reward will be selected.

Emphasize to the parents that it is very important to be **highly specific** about your expectations. Also, explain that each activity will be worth **3 points**. Finally, explain that the child must earn **2/3 of the daily points** to get the reward for the day.

Prior to starting the system, be sure to sit down with the child and **explain what the chart is about**. Also, be sure to include your child's input for things like rewards for good behavior. We want your child to be as invested in this process as you are. Finally, determine a time to meet every day to review the chart. Two times that are often very good for review are 6:00 PM or 8:00 PM (i.e., after dinner or before bedtime).

Although you will now be giving points for good behavior, be sure to continue to “catch your child being good” and use lots of positive verbal praise.

Provide the parents with the sample behavior chart and a blank copy. Determine 3-4 behaviors to target over the next week.

4.5 Review and homework (3 minutes)

Review the material covered in the session and answer any of the parents questions. Explain that the homework assignment will be described at the end of the session.

Child Session – 30 Minutes

Topics to be covered:

4.6 Review of events since last session

4.7 Review of previous meeting and homework

4.8 Set the agenda

4.9 Review child anxiety handouts

4.6 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

4.7 Review of previous meeting and homework (5 minutes)

Discuss material covered in the last session. Emphasize that the child will get the most out of the treatment if he/she thinks about and remembers what is covered in each meeting. Review the homework assignment to complete **Handout 3.3**.

4.8 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today’s meeting is to learn more about thinking mistakes and how to change our thoughts to feel better.”

4.9 Review child anxiety handouts

Review handouts 3.8-3.12. If not all the handouts were completed from Session 3, be sure to complete them before moving on to the Session 4 handouts. (20 minutes)

Parent(s) and Child - 10 Minutes

4.10 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. Explain that the homework assignment for this week is to **develop and implement the behavior chart** and to complete **Handouts 3.11 and 3.12**. Give the session handouts to the parent to take home and make sure the parents are clear on the homework assignment.

Session 5

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

5.1 Review of events since last session

5.2 Set the agenda

5.3 Managing anxious behaviors

5.4 Review and homework

5.1 Review of events since last session (15 minutes)

Ask the parent if any problems came up over the last week. Spend some time reviewing what was discussed last week and address any questions about the material covered. In addition, ask about homework completion. If the homework was not completed, explore reasons for this issue and plan for dealing with the issue over the next week.

Spend some time reviewing the **behavior chart**. If any problems came up, spend some time reviewing what happened and make any necessary changes to the behavior chart. Also, ask about the **anxiety-related homework** and if the parents encountered any problems in helping their child complete the handouts.

5.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to **managing anxious behaviors**.

5.3 Managing anxious behaviors (30 minutes)

Explain to parents that although the therapist's work with children is important in reducing anxiety, there are also **things that parents can do** to help out their children. Indicate that when children begin to avoid objects or situations, if parents or teachers inadvertently reinforce avoidance, the child will begin to avoid even more. For example, if a child is nervous and wants to avoid something, and goes to his or her parents, and they provide a lot of **extra attention** to the child, the child is likely to avoid the situation or stimulus more in the future. Furthermore, if a child refuses to be near a stimulus or situation due to complaints that he or she does not want to be scared and then gets to stay close to you, etc., then the child is likely to try to avoid the stimulus or situation again. In this example, the parents serve as "**safety signals**" for the child. In general, safety signals serve to maintain the fear, not to quell it. Although positive time with you is important, it is very important that the **positive time occurs independently of phobic avoidance or distress**, so that the child does not receive extra attention for non-brave, fearful behaviors. In fact, we want to **reinforce the child and give lots of extra attention and praise for brave behaviors**, and for staying near the feared stimulus or situation. Model ways to show empathy but also be challenging (e.g., "I know you are afraid, but let's try this together") when encountering fearful behaviors.

Briefly discuss principles of **graded exposure** and the concept of anxiety **habituation**. Be sure to emphasize that it is important to move slowly when doing exposure exercises to show the child that anxiety drops when he or she stays in the feared situation long enough.

Finally, emphasize the importance of **modeling brave behavior** and having **realistic expectations** for the child. Indicate that anxiety will not change overnight but gradual changes will be made over time. At the same time, be sure to show that you are confident that your child can overcome his or her fears.

Provide parents with the **DOs and DONTs handout** that discusses ways parents can manage child anxiety. Review the handout with the parents and answer any questions they might have about managing anxious behaviors.

5.4 Review and homework (3 minutes)

Review the material covered in the session and answer any of the parents questions. Explain that the homework assignment will be described at the end of the session.

Child Session – 30 Minutes

Topics to be covered:

5.5 Review of events since last session

5.6 Review of previous meeting and homework

5.7 Set the agenda

5.8 Review child anxiety handouts

5.5 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

5.6 Review of previous meeting and homework (5 minutes)

Discuss material covered in the last session. Emphasize that the child will get the most out of the treatment if he/she thinks about and remembers what is covered in each meeting. Review the homework assignment to complete **Handouts 3.11 and 3.12**.

5.7 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today’s meeting is to continue to learn to think like a detective and to learn to reward yourself for working on overcoming fears.”

5.8 Review child anxiety handouts

Review handouts 4.1 – 4.6. If not all the handouts were completed from Session 4, be sure to complete them before moving on to the Session 5 handouts. (20 minutes)

Parent(s) and Child - 10 Minutes

5.9 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. Explain that the homework assignment for this week is to **continue to develop and implement the behavior chart** and to complete **Handouts 4.6a and 4.6b**. Give the session handouts to the parent to take home and make sure the parents are clear on the homework assignment.

Session 6

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

6.1 Review of events since last session

6.2 Set the agenda

6.3 Rewarding brave behaviors

6.4 Stepladders

6.5 Review and homework

6.1 Review of events since last session (15 minutes)

Ask the parent if any problems came up over the last week. Spend some time reviewing what was discussed last week and address any questions about the material covered. In addition, ask about homework completion. If the homework was not completed, explore reasons for this issue and plan for dealing with the issue over the next week.

Spend some time reviewing the **behavior chart**. If any problems came up, spend some time reviewing what happened and make any necessary changes to the behavior chart. Also, ask about the **anxiety-related homework** and if the parents encountered any problems in helping their child complete the handouts.

6.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to **rewarding brave behaviors and stepladders**.

6.3 Rewarding brave behaviors (5 minutes)

Remind parents about the reinforcement strategies discussed last week (i.e., praising brave behaviors and ignoring avoidance behaviors). Explain that the next step in the program will be to set up exposure practice activities and to reward their child for brave behavior.

6.4 Stepladders (25 minutes)

Introduce the idea of a **stepladder** as a tool to work on gradual exposure. Provide the parents with a **stepladder handout**. Explain that each week a particular fear will be chosen to work on and rewards will be contingent on brave behaviors. Emphasize that the exposure activity should not end until **anxiety subsides**. Remind the parents about the importance of habituation in anxious situations.

Emphasize the importance of **repeated exposures** to maintain gains. Remind parents that we want to ignore anxious behaviors and reinforce brave behaviors. Discuss ways to show empathy but also be challenging.

Finally, ask the parents about ideas for stepladders over the coming weeks. Identify common themes. Identify one problem area to work on over the next week. Also be sure to ask the parents to generate some ideas for rewards.

6.5 Review and homework (3 minutes)

Review the material covered in the session and answer any of the parent's questions. Explain that the homework assignment will be described at the end of the session.

Child Session – 30 Minutes

Topics to be covered:

6.6 Review of events since last session

6.7 Review of previous meeting and homework

6.8 Set the agenda

6.9 Review child anxiety handouts

6.6 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

6.7 Review of previous meeting and homework (5 minutes)

Discuss material covered in the last session. Emphasize that the child will get the most out of the treatment if he/she thinks about and remembers what is covered in each meeting. Review the homework assignment to complete **Handouts 4.6a and 4.6b**.

6.8 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today's meeting is to continue to learn to develop a list of feared situations and learn strategies for facing and challenging those fears.”

6.9 Review child anxiety handouts

Review handouts 5.1 – 5.6. If not all the handouts were completed from Session 5, be sure to complete them before moving on to the Session 6 handouts. (20 minutes)

Parent(s) and Child - 10 Minutes

6.10 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. Develop a hierarchy with the family for the first stepladder using **Handouts 5.4 and 5.5**. Explain that the homework assignment for this week is to **continue to develop and implement the behavior chart** and to complete **Handout 5.6**. Encourage the family to complete 1 – 2 steps/week. Give the session handouts to the parent to take home and make sure the parents are clear on the homework assignment.

Session 7

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

7.1 Review of events since last session

7.2 Set the agenda

7.3 Revising stepladders

7.4 Daily report card

7.5 Review and homework

7.1 Review of events since last session (15 minutes)

Ask the parent if any problems came up over the last week. Spend some time reviewing what was discussed last week and address any questions about the material covered. In addition, ask about homework completion. If the homework was not completed, explore reasons for this issue and plan for dealing with the issue over the next week.

Spend some time reviewing the **behavior chart**. If any problems came up, spend some time reviewing what happened and make any necessary changes to the behavior chart. Also, ask about the **anxiety-related homework** and if the parents encountered any problems in helping their child complete the handouts. Spend some time discussing how the use of **stepladders** went over the last week.

7.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to **revising stepladders** and **the daily report card**.

7.3 Revising stepladders (15 minutes)

Discuss the importance of knowing what it is the child fears and consequently what it is that he/she is actually avoiding. Provide the example of a child who is afraid of using the classroom computer. A ladder might be built to help build the child's confidence with the computer, but we might find that the child is afraid of using a math program on the computer and to the computer itself. Our stepladder would be adjusted based on this information.

Spend some time asking the parents if a new stepladder will be needed for the week or if modifications are needed for the current stepladder. Work with the parents to come up with a revised stepladder for the next week.

7.4 Daily report card (15 minutes)

Explain to the parents that we are now going to extend the behavior management program to the school setting, particularly since the school setting often places greater demands on attention and concentration than the home setting.

Briefly discuss that **medication** may not be an important component in managing behaviors in the home, but it may be useful in the classroom depending on the severity of ADHD symptoms. Discuss past experiences with medication and whether medication has been helpful. Indicate to parents that it is often helpful to try some behavioral approaches prior to using medication. In addition, the two approaches can be used in combination.

Explain that the second big factor that may affect performance in school is the **teacher**. Explain that different teachers often handle different types of students very differently. The ideal combination is having patience and understanding but being firm, consistent, and structured. Indicate to the parents that it will be important to maintain contact with the teacher to make sure that there is consistency across settings.

Indicate that we will be implementing the behavior management system in school in the modified form of a **daily report card**. Explain that we will ask the teacher to rate your child's behavior **at least two times per day in three or four areas**. The report card will also have room for comments and room for the teacher's signature. Target areas will be identified in conjunction with the teacher.

Explain that the child will receive feedback and earn points from their teacher. Then the child will bring the report card home. You should review the daily report card with your child every day. Much like the behavior chart at home, your child will need to earn a certain number of points at school to have a "good day." It is recommended to start with **2/3rds of the points** as the criterion for earning a reward. Explain to the parents that there are **two options**: combine the daily report card points with the home behavior management system or keep it separate.

Once the parents decide which option to choose, develop a daily report card with the family. In addition, ask the parents to **contact the teacher over the next week** to identify any additional areas that the child might need help with.

7.5 Review and homework (3 minutes)

Review the material covered in the session and answer any of the parents' questions. Explain that the homework assignment will be described at the end of the session.

Child Session – 30 Minutes

After meeting with the parents, provide them with the assessment measures for the week and then escort them to the waiting room prior to meeting with the child.

Topics to be covered:

7.6 Review of events since last session

7.7 Review of previous meeting and homework

7.8 Set the agenda

7.9 Review child anxiety handouts

7.6 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

7.7 Review of previous meeting and homework (5 minutes)

Discuss material covered in the last session. Emphasize that the child will get the most out of the treatment if he/she thinks about and remembers what is covered in each meeting. Review the homework assignment to complete **Handout 5.6**. Ask how the child did with their **first stepladder** and if they used the **STOP technique**.

7.8 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today’s meeting is to continue to work on stepladders, strategies for overcoming anxiety, and meeting with your parents to help them better understand what you are going through.”

7.9 Review child anxiety handouts

Review handouts 6.1-6.4. If not all the handouts were completed from Session 6, be sure to complete them before moving on to the Session 7 handouts. (20 minutes)

Parent(s) and Child - 10 Minutes

7.10 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. Revise the stepladder with the family using **Handout 6.2**. Also explain that detective thinking should still be used when working our way up the stepladder (**Handout 6.3**). Explain that the homework assignment for this week is to **continue to develop and implement the behavior chart at home, introduce the daily report card, contact the teacher about target areas**, and complete **Handouts 6.2 and 6.3**. Encourage the family to complete 1-2 steps/week. Give the session handouts to the parent to take home and make sure the parents are clear on the homework assignment.

Session 8

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

8.1 Review of events since last session

8.2 Set the agenda

8.3 Identifying problems and difficulties

8.4 Review and homework

8.1 Review of events since last session (15 minutes)

Ask the parent if any problems came up over the last week. Spend some time reviewing what was discussed last week and address any questions about the material covered. In addition, ask about homework completion. If the homework was not completed, explore reasons for this issue and plan for dealing with the issue over the next week.

Spend some time reviewing the **behavior chart**. If any problems came up, spend some time reviewing what happened and make any necessary changes to the behavior chart. Spend some time discussing how the first week of the **daily report card** went. Discuss any modifications that need to be to the daily report card. Also, ask about the **anxiety-related homework**. Spend some time discussing how the use of **stepladders** went over the last week and if any revisions need to be made over the next week.

8.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to **identifying problems and difficulties**

8.3 Identifying problems and difficulties (30 minutes)

Explain to the parents that the final three sessions will be devoted to problem-solving and identifying difficulties that may be slowing treatment. Indicate that no new skills will be introduced, but it will be important to continue to practice the skills that have been taught (e.g., positive attention, behavior chart, daily report card, detective thinking, stepladders, etc.).

8.4 Review and homework (3 minutes)

Review the material covered in the session and answer any of the parents' questions. Explain that the homework assignment will be described at the end of the session.

Child Session – 30 Minutes

Topics to be covered:

8.5 Review of events since last session

8.6 Review of previous meeting and homework

8.7 Set the agenda

8.8 Review of treatment with child

8.5 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

8.6 Review of previous meeting and homework (5 minutes)

Discuss material covered in the last session. Emphasize that the child will get the most out of the treatment if he/she thinks about and remembers what is covered in each meeting. Review the homework assignment to complete **Handouts 6.2 and 6.3**. Ask how the child did with their **revised stepladder** and if they used the **STOP technique**.

8.7 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today’s meeting is to identify any problems or difficulties that might be making treatment progress difficult.”

8.8 Review of treatment with child

Spend some time discussing the treatment process with the child. Find out any issues that are still difficult for the child.

Parent(s) and Child - 10 Minutes

8.9 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. Revise the stepladder with the family using **Handout 6.2**. Also explain that detective thinking should still be used when working our way up the stepladder (**see detective thinking sheet – Handout 6.3**). Explain that the homework assignment for this week is to **continue to develop and implement the behavior chart at home, continue with the daily report card, and continue with stepladders**. Encourage the family to complete 1-2 steps/week. Give the session handouts to the parent to take home and make sure the parents are clear on the homework assignment.

Session 9

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

9.1 Review of events since last session

9.2 Set the agenda

9.3 Preparing for the future

9.4 Review and homework

9.1 Review of events since last session (15 minutes)

Ask the parent if any problems came up over the last week. Spend some time reviewing what was discussed last week and address any questions about the material covered. In addition, ask about homework completion. If the homework was not completed, explore reasons for this issue and plan for dealing with the issue over the next week.

Spend some time reviewing the **behavior chart**. If any problems came up, spend some time reviewing what happened and make any necessary changes to the behavior chart. Spend some time discussing how the **daily report card** went. Discuss any modifications that need to be made to the daily report card. Also, ask about the **anxiety-related homework**. Spend some time discussing how the use of **stepladders** went over the last week and if any revisions need to be made over the next week.

9.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to **preparing for the future**.

9.3 Preparing for the future (30 minutes)

Explain to the parents that it will be important to prepare for the future in order to maintain treatment gains. Spend some time asking the parents what they think might be challenging in the future. For example, would it be easy to slip back into old ways or stop using the treatment tools? What challenges might lie ahead? Emphasize to the parents that there may be times that they slip a bit, but it is important for them to remember that they now have some tools that they can use to help them get back on track.

9.4 Review and homework (3 minutes)

Review the material covered in the session and answer any of the parents' questions. Explain that the homework assignment will be described at the end of the session.

Child Session – 30 Minutes

Topics to be covered:

9.5 Review of events since last session

9.6 Review of previous meeting and homework

9.7 Set the agenda

9.8 Review of treatment with child

9.5 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

9.6 Review of previous meeting and homework (5 minutes)

Discuss the material covered in the last session. Emphasize that the child will get the most out of the treatment if he/she thinks about and remembers what is covered in each meeting. Review the homework assignment to **continue with stepladders**. Ask how the child did with the **stepladder** and if they used the **STOP technique**.

9.7 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today’s meeting is to think about how to keep fear from coming back in the future.”

9.8 Review of treatment with child

Spend some time discussing the treatment process with the child. Find out any issues that are still difficult for the child. Review **Handouts 11.1-11.2**. Finally, explain to the child that the final session will be a chance to celebrate treatment gains. Ask the child if he/she wants to bring a special game or wants to do a special activity with the therapist.

Parent(s) and Child - 10 Minutes

9.9 Review of session with the family

Have the child explain what they learned in the session and what the homework is for the next week. Revise the stepladder with the family using **Handout 6.2**. Also explain that detective thinking should still be used when working our way up the stepladder (see **detective thinking sheet – Handout 6.3**). Explain that the homework assignment for this week is to **continue to develop and implement the behavior chart at home, continue with the daily report card, and continue with stepladders**. Encourage the family to complete 1-2 steps/week. Give the session handouts to the parent to take home and make sure the parents are clear on the homework assignment.

Session 10 (Booster)

Parent(s) - 50 minutes

At the start of the session, explain to the child that you will be meeting with his/her parents for about 45-50 minutes. Escort the child to a room with an undergraduate supervisor. In addition, give the child the assessment measure for the day. Explain to the child that the measure does not have to be completed right away but should be completed when the therapist is done meeting with his/her parents. Ask the child supervisor to monitor the child's progress on the assessment measure.

Topics to be covered:

10.1 Review of events since last session

10.2 Set the agenda

10.3 Maintaining gains

10.4 Review

10.1 Review of events since last session (15 minutes)

Ask the parent if any problems came up over the last two weeks. Spend some time reviewing the **behavior chart**. If any problems came up, spend some time reviewing what happened and make any necessary changes to the behavior chart. Spend some time discussing the **daily report card**. Discuss any modifications that need to be to the daily report card. Also, ask about the **anxiety-related homework**. Spend some time discussing how the use of **stepladders** went over the two weeks and if any revisions need to be made over the next week.

10.2 Set the agenda (2 minutes)

Indicate that 50 minutes will be devoted to **maintaining gains**.

10.3 Maintaining gains (30 minutes)

Explain to the parents that the final session will be devoted to discussing how to continue to maintain gains. Indicate to the parents that the end of therapy marks a transition to providing treatment at home but not an end to treatment. Spend time discussing any challenges that came up over the last couple weeks and any challenges that may have been due to taking a week off. Be sure to indicate the importance of continued practice to help maintain the gains made in relation to ADHD and anxiety.

10.4 Review (3 minutes)

Review the material covered in the session and answer any of the parents' questions.

Child Session – 30 Minutes

Topics to be covered:

10.5 Review of events since last session

10.6 Review of previous meeting and homework

10.7 Set the agenda

10.8 Review of treatment with child

10.5 Review of events since last session (3 minutes)

Spend some time continuing to build rapport with the child through a game or brief discussion.

10.6 Set the agenda (2 minutes)

Discuss the plan for the day and show a **visual schedule (if needed)**.

“The agenda for today’s meeting is to discuss the importance of maintaining gains and to finish up with treatment.”

10.7 Review of treatment with child

Spend some time discussing the treatment process with the child. Find out any issues that are still difficult for the child. Be sure to discuss the importance of continued progress to conquer fears.

10.8 Gift certificate

Provide the child with the gift certificate for treatment and be sure to praise the child for all of the hard work over the treatment period.

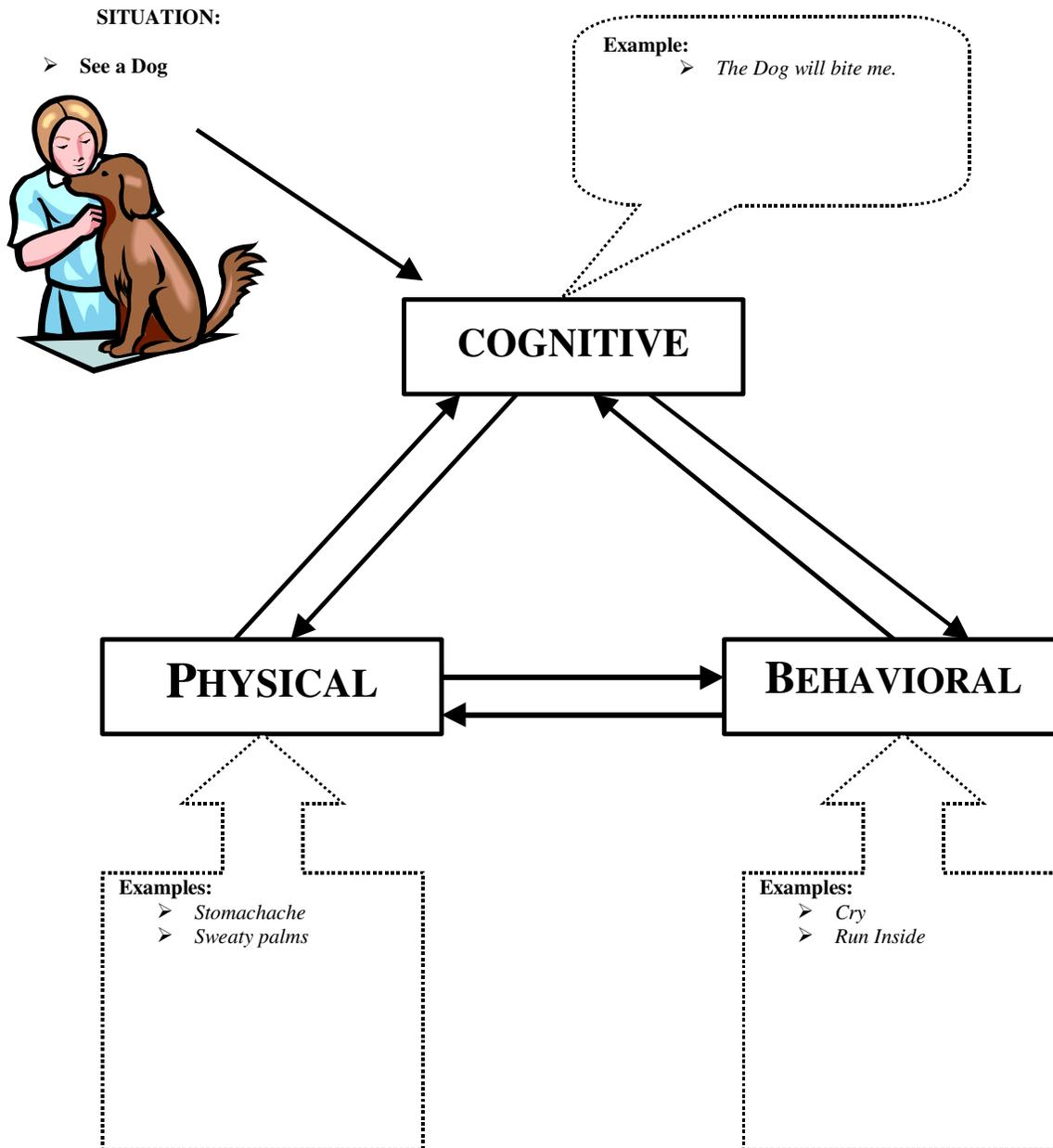
Parent(s) and Child - 10 Minutes

10.9 Review of session with the family

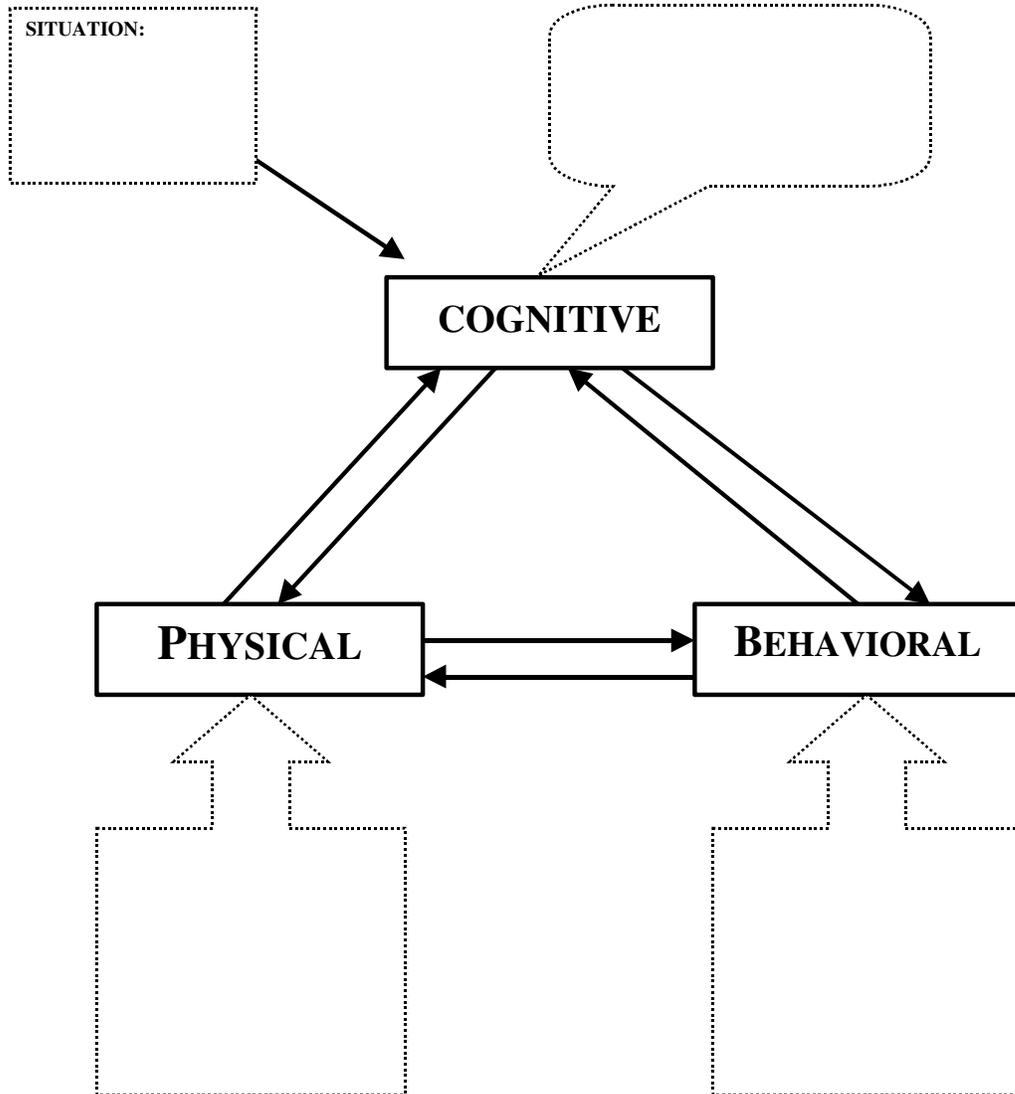
Discuss the progress made as a family over the treatment period. Be sure to praise all members of the family for their involvement in therapy. Indicate that it will be important for all family members to continue to work together to maintain gains.

Session 2

THREE COMPONENT MODEL OF ANXIETY



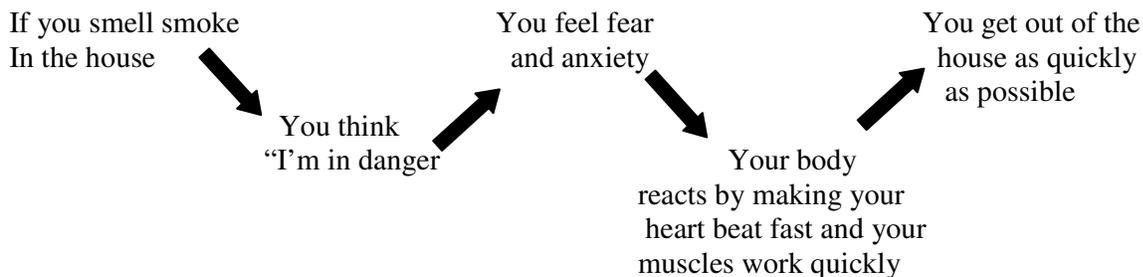
THREE COMPONENT MODEL OF ANXIETY



What is Anxiety?

Anxiety is another word for worries, fears, being shy and being scared or frightened.

It's a natural emotion that helps us to survive. We can't live without it! Anxiety is the emotion that helps to protect us in dangerous situations. If we didn't have any anxiety at all we might get hurt. For example:



This is called the **fight/flight response**. All animals have this response and so does every person you've ever known.

The fight/flight response can be very useful in the situation where your house is on fire but sometimes it happens when there's really no need to be afraid. We might have heard a noise outside and thought it was a burglar but it was really the next door neighbor's cat. Our body still reacted as though there was a danger but there wasn't any.

Who Gets Anxiety?

Everyone gets anxious. The only difference between the anxiety one person feels and what others may feel is the **degree** of anxiety experienced. You may find you become anxious more easily, more often and more strongly than others. However, the basic emotion of anxiety is the same for you as for everyone else.

If you get more anxious than other kids it's not because you are different, nor are you crazy. It's just because in some people anxiety happens more often. Anyone can be helped by learning to control his or her anxiety. It is especially important for kids who have high anxiety because often the anxiety is causing a lot of interference in their life. It might be affecting things at home, with your family, at school or while you're playing sports.

HANDOUT 2.1 (CONT.)

The Three Parts of Anxiety

If you look at the example of smoke in the house, you'll be able to see that there are three parts to anxiety — your body, your thoughts and your actions.

YOUR BODY: Your heart beats faster; your muscles become tense; your breathing gets faster; you'll even be thinking more. These changes prepare your body for action.

YOUR THOUGHTS: You start looking for danger and scary thoughts like 'something bad' might happen. Sometimes anxiety may begin as a worrisome thought which cannot be ignored.

YOUR ACTIONS: Anxiety causes you to want to run away or sometimes it will make you want to lash out. You may want to stay away from the thing that makes you anxious which sometimes means you miss out on doing things that could be fun.

So Why Me?

About one in every ten children experiences anxiety at a level that causes them to have problems with doing things. Some people are more anxious than others, partly because they are made that way.

People also learn to think and act in an anxious way by watching others or by going through scary experiences.

Where the anxiety comes from doesn't matter anyway because you have within you the power to change your anxiety by learning and applying some new skills.

So What Can Be Done?

Over the next few months you will be learning new ways of worrying less and of facing up to your fears. Sometimes it will be tricky to learn these skills but if you keep trying you will learn how to control your anxiety rather than it controlling you.

HANDOUT 2.2

Me and My Anxiety

Here are some pictures of the types of things that some children are afraid of or worry about. Circle the ones that can be a problem for you.



Strange Things



Crowds



Making Friends



Getting Hurt



Being Embarrassed



Performing



Seeing the Principal



Night Time



Heights



Ghosts



War



Making a Speech



Parents Going Out



Asking Questions



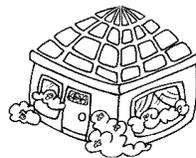
Getting in Trouble



Going to a Party



Bullies



Being Away From Home



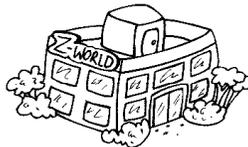
Water



Animals



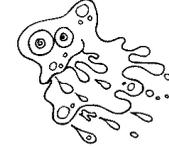
Loud Noises



Shopping Centres



Being Late



Germs



Dogs



Feeling Sick



School



HANDOUT 2.3

What's Life Like with Anxiety?

How does anxiety affect your life? Think about it and complete the following sentences

Being anxious makes me...

Being anxious stops me from...

Being anxious makes me feel bad because...

If I were no longer so anxious, what would be different?

What could I do? _____

Where could I go? _____

How would I feel? _____

Learning about Feelings

There are lots of different types of feelings. One of the best ways to tell how someone is feeling is to look at the expression on their face.

Below is a series of pictures. Underneath each picture write what you think the person is feeling.



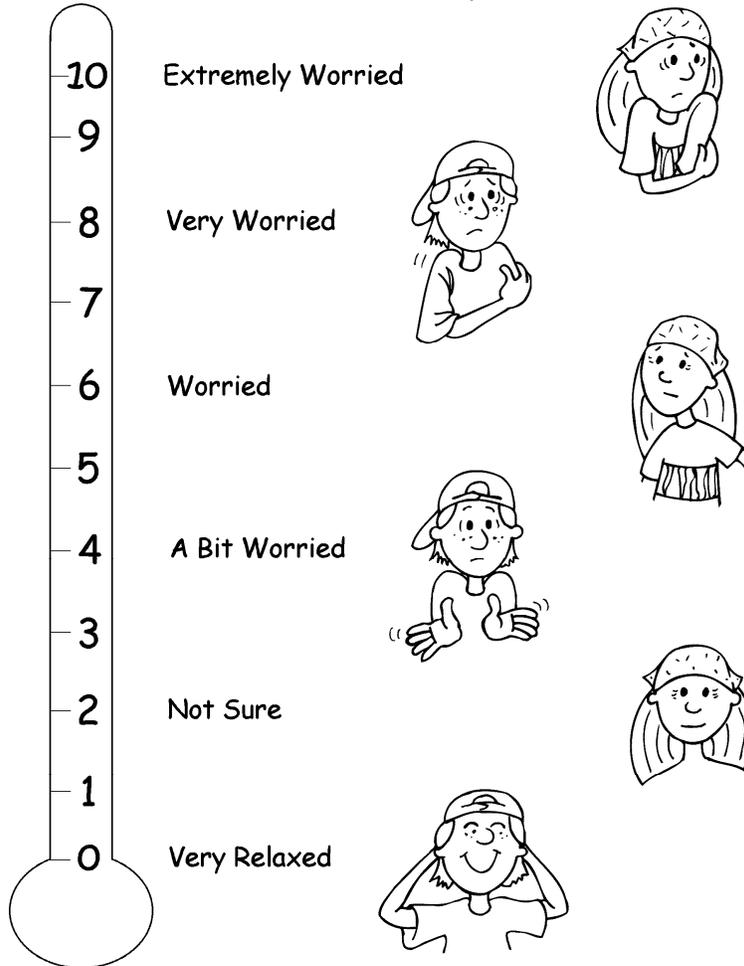
The Worry Scale

Sometimes when we are worried, we are only a little bit worried but other times we feel very, very worried.

A good way of describing how big a feeling is would be to use what we call a scale. A scale is like a thermometer. When the feeling is low, the number on the thermometer is low; when the feeling is strong the number on the thermometer is high.

Below is a scale for the feeling of worry. We're going to be using it a lot to help tell us how strong a worry is about a particular thing. To use the scale, you think about the situation and then give it the number, which shows how worried you are by that situation. For example if you are about to get up on stage to do a solo song in front of the whole school your worry rating might be a 9 on the scale.

The Worry Scale



HANDOUT 2.6

Top 10 List

Here are some things that are hard for me to do because of my fear, anxiety, or worry.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Session 3

HANDOUT 3.1

How Anxiety Affects My Thoughts

How I Feel Depends on What I Think!

Did you know that you can change how you're feeling by thinking something different? You'll see how in a minute.

Every minute of every day we are thinking about different things. We're not always aware of what we are thinking because it takes place automatically. For example if I say "Birthday" you might automatically think "Presents."

Have a look at these pictures. In the first one the girl is excited about her friend coming over. What do you think the boy in the second picture is thinking? Write a thought in his thought bubble.

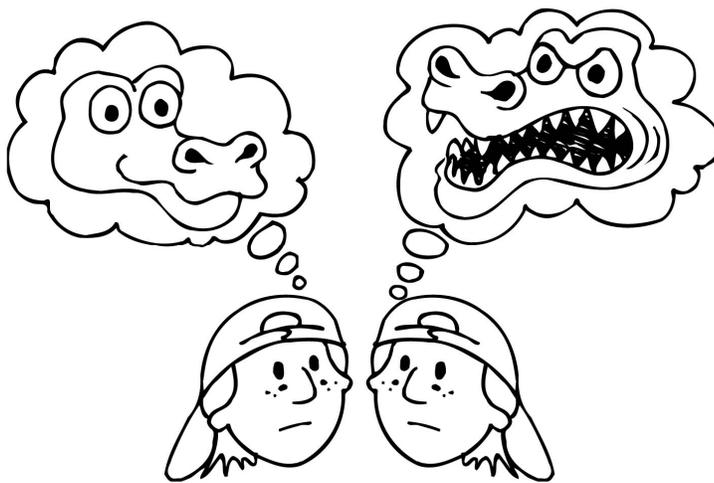


HANDOUT 3.1 (CONT.)

Now have a look at this picture, there are two thought bubbles. In one thought bubble write a thought that would make the girl happy and then in the other write a thought that may make the girl worried.



Have a look at this next picture. There are two boys at the zoo looking at the crocodiles. Circle the boy who you think would be the most frightened.



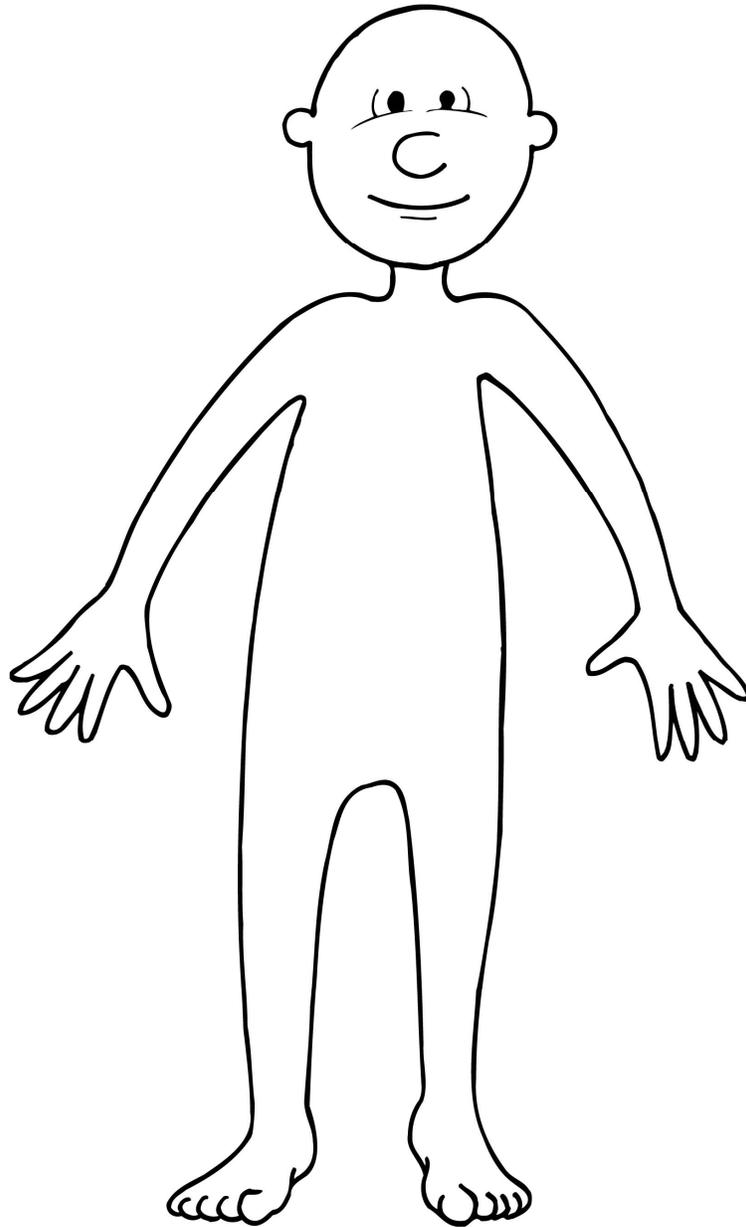
Can you see now how thinking different things might change how you are feeling?

HANDOUT 3.2

Anxiety and My Body

Anxiety causes all sorts of things to happen to our bodies.

Below is a picture of a body. Draw in all the things that you can think of that happen to your body when you're very worried. Then choose a different color and draw the things that might happen to other people when they worry.



HANDOUT 3.3

Linking Thoughts and Feelings

What you are thinking and how you are feeling have a lot to do with each other. Think of a time when you were really, really happy. In the shapes below, write down what was happening, what was running through your mind and finally what you were feeling. Circle what your worry rating would have been in that situation.

What happened?

What was I thinking?

What was I feeling?

Worry 0 1 2 3 4 5 6 7 8 9 10 Rating

Now think of a time when you were really, really worried. In the shapes below write down what was happening, what was running through your mind and finally what you were feeling. Circle what your worry rating would have been in that situation.

What happened?

What was I thinking?

What was I feeling?

Worry 0 1 2 3 4 5 6 7 8 9 10 Rating

Now you already know that you felt differently in those two situations but what was the difference between the two thoughts that you had in those situations?

HANDOUT 3.3 (CONT.)

Now think of a couple of situations that have happened in the past few days when you have been worried, even if it was just a little bit. For each one write down what happened, what you were thinking and what you were feeling. If you have trouble remembering what you were thinking, close your eyes and try to imagine that you are back in the situation. Don't forget to rate how worried you were in each situation.

What happened?

What was I thinking?

What was I feeling?

Worry 0 1 2 3 4 5 6 7 8 9 10 Rating

What happened?

What was I thinking?

What was I feeling?

Worry 0 1 2 3 4 5 6 7 8 9 10 Rating

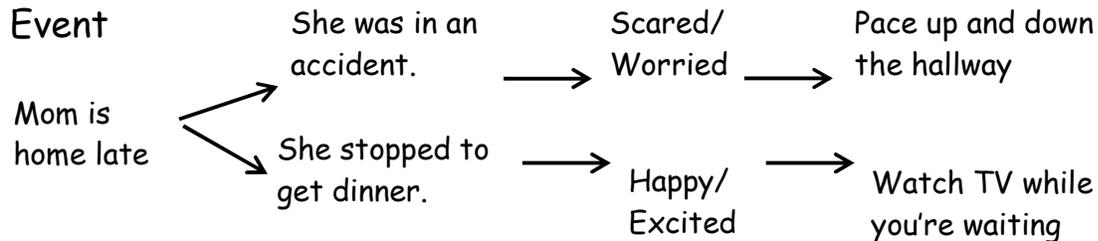
Can you see how your thoughts were linked to your feelings? We will be learning more about this in our meetings together.

Why Are Thoughts Important?

If you learn to control your thoughts, you will go a long way to reducing the worries in your life. Every situation you are in goes like this:

- First there is the **EVENT**, which is what is going on around you.
- Then there are your **THOUGHTS**, which are what go on in your head, like what you would write in your imaginary thought bubble if you were a cartoon.
- There's also your **FEELINGS** brought on by your thoughts which you can rate on your worry scale.
- Finally there is your **BEHAVIOR**, which is what you do.

For example:



So... what you think can change how you feel and what you do because your thought comes first!!!

Thoughts are important because they cause feelings and behaviors. Sometimes we have calm thoughts that make us feel good, and make us behave in ways that lead to good results for us. Other times we have worried thoughts that make us feel bad, and make us behave in ways that lead to bad results for us.

HANDOUT 3.6

Self-Talk

In the situations below, come up with two different thoughts that the kids might have.

Situation 1: You see a big dog in the street.

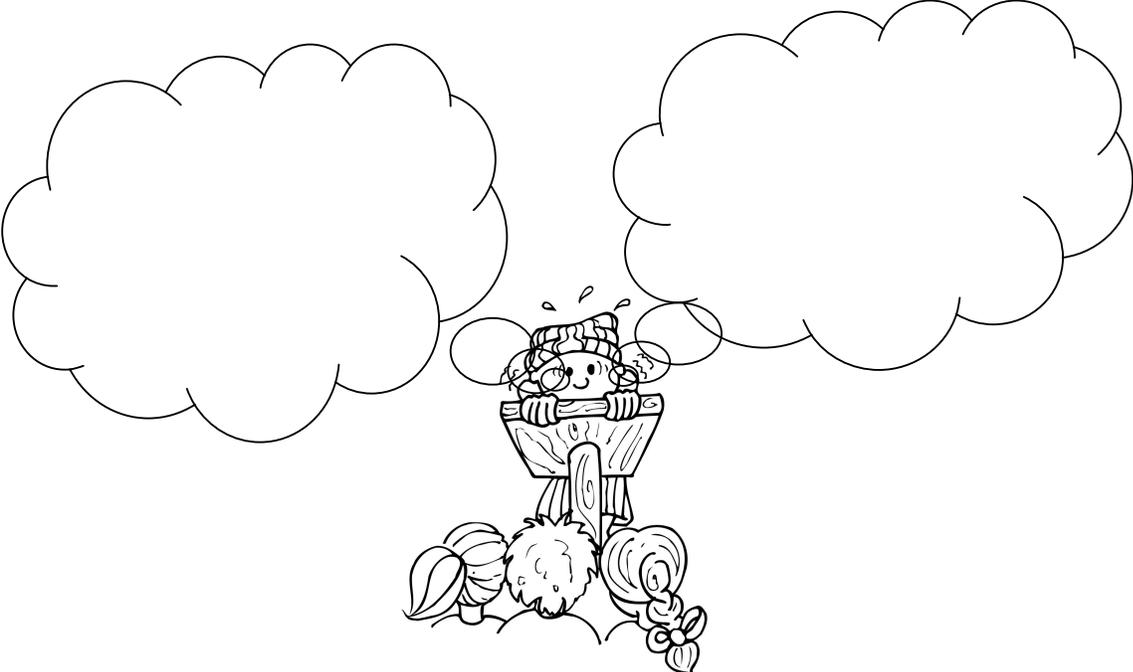


Situation 2: Your Mom is home late.



HANDOUT 3.6 (CONT.)

Situation 3: You're asked to give a talk in class.



Situation 4: You meet another kid.



HANDOUT 3.7

Alternatives

For each situation, fill in a CALM thought a person might have and then fill in what the person might feel, what worry rating the person would give, and what the person might do.

Do each one a second time and see what happens when the person has a WORRIED thought. Once again write the thought, how the person is feeling, what the worry rating is and what they might do next.

Situation: You hear some strange noises at night.			
	Thoughts	Feelings	Behaviors
Calm			
		Worry Rating:	
Worried			
		Worry Rating:	
Situation: You haven't done your homework for school.			
	Thoughts	Feelings	Behaviors
Calm			
		Worry Rating:	
Worried			
		Worry Rating:	
Situation: You want to invite a new friend to your party.			
	Thoughts	Feelings	Behaviors
Calm			
		Worry Rating:	
Worried			
		Worry Rating:	

Session 4

Behavior Chart (Sample)

Task	M	T	W	TR	F	SA	SU
Following directions (3)							
Morning Routine:							
Brushing teeth (1)							
Brushing hair (1)							
Making bed (1)							
Getting dressed (1)							
Out of house by 7:25 (1)							
Being respectful (3)							
Keeping hands to self (3)							

If child earns at least 9 of 14 points per day (i.e., 2/3 of points), he/she can stay up until 8:30 PM.

If child earns fewer than 9 of 14 points, he/she will go to bed at 8:00 PM.

Signature (child)

Signature (parent)

Signature (parent)

Behavior Chart

Task	M	T	W	TR	F	SA	SU

If child earns at least ___ of ___ points per day (i.e., 2/3 of points), he/she can _____
_____.

If child earns fewer than ___ of ___ points per day, he/she will
_____.

Signature (child)

Signature (parent)

Signature (parent)

What is Detective Thinking?

People who worry a lot tend to make two mistakes when they are thinking:

- They **overestimate** how likely it is that something bad will happen.
- OR**
- They **overestimate** how terrible it will be if that bad thing does happen.

In the example (see Handout 3.5) where mom was home late the bad thought “she was in an accident” overestimates how likely it is that mom had been in an accident even though there are lots of other things she may have been doing, like picking up dinner.

If a person doesn't make a thinking mistake then the thought is a realistic one. That means that it is likely to be true.

To control worries we need a way of deciding whether the thoughts behind the feelings have mistakes in them or whether they are realistic. That way we can throw the worried thoughts out and keep the realistic ones in our heads.

One way to decide if there's been a thinking mistake is to find evidence for the thought. Evidence will give us clues that we can use to help us make that decision.

The best people at finding clues are detectives. A detective is a special person who tries to solve a mystery. Sometimes our thoughts are a bit of a mystery. They can make us feel bad for no good reason. If we want to solve the mystery behind our thoughts we need to **act like detectives** and find evidence for our thought. That way, we can decide whether the thought is realistic or not. If it's not realistic we can find a calm thought to replace it.

To go any further you need to decide who your detective is going to be. Maybe you'd like to be Harry Potter or Hermione, Scooby Doo or Spiderman, or the greatest detective of all, Sherlock Holmes. You can be any detective you like or you can make up a character. Your detective is going to help you when you are anxious to find evidence so you can think realistically.

Who's your detective? (Write in the name of your detective below.)

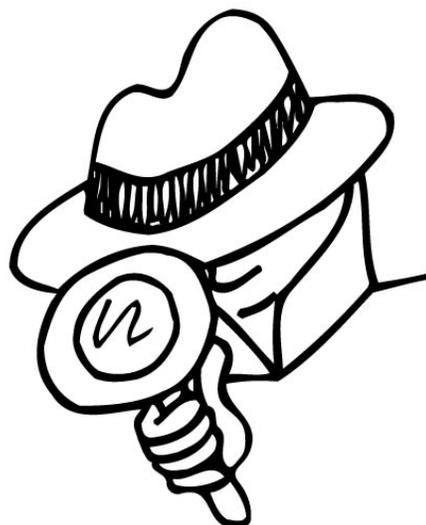
HANDOUT 3.9

How to Do Detective Thinking

To help your detective we have four steps for you to follow and a form for you to write down all the evidence that is discovered about a particular worry.

Steps for Detectives to Follow

1. *Write the event and then the thought behind the feeling.* Use the worry scale to rate how worried you are when you think this thought.
2. *Look for the evidence.* Ask what are the facts? What is likely to happen? What has happened to me and to others before?
3. *List all the alternative things that might happen.*
4. *Write down a realistic thought to replace the worried thought.* Give a new worry rating.



The Detective's Evidence Sheet

On the next page is an example of how a finished detective's evidence sheet looks for a boy called George. This one is very detailed. Sometimes you won't have quite so much evidence; other times you will have a whole lot more. Read through the example before going any further.

After you read through all of the evidence try to think up a realistic thought that George can use instead of his worried thought. Write it in the Realistic Thought Box on the table.

How worried do you think George would be if he came up with all of that evidence and believed his realistic thought instead? Write the worry rating into the Realistic Thought Box as well.

HANDOUT 3.9 (CONT.)

George's Detective's Evidence Sheet

	<p align="center">Realistic Thinking Detective's Evidence Sheet</p>
<p>Event What is happening?</p>	<p>I have to give a presentation at school.</p>
<p>Thoughts What am I thinking?</p>	<p>People will notice how embarrassed I am and they will talk about me behind my back.</p> <p align="right">Worry Rating: 8</p>
<p>What is the evidence?</p> <p>What are the facts?</p> <p>What else could happen?</p> <p>What happened when I worried before?</p> <p>What is likely to happen?</p> <p>What has happened to other people?</p>	<ul style="list-style-type: none"> ○ I've given talks before and once I got really embarrassed. ○ I have seen some other kids get embarrassed a couple of times, so I'm not the only one who feels like this. ○ I've heard other people say that they gave really bad talks or felt really embarrassed about doing talks, but I didn't notice that they did anything wrong or looked embarrassed. ○ Even when I did notice that other kids were embarrassed, I really didn't bother to talk about it much and I didn't hold it against them. ○ I might feel embarrassed, but people won't necessarily notice. ○ Most people look a bit nervous or embarrassed when they are speaking in front of a crowd, so I won't look different to most other people. ○ Even if people DO notice that I look uncomfortable, it doesn't mean that they'll talk about me in a horrible way. ○ I've given talks before and been embarrassed, but no one said anything much about it. ○ I've seen other people give talks and look really embarrassed, but people actually said kind things to them.
<p>What is my realistic thought?</p>	<p align="right">Worry Rating:</p>

Detective Thinking Practice

Let's give this a try by doing two examples, the first appears on this page and the second on the next.

- Remember the boy who was in the park and there was a big dog nearby. He was thinking, "The dog's going to bite me and I won't be able to stop him." Try filling out a detective's evidence sheet for him.

 Realistic Thinking Detective's Evidence Sheet	
Event What is happening?	There's a big dog coming towards me.
Thoughts What am I thinking?	The dog's going to bite me and I won't be able to stop him. <p style="text-align: right;">Worry Rating: 9</p>
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

HANDOUT 3.10 (CONT.)

2. Remember the girl who heard a noise at night and got scared because she thought “a burglar’s trying to break in.” Fill out a detective’s evidence sheet to help her come up with a more realistic thought.

 Realistic Thinking Detective's Evidence Sheet	
Event What is happening?	There's a strange sound outside.
Thoughts What am I thinking?	A burglar is trying to break in. Worry Rating: 10
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

How big was the drop in the worry ratings?

Worry ratings don't always drop to zero, but detective thinking will make the worries a lot smaller.

Learning about My Thoughts and Feelings

On this page and the next is a Handout that you should do over the next week. It's to help you learn what you think in different situations. Each time you get even a little bit worried or scared during this week, write down what was happening, what was going on in your head, what you were feeling and finally, using the Worry Scale, rate how worried you were.

???

*What I
Think &
Feel ???*

What happened?

What was I thinking?

What was I feelings?

Worry 0 1 2 3 4 5 6 7 8 9 10 Rating

What happened?

What was I thinking?

What was I feelings?

Worry 0 1 2 3 4 5 6 7 8 9 10 Rating

What happened?

What was I thinking?

What was I feelings?

Worry 0 1 2 3 4 5 6 7 8 9 10 Rating

Detective Thinking

This week you need to practice your detective thinking skills. Each time you get worried, instead of just writing down what the worry is, pretend to be your detective and find the evidence for your worry and see if you can get your worry ratings down. If you need help, ask mom or dad or another adult. They might be able to help you find some extra evidence. Even Harry Potter has two assistants! See if you can practice at least five times this week.

 <p style="text-align: center;">Realistic Thinking Detective's Evidence Sheet Practice #1</p>	
Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

HANDOUT 3.12 (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #2**

Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

HANDOUT 3.12 (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #3**

<p>Event What is happening?</p>	
<p>Thoughts What am I thinking?</p>	<p>Worry Rating:</p>
<p>What is the evidence?</p> <p>What are the facts?</p> <p>What else could happen?</p> <p>What happened when I worried before?</p> <p>What is likely to happen?</p> <p>What has happened to other people?</p>	
<p>What is my realistic thought?</p>	<p>Worry Rating:</p>

HANDOUT 3.12 (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #4**

Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

HANDOUT 3.12 (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #5**

<p>Event What is happening?</p>	
<p>Thoughts What am I thinking?</p>	<p>Worry Rating:</p>
<p>What is the evidence?</p> <p>What are the facts?</p> <p>What else could happen?</p> <p>What happened when I worried before?</p> <p>What is likely to happen?</p> <p>What has happened to other people?</p>	
<p>What is my realistic thought?</p>	<p>Worry Rating:</p>

Session 5

DOs and DONTs of helping your child with managing anxiety:

-
- DO save the extra praise for after the child has begun to approach the feared stimulus or situation. It is great to praise children even for small steps toward the larger goal (e.g., “you’ve done a great job sleeping in your own bed - I am very, very proud of the way you try new things even when it is hard.”)
 - DON’T: provide extra positive attention to child when child is complaining or distressed about the stimulus or situation. It is ok to be caring and to reflect the child’s feelings, and to tell your child that you understand how upsetting and hard it is to try to do this on his/her own, but that you are going to be very proud of him/her for trying.
-
- DO help your child undertake developmentally appropriate tasks, and communicate to your child that you are very confident that he or she can do the selected activity. Encourage your child to take small steps toward each goal, and provide plenty of praise and reinforcement along the way!
 - DON’T avoid engaging your child in situations that might involve exposure just because you think it might be difficult or because you want to avoid “making a scene” or upsetting your child.
-
- DO let your child make some small decisions on his or her own, and make some choices on his or her own. It is ok to let your child lead sometimes. For example, let your child decide between two acceptable reinforcers or two different exposure situations that you provide for him or her. You might let your child decide which meal (between the two choices you provide) would be most enjoyable for him or her, or which exposure situation (talking to new adults vs. talking to new children) he or she would like to work on first.
 - DON’T try to control everything that your child does, or to make all the choices or decisions for your child. It is important to give children space to practice making small choices.
-
- DO encourage your child without nagging. Let your child know how proud you are of him or her at all times, and communicate to your child that it will get easier and easier each time he or she tries to do something new. Let your child hear you brag about him or her to others (e.g., another parent, a grandparent, or good friend)—to let your child know just how proud you are.
 - DON’T worry if your child is at first resistant to trying new things. It is important to remember that learning new ways to behave in exposure situations is something that, with your coaching, your child will begin to learn to do more effectively. It is also the case that with practice, your child will become much more successful at entering previously avoided situations.

HANDOUT 4.1

Applying Detective Thinking to Big Worries

During the last week you would have tried to apply your detective thinking to some of your worries. Now we would like you to try to use detective thinking on two of your biggest worries. Try to think of the two things that scare you or worry you the most and do one detective thinking form for each. There is lots of room for evidence on these ones.

 Realistic Thinking Detective's Evidence Sheet	
Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

HANDOUT 4.1 (CONT.)

 <p style="text-align: center;">Realistic Thinking Detective's Evidence Sheet</p>	
Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

With these big worries, you may find that at first your worry ratings do not move too much but if you re-read the evidence several times over the next few weeks, you will find that slowly the worry ratings will come down.

HANDOUT 4.2

Applying Detective Thinking to Other People's Worries

Everyone in the world worries, but you know how to make worries better using your detective thinking. So now you can help other people to discover realistic thoughts. Find two people who are willing to tell you one of his or her worries, find out the event and the worried thought and then help them to discover evidence and come up with a new more realistic thought.

	Realistic Thinking Detective's Evidence Sheet
Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

HANDOUT 4.2 (CONT.)

	Realistic Thinking Detective's Evidence Sheet
Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

Were you able to be someone else's "coach" and help him/her to come up with a new thought? Bet you never thought that you were such an expert!

HANDOUT 4.3

Rewards

This week we are going to learn about rewards. Rewards are an important step in coping with anxiety.

What do you think a reward is? _____

See how many different rewards you can think of? List as many as you can.

Did you think of these ones?

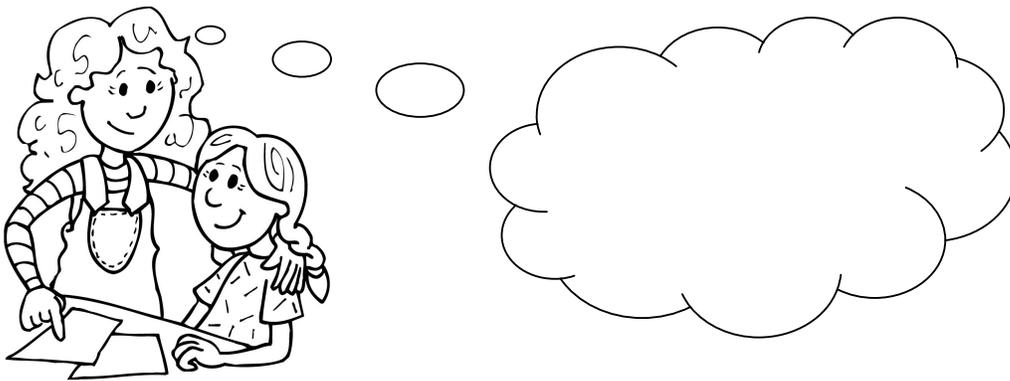


Remember, rewards are not only money and other material things. They can also be special time with people, activities or outings, not having to do things you don't enjoy and getting extra time to do the things that you like to do.

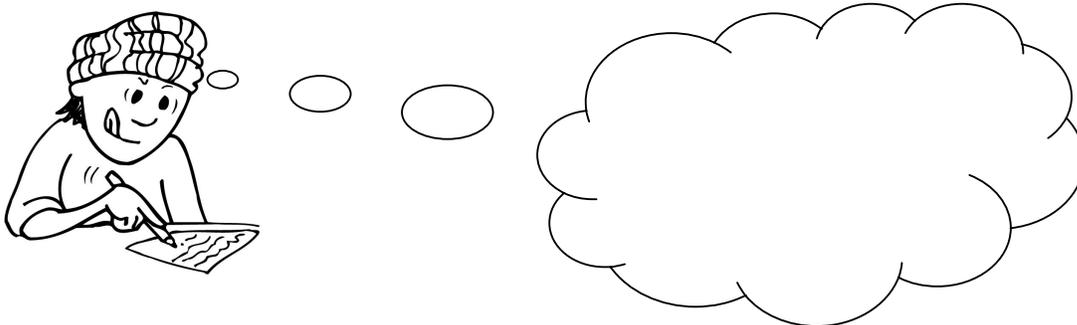
What is Rewarding Yourself?

Did you know that you can reward yourself? This sounds a bit silly at first but it is possible. When you do something for yourself or for other people, you can rate yourself on how good a job you do. Then you can say something to yourself like, "Hey, I did a good job!" This is called **self-talk rewards**. You can also let yourself do some special things that you enjoy doing. You might spend some extra time reading your favorite book or you could call a friend.

Try this example. Jessica just helped her friend to do a difficult math problem. What could Jessica say to herself to reward herself for being a help to her friend?



What about this one. George has spent all week studying for his science test. When the teacher gives it back to him, his mark is 6 out of 10, which is an OK mark — not a perfect mark, but not terrible either. What could George say to himself?



Sometimes even when we try really hard, we don't do as well as we had hoped. BUT, it's important to reward ourselves for the effort that we put in. Sometimes trying hard is even more important than the success we achieve. So remember to reward yourself for trying hard as well as for the good things.

Rewards for Trying Hard

The great thing about being a kid is that there are people around us who often give us rewards when we do things well. People like moms and dads, grandparents and teachers all give us rewards from time to time.

Pretty soon you will be starting to face your fears and this is going to take some really big efforts! So we need to work out what type of rewards you would like to work for. Then we can talk with your parents about which effort will lead to which reward.

On this page write down some ideas for rewards that you might like to talk about.

Fun things I can do with my family...

My parents telling me ...

Special activities I can do at home ...

Things I would like to work towards...

HANDOUT 4.6a

Rewarding Yourself

Over the next week, make a habit of rewarding yourself for good things and trying. Fill out this worksheet every time you do something good or try really hard. Practicing how your thoughts and feelings go together would be one thing you could reward yourself for!!

What Good Thing Did I Do?	Was It a Little, Big, or Medium Thing?	How Did I Reward Myself? (What did you say to yourself? What special thing did you do?)

Practicing Detective Thinking

This week you should also keep practicing your detective thinking whenever you find yourself getting worried. Practice as many times as you need to.

 Realistic Thinking Detective's Evidence Sheet Practice #1	
Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

HANDOUT 4.6b (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #2**

<p>Event What is happening?</p>	
<p>Thoughts What am I thinking?</p>	<p>Worry Rating:</p>
<p>What is the evidence?</p> <p>What are the facts?</p> <p>What else could happen?</p> <p>What happened when I worried before?</p> <p>What is likely to happen?</p> <p>What has happened to other people?</p>	
<p>What is my realistic thought?</p>	<p>Worry Rating:</p>

HANDOUT 4.6b (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #3**

<p>Event What is happening?</p>	
<p>Thoughts What am I thinking?</p>	<p>Worry Rating:</p>
<p>What is the evidence?</p> <p>What are the facts?</p> <p>What else could happen?</p> <p>What happened when I worried before?</p> <p>What is likely to happen?</p> <p>What has happened to other people?</p>	
<p>What is my realistic thought?</p>	<p>Worry Rating:</p>

HANDOUT 4.6b (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #4**

<p>Event What is happening?</p>	
<p>Thoughts What am I thinking?</p>	<p>Worry Rating:</p>
<p>What is the evidence?</p> <p>What are the facts?</p> <p>What else could happen?</p> <p>What happened when I worried before?</p> <p>What is likely to happen?</p> <p>What has happened to other people?</p>	
<p>What is my realistic thought?</p>	<p>Worry Rating:</p>

HANDOUT 4.6b (CONT.)



**Realistic Thinking
Detective's Evidence Sheet
Practice #5**

Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

Session 6

HANDOUT 5.1

When You Face Your Fears ... STOP!

It is very important to *stay in the situation* that makes you nervous or scared until you notice a decrease of fear.

If you leave the situation too early, you cannot experience that *the fear actually becomes less by itself*.

What can help you stay in the situation and face your fears?



We need to not run away or avoid. We need to **STOP** and stay in the situation. Also **STOP** stands for something very important:

■ **S**CARED

You recognize that you are Scared and want to leave the situation.

■ **T**HOUGHTS

What are your Thoughts when you are scared?

...OTHER THOUGHTS

What Other Thoughts can help you feel less anxious?

■ **O**VERPOWER

Stay in the situation, persist! Face your fears and Overpower them!

■ **P**RAISE

Praise yourself for facing your fears.

What makes it hard to face your fears?

THOUGHTS.

How can you change these thoughts that make you nervous or scared?

EXAMPLE: It is your birthday and you are having a party. It is 8 AM and you have not received your presents.

What are your THOUGHTS?

“My parents don’t love me.”
“My parents forgot my birthday.”
“No one likes me.”

What OTHER THOUGHTS can you have?

“My parents have not woken up yet.”
“It is too early.”
“It is not time for the party.”
“My presents are hidden.”
“If I don’t get presents, it is not the end of the world.”

Introduction to Stepladders: Fighting Fear by Facing Fear

Fears often cause us to avoid doing things we would otherwise like to be able to do. They often make us miss out on fun things and they make us feel bad. Fears are stubborn and they won't go away unless we actually stand up to them and face the situations that the fear tells us to avoid.

Do you remember your first day at school? You were probably very nervous and quite worried about what it would be like. Everybody starting school goes through these worries. On the first day the worry is really high, about a 9 on the worry scale. If everything goes well on the first day, on the second day the worry is a little less, about a 7. By the end of the week it's only a 2. On Monday, because you're out of practice, the worry goes back up to a 5 — not as high as it first was but not as good as Friday. On Tuesday the worry dives back down and it's only a 1 or it might even be gone altogether. By going to school every day and not letting the fear stop you from doing things, you were able to conquer the fear. So by facing the fear every day, slowly the fear disappeared.

Try to work Molly's problem out. Molly's best friend is having a farewell party before she moves to France. Of course Molly really wants to go but there is a problem. Molly is very afraid of heights and the party is at the top of Millennium Tower. Millennium Tower is 100 stories high. Molly doesn't think she would ever be able to go up that high. It's a 10 on her worry scale, but she doesn't want to miss out on saying Good-bye. Molly has 4 weeks before the party to try to find a way to face her fear.

What do you think Molly could do to solve this problem?



Handout 5.3

The Keys to Stepladders

We have already looked at the way unrealistic thinking is linked to worrying about different situations and found out how to make our thinking more realistic, – but this isn't enough. If we continue to avoid the situations that we fear, we never really get an opportunity to put our realistic thinking to the test!

The next step in overcoming worries and fears is to gradually face the situations that we feel anxious about, just like Molly did. This skill is called “Stepladders.”

The important things to remember about stepladders are:

- **It is gradual.** The first stage in stepladders is to make a list of all the situations that scare you. Then you put them in a step ladder where you can start with the things that make you just a little anxious (say a 2 or 3 on the worry scale) and then work up to things that are much harder (9 or 10 rating). This way, you get to feel comfortable at one level before moving on to the next level, which is much better than being thrown into the deep end!
- You use your **detective thinking** before, during, and after each step.
- It's important that you **stay** in each situation **long enough for your anxiety to drop**, even though the first time you try, you might worry that you'll be too anxious to stand it.
- **Repetition is important.** - Do it again and again. - Once is never enough! Make sure you try each step lots of times until you get bored rather than worried.
- **Don't be discouraged** by setbacks. - There will be easy days and difficult days. Remember, by trying hard you are still fighting those fears.
- Be aware of sneaky ways that you might still be avoiding your feelings even though you are “in” the situation. Watch out for “**safety strategies**” that distract you from facing your fear. For example, listening to a walk-man or having the dog or a friend or a parent with you while you face the fear will mean that you don't know that you can do it on your own. It's important to face your worry fully.
- Most importantly, **reward yourself!**

HANDOUT 5.4

Making a Fears and Worries List

The first thing you need to do to be able to face fears is list all of the situations that cause you to worry. If you need some help in coming up with ideas, look at your detective thinking sheets. Try to think of as many situations as you can.

My Fears and Worries List

These things are really hard to do	
These things are hard to do	
These things make me a little worried	

What seem to be your major worry areas?

HANDOUT 5.5

Creating a Stepladder Plan

Remember, the most important thing about stepladders is that they are **gradual**. We do this by creating step-by-step plans that you can work through. Just like Molly did to conquer her fear of heights.

You make one step-by-step plan for one of your fears and worries. For each plan you have a goal and each time you do a step you will earn a reward. The first step should have a worry rating of 2 or 3 and the highest step should have a rating of 9 or 10. You need to create lots of steps in between so that you break your fear down into small steps you can handle.

Some of the things you can change between steps are:

- The people who are with you, or how well you know them
- Whether you are in a familiar or unfamiliar place
- How long you stay in the situation
- How much time you have to prepare before hand
- How much of the scary thing is changed, like how dark it actually is

Choose one of the areas from your fears and worries list. If you have more than one, try the one that isn't the biggest worry first.

1. First, set a goal that is practical and something that can be achieved.
2. Then get some scrap paper, and list all the possible steps you can think of to break the worry down. Include the ones that are on your fears and worries list as well as new ones that you come up with by changing some of the ways you do it (see above).
3. Give each step a worry rating.
4. Choose enough steps so that almost all of the possible worry ratings have a step next to them. You may have to leave some out or add some more so that there are no big jumps in the worry scale ratings and so there aren't too many steps with the same rating.
5. Then write your chosen steps in order of lowest to highest on your stepladder.
6. Finally, talk with your parent(s) about what reward will go with each step. Remember, small rewards go with little steps and bigger rewards go with the harder steps.



Step by Step Plan

_____ Goal: _____

Step 1: _____

Reward: _____

Step 2: _____

Reward: _____

Step 3: _____

Reward: _____

Step 4: _____

Reward: _____

Step 5: _____

Reward: _____

Step 6: _____

Reward: _____

Step 7: _____

Reward: _____

Step 8: _____

Reward: _____

Step 9: _____

Reward: _____

Step 10: _____

Reward: _____

HANDOUT 5.6

Fighting Fear by Facing Fear Instructions

This Handout is one that you will be doing many times over the coming months. It is time to start your first stepladder.

Take a look at the form called **Fighting Fear by Facing Fear** on the next page; this is where you will make your plans for doing steps during the coming week. There are two parts to the form, a planning side and a review side. On the planning side of the form (which is shaded grey for the example), you will write down:

- What step you will do and, when you will do it,
- What coping strategies you will use while doing the step, and
- What your worry rating is when you think about doing the step

On the review side of the form, you will record:

- What your worry ratings were before and after doing the step,
- What you learned from the experience (This might help you with your detective thinking next time), and
- Whether or not you received your reward.

You will fill out the planning side of the form at the beginning of each week, and you fill out the review sections each time you try the step.

Before you try a step for the first time, do a detective thinking sheet to make sure you have a realistic thought in your head about what will happen.

After you do a step, make sure you get your reward and make sure you reward yourself as well.

Remember, you have to do each step until either it gets boring or your worry rating comes down to less than 3. Only then will you be able to do you move on to the next step.

Work with your clinician to come to an agreement about when you will do the first step(s) on your stepladder during the coming week and, write your plans onto the planning side of the Fighting Fear by Facing Fear form.

HANDOUT 5.6 (CONT.)

Fighting Fear By Facing Fear Form

What step will I do? When will I do it?	What strategies will I use?	Worry Ratings	What did I learn?	Did I receive my reward?
E.G. Step 4: Go to shop and ask where an item is kept When: After school on Tuesday 5 times	People will not think I am stupid for asking where stuff is. I will practice what to say beforehand	Today: <u>5</u> During: <u>7</u> After: <u>3</u>	That shop assistants are helpful and don't think that you are stupid for asking questions.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
		Today: _ During: _ After: _		Yes <input type="checkbox"/> No <input type="checkbox"/>
		Today: _ During: _ After: _		Yes <input type="checkbox"/> No <input type="checkbox"/>
		Today: _ During: _ After: _		Yes <input type="checkbox"/> No <input type="checkbox"/>
		Today: _ During: _ After: _		Yes <input type="checkbox"/> No <input type="checkbox"/>

Session 7

Daily Report Card for Monday (Day of Week)

Date: 9/22/08

Task	Morning	Lunch	Afternoon
Following directions (3)			
Completing classwork (3)			
Remaining in seat (3)			
Raising hand before talking (3)			

Signature (Teacher)

Daily Report Card for _____ (Day of Week)

Date: _____

Task	Morning	Lunch	Afternoon

Signature (Teacher)

HANDOUT 6.1

Revising Your Stepladders

Last week you wrote your first stepladder to help you reach a particular goal. Sometimes when you start working on a stepladder you find there are problems with it, which make it seem that the stepladder isn't working. There are some common problems that kids often come up against. These include:

- **Steps that are too big.** The next step seems way too difficult and makes you very anxious. This means you're too scared to give it a go.
- **Steps that are too small.** After doing one or two steps you find that the next step on the ladder doesn't bother you at all and you think it will be too easy.
- There are **too many goals** on one stepladder and it's making it difficult.

If a step is too big you need to find a step to go in between the one you just did and the next one on the list.

If steps seem too small then you should still do each step at least once so that you know for sure that it doesn't bother you. Then you can move on to the next step without having to do lots of practice on the easier step.

If there are too many different worries on one step ladder the best thing to do is break the ladder into two or more different ones so that you can work on each worry separately. We will do this in the next Handout.

Have a look at the stepladder that you wrote last week. Are there any steps that seem to be too big? Yes _____ No _____

If there are, what step could you add in between to make it into two smaller steps?

Step that seems too big:

Step _____

A new step that will help you reach the big step:

Step ____ A) _____

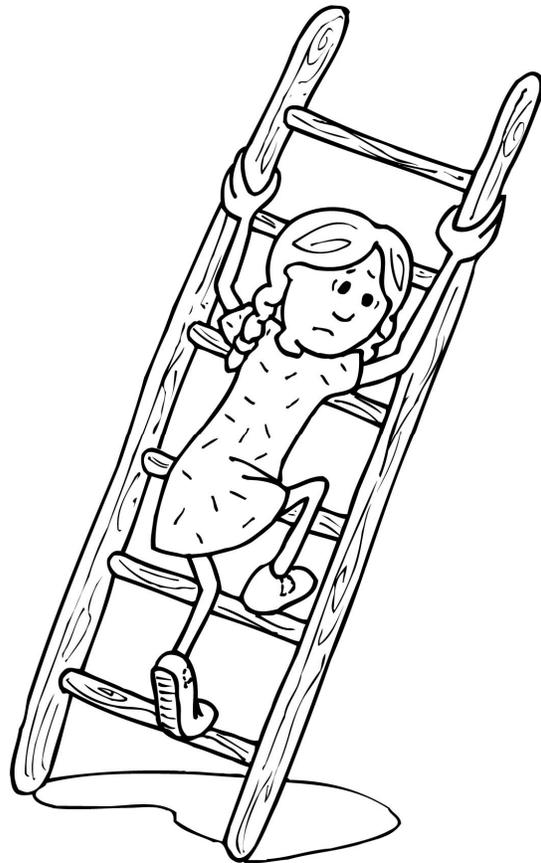
Write this step into your stepladder so you can do it at the right time.

New Stepladders

Remember last week when you filled out your **My Fears and Worries List** you wrote down the different themes that your worries come under. Remember also that each theme has its own stepladder. Last week we did a stepladder for one of the themes. This week we will write stepladders for each of your other themes. There are two more blank stepladders for you to use when writing new stepladders for each of your other themes. If you think you need more ask your clinician to copy some from their book.

Remember To Follow These Steps:

1. Write down a practical goal of what you would like to be able to do by the end of this step ladder.
2. List all the possible steps you can break the worry down into.
3. Give each step a worry rating.
4. Put them in order from lowest to highest.
5. Make sure you have enough steps at different worry levels so that there are never more than 2 worry points between each step.
6. Write the steps onto a step ladder and then negotiate what rewards will go with each step.



Spend some time now creating the new stepladders. Create one for each worry theme on your fears and worries list. Use the next page to begin.



Step by Step Plan

_____ Goal: _____

Step 1: _____

Reward: _____

Step 2: _____

Reward: _____

Step 3: _____

Reward: _____

Step 4: _____

Reward: _____

Step 5: _____

Reward: _____

Step 6: _____

Reward: _____

Step 7: _____

Reward: _____

Step 8: _____

Reward: _____

Step 9: _____

Reward: _____

Step 10: _____

Reward: _____

HANDOUT 6.3

Doing Steps

The important thing now is to keep working on your stepladders and to keep practicing detective thinking. You should be practicing EVERY SINGLE DAY, and if you can, more than once per day.

Don't forget to keep using your detective thinking evidence sheets before trying a step for the first time or whenever you find yourself getting very worried or afraid.

You can also start to use worry surfing on worries after you have used detective thinking. – Remember the key is to concentrate on what you are supposed to be doing instead of thinking about the worry.

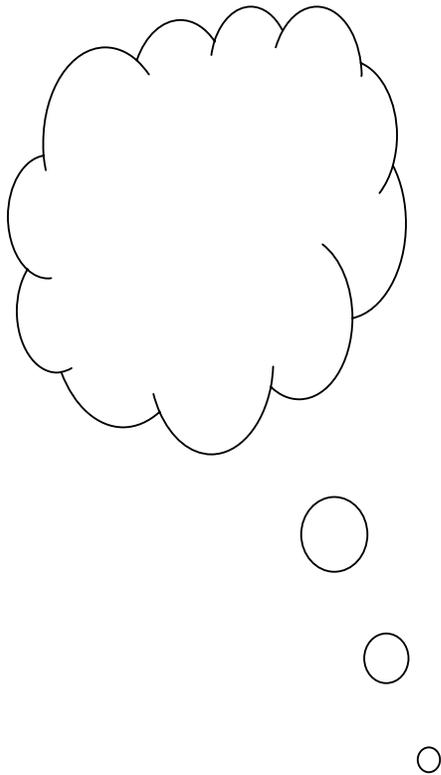
 Realistic Thinking Detective's Evidence Sheet	
Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	○
What is my realistic thought?	Worry Rating:

Event What is happening?	
Thoughts What am I thinking?	Worry Rating:
What is the evidence? What are the facts? What else could happen? What happened when I worried before? What is likely to happen? What has happened to other people?	
What is my realistic thought?	Worry Rating:

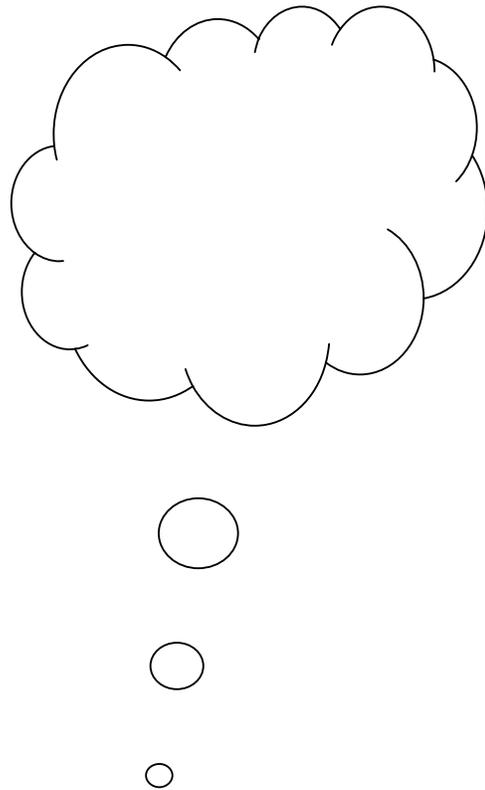
My Thoughts

On the left side, draw a picture of yourself in a situation that makes you nervous or scared, and write down the thoughts you have when you are in this situation. Then on the right side, draw another picture of yourself in the same situation, but now using the other thoughts you can have in the same situation.

thoughts



other Thoughts



...OVERCOME!

Session 9

HANDOUT 11.1

Planning For the Future

Most of you probably will not have worked through every single step on all of your step-ladders yet. It's very important that even though you have worked through all of the activities, it is important that you keep working up the stepladders until you reach your goals.

What steps do you still have left?

_____ from stepladder ____
_____ from stepladder ____
_____ from stepladder ____
_____ from stepladder ____

When do you plan to work on these steps? _____

What rewards are you still working towards?

What things could you face up to in the next few months that would help you conquer more fears?

Thing 1: _____ Worry Rating ____
Thing 2: _____ Worry Rating ____
Thing 3: _____ Worry Rating ____
Thing 4: _____ Worry Rating ____
Thing 5: _____ Worry Rating ____

What do you think the most important thing is? _____

When could you work on these fears? _____

HANDOUT 11.2

Stopping the Fears and Worries from Coming Back

Fears and worries are stubborn and they tend to try to sneak up on you when you're least expecting it. That's why it's important not to let your guard down.

The best way to do this is to practice both your detective thinking and the last step or two on each of your stepladders at least once or twice a month. That way, you won't have a chance to forget that the things that used to cause you worry, are really safe things and not something to be concerned about. Practicing gives fear a reminder that it's not welcome in your life except in really little bits.

It is OK to get worried once in a while and it's OK to be anxious when you have a test tomorrow, **BUT** your worry should never get so bad that it stops you from doing things that you want to do. If it does seem to be making you too nervous to do something you would like or need to do, then quickly do three things:

- Talk to someone like your mom or dad about it.
- Get your workbook out and try doing some detective thinking evidence sheets.
- See if you can break the situation down into some manageable steps which that you can try before doing the scary thing.

If you do these things your fears should never get too big and they shouldn't cause you too much trouble, especially now that you have the skills to beat fears and worries.