

CHANGES IN SOCIAL FUNCTIONING FOLLOWING COGNITIVE-BEHAVIORAL
THERAPY FOR YOUTH WITH ANXIETY DISORDERS: THE ROLE OF EMOTION
REGULATION

By

MARNI LEIGH JACOB

(Under the Direction of Cynthia Suveg)

ABSTRACT

The current study investigated changes in social functioning following cognitive-behavioral therapy (CBT) and emotion-focused CBT (ECBT) for 40 youth with anxiety disorders. Participants ranged in age from 7-12 and had a principal diagnosis of either Generalized Anxiety Disorder (GAD), Social Phobia (SoP), or Separation Anxiety Disorder (SAD). Analyses compared youth's social and emotional functioning from pre to post treatment and examined whether pre-post changes in emotion regulation mediated improvements in social functioning. Results indicated that treatment was associated with improvements in social and emotional functioning, yet no differences were found between treatments. Additionally, there was no evidence that emotion regulation mediated the changes in social functioning from pre to post treatment. This research contributes to our understanding of the interplay of social and emotional variables in youth with anxiety disorders. Additionally, this research informs treatment by providing information that current empirically-based treatments for anxiety (e.g., CBT, ECBT) improve specific types of social functioning.

INDEX WORDS: Anxiety disorders, Children, Emotion Regulation, Social Functioning

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CHAPTER 1

INTRODUCTION

Anxiety disorders are one of the most common set of mental health difficulties facing youth today. Left untreated, anxiety disorders often run a chronic course and are associated with significant impairment in a variety of domains (e.g., school, home life; Kendall et al., 2010; Langley, Bergman, McCracken, & Piacentini, 2004), including social functioning. In turn, social difficulties are associated with later maladaptive outcomes (Gest, Sesma, Masten, & Tellegen, 2006; Hubbard & Coie, 1994; Ladd & Troop-Gordon, 2003; Zettergren, 2005), so research investigating whether current empirically-based methods of intervention improve social functioning in youth with anxiety disorders is necessary. Although cognitive-behavioral therapy is the current empirically supported treatment for youth with anxiety, scarce research has examined whether this treatment modality also improves the social experiences of youth with anxiety disorders (cf., Flannery-Schroder & Kendall, 2000; Wood, 2006; Suveg, Hudson, et al., 2009). The goal of this study is to investigate changes in several indices of social functioning following two cognitive-behavioral treatment programs for youth with anxiety disorders. Links have been established between poor emotion regulation and social difficulties (Hubbard & Coie, 1994) and emotion regulation deficits have been implicated in anxiety disorders in youth (Suveg & Zeman, 2004); a secondary goal is to evaluate whether improvements in social functioning can be explained by changes in emotion regulation.

Social Functioning in Youth with Anxiety Disorders

Increasing research using clinical and non-clinical youth generally suggests that youth with anxiety have poorer social functioning than non-anxious youth (see review by Kingery,

Erdley, Marshall, Whitaker, & Reuter, 2010). Studies using non-clinical samples show that anxious youth have lower ratings of likability and are less preferred as playmates (Strauss, Frame, & Forehand, 1987), and that appearing anxious, withdrawn, or depressed may be related to negative evaluations and rejection by peers (Waas & Graczyk, 1999). Studies investigating social functioning in clinical youth with anxiety disorders are less prevalent, though research is growing. In a recent study, Ekornas et al. (2010) compared youth with anxiety disorders, ages 8 to 11, to a matched non-clinical control group and found that clinically anxious youth exhibited poorer self-perceived peer acceptance than the non-clinical group. Verduin and Kendall (2008) examined peer perceptions and liking of children with anxiety disorders. Peer raters watched videotaped speech samples of target children with and without anxiety disorders (Generalized Anxiety Disorder, Social Phobia, or Separation Anxiety Disorder) discussing their likes, dislikes, and personality characteristics. Peer raters then responded to a measure which assessed peer liking (e.g., *“How much did you like the child on the videotape?”* *If you had the chance, would you like to play with the child on the videotape?”*). Overall, children with anxiety disorders were liked less than children without anxiety disorders, but when considering individual diagnoses, this finding was wholly attributable to children with Social Phobia. This study also utilized self and peer reports of anxiety, and results showed that peers preferred children whom they had rated as less anxious and who had self-reported lower anxiety, determining that youth who reported feeling anxious were perceived to be anxious by their peers. Strauss, Lahey, Frick, Frame, and Hynd (1988) also examined peer likability in children with anxiety disorders. Results demonstrated that children with anxiety disorders were less well-liked by peers when compared to controls, and their ratings did not significantly differ from a group of children with conduct disorders. Additionally, the anxious youth received the lowest social impact scores

(comprised of total like-most and like-least nominations) of either group and were the most likely to fit into a socially neglected category of peer status. These studies suggest that anxiety is perceived by peers and aspects of its presentation are considered aversive, such as dysregulated or anxious behaviors (e.g., sweating, fidgeting). Anxious youth may also exhibit avoidant behavior because they do not have the emotion regulation skills to cope with new situations, so instead they may be less assertive and hesitant to initiate social activities (Ginsburg, La Greca, & Silverman, 1998), thus reducing their opportunities for social interactions. Another interpretation is that peers who detect anxiety in the target children may like them less due to associating them with a stigma. Peers may think they do not relate to anxious youth, so anxious youth may simply be ignored or neglected and may not even be given the chance to befriend a peer. This lack of social engagement can serve to maintain the youth's anxiety and will prevent them from practicing and subsequently improving their social skills.

When considering the lack of positive social engagement often exhibited by anxious youth, a child's own perception of loneliness is particularly relevant. Loneliness is a form of social functioning in which a child is particularly dissatisfied with his or her social interactions, lack of social support, and feels poorly accepted by peers (Asher, Hymel, & Renshaw, 1984; Asher & Wheeler, 1985). Another important component is children's treatment by peers, as youth may be treated positively or poorly depending on whether they exhibit various characteristics. For example, peers may tease an anxious youth who exhibits uncontrollable crying episodes. Peer victimization, "a specific form of peer maltreatment in which a child is targeted by a peer or group of peers" (Storch et al., 2006, p. 447) is one form of negative peer treatment that has been linked with anxiety. Overt victimization (i.e., physical forms of victimization and aggression such as hitting) is often the primary focus of attention and

prevention efforts, yet relational victimization (i.e., interpersonal attacks such as spreading rumors, excluding a child from peer activities) is a less studied problem (Dempsey & Storch, 2008; Storch, Masia-Warner, Crisp, & Klein, 2005). Peer victimization has been linked with generalized and social anxiety, depression, loneliness, low self-esteem, low self-worth, poorer social self-concept (i.e., a measure of the extent to which they see themselves as socially competent, well-accepted by peers, or having good social relationships), and social avoidance (Crick & Grotpeter, 1996; Grills & Ollendick, 2002; Hawker & Boulton, 2000). Peer victimization experiences may serve to maintain anxiety symptoms because they may reinforce the self-doubt and low self-esteem that is often characteristic of youth with anxiety.

Research on peer victimization in youth with anxiety disorders is very limited. Crawford et al. (2011) examined youth with anxiety disorders, 8-12 years old, and youth without anxiety disorders and found that anxiety served as an independent predictor of peer victimization in both groups. Further, the relationship between anxiety and peer victimization was almost twice as strong for clinically anxious children, suggesting that anxious youth are particularly vulnerable to victimization. Storch and colleagues (2006) found higher rates of peer victimization in youth diagnosed with obsessive-compulsive disorder (OCD) when compared to healthy controls and a sample of youth with diabetes, suggesting that the behaviors exhibited by youth with OCD (e.g., rituals) were likely considered even more bizarre than behaviors exhibited by children with diabetes (e.g., taking insulin shots frequently). Peer victimization was also found to mediate the relations between OCD severity and depression, externalizing behaviors, and loneliness. When considering several of the reasons mentioned previously (e.g., stigmatization, avoidant behavior displayed by anxious youth, observable displays of emotion dysregulation or anxious behaviors), it is understandable why youth with anxiety disorders may experience peer victimization and

loneliness. Unsuccessful social encounters may also contribute to anxiety in youth, as they may cause future avoidant behaviors and self-doubt which may maintain anxiety.

In addition to the study of negative peer treatment, there is a need to study positive peer treatment, as well as the factors that may influence positive interactions. Receipt of prosocial behavior is one form of positive peer treatment and consists of the frequency with which a peer tries to give a child help when he needs it, tries to cheer him up when he is sad or upset, tries to make him happy, says something nice to him, or shows him that he cares in some way (Crick & Grotpeter, 1996). One study found that the receipt of prosocial behaviors by peers partially moderated the relationship between peer victimization and loneliness in adolescence (Storch, Brassard, & Masia-Warner, 2003). Thus, children who experienced greater prosocial behavior (e.g., received help from peers when they needed it) experienced reduced feelings of loneliness. Crick and Grotpeter (1996) also found support for the importance of prosocial behaviors by peers; they found that a lack of prosocial treatment by peers significantly predicted social-psychological adjustment difficulties beyond what was accounted for by victimization. A review of the literature did not find any studies which examined receipt of prosocial behavior in clinical youth with anxiety disorders.

Collectively, a review of the literature suggests that social interactions with anxious youth are generally less enjoyable, which in part may be due to the anxious youth's own nervousness. Children with high anxiety may be reserved, may avoid peer interaction, or may act less competently in the presence of peers due to their experience of common features of anxiety (e.g., preoccupation with threat; Wood, 2006). Further, it seems likely that youths' anxious displays are perceived by fellow peers and are not received warmly. Similarly, youth who have experienced chronic social functioning difficulties may exhibit withdrawal due to

unsuccessful social encounters, and accordingly, may be more anxious about interacting with peers.

The Role of Emotion Regulation on Social Functioning
in Youth with Anxiety Disorders

In a review, Kingery et al. (2010) emphasizes the need for studies to identify factors that explain why youth with anxiety disorders experience poorer social functioning. From a developmental psychopathology perspective, understanding the mechanisms by which youth with anxiety disorders experience poorer social functioning is important because social difficulties are associated with a variety of later maladaptive outcomes (Gest et al., 2006; Ladd & Troop-Gordon, 2003). Empirical research supports the premise that emotion regulation skills might mediate changes in social functioning in youth with anxiety disorders.

Emotion regulation is defined as "the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (Thompson, 1994, p. 27-28). Halberstadt, Denham, and Dunsmore (2001) describe the importance of considering emotion in social functioning in their model for affective social competence, which they define as "the efficacious communication of one's own affect, one's successful interpretation and response to others' affective communication, and the awareness, acceptance, and management of one's own affect" (p. 80). Research has identified a relationship between emotion regulation and indicators of social functioning (Hubbard & Coie, 1994; Kingery et al., 2010). In children, studies have shown that better social functioning is predicted by high levels of emotion regulation (Eisenberg, Fabes, Guthrie, & Reiser, 2000; Eisenberg, Fabes, Murphy, Karbon, Smith, & Maszk, 1996; Eisenberg, Fabes, Murphy, Maszk, Smith, & Karon, 1995), and researchers acknowledge that

emotion regulation is critical for young children to engage in successful peer interactions (Eisenberg, Fabes, Bernzweig, Karbon, Poulin, & Hanish, 1993). Kochenderfer-Ladd and Skinner (2002) found relationships between childrens' maladaptive emotion regulation strategies [cognitive distancing (e.g., refusing to think about the experience), internalizing (e.g., getting mad at oneself), or externalizing strategies (e.g., dealing with negative emotions by taking them out on others)], and various maladaptive outcomes (e.g., peer victimization, loneliness, peer preference, social problems). Internalizing, externalizing, and cognitive distancing regulation strategies were associated with increased loneliness, while internalizing and externalizing strategies were also associated with peer victimization. In girls, distancing and externalizing strategies were related to higher social problems ratings, and externalizing was also inversely related to peer preference ratings (measured by sociometric status nominations). Thus, maladaptive attempts at emotion-regulation appear to be perceived poorly by peers; those who externalize or dramatize their emotions may experience peer difficulties, whereas youth who chronically inhibit their emotions may be lonelier, may maintain conflict, and may experience more social problems than youth who appropriately express and regulate their emotions (Kochenderfer-Ladd & Skinner, 2002).

The aforementioned research supports the notion that deficits in emotion regulation are associated with poorer social functioning. There is also a growing literature that identifies specific deficits in emotion regulation in anxious youth (Carthy, Horesh, Apter, Edge, & Gross, 2010; Legerstee, Garnefski, Jellesma, Verhulst, & Utens, 2010; Suveg & Zeman, 2004). For example, youth with anxiety disorders use more maladaptive emotion regulation strategies than those without anxiety disorders (Carthy et al., 2010; Legerstee et al., 2010; Suveg & Zeman, 2004). Compared to youth without anxiety disorders, children with anxiety disorders engage in

fewer problem-solving emotion regulation strategies and display less positive affect when discussing emotional experiences (Suveg et al., 2008). Emotion awareness is also a key component of emotion regulation given that children who do not recognize their emotional experiences will likely evidence difficulty with regulation, and several studies have linked emotion awareness with anxiety in youth. One study using a community sample found that poor emotion awareness and reluctance to express negative emotions were significantly related to anxiety symptoms in youth (Penza-Clyve & Zeman, 2002). Another study demonstrated that emotion awareness was related to social anxiety and ruminative worry thoughts (Rieffe, Oosterveld, Miers, Terwogt, & Ly, 2008). Similarly, other research supports the association between poor emotion awareness and anxiety symptoms (e.g., Suveg, Hoffman, Zeman, & Thomassin, 2009).

Thus, the literature suggests that there are links between deficits in emotion regulation and social problems. Further, the few empirical studies on emotion regulation and anxiety suggest that youth with anxiety evidence emotion regulation deficits. Continued investigation of these constructs will be important to understand the interplay of emotional and social functioning variables in youth with anxiety disorders.

Cognitive-Behavioral Treatment for Youth with Anxiety Disorders

Empirical research demonstrates that cognitive-behavioral therapy (CBT) is *probably efficacious* for the treatment of youth anxiety disorders (Silverman, Pina, & Viswesvaran, 2008). Most CBT programs focus on modifying the cognitive (e.g., maladaptive thinking patterns) and behavioral (e.g., avoidance) components of anxiety. Some CBT programs, however, also incorporate emotion regulatory components, though this is rarely the primary focus of treatment. For example, relaxation training is often used in CBT to help reduce a child's

physiological response to anxiety (e.g., Coping Cat; Kendall, 1994). Relaxation may serve as an emotion regulation strategy because it allows the youth to modify their physiological response to anxiety and decrease arousal (Hannesdottir & Ollendick, 2007). Cognitive restructuring may also change a child's emotions through changing maladaptive thinking patterns (e.g., increasing self-efficacy for emotion regulatory abilities) (Hannesdottir & Ollendick, 2007). Given that CBT targets maladaptive thinking patterns in youth with anxiety disorders, modification of these thought patterns might provide the youth with greater self-efficacy and willingness to implement effective emotion coping strategies, which might have positive social outcomes. Nevertheless, though CBT is generally effective in treating anxiety, recent research suggests that improvements in emotion regulation following CBT may be primarily limited to the improved regulation of worry and may not generalize to other emotions. For example, Suveg, Sood, Comer, and Kendall (2009) examined emotion regulation following CBT for youth with anxiety disorders. Thirty-seven youth, aged 7-17 years, diagnosed with either GAD, SAD, and/or SoP completed 16 CBT sessions. Youth demonstrated significant improvements in anxiety, self-efficacy, emotion awareness, and worry regulation skills. However, these youth did not evidence improvements in regulating other emotions (e.g., anger, sadness). Thus, CBT treatment programs seem to implicitly target emotion regulation in some manner, but do not directly address the emotion-related deficits identified through basic research. In a review, Suveg, Goodman, South-Gerow, and Kendall (2007) discuss findings from the affective neuroscience and clinical psychology literatures and emphasize that treatments which strongly consider emotion in treatment may be associated with additional treatment benefits (e.g., treatments may impact neural circuitry which underlies emotional responding). Further, the review highlights that youth with anxiety often evidence emotion regulation deficits beyond the experience of

worry (e.g., they exhibit difficulties with anger and sadness regulation as well). Thus, treatments which have an emotion-focused component are likely to be associated with significant positive outcomes that generalize to emotions besides the “target” emotion in the primary disorder, which might facilitate more widespread improvements in regulation skills, at least for youth who exhibit broad emotion regulation deficits at pretreatment (Suveg et al., 2007).

In a preliminary investigation, Suveg, Kendall, Comer, and Robin (2006) developed an Emotion-Focused CBT (ECBT) program for youth with anxiety disorders. Emotion-focused CBT addresses all of the empirically-based components of traditional CBT, yet also includes an additional component to address the emotion-related deficits identified in youth with anxiety disorders (Southam-Gerow & Kendall, 2000; Suveg & Zeman, 2004). Suveg et al. (2006) conducted a multiple-baseline study using ECBT for six anxious youth with principal diagnoses of GAD, SAD, or SoP. After completion of a 16-session treatment, most youth exhibited improvements in anxiety and overall adjustment, their ability to identify emotional states, ability to use emotion language to discuss emotion-related experiences, and ability to understand how to use emotion regulation strategies such as hiding and changing emotions to manage a variety of emotions (e.g., guilt, sadness, anger) aside from solely the regulation of anxiety. Though this study provided initial support for ECBT, it will be important to compare ECBT to other treatment approaches (e.g., CBT) to further clarify the treatment gains achieved by each treatment and also to identify whether one treatment may be more beneficial for youth with particular characteristics.

Few studies have examined social functioning following CBT. Wood (2006) examined the effect of reductions in child anxiety on improvements in social functioning and school performance after youth participated in a CBT intervention program. Results indicated that

reductions in anxiety were predictive of improved school performance and social functioning over the course of the intervention. Suveg, Hudson, et al. (2009) found significant improvements in mother-reported social competence for girls one year following individual cognitive-behavioral therapy for anxiety. These findings suggest that changes in anxiety may influence children's social and academic functioning. However, a study by Flannery-Shroeder and Kendall (2000) did not find either group-CBT or individual-CBT for youth with anxiety disorders to be effective in improving youth social functioning or loneliness. These mixed results suggest the importance of continued research on whether CBT demonstrates improvements in youth social functioning.

Collectively, research has shown that youth with anxiety disorders often exhibit difficulties with social functioning, and previous research has linked deficits in emotion regulation to social problems. The empirical study of these issues is particularly important because youth who experience social problems are at a greater risk for future maladjustment when compared with children who do not experience peer relationship difficulties (Gest et al., 2006; Hubbard & Coie, 1994; Ladd & Troop-Gordon, 2003; Zettergren, 2005). Therefore, the goal of the current study is to examine whether participation in one of two cognitive-behavioral treatment programs (i.e., CBT, ECBT) is associated with improvements in social functioning for youth with anxiety disorders. Given the emotion-focused component of ECBT, it is hypothesized that youth in the ECBT treatment group will demonstrate greater improvements in social functioning than the CBT group. A secondary goal is to examine whether changes in social functioning are mediated by improvements in emotion regulation. Articulation of the mechanisms that mediate changes in social functioning during treatment may contribute to a

better understanding of youth psychopathology and social adjustment, and to the refinement of intervention programs.

Study Hypotheses

Based on theory and the empirical evidence discussed previously, the following hypotheses were set forth:

1. Participation in either CBT or ECBT will be associated with improvements in social functioning (e.g., reductions in relational victimization, overt victimization, loneliness and social dissatisfaction, and social problems, as well as increases in receipt of prosocial behavior) for youth with anxiety disorders. However, youth in the ECBT treatment group will demonstrate greater improvements in social functioning.
2. Changes in emotion regulation will mediate the changes in social functioning from pre to post treatment for both treatment groups.

CHAPTER 2

METHOD

Procedure

Participants and their parents/caregivers were recruited from community schools, doctors' offices, and flyers that were posted throughout the community. When parents called in, they first completed a phone screener to assess anxiety disorder symptomology and inclusion/exclusion criteria. Note that this study was part of a larger study examining two treatments, cognitive-behavioral therapy and emotion-focused cognitive-behavioral therapy, for youth with anxiety disorders. Exclusion criteria consisted of the following: IQ below 80, psychotic symptoms, use of psychotropic medication other than stimulant medication, current participation in psychological treatment, parent/caregiver not living with children for at least six months, or suicidal ideation. Participants who were eligible based on the screener were then scheduled for a comprehensive assessment. During the assessment, parents/caregivers provided their written consent and children provided their assent to participate in the study. Diagnostic interviews were then conducted by trained clinical psychology graduate students. Participants were eligible if they had a primary diagnosis of either Generalized Anxiety Disorder (GAD), Social Phobia (SoP), and/or Separation Anxiety Disorder (SAD) based on the diagnostic interview. After eligibility was determined, children and their parent/caregiver completed study questionnaires with the help of a research assistant as needed. Participants were randomly assigned to one of the cognitive-behavioral treatment programs.

Participants

Sixty youth participated in the study assessment and diagnostic interview. Only youth with a primary anxiety disorder diagnosis of Generalized Anxiety Disorder, Social Phobia, and/or Separation Anxiety Disorder based upon the Anxiety Disorder Interview Schedule (ADIS-IV-C/P; Silverman & Albano, 1996) were included. See table 1 for a listing of participant primary diagnoses along with their comorbidity. A parent/guardian also participated and was required to have lived with the child for at least six months prior to study entry. Of the 60 youth who participated in the diagnostic interview, nine youth were excluded from study participation due to ineligibility (e.g., primary diagnosis was not GAD, SoP, or SAD, presence of subclinical symptomatology and not meeting full diagnostic criteria). The remaining 51 children were enrolled in study treatment. Youth ranged in age from 7-12 years (M age in years = 9.02, SD = 1.67), and 56.9% of the sample ($n=29$) was male, 43.1% ($n=22$) was female. Eleven of the 51 participants attrited during treatment. See figure 1 for a diagram of participant flow through the current study. Parents/guardians ranged in age from 26-54 years (M age = 37.8, SD = 5.57).

In regard to the diversity of the sample of the 51 youth enrolled in treatment, 44 youth (86.3 %) were Caucasian, 3 (5.9%) were African American, 2 (3.9%) were Hispanic, and 2 (3.9%) identified as “other.” Household income ranged from less than \$19,999 to over \$80,000 with 5.9% of the sample earning less than \$19,999, 17.7% between \$20,000 and \$39,000, 17.6% between \$40,000 and \$59,999, 15.7% between \$60,000 and \$79,999, and 43.1% of the sample earning over \$80,000.

Measures

Demographics Measure. The Demographics measure is a questionnaire which includes descriptive information about age, sex, race/ethnicity, parent occupation and income, parent education level, marital status of family members, and previous family mental and health history.

Anxiety Disorder Diagnoses. The Anxiety Disorder Interview Schedule (ADIS-IV-C/P; Silverman & Albano, 1996) is a semi-structured clinician-administered interview based on DSM-IV criteria that assesses for the presence of anxiety and related disorders. The child and parent interviews are completed separately and diagnoses are given based upon the fulfillment of diagnostic criteria and a clinician severity rating (CSR) greater than or equal to 4 on a scale from 0-8. Parent and child data are then integrated to form composite diagnoses, and final diagnoses are assigned if a diagnosis was obtained from either the parent or child interview. The ADIS-IV-C and ADIS-IV-P have demonstrated excellent psychometric properties (Silverman, Saavedra, & Pina, 2001) and are considered the “gold standard” for the assessment of anxiety disorders. Psychometric studies of the ADIS-IV-C have shown test-retest reliability and Kappa coefficients ranging from $k = .63-.80$ using the ADIS-IV-C, and $k = .65-.88$ using the ADIS-IV-P (Silverman et al., 2001). To examine inter-rater reliability for the current study, 20% of the video-taped diagnostic interviews were watched and re-rated by another trained diagnostician, which resulted in inter-rater reliability of $k = .76$ (excellent range).

Measures of Emotion Regulation

Child Report of Emotion Regulation. The Childrens’ Emotion Management Scales (CEMS anger, sadness, and worry scales; Zeman, Cassano, Suveg, & Shipman, 2010; Zeman, Shipman, Penza-Clyve, 2001) are one of the few psychometrically studied measures of emotion regulation in youth. The CEMS assess ways in which youth manage anger, sadness, and worry.

Each measure includes three subscales: (a) Inhibition, suppression of emotional expression (e.g., *"I get sad inside but I don't show it."*); (b) Dysregulated Expression, children's culturally inappropriate emotional expression (e.g., *"I do things like slam doors when I'm mad."*); and (c) Emotion Regulation Coping, children's adaptive methods of emotion management (e.g., *"I keep myself from losing control of my worried feelings."*). The Emotion Regulation Coping scale, which is a composite of the anger, sadness, and worry coping scales, was used for the current study. Initial reliability and validity data for the scale are acceptable ($\alpha = .62-.77$) and the scales demonstrate good test-retest reliability (Zeman et al., 2001). Initial data support the use of a Worry scale with a similar three-factor structure (Zeman et al., 2010). Reliability was $\alpha = .78$ for the emotion regulation coping scale in the current study.

Parent Report of Emotion Regulation. The Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) is a 24-item report of children's emotion regulatory abilities. This measure yields two subscales: Emotion Regulation and Lability/Negativity. The Emotion Regulation subscale is comprised of items measuring appropriate emotional and affective expression, empathy, and emotional self-awareness (e.g., *"Can recover quickly from episodes of upset or distress,"* and *"Can say when s/he is feeling sad, angry, or mad, fearful, or afraid"*). The Lability/Negativity subscale assesses inflexibility, mood lability, and dysregulated negative affect (e.g., *"Is prone to angry outbursts/tantrums easily,"* and *"Exhibits wide mood swings"*). Higher scores indicate better emotion regulation and greater lability/negativity, respectively. This measure has demonstrated good internal consistency, (i.e., .83 for the Emotion Regulation subscale, .96 for Lability/Negativity; Shields & Cicchetti, 1997). In the current study, 49 of the ERC measures were mother-completed, and 2 were father-completed. Reliability was $\alpha = .83$ for the 8-item Emotion Regulation scale, and it was $\alpha = .87$ for the 15-item Lability/Negativity scale.

Measures of Social Functioning

Child Report of Positive and Negative Treatment by Peers. The Social Experience Questionnaire – Self Report (SEQ-SR; Crick & Grotpeter, 1996) is a 13-item child self-report measure of children’s treatment by peers. The measure is comprised of three subscales: Relational Victimization, Overt Victimization, and Receipt of Prosocial Behavior. The relational victimization subscale assesses the frequency with which peers attempt to harm childrens’ relationships with others, the overt victimization subscale assesses the experience of physical conflict with peers, and the receipt of prosocial behavior subscale assesses the frequency with which peers direct caring behaviors towards the child. Youth are asked to report the frequency that they experience the described behaviors by peers. Items are rated on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*all the time*). Higher scores on each subscale are indicative of greater experiences of each construct (i.e., relational victimization, overt victimization, receipt of prosocial behavior). This scale has demonstrated good psychometric properties (e.g., $\alpha=.77-.80$ for all three subscales; Crick & Grotpeter, 1996). The relational and overt victimization subscales were used to assess negative treatment by peers, whereas the receipt of prosocial behavior subscale were used to assess positive treatment by peers. For the current study, internal consistency was $\alpha = .82, .84,$ and $.76$ for the relational victimization, overt victimization, and receipt of prosocial behavior scales, respectively.

Child Report of Loneliness and Social Dissatisfaction. The Asher Loneliness Scale (ALS; Asher et al., 1984) is a 16-item scale that assesses feelings of loneliness and social dissatisfaction in youth (e.g., “*I have nobody to talk to,*” “*It’s easy for me to make new friends at school;*” reverse coded). Responses to the 16-items are summed to create a total loneliness and social dissatisfaction score. The original scale consists of 24-items, eight of which are filler

items that inquire about the child's hobbies; these items were removed from the scale for the current study given the already lengthy assessment battery. Higher ALS total score ratings are indicative of greater loneliness and social dissatisfaction. The ALS total loneliness score is positively related to negative peer nominations and negatively associated with positive peer nominations and play ratings, supporting the convergent and divergent validity of this measure (Asher et al., 1984; Asher & Wheeler, 1985). The 16-item scale demonstrates good psychometric properties ($\alpha=.90$; Asher et al., 1984; Storch et al., 2006). Internal consistency was .89 for the child loneliness and social dissatisfaction scale in the current study.

Child Behavior Checklist (CBCL; Achenbach, 1991). The CBCL is a 118-item parent-report of children's emotional and behavioral functioning over the past 6 months. Items are rated on a 3-point Likert scale, consisting of "not true," "sometimes true," and "very true or often true." The CBCL consists of three composite scales and eight subscales. The social problems subscale was used for this study and consists of 11 items relating to childrens' feelings of rejection by peers, feelings of social isolation and inferiority, and age-appropriateness of their social behaviors. The CBCL is used extensively and demonstrates strong psychometric properties (Achenbach, 1991). In the current study, 49 of the CBCLs were mother-completed, and 2 were father-completed, and reliability was $\alpha=.73$ for the social problems scale. Based on norms, T-scores from 65-69 are considered to be in the borderline range, whereas T-scores ≥ 70 are considered clinically significant. In the current study, 17.6% and 15.7% of youth fell in the borderline and clinical range, respectively, at pre-assessment, based on parent report of social problems.

Teacher Report of Child Social Problems. The Teacher Report Form (TRF; Achenbach & Rescorla, 2001) is a 118-item measure completed by a teacher to provide a measure of

childrens' emotional and behavioral functioning and academic competencies. Items are rated on a 3-point Likert scale, consisting of “*not true*,” “*sometimes true*,” and “*very true or often true*.” The TRF consists of three composite scales and eight subscales. The social problems subscale was used for this study and consists of 13 items relating to children's feelings of rejection by peers, feelings of social isolation and inferiority, and age-appropriateness of their social behaviors. The TRF is used extensively and the social problems subscale has shown good reliability ($\alpha = .81$; Schultz et al., 2001). Reliability was $\alpha = .78$ for the teacher-report of child social problems in the current study. Based on norms and similar to the CBCL, T-scores from 65-69 are considered to be in the borderline range, whereas T-scores ≥ 70 are considered clinically significant. In the current study, 9.8% of youth fell in the borderline range, and no youth were identified as being in the clinical range at pre-assessment based on teacher report of social problems.

Treatment

Cognitive-Behavioral Therapy (CBT)

Cognitive-behavioral treatment was conducted based on the Coping Cat Program (Kendall, 1994) which has received significant empirical support (Kendall, 1994; Kendall, Flannery-Schroeder, Panichelli-Mindell, Southam-Gerow, Henin, & Warman, 1997; Kendall, Hudson, Gosch, Flannery-Shroeder, & Suveg, 2008). For purposes of this study, the Coping Cat Program was modified from 16- to 10-sessions. The majority of the sessions were individual CBT with the youth; though two sessions involved parents. Treatment components included psychoeducation, identification of somatic responses to anxiety, relaxation training, cognitive restructuring, problem-solving, and imaginal and in-vivo exposure. These components were incorporated into treatment by encouraging use of a FEAR plan (i.e., an acronym used to

facilitate skill application; see Podell, Mychailyszyn, Edmunds, Puleo, and Kendall, 2010 for a thorough discussion) for managing anxiety. Treatment was delivered by clinical psychology doctoral students who were supervised by a licensed clinical psychologist who has significant experience in the treatment of youth with anxiety disorders. Additionally, the program used a therapist manual and a client workbook to guide treatment (Kendall & Hedtke, 2006a; Kendall & Hedtke, 2006b).

Emotion-Focused Cognitive-Behavioral-Therapy (ECBT)

Emotion-focused CBT (Suveg et al., 2006) is an adapted form of CBT that utilizes all of the empirically-supported traditional components of CBT, but also seeks to target the emotion deficits evidenced in anxious youth (e.g., Southam-Gerow & Kendall, 2000; Suveg & Zeman, 2004). Suveg et al. (2006) describes that “The fundamental difference between individual CBT and ECBT is the systematic integration of emotion-related concepts in ECBT in an effort to facilitate the development of both emotion understanding and emotion regulation skills, beyond the experience of anxiety” (p. 80-81). Treatment consists of 10 sessions, and the initial phase of ECBT involves learning about and recognizing emotions (e.g., anxiety, anger, guilt, happiness) in oneself and others. The second phase uses exposures to anxiety-provoking and other emotion-provoking (e.g., anger) scenarios that the youth has difficulty regulating, and the youth are coached on how to regulate these experiences. Treatment is conducted based on an ECBT manual and an accompanying workbook (Suveg & Kendall, 2005a; 2005b) which were adapted based on the Coping Cat treatment manual and workbook (Kendall & Hedtke, 2006a; 2006b) and which have been successfully used previously (Suveg et al., 2006).

CHAPTER 3

RESULTS

Prior to the conduction of statistical analyses, reliability analyses were conducted on all measures, as discussed above, and the assumptions underlying each analysis were explored. Intent-to-treat analyses (see Ten Have, Sharon-Lise, Marcus, Brown, Lavori, & Duan, 2008 for a discussion of this technique) were conducted. Intent-to-treat analyses utilize data from all participants who have been involved in the study ($n=51$) regardless of their adherence to the treatment regimen and reflect a rigorous test of treatment outcomes. Accordingly, the last data point for all participants who attrited from treatment was carried forward in analyses. Interrcorrelations between study variables are indicated in tables 2 and 3. Cohen's d was used as a measure of effect size where appropriate with values equal to or greater than .2, .5, and .8 representing small, medium, and large effect sizes, respectively (Cohen, 1992).

Pre-Post Differences in Social Functioning

Two one-way repeated measures multivariate analyses of variance (i.e., RM MANOVA) were used to test the hypothesis that involvement in ECBT or CBT would be associated with improvements in social functioning, and that involvement in ECBT would be associated with greater improvements in social functioning compared to CBT. Treatment group (i.e., ECBT, CBT) was entered as the independent variable for both of the RM MANOVAs, and the social functioning variables were entered in two separate RM MANOVAs based on child report (i.e., relational victimization, overt victimization, receipt of prosocial behavior, loneliness and social dissatisfaction) and other report (i.e., parent report of child social problems, teacher report of child social problems) as dependent variables. For the RM MANOVA that consisted of child

self-report, there were no between group differences, $F(4, 46) = .717, p = .585$. However, results demonstrated a significant main effect across time from pre to post social functioning, [$F(4, 46) = 2.657, p = .045$]. Univariate analyses revealed significant pre to post differences on child relational victimization [$F(1, 49) = 4.629, p = .036; d = .32$] and child loneliness and social dissatisfaction [$F(1, 49) = 8.889, p = .004; d = .31$], indicating that there were reductions in social functioning difficulties after participation in treatment.

The RM MANOVA analysis that consisted of other-report social functioning variables consisted of notably fewer participants (CBT group: $n = 16$, ECBT group: $n = 15$) because of missing data. Data was missing for a variety of reasons: either the pre or post assessment occurred during summer and no appropriate teacher figure could be identified and therefore pre to post change could not be calculated, or teacher report measures were completed too late after the child had started treatment and thus were not used. The analysis indicated no between-group differences, [$F(2, 28) = 1.443, p = .253$]. However, results demonstrated a significant main effect across time from pre to post social functioning, [$F(2, 28) = 6.257, p = .006$]. Univariate analyses revealed significant pre to post differences on parent report of child social problems, [$F(1, 29) = 11.949, p = .002; d = .48$], in that parents reported that their children exhibited fewer social problems after participation in treatment.

Pre-Post Differences in Emotional Functioning

Exploratory analyses also looked at pre to post changes in emotional functioning by group. Treatment group (i.e., ECBT, CBT) was entered as the independent variable and the emotion regulation variables were entered as dependent variables in separate RM MANOVAs based on child self-report (i.e., child-reported emotion regulation coping) and other-report (i.e., parent report of child emotion regulation, parent report of child lability/negativity). For the RM

MANOVA that consisted of child-report, there were no between group differences, [$F(1, 49) = .026, p = .872$] or differences across time for child-report of emotion regulation coping [$F(1, 49) = 2.613, p = .112$].

For the RM MANOVA that examined other-report of emotion variables, there were no between group differences, [$F(2, 48) = 1.506, p = .232$]. However, results demonstrated a significant main effect across time from pre to post emotional functioning, $F(2, 48) = 11.665, p < .001$. Univariate analyses revealed significant pre to post differences on parent report of child emotion regulation [$F(1, 49) = 8.916, p = .004; d = -.31$] and parent report of child negativity/lability [$F(1, 49) = 23.786, p < .001; d = .36$]. Specifically, parents reported that youth demonstrated improvements in emotion regulation and reductions in negativity/lability after treatment participation.

Mediation Analyses

The hypothesis that changes in social functioning from pre- to post- treatment would be mediated by changes in emotion regulation was examined using a publicly available macro available at <http://www.afhayes.com> that utilizes a bootstrapping technique (Preacher & Hayes, 2004). Given that limitations have been noted with the traditional Baron & Kenny procedures (e.g., possibility of Type I error, low power, questions regarding whether the analyses formally test the significance of the indirect effect; see Holmbeck, 2002 and Preacher & Hayes, 2004 for a discussion), the Preacher and Hayes bootstrapping technique also allows for better estimation of the size and significance of the indirect effect and is able to be used with small sample sizes. Additionally, this macro generates 5000 bootstrap resamples to estimate 95% confidence intervals.

Given that groups did not differ on measures of social or emotional functioning at post-treatment, treatment groups (i.e., ECBT and CBT) were combined for the mediation analyses. Means, standard deviations, range, and mean change from pre to post treatment for the combined sample study variables are presented in table 4. Pre-assessment social functioning scores for each of our variables for which we found significant pre to post treatment differences (i.e., child report of relational victimization, child report of loneliness and social dissatisfaction, parent report of child social problems) served as the independent variables for each analysis, whereas the corresponding post-treatment social functioning scores served as the dependent variables. For the emotion regulation measures for which we found significant pre to post treatment differences (i.e., parent report of child emotion regulation, parent report of child lability/negativity), change scores were calculated as the difference between pre-treatment and post-treatment scores, and these served as the potential mediators. Accordingly, six analyses were conducted to evaluate whether emotion regulation mediated the relationship between the pre and post measures of social functioning. Results were non-significant for all six mediation analyses. See tables 5-10 for results.

CHAPTER 4

DISCUSSION

The goal of the current study was to examine changes in social functioning following two cognitive-behavioral treatment programs for youth with anxiety disorders. A secondary goal was to evaluate whether improvements in social functioning could be explained by changes in emotion regulation. It was hypothesized that both CBT and ECBT would be associated with improvements in social functioning, but that youth in the ECBT group would demonstrate greater improvements in social functioning. It was further hypothesized that pre to post changes in social functioning would be mediated by changes in emotion regulation. Overall, results provided partial support for study hypotheses. Results demonstrated improvements in several aspects of social functioning (i.e., child report of relational victimization, child report of loneliness and social dissatisfaction, and parent report of social problems) from pre to post treatment for both treatment groups. However, no significant differences were found between the CBT and ECBT treatment groups in regard to changes in social functioning. Analyses also demonstrated improvements in several aspects of emotional functioning (i.e., parent report of child emotion regulation, parent report of negativity/lability) from pre to post treatment. Nevertheless, no evidence was found for the significance of changes in emotion regulation as a mediator of pre to post treatment social functioning.

Regarding the hypothesis that treatment participation would result in changes in social functioning, pre to post differences were specifically found for child report of relational victimization, child report of loneliness and social dissatisfaction, and parent report of child social problems. No significant pre-post differences were found for child report of overt

victimization, child report of receipt of prosocial behavior, or teacher report of child social problems. These results are informative given the scarcity of research on the potential social benefits of cognitive-behavioral therapy for anxiety, as well as the mixed research findings in the literature. The findings are consistent with Wood (2006) and Suveg, Hudson, et al. (2009) who found improvements in parent-reported social functioning after CBT. Of note, both the Wood (2006) and the Suveg, Hudson, et al. (2009) studies utilized the CBCL (the same measure used in the current study) to obtain a measure of social functioning. However, those studies used the social competence scale (i.e., a measure of adaptive social functioning such as children's involvement in activities, their number of friends, and their ability to get along with others), whereas the current study used the social problems scale (i.e., a measure of maladaptive social functioning such as difficulty getting along with other kids and getting teased a lot).

Accordingly, when considering the current study along with the Wood (2006) and Suveg, Hudson, et al. (2009) studies, there is research support that CBT is associated with improvements in both adaptive social functioning (i.e., social competence) and reductions in maladaptive social functioning (i.e., social problems). Further, the significant pre-to post-treatment findings in regard to parent report of social problems is a clinically meaningful finding. Clinically significant improvements are typically defined as changes that return participants who fall in the clinical range to the non-clinical range. At pretreatment, 17.6% and 15.7% of youth fell in the borderline and clinical range, respectively, based on parent report of social problems, compared to 11.8% and 2.0% at posttreatment. When considering items on the social problems subscale of the CBCL (e.g., *"Clings to adults or too dependent," "Gets teased a lot," "Doesn't get along with other kids," "Easily jealous"*), it makes sense that youth who are taught adaptive coping

strategies, problem-solving techniques, and who are encouraged to minimize avoidance through CBT showed reductions in these social difficulties.

Nevertheless, results are inconsistent with Flannery-Shroeder and Kendall (2000) who did not find CBT for youth with anxiety disorders to be effective in improving youth social functioning based on child and parent report across a variety of indices (e.g., social anxiety, friendships, loneliness, or social activities). Of note, the Flannery-Shroeder and Kendall (2000) study used the same measure of loneliness (i.e., ALS) as used in the current study, so it is uncertain why we found reductions in child report of loneliness whereas the Flannery-Shroeder and Kendall (2000) study did not. Thus, continued research will be important to better explain the impact of CBT upon youth social functioning. When considering child-report variables, it is possible that youth reported reduced loneliness and relational victimization in the current study given that a youth who has learned effective ways to manage his or her anxiety, through treatment, is likely to engage in less avoidant behavior because he or she will have learned skills to manage symptoms of worry and nervousness. Given this, the youth's confidence and his or her willingness to engage with others in the social environment will likely be heightened. Further, if a peer demonstrates poor emotion regulation, perhaps peers simply ignore that child and keep their distance, which might explain the occurrence of child loneliness. Parents are likely particularly attuned to their child's social behavior, so if differences are present, it is likely that parents would be aware of it, as indicated in the current study.

The lack of findings for increases in receipt of prosocial behavior were surprising. The Wood (2006) and Suveg, Hudson, et al. (2009) studies found improvements in social competence (i.e., a child's *own* ability and success in interacting socially) after CBT but did not assess specific receipt of prosocial behaviors. In this study, it appears that despite improvements in

social functioning, the changes in behavior after CBT were not marked enough to motivate positive treatment by *other* peers in the current study. Another possibility is that the window of time between pre-treatment and post-treatment may not have been enough time for peers to notice changes in the youth's behavior, thus precluding the youth from receipt of prosocial behavior. Perhaps as the youth has more time to demonstrate his or her improvements in adaptive coping given the skills learned through CBT, the youth will experience more receipt of prosocial behavior. Accordingly, it would be interesting to examine this variable at a one-year follow-up assessment to see if such change is noted.

Furthermore, we did not find changes in social functioning based on teacher report. Given the lack of previous research that examines teacher report of social functioning after CBT, the evaluation of this construct in itself is a strength of the current study. Given that we did not find changes in receipt of prosocial behavior either, it is possible that changes in social functioning simply take longer to notice in the school setting. Similar to above, it would be interesting to examine teacher report of social functioning at a one-year follow-up assessment after the child has had more time to demonstrate his or her improved skill set. Nevertheless, the lack of teacher-report findings for social functioning may also be due to the smaller sample size implicated in those analyses. Overall, continued research to further understand the potential benefits of CBT for anxiety upon social functioning in both the home and school settings is necessary

In regard to changes in emotional functioning, no significant differences were found across time between ECBT and CBT treatment conditions. However, results demonstrated significant pre to post differences on parent report of child emotion regulation and parent report of child negativity/lability. No significant differences were found based on child report of

emotion regulation coping. It is possible that parents were notably attuned to these changes in youth emotion management abilities, yet given their age, children may not have had the insight to notice that they were engaging in more adaptive regulation efforts. Some research shows that youth express their emotions differently in the context of peers versus in their home environment (Karniol & Heiman, 1987; Zeman & Garber, 1996; Zeman & Shipman, 1997). Thus, the fact that parents noticed a significant change in emotional functioning from pre to post, while the youth did not, suggests that there may have been observable changes in how youth managed their emotions when they were expressing them freely in a comfortable setting, such as at home. Additionally, when considering some of the items that comprise the emotion regulation scale (e.g., *“Responds positively to neutral or friendly overtures by peers,” “Is empathic towards others; shows concern or sadness when others are upset or distressed”*), it makes sense that improvements in these adaptive emotion management strategies would have positive social implications. Similarly, when considering items that comprise the negativity/lability scale (e.g., *“Responds negatively to neutral or friendly overtures by peers,” “Displays negative emotions when attempting to engage others in play”*), it is reasonable that reductions in those maladaptive emotion management strategies would be associated with positive social implications as well.

It is uncertain why there was no evidence of mediation in the current study. It is possible that the relationships simply do not exist in the manner proposed in the current study. Another possibility is that the small sample size limited the ability to detect mediation due to low power. However, examination of the mediation analyses does demonstrate some correlations between social functioning variables and changes in emotion regulation, yet still no evidence for mediation was found in the current study. Future research with a larger sample size might help to better understand the current findings.

Of note, an interesting observation is that several of the relationships between emotion and social functioning variables were stronger at post-treatment (e.g., parent report of child emotion regulation and child report of relational victimization, parent report of child negativity/lability and teacher report of child social problems). All relationships were in the expected directions (i.e., adaptive emotion functioning was associated with positive social functioning, maladaptive emotion functioning was associated with social functioning difficulties). Interestingly though, these relationships were not present at pre-treatment. Thus, it is possible that some aspect of the CBT treatment, perhaps that was not directly evaluated in the current study, explains such findings. Accordingly, continued research that better explicates the impact of different treatment components of CBT will be necessary to provide a rationale for such findings.

Study Limitations and Future Directions

Although several interesting findings were discovered, this study was marked by limitations. Although pre-post differences were found for both social and emotional functioning, there were no significant differences between the groups from pre to post social or emotional functioning. It is uncertain why no group differences were found. However, it is likely that our small sample size limited our ability to detect significant differences. Future research should be conducted with larger sample sizes in each group to provide enough power to obtain a better estimate of whether there might be changes between groups from pre to post treatment. Given that this study took place over several months, it is possible that improvements in social and emotional functioning were due to maturity over time, so this study would have benefitted from a wait-list control group to allow for such comparisons to be made. As mentioned by Wood (2006), it is also possible that aspects of the CBT program (e.g., problem-solving component)

could have been responsible for the changes in social functioning by directly targeting social skills rather than indirectly affecting social functioning due to reducing anxiety or improving emotion functioning. Future research should continue to examine the mechanisms that underlie associations between anxiety and poor social and emotional functioning in youth to inform and improve interventions. Another limitation was the homogeneity of the sample. First, the majority of parental respondents were mothers. Given the research that children express emotions differently in the context of different people (e.g., same or other-sex individuals), it would be interesting to see if results varied based on sex of parent. Secondly, the majority of participants were Caucasian and from a relatively middle-class socioeconomic status, which may limit the generalizability of study findings. Future research should include a more diverse sample of youth with anxiety disorders.

Despite some limitations, this study has many strengths and clinical implications. First, it extended the current literature by examining potential social and emotional implications of CBT treatment for youth anxiety. The more data we have on the widespread benefits of treatment methods, the more support we have to encourage youth with anxiety disorders to engage in and potentially benefit from such empirically supported treatments. Further, little research has examined social and emotion functioning simultaneously in youth with anxiety disorders, despite the fact that a great deal of research links social and emotion functioning in non-clinical youth (Eisenberg et al., 2000; Eisenberg et al., 1996; Eisenberg et al., 1995), so this research provides initial steps towards obtaining more information in that domain. Additionally, another strength of this study was the use of multiple reporters, as we considered child, parent, and teacher report of social functioning, as well as child and parent report of emotional functioning. Further, this study used intent to treat analyses which are a rigorous test of treatment outcomes.

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Table 1: Participant Primary Diagnoses and Comorbidity

	Generalized Anxiety Disorder (<i>n</i> =33)	Social Phobia (<i>n</i> =11)	Separation Anxiety Disorder (<i>n</i> =7)
Generalized Anxiety Disorder	--	8	6
Social Phobia	18	--	3
Separation Anxiety Disorder	17	4	--
Specific Phobia	27	7	5
Attention Deficit Hyperactivity Disorder	8	5	2
Obsessive-Compulsive Disorder	3	1	0
Oppositional Defiant Disorder	4	4	1
Enuresis	3	0	0
Post-Traumatic Stress Disorder	2	0	0
Major Depressive Disorder	1	1	0
Dysthymia	3	0	0

Table 2: Intercorrelations between Study Measures at Pre-Treatment for All Participants

	1	2	3	4	5	6	7	8	9
1. CEMS: Emotion Regulation Coping	--								
2. ERC: Emotion Regulation	.016	--							
3. ERC: Lability/Negativity	.062	-.563***	--						
4. SEQ: Relational Victimization	-.020	.094	.12	--					
5. SEQ: Overt Victimization	.307*	.103	.072	.787***	--				
6. SEQ: Receipt of Prosocial Behavior	.445***	.176	.017	.225	.301*	--			
7. ALS: Loneliness & Social Dissatisfaction	-.323*	.014	-.051	.371**	.411**	-.279*	--		
8. CBCL: Parent Report of Child Social Problems	.074	-.381**	.539***	.121	.193	.126	.107	--	
9. TRF: Teacher Report of Child Social Problems	-.056	-.162	.301 ⁺	.184	.135	.014	.225	.634***	--

Note: CEMS = Childrens Emotion Management Scales; ERC = Emotion Regulation Checklist; SEQ = Social Experience Questionnaire; ALS = Asher Loneliness Scale; CBCL = Child Behavior Checklist; TRF = Teacher Report Form

⁺ $p = .06$, * $p < .05$, ** $p < .01$, *** $p \leq .001$

Table 3: Intercorrelations between Study Measures at Post-Treatment for All Participants

	1	2	3	4	5	6	7	8	9
1. CEMS: Emotion Regulation Coping	--								
2. ERC: Emotion Regulation	.082	--							
3. ERC: Lability/Negativity	.024	-.732***	--						
4. SEQ: Relational Victimization	-.185	-.441***	.323*	--					
5. SEQ: Overt Victimization	-.049	-.111	.143	.605***	--				
6. SEQ: Receipt of Prosocial Behavior	.368**	.291*	-.144	-.277*	-.122	--			
7. ALS: Loneliness & Social Dissatisfaction	-.352*	-.157	.119	.520***	.455***	-.348*	--		
8. CBCL: Parent Report of Child Social Problems	.227	-.533***	.692***	.296*	.247	-.038	.110	--	
9. TRF: Teacher Report of Child Social Problems	.222	-.263	.445**	.146	.059	.156	.063	.479**	--

Note: CEMS = Childrens Emotion Management Scales; ERC = Emotion Regulation Checklist; SEQ = Social Experience Questionnaire; ALS = Asher Loneliness Scale; CBCL = Child Behavior Checklist; TRF = Teacher Report Form

* $p < .05$, ** $p < .01$, *** $p \leq .001$

Table 4: Means, Standard Deviations, Range, and Mean Change from Pre to Post Treatment for Combined Sample Study Variables

	Pre-Treatment		Post-Treatment		Mean Pre-Post Treatment Change
	Mean (SD)	Range	Mean (SD)	Range	
1. CEMS: Emotion Regulation Coping	2.05 (.40)	1.33-2.72	2.13 (.45)	1-2.83	.08
2. ERC: Emotion Regulation	24.37 (3.26)	18-31	25.41(3.41)	18-31	1.04*
3. ERC: Lability/Negativity	31.75 (6.54)	20-47	29.31(6.83)	20-47	2.43*
4. SEQ: Relational Victimization	9.45 (4.57)	5-25	8.22 (3.01)	5-16	1.24*
5. SEQ: Overt Victimization	8.45 (4.32)	5-25	7.53 (2.82)	5-16	.92
6. SEQ: Receipt of Prosocial Behavior	18.28 (4.08)	7-25	18.63 (4.14)	5-25	.35
7. ALS: Loneliness & Social Dissatisfaction	33.88 (11.36)	16-62	30.57 (9.70)	16-51	3.31*
8. CBCL: Parent Report of Child Social Problems	5.41(3.77)	0-18	3.75 (3.19)	0-18	1.67**
9. TRF: Teacher Report of Child Social Problems	1.50 (2.06)	0-6	1.62 (2.34)	0-10	.09

Note: CEMS = Childrens Emotion Management Scales; ERC = Emotion Regulation Checklist; SEQ = Social Experience Questionnaire; ALS = Asher Loneliness Scale; CBCL = Child Behavior Checklist; TRF = Teacher Report Form

* $p < .05$, ** $p < .01$, *** $p \leq .001$

Table 5: Analysis of whether parent report of child emotion regulation mediate the relationship between parent report of child social problems at pre treatment and parent report of child social problems at post treatment

<i>Path</i>	Relationship	β	SE	<i>t</i>	<i>p</i>	<i>z</i>
<i>a-path</i>	Pre Social Problems ↔ Emotion Regulation	.10	.10	.99	.33	
<i>b-path</i>	Emotion Regulation ↔ Post Social Problems	-.28*	.11	-2.5	.02	
<i>c-path</i>	Pre Social Problems ↔ Post Social Problems	.62***	.08	7.68	≤.001	
<i>c'-path</i>	Pre Social Problems ↔ Post Social Problems	.65***	.08	8.35	≤.001	
<i>ab-path</i>	Pre Social Problems ↔ Emotion Regulation ↔ Post Social Problems	-.03	-.03		.35	-.93

* $p < 0.05$, ** $p < 0.01$, *** $p \leq .001$; Overall Model: $R^2 = .60$, $p \leq .001$, $F(2, 48) = 35.74$

Table 6: Analysis of whether changes in parent report of child negativity/lability mediate the relationship between parent report of child social problems at pre treatment and parent report of child social problems at post treatment

<i>Path</i>	Relationship	β	SE	<i>t</i>	<i>p</i>	<i>z</i>
<i>a-path</i>	Pre Social Problems ↔ Negativity/Lability	.10	.14	-.73	.47	
<i>b-path</i>	Negativity/Lability ↔ Post Social Problems	-.29***	.08	3.76	≤.001	
<i>c-path</i>	Pre Social Problems ↔ Post Social Problems	.62***	.08	7.68	≤.001	
<i>c'-path</i>	Pre Social Problems ↔ Post Social Problems	.65***	.07	8.98	≤.001	
<i>ab-path</i>	Pre Social Problems ↔ Negativity/Lability ↔ Post Social Problems	-.03	-.04		.47	-.72

* $p < 0.05$, ** $p < 0.01$, *** $p \leq .001$; Overall Model: $R^2 = .65$, $p \leq .001$, $F(2, 48) = 44.40$

Table 7: Analysis of whether changes in parent report of child emotion regulation mediates the relationship between child report of loneliness and social dissatisfaction at pre treatment and child report of loneliness and social dissatisfaction at post treatment

<i>Path</i>	Relationship	β	SE	<i>t</i>	<i>p</i>	<i>z</i>
<i>a-path</i>	Pre Loneliness ↔ Emotion Regulation	-.02	.03	-.52	.60	
<i>b-path</i>	Emotion Regulation ↔ Post Loneliness	-.67	.36	-1.89	.07	
<i>c-path</i>	Pre Loneliness ↔ Post Loneliness	.62***	.08	7.40	≤.001	
<i>c'-path</i>	Pre Loneliness ↔ Post Loneliness	.61***	.08	7.40	≤.001	
<i>ab-path</i>	Pre Loneliness ↔ Emotion Regulation ↔ Post Loneliness	-.01	.02		.61	.51

* $p < 0.05$, ** $p < 0.01$, *** $p \leq .001$; Overall Model: $R^2 = .56$, $p \leq .001$, $F(2, 48) = 30.36$

Table 8: Analysis of whether parent report of child negativity/lability mediates the relationship between child report of loneliness and social dissatisfaction at pre treatment and child report of loneliness and social dissatisfaction at post treatment

<i>Path</i>	Relationship	β	SE	<i>t</i>	<i>p</i>	<i>z</i>
<i>a-path</i>	Pre Loneliness ↔ Negativity/Lability	.01	.05	-.27	.79	
<i>b-path</i>	Negativity/Lability ↔ Post Loneliness	.62*	.25	2.44	.02	
<i>c-path</i>	Pre Loneliness ↔ Post Loneliness	.62	.08	7.34	≤.001	
<i>c'-path</i>	Pre Loneliness ↔ Post Loneliness	.63	.08	7.82	≤.001	
<i>ab-path</i>	Pre Loneliness ↔ Negativity/Lability ↔ Post Loneliness	-.01	.03		.79	-.27

* $p < 0.05$, ** $p < 0.01$, *** $p \leq .001$; Overall Model: $R^2 = .58$, $F(2, 48) = 32.87$

Table 9: Analysis of whether changes in parent report of child emotion regulation mediates the relationship between child report of relational victimization at pre treatment and child report of relational victimization at post treatment

<i>Path</i>	Relationship	β	SE	<i>t</i>	<i>p</i>	<i>z</i>
<i>a-path</i>	Pre Relational Victimization ↔ Emotion Regulation	-.11	.08	-1.42	.16	
<i>b-path</i>	Emotion Regulation ↔ Post Relational Victimization	-.15	.15	-1.02	.31	
<i>c-path</i>	Pre Relational Victimization ↔ Post Relational Victimization	.32***	.08	3.92	≤.001	
<i>c'-path</i>	Pre Relational Victimization ↔ Post Social Problems	.30***	.08	3.64	≤.001	
<i>ab-path</i>	Pre Relational Victimization ↔ Emotion Regulation ↔ Post Relational Victimization	.02	.02		.40	.84

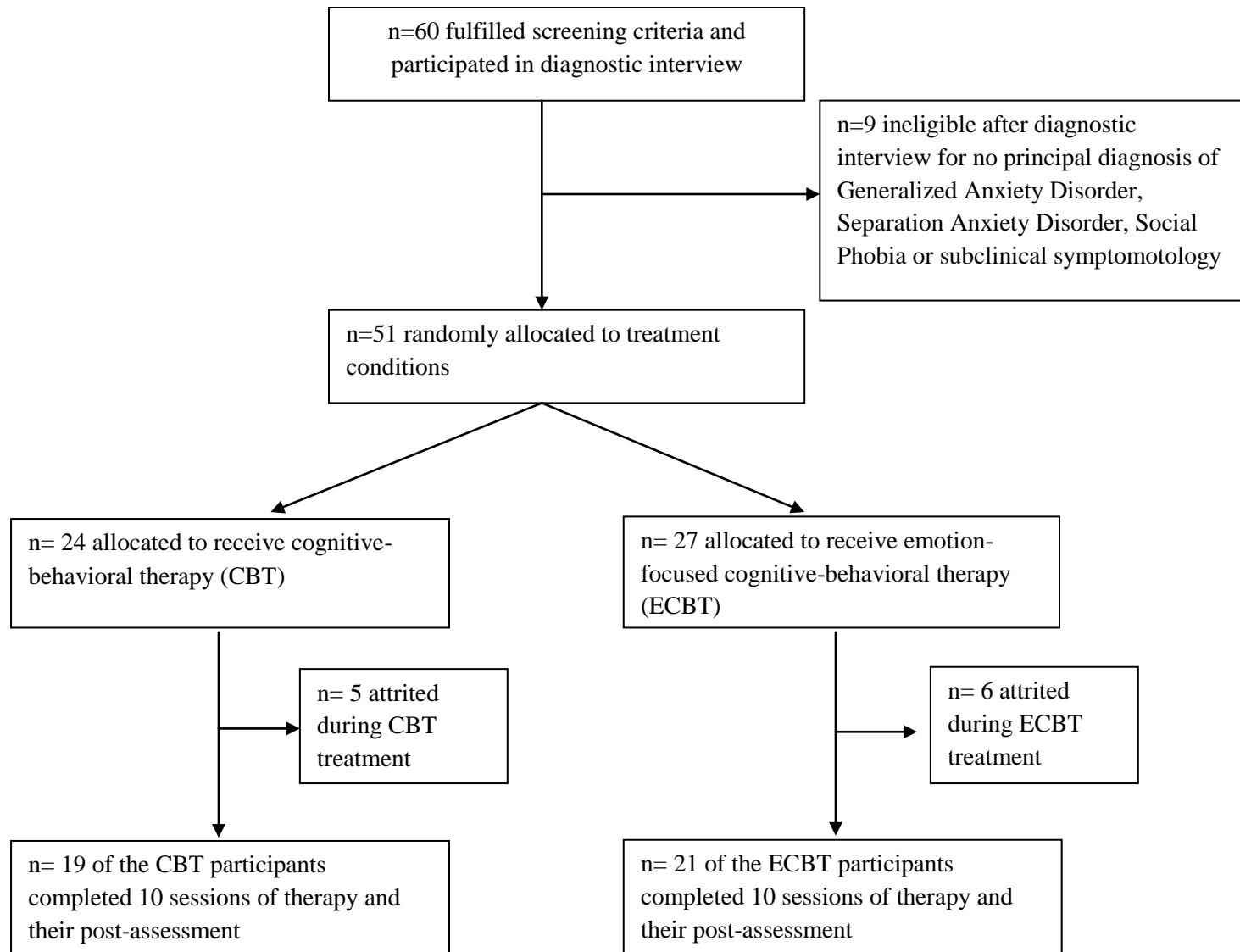
* $p < 0.05$, ** $p < 0.01$, *** $p \leq .001$; Overall Model: $R^2 = .26$, $p \leq .001$, $F(2, 48) = 8.21$

Table 10: Analysis of whether changes in parent report of child negativity/lability mediated the relationship between child report of relational victimization at pre treatment and child report of relational victimization at post treatment

<i>Path</i>	Relationship	β	SE	<i>t</i>	<i>p</i>	<i>z</i>
<i>a-path</i>	Pre Relational Victimization ↔ Negativity/Lability	-.01	.11	-.10	.92	
<i>b-path</i>	Negativity/Lability ↔ Post Relational Victimization	.21*	.10	2.08	.04	
<i>c-path</i>	Pre Relational Victimization ↔ Post Relational Victimization	.32	.08	3.92	≤.001	
<i>c'-path</i>	Pre Relational Victimization ↔ Post Social Problems	.32	.08	4.08	≤.001	
<i>ab-path</i>	Pre Relational Victimization ↔ Negativity/Lability ↔ Post Relational Victimization	-.002	.02		.92	-.10

* $p < 0.05$, ** $p < 0.01$, *** $p \leq .001$; Overall Model: $R^2 = .30$, $p \leq .001$, $F(2, 48) = 10.37$

Figure 1: Participant flow through the treatment study



APPENDIX A: STUDY MEASURES

Demographics Form

Child's Name: _____

Child's Date of Birth: _____ Child Age _____ Sex: ___ Male (0) ___ Female (1)

Is child currently attending school (*if homeschooled, please indicate so*).

0. ___ No, my child is not attending school.
1. ___ Yes, my child attends a public or private school.
2. ___ My child is homeschooled.

Name of Child's school: _____ Grade: _____
In summertime, indicate grade going into.

Race:

1. ___ Caucasian
2. ___ Black
3. ___ Asian
4. ___ Hispanic
5. ___ Other (Specify: _____)

Referral Source: How did you hear about our study?

1. ___ Through my child's school
2. ___ UGA Campus Postings/Flyers Please list where: _____
3. ___ Community Flyers/Postings Please list where: _____
4. ___ Professional advertisements (e.g., newspaper) Please list where: _____
5. ___ UGA Psychology Clinic or Doctor's Office
6. ___ Other Please list where: _____

Mother's Name: _____ Mother's age: _____

Mother's race:

1. _____ Caucasian
2. _____ Black
3. _____ Asian
4. _____ Hispanic
5. _____ Other (Specify: _____)

Mother's relationship to child:

1. _____ Natural mother
2. _____ Stepmother
3. _____ Foster mother
4. _____ Other (Specify: _____)

Mother's marital status:

0. _____ Never married
1. _____ Married
2. _____ Separated
3. _____ Divorced
4. _____ Widowed

If presently married, have there been any previous marriages?

0. _____ No
1. _____ Yes How many? _____

Mother's educational level:

1. _____ Graduate school training
2. _____ College graduate
3. _____ Partial college training
4. _____ High school graduate (GED)
5. _____ Partial high school training
6. _____ Junior high school graduate
7. _____ Less than 7 years of school
8. _____ Other (Specify: _____)

Is mother presently employed?

0. _____ No
1. _____ Yes

Mother's occupation: _____

Source of income, if unemployed:

1. _____ Unemployment compensation
2. _____ Public assistance
3. _____ Social security
4. _____ Other (Specify: _____)
5. _____ No source of income



Father's name: _____ Father's age: _____

Father's race:

1. _____ Caucasian
2. _____ Black
3. _____ Asian
4. _____ Hispanic
5. _____ Other (Specify: _____)

Father's relationship to child:

1. _____ Natural father
2. _____ Stepfather
3. _____ Foster father
4. _____ Other (Specify: _____)

Father's marital status:

0. _____ Never married
1. _____ Married
2. _____ Separated
3. _____ Divorced
4. _____ Widowed

If presently married, have there been any previous marriages?

0. _____ No
1. _____ Yes How many? _____

Father's educational level:

1. _____ Graduate school training
2. _____ College graduate
3. _____ Partial college training
4. _____ High school graduate (GED)
5. _____ Partial high school training
6. _____ Junior high school graduate
7. _____ Less than 7 years of school
8. _____ Other (Specify: _____)

Is father presently employed?

0. _____ No
1. _____ Yes

Father's occupation: _____

Source of income, if unemployed:

1. _____ Unemployment compensation
2. _____ Public assistance
3. _____ Social security
4. _____ Other (Specify: _____)
5. _____ No source of income



Estimate total household income, including all sources (for the child's household):

1. _____ \$0 to \$9,999
2. _____ \$10,000-\$19,999
3. _____ \$20,000-\$29,999
4. _____ \$30,000-\$39,999
5. _____ \$40,000-\$49,999
6. _____ \$50,000-\$59,999
7. _____ \$60,000-\$69,999
8. _____ \$70,000-\$79,999
9. _____ over \$80,000

Marital status of child's parents:

0. _____ Never married
1. _____ Married
2. _____ Separated
3. _____ Divorced
4. _____ Widowed

Child's living arrangements:

1. _____ Mother and father in home with children
2. _____ Mother only in home with children
3. _____ Father only in home with children
4. _____ Foster home or guardian
5. _____ Other (Specify: _____)

Please list the child's brothers and/or sisters:

Name:	Age	Sex	Living in the home?	Relationship to child
1. _____	_____	M F	Y N	Full Half Step Other
2. _____	_____	M F	Y N	Full Half Step Other
3. _____	_____	M F	Y N	Full Half Step Other
4. _____	_____	M F	Y N	Full Half Step Other
5. _____	_____	M F	Y N	Full Half Step Other

Please list any other people living in the home:

Name:	Age	Relationship to family:				
1. _____	_____	Family	Friend	Sig. Other	Foster Child	Other
2. _____	_____	Family	Friend	Sig. Other	Foster Child	Other
3. _____	_____	Family	Friend	Sig. Other	Foster Child	Other
4. _____	_____	Family	Friend	Sig. Other	Foster Child	Other
5. _____	_____	Family	Friend	Sig. Other	Foster Child	Other

How would you assess the health of your family – both physical and emotional – over the past year?

Circle a number.

1	2	3	4	5
poor				excellent

How would you assess the stress in your family over the past year?

Circle a number.

1	2	3	4	5
low stress				high stress

Emotion Regulation Checklist (ERC)

1. Is a cheerful child.

1	2	3	4
Never	Sometimes	Often	Always

2. Exhibits wide mood swings (for example, the child's emotional state is difficult to anticipate because she moves quickly from a very positive or neutral to very negative emotional states).

1	2	3	4
Never	Sometimes	Often	Always

3. Responds positively to neutral or friendly overtures by adults.

1	2	3	4
Never	Sometimes	Often	Always

4. Transitions well from one activity to another (for example, does not become anxious, angry, or overly excited when moving from one activity to another).

1	2	3	4
Never	Sometimes	Often	Always

5. Can recover quickly from episodes of upset or distress (for example, does not pout or remain sullen, anxious, or sad after emotionally distressing events).

1	2	3	4
Never	Sometimes	Often	Always

6. Is easily frustrated.

1	2	3	4
Never	Sometimes	Often	Always

7. Responds positively to neutral or friendly overtures by peers.

1	2	3	4
Never	Sometimes	Often	Always

8. Is prone to angry outbursts/tantrums easily.

1	2	3	4
Never	Sometimes	Often	Always

9. Is able to delay gratification.

1	2	3	4
Never	Sometimes	Often	Always

10. Takes pleasure in the distress of others (for example, laughs when another person gets hurt or punished: enjoys teasing others).

1	2	3	4
Never	Sometimes	Often	Always

11. Can modulate excitement in emotionally arousing situations (for example, does not get 'carried away' in high energy play situations, or overly excited in inappropriate contexts).

1	2	3	4
Never	Sometimes	Often	Always

12. Is whiny or clingy with adults.

1	2	3	4
Never	Sometimes	Often	Always

13. Is prone to disruptive outbursts of energy or exuberance.

1	2	3	4
Never	Sometimes	Often	Always

14. Responds angrily to limit-setting by adults.

1	2	3	4
Never	Sometimes	Often	Always

15. Can say when s/he is feeling sad, angry or mad, fearful or afraid.

1	2	3	4
Never	Sometimes	Often	Always

16. Seems sad or listless.

1	2	3	4
Never	Sometimes	Often	Always

17. Is overly exuberant/excitable when attempting to engage others in play.

1	2	3	4
Never	Sometimes	Often	Always

18. Displays flat affect/emotion (for example, expression is vacant and unexpressive; child seems emotionally absent).

1	2	3	4
Never	Sometimes	Often	Always

19. Responds negatively to neutral or friendly overtures by peers (for example, speaks in an angry tone of voice; or responds angrily).

1	2	3	4
Never	Sometimes	Often	Always

20. Is impulsive (responds quickly without thinking).

1	2	3	4
Never	Sometimes	Often	Always

21. Is empathic towards others; shows concern or sadness when others are upset or distressed.

1	2	3	4
Never	Sometimes	Often	Always

22. Displays excessive energy or excitement that others find intrusive or disruptive.

1	2	3	4
Never	Sometimes	Often	Always

23. Displays appropriate negative emotion (for example, anger fear, frustration, distress) in response to hostile, aggressive, or intrusive acts by peers.

1	2	3	4
Never	Sometimes	Often	Always

24. Displays negative emotion when attempting to engage others in play.

1	2	3	4
Never	Sometimes	Often	Always

Childrens' Emotion Management Scales (CEMS)

This form asks you what you usually do when you're feeling **MAD**.

1. When I'm feeling mad, I can control my temper.	Hardly ever 1	Sometimes 2	Often 3
2. I hold my anger in.	Hardly ever 1	Sometimes 2	Often 3
3. I stay calm and keep my cool when I'm feeling mad.	Hardly ever 1	Sometimes 2	Often 3
4. I do things like to slam doors when I'm mad.	Hardly ever 1	Sometimes 2	Often 3
5. I hide my anger.	Hardly ever 1	Sometimes 2	Often 3
6. I attack whatever it is that makes me very angry.	Hardly ever 1	Sometimes 2	Often 3
7. I get mad inside but I don't show it.	Hardly ever 1	Sometimes 2	Often 3
8. I can stop myself from losing my temper when I'm mad.	Hardly ever 1	Sometimes 2	Often 3
9. I say mean things to others when I'm mad.	Hardly ever 1	Sometimes 2	Often 3
10. I try to calmly deal with what is making me mad.	Hardly ever 1	Sometimes 2	Often 3
11. I'm afraid to show my anger.	Hardly ever 1	Sometimes 2	Often 3

Childrens' Emotion Management Scales (CEMS)

This form asks you what you usually do when you're feeling **SAD**.

1. When I'm sad, I can control my crying and carrying on.	Hardly ever	Sometimes	Often
	1	2	3
2. I hold my sad feelings in.	Hardly ever	Sometimes	Often
	1	2	3
3. I stay calm and don't let sad things get to me.	Hardly ever	Sometimes	Often
	1	2	3
4. I whine/fuss about what's making me sad.	Hardly ever	Sometimes	Often
	1	2	3
5. I hide my sadness.	Hardly ever	Sometimes	Often
	1	2	3
6. When I'm sad, I do something totally different until I calm down.	Hardly ever	Sometimes	Often
	1	2	3
7. I get sad inside but don't show it.	Hardly ever	Sometimes	Often
	1	2	3
8. I can stop myself from losing control of my sad feelings.	Hardly ever	Sometimes	Often
	1	2	3
9. I cry and carry on when I'm sad.	Hardly ever	Sometimes	Often
	1	2	3
10. I try to calmly deal with what is making me sad.	Hardly ever	Sometimes	Often
	1	2	3
11. I do things like mope around when I'm sad.	Hardly ever	Sometimes	Often
	1	2	3
12. I'm afraid to show my sadness.	Hardly ever	Sometimes	Often
	1	2	3

Childrens' Emotion Management Scales (CEMS)

This form asks you what you usually do when you're feeling **WORRIED**.

1. I keep myself from losing control of my worried feelings.	Hardly ever	Sometimes	Often
	1	2	3
2. I show my worried feelings.	Hardly ever	Sometimes	Often
	1	2	3
3. I hold my worried feelings in.	Hardly ever	Sometimes	Often
	1	2	3
4. I talk to someone until I feel better when I'm feeling worried.	Hardly ever	Sometimes	Often
	1	2	3
5. I do things like cry and carry on when I'm worried.	Hardly ever	Sometimes	Often
	1	2	3
6. I hide my worried feelings.	Hardly ever	Sometimes	Often
	1	2	3
7. I stay calm when I'm feeling worried.	Hardly ever	Sometimes	Often
	1	2	3
8. I avoid whatever it is that makes me feel very worried.	Hardly ever	Sometimes	Often
	1	2	3
9. I get worried inside but don't show it.	Hardly ever	Sometimes	Often
	1	2	3
10. When I feel worried I do something totally different until I calm down.	Hardly ever	Sometimes	Often
	1	2	3
11. I keep whining about how worried I am.	Hardly ever	Sometimes	Often
	1	2	3
12. I can't stop myself from acting really worried.	Hardly ever	Sometimes	Often
	1	2	3
13. I try to calmly settle the problem when I feel worried.	Hardly ever	Sometimes	Often
	1	2	3

Social Experience Questionnaire (SEQ)

Here is a list of things that sometimes happen to kids your age at school. How often do they happen to you at school? Please respond with the frequency with which you have received these behaviors from peers. In this questionnaire, "other kids" may refer to peers at your school or in your neighborhood.

		Never	A little	Sometimes	Most of the Time	All of the Time
<i>Example A</i>	<i>How often do you eat lunch at school?</i>	1	2	3	4	5
<i>Example B</i>	<i>How often does your class go outside to play?</i>	1	2	3	4	5

		Never	A little	Sometimes	Most of the Time	All of the Time
1	How often does another kid give you help when you need it?	1	2	3	4	5
2	How often do you get hit by another kid at school?	1	2	3	4	5
3	How often do other kids leave you out on purpose when it is time to play or do an activity?	1	2	3	4	5
4	How often does another kid yell at you and call you mean names?	1	2	3	4	5
5	How often does another kid try to cheer you up when you feel sad or upset?	1	2	3	4	5
6	How often does a kid who is mad at you try to get back at you by not letting you be in their group anymore?	1	2	3	4	5
7	How often do you get pushed or shoved by another kid at school?	1	2	3	4	5

8	How often does another kid do something that makes you feel happy?	1	2	3	4	5
9	How often does a classmate tell lies about you to make other kids not like you anymore?	1	2	3	4	5
10	How often does another kid kick you or pull your hair?	1	2	3	4	5
11	How often does another kid say they won't like you unless you do what they want you to do?	1	2	3	4	5
12	How often does another kid say something nice to you?	1	2	3	4	5
13	How often does a kid try to keep others from liking you by saying mean things about you?	1	2	3	4	5
14	How often does another kid say they will beat you up if you don't do what they want you to do?	1	2	3	4	5
15	How often do other kids let you know that they care about you?	1	2	3	4	5

Asher Loneliness Scale (ALS)

For each question, please circle the number that best reflects how true each statement is of yourself.

		Not true at all	Hardly Ever True	Sometimes True	True Most of the Time	Always True
1	It's easy for me to make new friends at school.	1	2	3	4	5
2	I have nobody to talk to.	1	2	3	4	5
3	I'm good at working with other children.	1	2	3	4	5
4	It's hard for me to make friends.	1	2	3	4	5
5	I have lots of friends.	1	2	3	4	5
6	I feel alone.	1	2	3	4	5
7	I can find a friend when I need one.	1	2	3	4	5
8	It's hard to get other kids to like me.	1	2	3	4	5
9	I don't have anyone to play with.	1	2	3	4	5
10	I get along with other kids.	1	2	3	4	5
11	I feel left out of things.	1	2	3	4	5
12	There's nobody I can go to when I need help.	1	2	3	4	5
13	I don't get along with other children.	1	2	3	4	5
14	I'm lonely.	1	2	3	4	5
15	I am well-liked by kids in my class.	1	2	3	4	5
16	I don't have any friends.	1	2	3	4	5

*The ADIS-IV-C/P, CBCL, and TRF are copyrighted measures and are available upon request.