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# A Preliminary Evaluation of the Parent Resilience Program: A Program for the Parents of Shy and Anxious Preschool-Aged Children

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A Preliminary Evaluation of the Parent Resilience Program:  
A Program for the Parents of Shy and Anxious Preschool-Aged Children

by

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in partial fulfillment of the requirements for the degree of

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COLLEGE OF ARTS AND SCIENCES

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### **Abstract**

The purpose of this study was to evaluate the effectiveness of a new anxiety prevention program, the Parent Resilience Program. The program is a cognitive-behavioral based prevention program designed to reduce the risk of anxiety in young children, specifically by reducing parent stress and teaching coping skills. The sample consisted of the parents and/or caregivers of 12 preschool-aged children. Parents attended eight weekly sessions of a psychologist-led intervention. Significant reductions were observed related to the impact of shyness on the child's quality of life as well as parental anxiety and stress, both of which are risk factors for developing an anxiety disorder. In line with this, trends toward reduction were also seen in child anxiety symptoms and behavioral inhibition. These preliminary results suggest that the Parent Resilience Program may be effective at reducing the risk factors associated with the development of anxiety disorders.

## **Introduction**

Anxiety disorders are among the most common forms of mental distress in childhood and adolescence. In particular, recent 12-month prevalence rates have been reported to be as high as 18.1% (Baumeister & Härter, 2007), with most researchers reporting 10-15% (Teubert & Pinquart, 2011). It has also been found that symptoms are often chronic or reoccurring throughout one's lifetime (Hirshfeld-Becker & Biederman, 2002). Further, anxiety has been found to have a negative impact on quality of life, including social relationships and academic performance in children (Mychailyszvn, Mendez, & Kendall, 2010). Langley, Bergman, McCracken, and Piacentini (2004) found that making new friends, taking tests, and concentrating on work were rated as the most difficult activities for adolescents with anxiety. Additionally, it is important to note that anxiety disorders commonly precede comorbid disorders such as another anxiety disorder or depression (Kashani & Orvaschel, 1990).

Although effective treatments have been developed, treatment for anxiety disorders can be very costly, and there is a much higher demand for mental health services than is available (Donovan & Spence, 2000). Cognitive behavioral therapy (CBT) is an empirically supported treatment for anxiety disorders, and may be the most recommended treatment for managing anxiety disorders (Dozois & Dobson, 2004). However, the negative consequences of anxiety disorders often take effect well before a child is diagnosed, and anxious children are often overlooked or under-referred due to their non-disruptive nature (Donovan & Spence, 2000). For example, Kashani and Orvaschel (1990) found that anxiety levels were higher on child self-

report measures when compared to parent report, indicating that parents often do not detect that their child is suffering from anxiety. By the time many children are referred for treatment, the anxiety disorder has already been prominently established and its adverse effects can be difficult to reverse (Donovan & Spence, 2000).

Due to the limitations of treatment discussed above, prevention programs may have several advantages over traditional treatment approaches. In particular, prevention is aimed at reducing the incidence of anxiety disorders, and therefore does not target individuals who are already suffering from a disorder (Feldner, Zvolensky, & Schmidt, 2004). Another potential advantage to prevention programs is that these programs have the potential to be conducted by non-clinicians (i.e., school teachers). In particular, there is evidence to suggest that non-clinicians may be effective at implementing anxiety prevention programs when compared to clinicians. For example, Barrett and Turner (2001) found no significant difference in results from psychologist-led and trained teacher-led prevention programs, strongly indicating that prevention can be effective in a classroom setting. Further, administering prevention programs in this way can be more cost-effective, and the use of non-clinicians may increase accessibility of services. Therefore, non-clinicians such as teachers may be trained to administer prevention programs in schools, reaching a large number of children. Despite this promising direction of research, research in the area of anxiety prevention is still in the beginning stages and these programs are not being widely implemented, especially in the United States.

### **An Overview of Prevention Research in Psychology**

Prevention programs have been classified into 3 basic categories: universal, selected, and indicated approaches (Feldner et al., 2004). Universal programs are available to all members of a population and do not consider risk factors for developing a disorder. An advantage of this



strategy is that participants will not be stigmatized for their participation, which may happen with other types of programs (Bienvenu & Ginsburg, 2007). Universal programs may also be less time consuming because there is no participant screening; however, they usually yield smaller effect sizes compared to selected and indicated programs even when controlling for children not at risk of developing a disorder (Dadds & Roth, 2008).

In contrast, targeted programs (i.e., selective and indicated) focus on specific individuals in a population who are considered at risk for developing a disorder, or are exhibiting sub-clinical symptoms. This is the most common strategy in prevention research (Donovan & Spence, 2000). Dadds and Roth (2008) reported that targeted interventions generally produced larger effect sizes than did universal interventions, suggesting that participation in a targeted prevention program may be more beneficial to high risk children. Further, targeted interventions are arguably more cost-effective than universal prevention, as resources tend to be limited (Bienvenu & Ginsburg, 2007).

In summary, universal programs can provide many benefits for anxiety prevention. However, targeted programs may be more cost-effective and can focus on high-risk children, rendering them more beneficial to children in need of prevention services.

### **Universal Anxiety Prevention Programs**

One of the most extensively implemented and evaluated universal anxiety prevention programs to date is the FRIENDS program (Stallard, 2010). It is a 10-week program implemented in schools and has been found to reduce anxiety levels in children from elementary school to high school, with significant results at 12-, 24-, and 36-month follow-up (Barrett, Farrell, Ollendick, & Dadds, 2006). Further, the FRIENDS program has been facilitated by trained teachers as well as psychologists, with no difference in the effectiveness of leaders

(Barrett, Sonderegger, & Sonderegger, 2001; Barrett & Turner, 2001). The program has also been implemented cross-culturally, and has led to reduced anxiety levels and increased self-esteem in elementary and high school students who were immigrants with non-English speaking backgrounds (Barrett, Sonderegger, & Xenos, 2009). The impact of parent involvement in prevention programs was assessed in a more recent study by Fukushima-Flores and Miller (2011). When measuring parent anxiety, a common risk factor, no significant differences were found compared to parents who did not attend the program, but it may be due to a small sample size (only twenty parents in attendance). Results were assessed immediately following the intervention, and it is possible that effects could have been delayed and may emerge over time at follow-up.

REACH for RESILIENCE is another universal intervention program designed for young children (Dadds & Roth, 2008). Parents attended six training sessions that focused on the relationship between parenting style and internalizing disorders in children. Developing positive attitudes and increasing social aptitude were goals of the program. REACH for RESILIENCE was found to have some positive effects on parental stress and both internalizing and externalizing problems in children.

Additional universal programs include MoodGYM (Calear et al., 2009), the Aussie Optimism Program (Roberts et al., 2010), the Feelings Club CBT Program (Simpson, 2007), and a cognitive-behavioral program by McLaughlin (2008). Overall, universal programs have been found to have a significant effect on anxiety symptoms. Although the effect sizes for universal have been found to be small, the effects are comparable to the effects for other psychological prevention programs, such as programs for depression and substance abuse.

In summary, the majority of universal anxiety prevention research has utilized the FRIENDS program, which is designed for adolescents ages 7 to 16 years old. FRIENDS has typically been found to reduce anxiety symptoms in the intervention groups, while the comparison groups experience a smaller reduction. Mere participation in the study may be responsible for reductions in comparison groups, as participants become more aware of their anxious thoughts and behaviors (Lau & Rapee, 2011).

**Targeted Anxiety Prevention Programs.** Dadds, Spence, Holland, Barrett, and Laurens (1997) adapted the FRIENDS program in a targeted prevention study for elementary and middle school-aged children. Children were recruited from eight primary schools and screened for anxiety risk factors using both child and teacher reports. Children who showed symptoms but did not meet criteria for a full disorder were included in the study. Further, children who did meet *DSM-IV* diagnostic criteria for an anxiety disorder but were considered less severe based on life interference were included in the study to evaluate the effectiveness of the program. Clinical psychologists led sessions in which children were taught coping strategies to manage anxious thoughts and behaviors. Parents also attended their own sessions where they learned skills to manage their children's anxiety. At 6-month follow-up, significantly fewer children in the intervention group met criteria for a *DSM-IV* anxiety disorder when compared to the control group (Dadds et al.). Gains were maintained at 2-year follow-up (Dadds, Holland, Laurens, Mullins, Barrett, & Spence, 1999).

In a more recent study by Bernstein, Layne, Egan, and Tennison (2005), the FRIENDS manual was used in an indicated prevention program. In particular, children between the ages of seven and eleven, who had been previously diagnosed with a *DSM-IV* anxiety disorder, were placed into one of three groups: group CBT for children, group CBT for children plus parent

training, and a control group. Post-intervention, a greater percentage of children no longer met diagnostic criteria for an anxiety disorder in the intervention groups when compared to the control group. Children whose parents participated in the program showed greater reductions in anxiety when compared to children whose parents did not participate, indicating parent involvement in prevention programs may be beneficial.

Other studies have focused on the prevention of anxiety in preschool-aged children. In particular, the Preschool Intervention Project (PIP), a selective intervention program targeting young children at risk for developing anxiety disorders, (Kennedy, Rapee, & Edwards, 2009; Rapee, Kennedy, Ingram, Edwards, & Sweeney, 2005). Risk factors included behavioral inhibition and having a parent with an anxiety disorder. The authors found a reduction in the percentage of children who met diagnostic criteria for an anxiety disorder who also had a parent with an anxiety disorder. A similar study by Rapee and colleagues found a decrease in the instance of anxiety disorder diagnoses at 12-, 24-, and 36-month follow-ups for inhibited children whose parents participated in the intervention (Rapee et al., 2005; Rapee, Kennedy, Ingram, Edwards, & Sweeney, 2010).

In summary, targeted prevention studies have been conducted with children from preschool to middle school, with some key differences in the programs based on age group. Programs that target elementary and middle school students often use initial anxiety symptoms as risk factors, but Ginsburg (2009) pointed out that most published studies had not targeted children of parents with anxiety disorders, who may be at the greatest risk for developing a disorder. In most preschool studies, participants are recruited based on behavioral inhibition and having a parent with an existing anxiety disorder, which is important to note because many studies show evidence that inhibited temperament is linked to anxiety, and children with anxiety are more

likely than non-anxious children to have a parent with anxiety (Rapee, Schniering, & Hudson, 2009). Rapee et al. (2009) also point out that the age of onset is a much-debated issue and varies based on specific anxiety disorder, ranging from early childhood to early adulthood. Therefore, early intervention is necessary because as mentioned before, anxiety disorders may be difficult to extinguish once established. The overall effect size for targeted programs has been reported at .26 (Fisak, Richard, & Mann, 2011).

### **Limitations to Previous Research**

Although progress has been made, a number of limitations exist in the research literature. The FRIENDS program, which was the model for many later prevention programs, was developed in Australia (Barrett & Turner, 2001). Much of the current research in anxiety prevention has thus been conducted outside of the United States. In fact, Australian programs have been found to be more effective than non-Australian programs, but it may be due to the widespread use of the FRIENDS program in Australia (Fisak et al., 2011). Additionally, most of the above research concentrated on adolescents in middle and high school, with little research conducted with young children.

### **Rationale for the Current Study**

The purpose of the current study was to develop and implement an anxiety prevention program for preschool-aged children. The rationale behind the main features of this program, along with the potential contribution to the research literature, is provided below.

**Developmental Timing of Intervention.** The timing of the implementation of prevention programs is an important consideration, as they may be most effective when implemented before the typical age of onset of anxiety disorders, which is often in elementary school. Consequently, preschool may be an optimal stage to implement anxiety prevention

programs. In particular, shy/inhibited behavior in preschool-aged children is a well-established risk factor in the development of anxiety over time. Consequently, the identification of shy/inhibited preschool children may be an effective strategy to recruit for a targeted anxiety prevention program.

Although preschool may be an effective developmental stage in which to intervene, surprisingly few studies have focused on this age group (Dadds & Roth, 2008; Rapee et al., 2005, Kennedy et al., 2009; Rapee et al., 2010). Further, it appears that preschool anxiety programs have yet to be implemented in the United States.

**Parent Involvement.** Direct intervention with parents may be an optimal approach to the prevention of child anxiety in preschool-aged children, and consistent with this premise, most of the previously published anxiety prevention studies have focused on parent-based intervention (Kennedy et al., 2009; Rapee et al., 2005). One reason for this approach is that preschool-aged children may lack insight into their shyness and the potential implications of their shyness, and they may lack the motivation to engage in treatment. Another argument for the focus on parent-based intervention is that parent behaviors such as overprotection and modeling have been found to be associated with child anxiety (Rapee, 2012). Consequently, the current program focused on parenting training. Skills discussed in the program fall under two basic categories: (1) strategies focused directly on the management of child anxiety, including the reduction of anxious modeling and overprotection, and (2) basic positive parenting strategies, which may improve overall parent effectiveness may decrease stress and tension in the parent-child relationship.

Finally, parents may experience stress and anxiety related to the challenges of parenting a shy/inhibited child. This stress and anxiety may have a negative impact on parenting skills and the parent-child relationship. More specifically, when parents experience stress, they may be less

likely to implement newly learned parenting strategies, and they may default back to more habitual, less effective parenting strategies (Dumas, 2005). Consequently, parents may benefit from training in mindful parenting, which may decrease parent stress and increase parent self-awareness and acceptance. The end results may be more effective parenting and decreased stress in the parent-child relationship. More specifically, mindfulness may lead to improved moment-to-moment awareness and acceptance during parent-child interactions, an increased likelihood of successfully implementing newly learned skills, and a reduction in parenting behaviors that may contribute to the development and maintenance of child anxiety.

### **Focus of the Current Study and Hypotheses**

The purpose of this study was to provide preliminary examination of the effectiveness of the Parent Resilience Program. Parents of children at risk for developing an anxiety disorder attended an eight session cognitive-behavioral program which emphasized basic parenting skills, anxiety-related parenting skills, and mindful parenting. The program was specially designed for preschool aged children to decrease the likelihood that anxiety disorders would develop. The risk factors of interest in this study were shyness, behavioral inhibition, and/or a parent with an anxiety disorder. These factors were selected because they are robust risk factors for the development of child anxiety (Kennedy et al., 2009).

It was hypothesized that children of parents who participated in the Parent Resilience Program would show a significant reduction in levels of shyness, anxiety symptoms, and interference in quality of life due to shyness and anxiety. Further, it was anticipated that parents who participated would exhibit reductions in parenting stress as well as reductions in internalizing symptoms. Increases in levels of parent mindfulness were also expected due to the

program's emphasis on mindful parenting. Finally, it was anticipated that the program would have a high level of acceptability, or participant satisfaction.



## Method

### Participants

Twelve parents or caregivers of preschool-aged children between the ages of 3 and 6 were self-referred from local preschools. All caregivers were female and ranged in age from 21 to 59 years old. Regarding ethnicity, 41.7% were Caucasian/White, 50% were African-American/Black, and 8.3% were Asian/Pacific Islander. Regarding parent education, 16.7% were high school graduates or had a GED, 41.7% had some college, 25% were college graduates, and 16.7% had received a graduate or professional degree. Income ranged from under \$20,000 (41.7%) to over \$100,000 (8.3%), and number of children ranged from one to six, with 50% of parents having two children. Marital status was as follows: 25% single/never married, 66.7% married, and 8.3% divorced. One third of parents had been previously diagnosed with an anxiety or mood disorder.

The children were 50% female and 50% male, ranging in age from three to six years old ( $M = 4.08$ ,  $SD = .97$ ). Most children were in preschool or kindergarten, with one child in first grade. Children's ethnicities were 41.7% Caucasian/white, 41.7% African-American/black, 8.3% Asian/Pacific Islander, and 8.3% other. All but one were biological children, while one was in custody but not adopted. One third of the children had been diagnosed with anxiety or other psychiatric disorder, and 16.7% had been diagnosed with a developmental disability. Participants were compensated \$30 at the completion of study for their time and participation.

## Measures

**Preschool Anxiety Scale.** Anxiety levels for the participating children were measured before and after the prevention program using the Preschool Anxiety Scale (PAS; Spence, Rapee, McDonald, & Ingram, 2001). The PAS is a 28-item questionnaire that measures symptoms associated with the common anxiety disorders in children (Spence et al., 2001). In addition to a total score, this measure includes the following subscales: generalized anxiety, social anxiety, obsessive-compulsive disorder, fear of physical injury, and separation anxiety. This measure was based on parent-report, and is based on a Likert scale, with higher scores indicating higher levels of anxiety. Broeren and Muris (2007) found that the PAS correlated highly with two other measures of anxiety, the Child Behavior Checklist and the Children's Moods Fears and Worries Questionnaire, indicating it is a valid measure of child anxiety. Broeren and Muris (2007) also reported Cronbach's alphas at .86 for the total score, with the subscales ranging from .59 to .81. For the current study, Cronbach's alphas ranged from .59 to .89 for the subscales and .90 for the total score.

**Behavioural Inhibition Questionnaire.** The Behavioural Inhibition Questionnaire (BIQ) is a 30-item scale which measures inhibited temperament in young children across three domains: social, situational, and physical caution (Kennedy et al., 2009). This measure is based on a Likert scale, with higher scores indicating higher levels of inhibition/shyness. Cronbach's alphas have previously ranged from .74 to .96. BIQ scores also correlated highly with parent and teacher reports of inhibition, demonstrating good convergent and discriminant validity for the measure (Kim, Klein, Olino, Dyson, Dougherty, & Durbin, 2011). For the current study, Cronbach's alpha showed high internal consistency at .92.

**Child Anxiety Life Interference Scale—Preschool Version.** The Child Anxiety Life Interference Scale—Preschool Version (CALIS-P) is a 20-item questionnaire which measures the influence of the child's anxiety symptoms on their own life, general family life, and the parents' lives (Lyneham, H. J. et al., 2008). Life interference was measured by parent-report and by a Likert scale, with higher scores indicating higher levels of interference. Kennedy et al. (2009) reported a Cronbach's of .95 for the total score on the CALIS-P (Kennedy et al., 2009). Cronbach's alphas for the current study were .82 for the total score and ranged from .71 to .80 for the subscales.

**Parental Stress Index—Short Form.** The Parental Stress Index—Short Form (PSI) is a 38-item measure of stress related to one's role as a parent (Abidin, 1990). In addition to a total score, the index also includes three subscales: parental distress, stress related to parent-child dysfunctional interaction, and stress related to difficulty of child. The PSI is measured using a Likert scale where lower scores indicate higher levels of stress. Haskett, Ahern, Ward, and Allaire (2006) found that the PSI correlated with criterion variables and was a valid measure of parent stress. Scores were also reliable at one-year retest. Cronbach's alpha levels for the subscales have previously been reported between .80 and .91, and test-retest reliability over 6 months was estimated between .78 and .85 (Dadds & Roth, 2008). Cronbach's alpha was reported at .94 for the total score and ranged from .77 to .93 for the subscales in this study.

**Depression Anxiety Stress Scales 21.** The Depression Anxiety Stress Scales- 21 (DASS-21) is a 21-item measure of negative affect, including symptoms consistent with depression and anxiety. This scale, which was completed by parents, includes the Anxiety, Stress, and Depression subscales. The DASS-21 is based on a Likert scale with higher scores indicating higher levels of depression, anxiety, and stress. The scale has been found to have high internal

consistency, with Cronbach's alphas for the subscales ranging from .82 to .93. When compared with other valid measures of depression and anxiety, the DASS-21 has been reported to have good convergent and discriminant validity (Henry & Crawford, 2005). For this study, Cronbach's alphas were .32 for the anxiety subscale, .81 for the stress subscale, and .90 for the depression subscale.

**Mindful Attention and Awareness Scale.** Parents completed the Mindful Attention and Awareness Scale (MAAS), which is a 15-item questionnaire which measures present moment awareness (Brown & Ryan, 2003). Items on the MAAS are scored on a Likert scale where higher scores indicate higher levels of mindfulness. Brown and Ryan (2003) found the MAAS to correlate positively with other measures of mindfulness, making it a valid measure of the construct. The MAAS is reported to have good internal consistency, with Cronbach's alpha previously reported at .89 (MacKillop & Anderson, 2007). For the current study, Cronbach's alpha was equal to .90.

**Program Acceptability Questionnaire.** Parents completed a 17-item post-intervention questionnaire. Seven items assessed the overall satisfaction of the program, and 10 items assessed the perceived helpfulness of the program. Response options were based on a Likert scale in which higher scores indicated higher satisfaction and helpfulness. It was modeled after participation surveys from Ginsburg (2009) and Rose, Miller, and Martinez (2009). Cronbach's alphas for the current study ranged from .72 to .92 for the subscales.

### **Design and Procedure**

Parents were self-referred, and interested parents attended eight weekly sessions led by a clinical psychologist. Sessions were in the form of cognitive-behavioral therapy, emphasizing basic parenting skills, anxiety-related parenting skills, and mindful parenting. Basic parenting

skills included spending special time with children, giving praise and rewards for good behavior, and timeout for undesirable behavior. Anxiety-related parenting skills included avoiding modeling anxious behaviors and overprotection while socializing a child. Exposure to anxious stimuli was also a key feature of the program. Finally, mindful parenting included acting with awareness, decentering, and engaging in mindful breathing exercises. See Appendix A for a more comprehensive overview of the program.

The Parent Resilience Program was modeled after Rapee's Preschool Intervention Project (PIP), Cartwright-Hatton's Parents for Anxious Children-Manchester (PAC), Ginsburg's Child Anxiety Prevention (CAPS), and Duncan, Coatsworth, and Greenberg's Strengthening Families Program (SFP). PIP influenced the exposure model of the program while PAC influenced the emphasis on positive parenting. CAPS inspired the inclusion overprotection and the concept of "parenting slips" and SFP was influential in the development of the attention and awareness component of the program.

Participants completed all measures at the beginning of the program and again upon completion of the prevention program, with the exception of the Program Acceptability Questionnaire, which was only administered at the end of the program. These scales will also be administered at yearly follow-ups.

## Results

### Data Analysis

Paired samples *t*-tests were conducted to compare mean pretest-posttest scores for all measures and subscales. In cases where only a small number of responses were missing for a measure, missing data were replaced with series means. Therefore, there was no adjustment made for degrees of freedom. PAS scores were omitted for one participant and DASS scores were omitted for another participant because the scales were not completed. This study had zero percent participant attrition.

### Child Functioning

Means and standard deviation for all child functioning variables can be found in Table 1.

Mean scores on the Behavioral Inhibition Questionnaire, a measure of shy, inhibited temperament in the child, were compared at pre and post-intervention. Although there was a trend towards reduction in mean scores from pre to post-intervention, this change was not statistically significant,  $t(11) = 1.81, p = .10$ .

Life interference due to shyness and anxiety was measured using the Child Anxiety Life Interference Scale was also compared at pre to post intervention. Parents reported a significant reduction of child interference from pre to post-intervention,  $t(11) = 2.91, p = .01$ . Although Family interference decreased, the reduction was not statistically significant,  $t(11) = .55, p = .60$ . Further, total anxiety interference scores did not significantly change from pre- to post-intervention,  $t(11) = 1.85, p = .09$ .

Although a trend towards lower scores on the PAS was found for each subscale, changes were not statistically significant from pre to post-intervention. General anxiety was not significantly reduced,  $t(10) = 1.50, p = .16$ . Social anxiety also was not significantly reduced,  $t(10) = 1.29, p = .23$ . There was no significant difference,  $t(10) = .88, p = .40$  between pre- and post-intervention OCD. Physical injury fears showed a slight decrease post-intervention, however was also not significant,  $t(10) = 1.22, p = .25$ . Separation anxiety decreased; however, the change was not quite statistically significant,  $t(10) = 2.11, p = .06$ . No significant difference was found between mean total scores at pre-intervention and post-intervention,  $t(10) = 1.73, p = .11$ .

### **Parent Functioning**

Means and standard deviations for all parent functioning variables can be found in Table 2. On the Depression Anxiety Stress Scales, parent anxiety was reduced significantly,  $t(10) = 3.07, p = .01$ . Parent stress decreased significantly as well,  $t(10) = 2.47, p = .03$ . The Depression Anxiety Stress Scales also measured depression in the parents which was not significantly affected by the program,  $t(10) = 1.30, p = .22$ .

On the Parental Stress Index, a lower number indicated higher stress. Parental Distress decreased after the program, however it was not a significant decrease,  $t(11) = .84, p = .42$ . A reduction was also seen in Parent-Child Dysfunctional Interaction, although it was not significant,  $t(11) = .89, p = .39$ . No significant change was found for the Difficult Child subscale,  $t(11) = 1.81, p = .10$ . The total score on the PSI increased at post-intervention (indicating a reduction), but the change was not significant,  $t(11) = 1.41, p = .19$ . There was no change in mindfulness when measured by the Mindful Attention and Awareness Scale,  $t(11) = .22, p = .83$ .

### **Program Acceptability**

The program received positive reviews from all participants, who gave a mean score of 4.72 ( $SD = .38$ ) out of 5 for enjoyment of the program (Section 1) and a mean score of 4.77 ( $SD = .24$ ) out of 5 for helpfulness of the program (Section 2). Ninety-seven percent of all responses on the program acceptability questionnaire were 4 or 5 out of 5, with the remaining responses being 3 out of 5. Means and standard deviations for all items on the Program Acceptability Questionnaire can be found in Table 3.



## Discussion

The purpose of this study was to provide an initial examination of the effectiveness of the Parent Resilience Program. This study has the potential to provide two particularly noteworthy contributions to the literature on anxiety prevention. First, the study took place in the United States, where research in this particular field is almost non-existent. Second, pre-school aged children, who are an underrepresented group in the literature, were the main focus of this study. This study also included a variable not previously examined in anxiety prevention research, mindfulness related to stress management. Overall, the initial results are promising, and preliminary findings provide support for the acceptability and effectiveness of this program.

Behaviorally inhibited temperament/shyness has been well established as a risk factor in the development of child anxiety (Rapee et al., 2009). As a result, behavioral inhibition has been used to recruit for targeted anxiety prevention programs, and a goal of prevention programs is to reduce shyness. Although a trend towards reductions in behavioral inhibition was found in this study, the change was not significant. Lack of significance may be due to a small sample size, leading to limited statistical power. However, it is important to note that the *p*-value for the BIQ scores approached significance. Further, mixed results have been observed in previous preschool anxiety prevention in relation to the reduction in behavioral inhibition (Kennedy et al., 2009; Rapee et al. 2005; Rapee et al., 2010). In particular, Rapee et al. (2005) found no significant reduction in behavioral inhibition at 12-month follow-up using different measures, however Kennedy et al. (2009) did see a reduction in inhibition at six-month follow-up using the BIQ as

well as observational variables, indicating that the effect may be not be observed immediately. Future studies with larger samples may yield significant reductions in behavioral inhibition, and it is possible that effects were delayed and a significant reduction will be seen at follow-up. It is also noteworthy that behavioral inhibition has been found to be relatively stable trait, and therefore, behavioral inhibition may be somewhat resistant to change, and reductions may not be apparent until well after the completion of the intervention (Fox, Henderson, Rubin, Calkins, and Schmidt, 2001). In a follow-up study, Rapee et al. (2010) reported a main effect over time for the reduction of behavioral inhibition at three-year follow-up, but there was no main effect for group and no interaction between group and time, again suggesting it may be difficult to modify temperament.

There were no significant reductions in child anxiety on the total score or any of the subscales. As with inhibited temperament, the reductions were not significant; however, there was a trend towards reduction. Again, non-significant changes may be related to small sample size and low statistical power. It is noteworthy that children were considered “at risk” for anxiety. According to how the scale’s scores are to be interpreted, and relative to normative data (Spence et al., 2001), the physical injury fears, separation anxiety, and OCD subscales were reduced from elevated scores to scores within the normal range at post-intervention. However, this study focused more on the prevention of increased anxiety symptoms over time rather than reducing current anxiety symptoms. In a universal trial of the FRIENDS program for preschool-aged children, Pahl and Barrett (2010) did not observe a significant reduction in the total PAS score at post-intervention. However, the reductions did reach significance at 12-month follow-up. Therefore, results at one-year follow-up may show a clearer pattern.

Although anxiety levels in children were not reduced significantly, the degree to which anxiety and shyness had a negative impact on the child's life was reduced, which may indicate an improved quality of life for children during the course of the program. Anxiety interference in the child's life was significantly reduced, which was a primary goal of the program. This finding is a unique contribution of the study because it demonstrates that even if a child's temperament cannot be changed, the degree to which his or her temperamental characteristics get in the way of the child's functioning can be changed.

Interference from the child's anxiety in the parent's life was not affected significantly, though there was a trend toward reduction. However, the pre-intervention score for family interference was much lower than the child interference score, indicating that parents' quality of life was not substantially affected by their child's anxiety. Consequently, there may have been floor effects for this measure. Total anxiety interference also did not appear to be affected, but this included family interference, which remained unchanged. In relation to previous research, Kennedy et al. (2009) reported a significant decrease in total anxiety interference using the same scale, which differed from the findings in this study. However, the 2009 study did not report individual scales for child and family interference.

Based on the DASS, significant reductions were found on the parent anxiety and stress scales of the DASS, both of which assess anxiety and related symptoms. As discussed earlier, history of parental anxiety is a risk factor for the child developing an anxiety disorder (Kennedy et al., 2009). Therefore, reducing parent anxiety reduces the risk for the child. Additionally, decreasing parent anxiety may lead to reduced modeling of anxious behaviors as well as less overprotection. The results in this study differ from the findings of Fukushima-Flores and Miller (2011) with the FRIENDS program. This difference is likely due to the FRIENDS program being

designed for adolescent participation with little focus on parent involvement, while the Parent Resilience Program was designed for parents, with emphasis on parenting skills and reducing parent anxiety. In a similar study to the current one, Kennedy et al. (2009) found no change in parent anxiety on the DASS using a program designed for parents of preschool aged children. This difference may be due to the Parent Resilience Program emphasizing parent stress reduction and acceptance, whereas the FRIENDS program did not. The observed reduction in parent anxiety and its status as a risk factor in the development of anxiety disorders provides evidence that the Parent Resilience Program can help prevent anxiety disorders.

Parent depression did not change significantly. However the Parent Resilience Program addresses anxiety more directly than depression. Decreases in depression, a disorder often comorbid with anxiety, would have been interpreted as a secondary effect of the program's reduction of anxiety and stress. These results may provide support for the distinct effects of the program.

While parent stress, a form of anxiety, did not decrease significantly for the PSI and the subscales, the post-intervention scores for each of these measures indicated a trend in the expected direction. The PSI measures parent stress in regards to parenting and having a difficult child, while the DASS measures general stress and is more focused on parent adjustment, which may be a reason for the difference in findings.

No significant differences were found from pre to post-intervention on the Mindful Attention and Awareness Scale, a measure of parent mindfulness. It is possible that the mindfulness-based interventions do not produce significant changes in parent mindfulness. As a result, changes in mindfulness may have not been the mediating mechanism of change that led to decreases in parent anxiety. However, based on work by Baer and colleagues, the MAAS only

measures one facet of mindfulness: acting with awareness (Baer et al., 2008). For example, it is possible that change may be observed in the future using the Five Facet Mindfulness Questionnaire (FFMQ), which measures mindfulness using the following subscales: observing, describing, acting with awareness, nonjudging of inner experience, and nonreactivity to inner experience (Baer et al., 2008). It is possible that the Parent Resilience Program affects nonjudging of inner experiencing or nonreactivity to inner experience. This is the first study of its kind to examine mindfulness as a variable, so it is unclear at this point whether mindfulness-based modules presented in the current program lead to changes in levels of parent mindfulness.

Finally, the program received high acceptability ratings from participants in both enjoyment and helpfulness. The most helpful aspects of the program seemed to be factual information about anxiety and shyness, information on positive parenting, and session handouts. Daily diaries were rated as the least helpful, with one third of participants rating their helpfulness as 3 out of 5, although they still received a mean score of 4.09 out of 5. Although homework compliance can be a challenge in cognitive-behavioral therapy (Kazantzis, Deane, & Ronan, 2000), participant feedback in follow-up studies is strongly encouraged to determine the reason parents did not view homework as helpful as the other components of the program. If the homework was too complicated, not seen as relevant, or if there were barriers to completing the homework, modifications can be made to improve this component of the program. Kazantzis, Deane, and Ronan (2000) conducted a meta-analysis on homework in cognitive-behavioral therapy, reporting that homework assignments facilitate improvement in treatment and homework compliance is related to treatment outcome. It is unclear whether or not the completion of homework was related to treatment outcome in this study. Parents claimed the program helped their child's coping and they were likely to recommend the program to others.

High satisfaction from parents along with zero percent attrition suggests families felt that they benefited from participation in the program.

### **Limitations and Directions for Future Research**

Given that this was an exploratory study, the sample size was rather small when compared to similar studies in the field. It is likely that a larger sample size would result in more robust effect sizes. Further, screening children may be an effective recruitment strategy and should help confirm elevated levels of shyness before participating in the program, leading to potentially larger reductions in child anxiety and inhibition. Now that initial support has been found for the acceptability and effectiveness of this study, a phase 2 study is planned that includes larger samples.

This study used a quasi-experimental design, meaning there was no control or comparison group. It is likely that having a comparison group in future studies would be useful in minimizing threats to validity. Shadish, Cook, and Campbell (2002) explain that the one-group pretest-posttest design does not provide strong evidence that is necessary to make a causal inference, as there may be other possible explanations for the resulted change such as maturation or history. The use of a comparison group could help to counter the possibility of an extraneous variable or regression toward the mean causing a reduction in anxiety levels. Further, data collection from multiple sites will maximize accessibility, diversity, and community involvement. Again, in the next phase of data collection, the use of comparison groups and multiple sites is planned.

In accordance with Barrett and Turner's (2001) findings, this program has the potential to be led by trained non-clinicians, which will allow a greater number of people access to the program. Teachers can be trained to implement the program in schools, making it more cost-

effective and still effective in preventing anxiety (Barrett & Turner, 2001). It is recommended that follow-up studies be conducted in which the effectiveness of the program for clinicians versus non-clinicians can be examined.

In addition to behavioral inhibition and parent anxiety, it may be feasible to focus on recruitment based on other empirically supported risk factors such as parenting behavior and stressful life events (Fisak et al., 2011). Parenting behaviors, such as modeling and overprotection, may alter the course of anxiety during a child's youth (Rapee et al., 2010). Stressful life events such as the death of a loved one may also contribute to the development of an anxiety disorder.

The use of observational variables and structured interviews in both screening and pre-intervention/post-intervention comparisons could prove useful despite requiring more resources. In particular, the Anxiety Disorders Interview Schedule (ADIS) diagnostic interview would provide the ability to screen for anxiety as well as measure diagnostic status over time. Test-retest reliability for ADIS using DSM-IV criteria has shown it to be a reliable instrument (Silverman, Saavedra, & Armando, 2001). Observing parent-child interactions for behavioral change and measuring shyness based on observational tasks may also provide clearer evidence for the effectiveness of the program.

Long-term follow-up is planned for participants from this study at one year from the post-intervention date. Rapee et al. (2010) conducted one- two- and three-year follow-ups following their 2005 study and found that the effects became slightly larger each year, indicating that intervention at an early age lead to gradually increasing benefits over time. In the current study it is also anticipated that delayed effects of the impact of the program may emerge over time. In conclusion, an early life intervention may be able to alter the trajectory of anxiety in a child's

life, producing long-term effects that result in reduced frequency and severity of anxiety symptoms (Rapee et al., 2010). The Parent Resilience Program is a promising new prevention program that potentially provides a number of unique contributions to the literature and a number of directions for future research.



Table 1.  
*Means and standard deviations for Child Functioning variables.*

	Pretest Mean	Posttest Mean	Pretest Standard Deviation	Posttest Standard Deviation
BIQ - Total Score	137.32	128.08	31.81	30.65
PAS - General Anxiety Subscale	6.73	4.18	5.68	3.63
PAS - Social Anxiety Subscale	11.45	9.36	7.61	6.22
PAS - Physical Injury Subscale	10.09	8.16	5.05	5.28
PAS - Separation Anxiety Subscale	6.75	4.00	3.80	3.29
PAS - OCD Subscale	2.36	1.74	3.23	1.92
PAS - Total Score	37.39	27.45	18.83	15.48
CALIS - Child Interference Subscale	18.11	12.60*	8.56	7.34
CALIS - Family Interference Subscale	9.83	8.80	5.77	8.51
CALIS - Total Score	27.95	21.39	12.05	14.30

\*Means marked with an asterisk indicate significant reductions with  $\alpha = .05$

Table 2.

*Means and standard deviations for Parent Functioning variables.*

	Pretest Mean	Posttest Mean	Pretest Standard Deviation	Posttest Standard Deviation
PSI - Parental Distress Subscale	33.67	35.25	8.32	8.13
PSI - Parent-Child Dysfunctional Interaction Subscale	39.85	41.20	5.79	6.66
PSI - Difficult Child Subscale	25.01	28.14	11.76	8.52
PSI - Total Score	98.52	104.59	23.16	21.10
DASS - Depression Subscale	4.00	2.09	5.08	3.88
DASS - Anxiety Subscale	2.55	1.09*	2.21	1.30
DASS - Stress Subscale	7.45	4.64*	5.18	3.96
MAAS - Total Score	4.51	4.46	1.03	0.77

\*Means marked with an asterisk indicate significant reductions with  $\alpha = .05$

Table 3.  
*Means and Standard Deviations of participant ratings on the Program Acceptability Questionnaire.*

Acceptability Questions	Mean	Standard Deviation
Please indicate to what extent you agree with the following statements.		
I enjoyed participating in this program.	4.75	.45
I think my child enjoyed participating in this program.	4.40	.70
I would recommend this program to others.	4.83	.39
Weekly sessions were conveniently located.	4.75	.45
Weekly sessions were at a convenient time of day.	4.75	.45
Programs like this one are useful in general.	4.75	.45
This program was useful in enhancing my child's coping skills.	4.83	.39
Please indicate how helpful each component of the program was.		
Factual information about shyness & anxiety.	4.92	.29
Information about positive parenting.	4.92	.29
Information about overprotection & independence.	4.75	.45
Information about modeling of fear & anxiety.	4.83	.39
Information about exposure & anxiety.	4.75	.45
Information about coping skills (including awareness breathing & distancing).	4.83	.39
Information about setting limits (including timeout & ignoring).	4.83	.39
Session handouts.	4.92	.29
Out of session practice tasks.	4.83	.39
Daily diaries.	4.09	.94

## **Appendix A**

### **Outline of the Parent Resilience Program**

#### **Session I: Program Introduction**

During the first weekly session of the program, group leaders and group members will introduce themselves and the confidentiality and privacy of participation and data will be discussed. An overview of the psychoeducational program will be presented including the purpose and dates of all future sessions. Topics of discussion will include parenting skills, stress management, shyness, and components as well as causes of anxiety. Parents will be asked to list their child's shy, anxious, and avoidant behaviors.

#### **Session II: Basics of Positive Parenting**

Session II will focus on positive parenting, which includes praise, rewards, play, and special time, or spending time with children. By increasing these positive behaviors, it is expected that negative behaviors such as yelling and criticizing will decrease. Stress management for parents and children will also be discussed.

#### **Session III: Positive Parenting and Awareness and Coping**

The third weekly session will review basics of positive parenting from the previous week with an emphasis on praise and rewards. Session III will also focus on awareness and coping (a mindfulness-based skill). Parents should practice present moment awareness as opposed to "autopilot". There will be an exercise on awareness breathing in order to practice being present in the moment.

**Session IV: Modeling and Awareness and Coping**

Parents will learn about modeling stress and anxiety to their children. They will be taught that even if they feel anxious, they don't necessarily have to model anxious behavior to their child, and they will also learn steps to decrease modeling. Awareness and coping will be revisited, with an emphasis on distancing, or being aware of thoughts and feelings without responding to them. Parents were instructed to practice rewards and special time with their children, as well as practice distancing during every day tasks at least once per day.

**Session V: Overprotection and Independence**

Parents will learn the consequences of overprotecting their children, including limited opportunities for the child to face his or her fears, or leading the child to believe that the world is a dangerous place. Parents will learn to create a fair balance between encouraging independence and protecting their children. A handout will be given out describing common overprotective behaviors and how to modify them.

**Session VI: Exposure**

Session VI will cover exposure to anxious stimuli as a strategy for managing anxiety. This is basically facing your fears, but it should be done so gradually and repetitively, with the use of rewards. Parents are instructed to prepare for and try a first exposure with their child.

**Session VII: Exposure, Ignoring, and Socialization**

Exposure will be reviewed. The group will also discuss socialization as a way to prevent anxiety and manage shyness. Parents will discuss ways to increase social networks and relations. Parents will also be given tips for ignoring anxious behaviors and decreasing excessive reassurance. They should continue to practice awareness and coping from previous sessions.

**Session VIII: Timeout, Consequences, and Planning for the Future**

Parents will talk about consequences and loss of privileges for difficult children, including appropriate consequences for specific behaviors. Timeout will also be discussed and a consequence; when it should be used, good places for timeout, and basic rules of timeout. Parents will also learn about teaching coping skills to their children, and planning for the future by continuing to use the skills taught in this program.

## Appendix B

### Participant Survey Packet

Note: As discussed above. In order to maximize confidentiality of your responses to the below questionnaires will not be stored with any forms that include your name, contact information, or other identifiable information.

#### Section I- Parent Information

Directions: Please complete each of the following questions regarding your background and interest in the study.

#### Study Interest

What led you to be interested in this study (check all that apply)?

1. \_\_\_\_\_ I have a shy or anxious child preschool-aged child.
2. \_\_\_\_\_ I am shy, have a history of anxiety, or have an anxiety disorder.  
If you checked yes for #2 please provide a brief summary (e.g., do you have a history of shyness, anxiety or both) \_\_\_\_\_

#### Background Information

1. Your gender: \_\_\_\_\_ Female \_\_\_\_\_ Male
2. Your age in years: \_\_\_\_\_
3. Your relationships status:  
 \_\_\_\_\_ Single, never married  
 \_\_\_\_\_ Married  
 \_\_\_\_\_ Divorced  
 \_\_\_\_\_ Widowed

## 4. Your race/ethnicity:

- Caucasian/White  
 African-American/Black  
 Asian/Pacific Islander  
 Hispanic (please list nationality/country origin ( \_\_\_\_\_ ))  
 Other (please list/describe) \_\_\_\_\_

## 5. Highest level of education:

- Elementary school  
 Junior high school  
 High school graduate/GED  
 Some college  
 College graduate  
 Graduate or professional degree

## 6. What is your estimated household income?

- < \$20,000  
 \$20,000-\$39,000  
 \$40,000-\$59,000  
 \$60,000-79,000  
 \$80,000-\$99,000  
 > \$100,000

## 7. How many children do you have? \_\_\_\_\_

## 8. Please list their ages \_\_\_\_\_

9. Have you ever been diagnosed with an anxiety disorder or other psychiatric disorder (mental health disorder or mental illness)?  yes  no

## 9a. If yes, what was your diagnosis? \_\_\_\_\_

9b. Are you currently being treated for this disorder? If yes, please describe:  
\_\_\_\_\_9c. Have you been treated for this disorder in the past? If yes please describe:  
\_\_\_\_\_



### Section II- Child Information

Please answer the following regarding your preschool-aged child.

1. Gender:    \_\_\_\_\_ Male    \_\_\_\_\_ Female

2. Age: \_\_\_\_\_

3. Grade: \_\_\_\_\_

4. Race:

\_\_\_\_\_ Caucasian/White

\_\_\_\_\_ African-American/Black

\_\_\_\_\_ Asian/Pacific Islander

\_\_\_\_\_ Hispanic (please list nationality/country of origin) \_\_\_\_\_)

\_\_\_\_\_ Other (please list/describe \_\_\_\_\_)

5. How long have you lived with child? (Please provide your answer in years) \_\_\_\_\_

6. This child is:

\_\_\_\_\_ a biological child

\_\_\_\_\_ a step-child

\_\_\_\_\_ adopted

\_\_\_\_\_ in my custody, but has not been adopted

\_\_\_\_\_ other \_\_\_\_\_

7. Has your child ever been diagnosed with a developmental disability?

\_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, please list: \_\_\_\_\_

8. Has your child ever been diagnosed with a psychiatric disorder (mental illness or mental disorder)?

\_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, please list diagnosis or briefly describe: \_\_\_\_\_

9. Has your child ever been diagnosed with a chronic illness or physical disability?

\_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, please list or briefly describe:

\_\_\_\_\_

### Preschool Anxiety Scale

Below is a list of items that describe children. For each item please circle the response that best describes your child. Please circle the 4 if the item is very often true, 3 if the item is quite often true, 2 if the item is sometimes true, 1 if the item is seldom true or if it is not true at all circle the 0. Please answer all the items as well as you can, even if some do not seem to apply to your child.

	Not True at All	Seldom True	Sometimes True	Quite Often True	Very Often True
1 Has difficulty stopping him/herself from worrying.....	0	1	2	3	4
2 Worries that he/she will do something to look stupid in front of other people.....	0	1	2	3	4
3 Keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap).....	0	1	2	3	4
4 Is tense, restless, or irritable due to worrying.....	0	1	2	3	4
5 Is scared to ask an adult for help (e.g., a preschool or school teacher).....	0	1	2	3	4
6 Is reluctant to go to sleep without you or to sleep away from home.....	0	1	2	3	4
7 Is scared of heights (high places).....	0	1	2	3	4
8 Has trouble sleeping due to worrying.....	0	1	2	3	4
9 Washes his/her hands over and over many times each day.....	0	1	2	3	4
10 Is afraid of crowded or closed-in places.....	0	1	2	3	4
11 Is afraid of meeting or talking to unfamiliar people....	0	1	2	3	4
12 Worries that something bad will happen to his/her parents.....	0	1	2	3	4
13 Is scared of thunder storms.....	0	1	2	3	4
14 Spends a large part of each day worrying about various things.....	0	1	2	3	4
15 Is afraid of talking in front of the class (preschool group) e.g., show and tell.....	0	1	2	3	4
16 Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again.....	0	1	2	3	4
17 Is nervous of going swimming.....	0	1	2	3	4
18 Has to have things in exactly the right order or position to stop bad things from happening.....	0	1	2	3	4
19 Worries that he/she will do something embarrassing in front of other people.....	0	1	2	3	4
20 Is afraid of insects and/or spiders.....	0	1	2	3	4

21	Has bad or silly thoughts or images that keep coming back over and over.....	0	1	2	3	4
22	Becomes distressed about your leaving him/her at preschool/school or with a babysitter.....	0	1	2	3	4
		Not True at All	Seldom True	Sometimes True	Quite Often True	Very Often True
23	Is afraid to go up to group of children and join their activities.....	0	1	2	3	4
24	Is frightened of dogs.....	0	1	2	3	4
25	Has nightmares about being apart from you.....	0	1	2	3	4
26	Is afraid of the dark.....	0	1	2	3	4
27	Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening.....	0	1	2	3	4
28	Asks for reassurance when it doesn't seem necessary.	0	1	2	3	4
29	Has your child ever experienced anything really bad or traumatic (e.g., severe accident, death of a family member/friend, assault, robbery, disaster).....	YES	NO			

If yes, please briefly describe the event that your child experienced.

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If you answered NO to question 29, please do not answer questions 30-34. If you answered YES, please DO answer the following questions.

Do the following statements describe your child's behavior since the event?

30	Has bad dreams or nightmares about the event.....	0	1	2	3	4
31	Remembers the event and becomes distressed.....	0	1	2	3	4
32	Becomes distressed when reminded of the event.....	0	1	2	3	4
33	Suddenly behaves as if he/she is reliving the bad experience.....	0	1	2	3	4
34	Shows bodily signs of fear (e.g., sweating, shaking or racing heart) when reminded of the event.....	0	1	2	3	4

### Behavioral Inhibition Questionnaire

The following statements describe children's behaviour in different situations. Each statement asks you to judge whether that behaviour occurs for your child "hardly ever", "infrequently", "once in a while", "sometimes", "often", "very often", or "almost always". Please circle the number "1" if the behaviour "hardly ever" occurs, the number "2" if it occurs "infrequently", etc. Try to make this judgment to the best of your ability, based on how you think your child compares with other children about the same age.

	Hardly ever	Infrequently	Once in a while	Sometimes	Often	Very often	Almost always
1 Approaches new situations or activities very hesitantly.....	1	2	3	4	5	6	7
2 Will happily approach a group of unfamiliar children to join in their play.....	1	2	3	4	5	6	7
3 Is very quiet around new (adult) guests to our home.....	1	2	3	4	5	6	7
4 Is cautious in activities that involve physical challenge (e.g., climbing, jumping from heights).....	1	2	3	4	5	6	7
5 Settles in quickly when we visit the homes of people we don't know well.....	1	2	3	4	5	6	7
6 Enjoys being the center of attention.	1	2	3	4	5	6	7
7 Is comfortable asking other children to play.....	1	2	3	4	5	6	7
8 Is shy when first meeting new children.....	1	2	3	4	5	6	7
9 Happily separates from parent(s) when left in new situations for the first time (e.g., kindergarten, preschool, childcare).....	1	2	3	4	5	6	7
10 Is happy to perform in front of others (e.g., singing, dancing).....	1	2	3	4	5	6	7
11 Quickly adjusts to new situations (e.g., kindergarten, preschool, childcare).....	1	2	3	4	5	6	7
12 Is reluctant to approach a group of unfamiliar children to ask to join in.	1	2	3	4	5	6	7
13 Is confident in activities that involve physical challenge (e.g., climbing, jumping from heights)....	1	2	3	4	5	6	7
14 Is independent.....	1	2	3	4	5	6	7
15 Seems comfortable in new situations.....	1	2	3	4	5	6	7
16 Is very talkative to adult strangers...	1	2	3	4	5	6	7

	Hardly ever	Infrequently	Once in a while	Sometimes	Often	Very often	Almost always
17 Is hesitant to explore new play equipment.....	1	2	3	4	5	6	7
18 Gets upset at being left in new situations for the first time (e.g., kindergarten, preschool, childcare)..	1	2	3	4	5	6	7
19 Is very friendly with children he or she has just met.....	1	2	3	4	5	6	7
20 Tends to watch other children, rather than join in their games.....	1	2	3	4	5	6	7
21 Dislikes being the center of attention.....	1	2	3	4	5	6	7
22 Is clingy when we visit the homes of people we don't know well.....	1	2	3	4	5	6	7
23 Happily approaches new situations or activities.....	1	2	3	4	5	6	7
24 Is outgoing.....	1	2	3	4	5	6	7
25 Seems nervous or uncomfortable in new situations.....	1	2	3	4	5	6	7
26 Happily chats to new (adult) visitors to our home.....	1	2	3	4	5	6	7
27 Takes many days to adjust to new situations (e.g., kindergarten, preschool, childcare).....	1	2	3	4	5	6	7
28 Is reluctant to perform in front of others (e.g., singing, dancing).....	1	2	3	4	5	6	7
29 Happily explores new play equipment.....	1	2	3	4	5	6	7
30 Is very quiet with adult strangers....	1	2	3	4	5	6	7

**Child Anxiety Life Interference Scale- Preschool Version**

1	How old was your child when anxiety/excessive shyness first started to be a problem (i.e interfering with her/his ability to interact with people outside the family or participate in age-appropriate activities such as preschool)?	(years, months)				
		Not at all	Only a little	Some	Quite a lot	A great deal
2	Does being anxious or very shy upset or distress your child?.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	How much does being anxious or very shy interfere with your child's everyday life in the following areas?..					
a	Getting on with parents.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b	Getting on with siblings.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c	Interacting (e.g. playing/talking) with other children at preschool/daycare .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d	Interacting (e.g. playing/talking) with familiar adults (e.g. relatives, parent's friends).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e	Interacting (e.g. playing/talking) with unfamiliar adults....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f	Ability to participate in activities at preschool/daycare.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g	Ability to participate in activities outside preschool/daycare (e.g. swimming lessons).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h	Ability to participate in enjoyable activities like going to parties, concerts.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i	Ability to perform daily activities independently (e.g. sleeping, playing).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j	Ability to separate from parents to attend preschool/daycare, stay with babysitters .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	How much does your child's anxiety or excessive shyness interfere with <u>your</u> everyday life in the following areas?.....					
a	Your relationship with your partner.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b	Your relationship with extended family.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c	Time spent fostering personal friendships.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	<b>Not at all</b>	<b>Only a little</b>	<b>Some</b>	<b>Quite a lot</b>	<b>A great deal</b>
d Your career (choice to work, how many hours you do, or how often you miss work) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e The level of harmony in the family home.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f Your ability to go out to activities/events without your child.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g Your ability to go out to activities/events with your child..	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h Your level of stress.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i Your free time.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Parent Stress Index

This questionnaire contains 36 statements. Read each statement carefully. For each statement, please focus on the child participating in this study, and circle the response that best represents your opinion. While you may not find a response that exactly states your feelings, please circle the response that comes closest to describing how you feel. **YOUR FIRST REACTION TO EACH QUESTION SHOULD BE YOUR ANSWER.** Circle only one response for each statement, and respond to all statements.

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1 I often have the feeling that I cannot handle things very well.....	SA	A	NS	D	SD
2 I find myself giving up more of my life to meet my children's needs than I ever expected.....	SA	A	NS	D	SD
3 I feel trapped by my responsibilities as a parent.....	SA	A	NS	D	SD
4 Since having this child, I have been unable to do new and different things.....	SA	A	NS	D	SD
5 Since having a child, I feel that I am almost never able to do things that I like to do.....	SA	A	NS	D	SD
6 I am unhappy with the last purchase of clothing I made for myself.....	SA	A	NS	D	SD
7 There are quite a few things that bother me about my life.....	SA	A	NS	D	SD
8 Having a child has caused more problems than I expected in my relationship with my spouse (or male/female friend).....	SA	A	NS	D	SD
9 I feel alone and without friends.....	SA	A	NS	D	SD
10 When I go to a party, I usually expect not to enjoy myself.....	SA	A	NS	D	SD
11 I am not as interested in people as I used to be.....	SA	A	NS	D	SD
12 I don't enjoy things as I used to.....	SA	A	NS	D	SD
13 My child rarely does things for me that make me feel good.....	SA	A	NS	D	SD
14 Sometimes I feel my child doesn't like me and doesn't want to be close to me.....	SA	A	NS	D	SD
15 My child smiles at me much less than I expected.....	SA	A	NS	D	SD
16 When I do things for my child, I get the feeling that my efforts are not appreciated very much.....	SA	A	NS	D	SD
17 When playing, my child doesn't often giggle or laugh.....	SA	A	NS	D	SD
18 My child doesn't seem to learn as quickly as most children.....	SA	A	NS	D	SD
19 My child doesn't seem to smile as much as most children.....	SA	A	NS	D	SD
20 My child is not able to do as much as I expected.....	SA	A	NS	D	SD
21 It takes a long time and it is very hard for my child to get used to new things.....	SA	A	NS	D	SD



	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
For the next statement, choose your response from the choices "1" to "5" below.					
22 I feel that I am:	1	2	3	4	5
1. not very good at being a parent					
2. a person who has some trouble being a parent					
3. an average parent					
4. a better than average parent					
5. a very good parent					
23 I expected to have closer and warmer feelings for my child than I do and this bothers me.....	SA	A	NS	D	SD
24 Sometimes my child does things that bother me just to be mean.....	SA	A	NS	D	SD
25 My child seems to cry or fuss more often than most children.....	SA	A	NS	D	SD
26 My child generally wakes up in a bad mood.....	SA	A	NS	D	SD
27 I feel that my child is very moody and easily upset....	SA	A	NS	D	SD
28 My child does a few things which bother me a great deal.....	SA	A	NS	D	SD
29 My child reacts very strongly when something happens that my child doesn't like.....	SA	A	NS	D	SD
30 My child gets upset easily over the smaller thing.....	SA	A	NS	D	SD
31 My child's sleeping or eating schedule was much harder to establish than I expected.....	SA	A	NS	D	SD
For the next statement, choose your response from the choices "1" to "5" below.					
32 I have found that getting my child to do something or stop doing something is:	1	2	3	4	5
1. much harder than I expected					
2. somewhat harder than I expected					
3. about as hard as I expected					
4. somewhat easier than I expected					
5. much easier than I expected					
For the next statement, choose your response from the choices "10+" to "1-3."					
33 Think carefully and count the number of things which your child does that bother you. For example: dawdles, refuses to listen, overactive, cries, interrupts, fights, whines, etc.	10+	8-9	6-7	4-5	1-3
34 There are some things my child does that really bother me a lot.....	SA	A	NS	D	SD
35 My child turned out to be more of a problem than I had expected.....	SA	A	NS	D	SD
36 My child makes more demands on me than most children.....	SA	A	NS	D	SD

### Depression Anxiety Stress Scales

Directions: Please read each statement and circle a number that indicates how much the statement applied to you over the past week. Remember, there are no right or wrong answers.

0	Did not apply to me at all
1	Applied to me to some degree, or some of the time
2	Applied to me a considerable degree, or good part of the time
3	Applied to me very much or most of the time.

- |   |   |   |   |   |
|---|---|---|---|---|
| 1. I found it hard to wind down   | 0 | 1 | 2 | 3 |
| 2. I was aware of dryness of my mouth   | 0 | 1 | 2 | 3 |
| 3. I couldn't seem to experience any positive feeling at all  | 0 | 1 | 2 | 3 |
| 4. I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion) | 0 | 1 | 2 | 3 |
| 5. I found it difficult to work up the initiative to do things  | 0 | 1 | 2 | 3 |
| 6. I tended to over-react to situations   | 0 | 1 | 2 | 3 |
| 7. I experienced trembling (e.g., in the hands)   | 0 | 1 | 2 | 3 |
| 8. I felt that I was using a lot of nervous energy  | 0 | 1 | 2 | 3 |
| 9. I was worried about situations in which I might panic and make a fool of myself  | 0 | 1 | 2 | 3 |
| 10. I felt that I had nothing to look forward to  | 0 | 1 | 2 | 3 |
| 11. I found myself getting agitated   | 0 | 1 | 2 | 3 |
| 12. I found it difficult to relax   | 0 | 1 | 2 | 3 |
| 13. I felt down-hearted and blue  | 0 | 1 | 2 | 3 |
| 14. I was intolerant of anything that kept me from getting on with what I was doing   | 0 | 1 | 2 | 3 |
| 15. I felt I was close to panic   | 0 | 1 | 2 | 3 |
| 16. I was unable to become enthusiastic about anything  | 0 | 1 | 2 | 3 |
| 17. I felt I wasn't worth much as a person  | 0 | 1 | 2 | 3 |

18. I felt that I was rather touchy

0 1 2 3

0	Did not apply to me at all
1	Applied to me to some degree, or some of the time
2	Applied to me a considerable degree, or good part of the time
3	Applied to me very much or most of the time.

19. I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)

0 1 2 3

20. I felt scared without any good reason

0 1 2 3

21. I felt that life was meaningless

0 1 2 3

### Mindful Attention and Awareness Scale

Please indicate the degree to which you agree with each of the following items using the scale below. Simply circle your response to each item.

	1	2	3	4	5	6			
	almost always	very frequently	somewhat frequently	somewhat infrequently	very infrequently	almost never			
1. I could be experiencing some emotion and not be conscious of it until some time later.				1	2	3	4	5	6
2. I break or spill things because of carelessness, not paying attention, or thinking of something else.				1	2	3	4	5	6
3. I find it difficult to stay focused on what's happening in the present.				1	2	3	4	5	6
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.				1	2	3	4	5	6
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.				1	2	3	4	5	6
6. I forget a person's name almost as soon as I've been told it for the first time.				1	2	3	4	5	6
7. It seems I am "running on automatic" without much awareness of what I'm doing.				1	2	3	4	5	6
8. I rush through activities without being really attentive to them.				1	2	3	4	5	6
9. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.				1	2	3	4	5	6
10. I do jobs or tasks automatically, without being aware of what I'm doing.				1	2	3	4	5	6
11. I find myself listening to someone with one ear, doing something else at the same time.				1	2	3	4	5	6
12. I drive places on "automatic pilot" and then wonder why I went there.				1	2	3	4	5	6
13. I find myself preoccupied with the future or the past.				1	2	3	4	5	6
14. I find myself doing things without paying attention.				1	2	3	4	5	6
15. I snack without being aware that I'm eating.				1	2	3	4	5	6

**Program Acceptability Questionnaire**  
(Only to be completed after participation in the program)

**Section I. Please indicate to what extent you agree with the following statements.**

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I enjoyed participating in this program...	5	4	3	2	1
2	I think my child enjoyed participating in this program.....	5	4	3	2	1
3	I would recommend this program to others.....	5	4	3	2	1
4	Weekly sessions were conveniently located.....	5	4	3	2	1
5	Weekly sessions were at a convenient time of day.....	5	4	3	2	1
6	Programs like this one are useful in general.....	5	4	3	2	1
7	This program was useful in enhancing my child's coping skills.	5	4	3	2	1

**Section II. Please indicate how helpful each component of the program was.**

		Very Helpful	Somewhat Helpful	Neutral	Somewhat Unhelpful	Very Unhelpful
8	Factual information about shyness & anxiety.	5	4	3	2	1
9	Information about positive parenting.	5	4	3	2	1
10	Information about overprotection & independence.	5	4	3	2	1
11	Information about modeling of fear & anxiety.	5	4	3	2	1
12	Information about exposure & anxiety.	5	4	3	2	1
13	Information about coping skills (including awareness breathing & decetering).	5	4	3	2	1
14	Information about setting limits (including timeout & ignoring)	5	4	3	2	1
15	Session handouts.	5	4	3	2	1
16	Out of session practice tasks.	5	4	3	2	1
17	Daily diaries.	5	4	3	2	1

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### **Vita**

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