

The Unique Impact of Parent Training for Separation Anxiety Disorder in Children

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This investigation examined the preliminary efficacy of an integrated cognitive-behavioral parent-training protocol for six families of separation-anxious children (7 to 10 years of age) using a **multiple baseline design across participants**. Although families were assessed on child, parent, and clinician ratings at pre- and posttreatment as well as 6-month follow-up, only parents received education and training. Although the parent-training protocol was largely effective and treatment gains were maintained at 6-month follow-up, only those child participants whose parents experienced clinically significant improvement on parental process measures (i.e., enhanced efficacy or satisfaction, reduced stress) achieved high end-state functioning. Implications regarding the importance of individualized family-based interventions for treating anxious youth are discussed.

A NUMBER OF STUDIES with anxious youth have characterized their family environments as higher in control and conflict and lower in warmth and support than families of children who do not experience internalizing behavior problems (Chorpita, Brown, & Barlow, 1998; Cobham, Dadds, & Spence, 1998; Dumas, LaFreniere, & Serketich, 1995; Siqueland, Kendall, & Steinberg, 1996; Stark, Humphrey, Crook & Lewis, 1990). Given the importance of family factors in the development of anxiety in children and the modest findings associated with

child-focused CBT trials for this population (57.5% diagnosis free at posttreatment compared to 34.8% of wait-list controls; see Cartwright-Hatton, Roberts, Chitsabesan, Fothergill, & Harrington, 2004), it's not surprising that family-based treatments are emerging.

The benefits of parent training (PT) include enhanced knowledge and understanding of child development (Budd & Itzkowitz, 1990; Galambos, Barker, & Almeida, 2003), identifying and managing child behavior problems (Barkley, 2005), as well as improving parent-child communication (Foote, Eyberg, & Schuhmann, 1998). Regarding anxious youth, the majority of family-based studies have compared a child-focused CBT to a similar treatment with the addition of parent sessions. Some studies report a greater percentage of diagnosis-free participants with the addition of a parenting component (57% versus 84%, Barrett, Dadds, & Rapee, 1996; Barrett, Rapee, Dadds, & Ryan, 1996; 52.6% versus 78.9%, Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006). Other studies, however, reported no additional benefits of PT over and above child-based CBT (Barrett, 1998; Nauta, Scholing, Emmelkamp, & Minderaa, 2003; Spence, Donovan, & Brechman-Toussaint, 2000). In addition, it is difficult to draw firm conclusions because the studies examined a broad range of anxiety disorders and differed widely regarding the content and format of treatment sessions as well as the outcome measures employed. Most importantly, the process of behavior change was not evaluated.

Recently, Choate, Pincus, Eyberg, and Barlow (2005) demonstrated that targeting both child-directed and parent-directed interactions was an effective way of treating three children with principal diagnoses of *DSM-IV-TR* (American Psychiatric Association, 2000) separation anxiety disorder (SAD). Family-based treatment appears to have remarkable

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relevance for youth with SAD (see Eisen, Brien, Bowers, & Strudler, 2001; Eisen, Engler, & Geyer, 1998; Eisen & Schaefer, 2005, for reviews). The family environments of separation-anxious youth are often associated with insecure-ambivalent parent-child attachments (Main, Kaplan, & Cassidy, 1985; Ollendick, 1998) and high levels of parental overprotection (Hudson & Rapee, 2001; Rapee, 2002). SAD is the most prevalent anxiety disorder of childhood, ranging from 3% to 13% in community samples (Anderson, Williams, McGee, & Silva, 1987; Cohen, Cohen, & Brook, 1993), yet research efforts continue to lag behind.

To date, the individual contribution of a PT intervention for a specific anxiety disorder of childhood has not been examined. The present study investigated the preliminary efficacy of an integrated cognitive-behavioral PT protocol designed specifically for parents of separation-anxious youth (Raleigh, Brien, & Eisen, 2002; see Eisen & Schaefer, 2005). Both child and parent participants were assessed at pretreatment. However, only parent participants received education and training. We hypothesized that PT would lead to important process changes (i.e., enhanced parental self-efficacy, satisfaction, and reduced stress). These changes, in turn, would lead to more effective parenting, and ultimately, reduced childhood anxiety. Thus, child participants would only satisfy positive end-state functioning criteria when their parents achieved treatment responder status (outlined in the method section).

Method

PARTICIPANTS

Participants were six families, with children aged 7 to 10 years (mean age = 8 years, 7 months) who received principal diagnoses of *DSM-IV-TR* SAD with at least moderate impairment (received a 4 or more on a 0-to-8 clinician rating scale) using the Anxiety Disorders Interview Schedule for *DSM-IV-Child* and Parent versions (ADIS for *DSM-IV: C/P*; Silverman & Albano, 1996) (described below). Composite diagnoses were assigned based on ADIS for *DSM-IV: C/P* data, taking into account severity of disorder and the extent to which the disorder led to interference in functioning. Participants were referred to the Child Anxiety Disorders Clinic (CADC), Center for Psychological Services, at Fairleigh Dickinson University (FDU) from multiple community agencies throughout the Bergen County, New Jersey area. Exclusionary criteria included receiving a SAD diagnosis secondary to other disorders or undergoing current pharmacological/other psychotherapeutic treatment for presenting problems. Further descriptive information on each participant is presented below and in Table 1.

Child participant 1 (P1) was an 8-year-old Caucasian female in the third grade. Her primary complaints included high levels of fear and discomfort around separation from her parents, stomachaches, and bedtime fears. She also presented with several mildly impairing comorbid disorders including generalized anxiety disorder (GAD) and specific phobia—animal type (spiders).

Child participant 2 (P2) was a 7-year-old Caucasian female in the second grade. Her primary complaints included intense fear and discomfort around separation from her parents, multiple worries regarding personal harm, and being alone, stomachaches and nighttime fears. She also presented with several severely impairing comorbid disorders including GAD, social anxiety disorder, and specific phobia-blood-injection-injury type (medical procedures).

Child participant 3 (P3) was a 7-year-old Caucasian male in the second grade. His primary complaints included intense fear of being separated from his parents, multiple worries regarding personal harm, and strong fears of being abandoned. Based on maternal reports, he also presented with moderately impairing comorbid disorders including social anxiety disorder and dysthymic disorder. In addition, psychological testing administered by the school disclosed a mild learning disorder.

Child participant 4 (P4) was a 9-year-old Hispanic male (fluent in English, as well as his parents) in the fourth grade. His primary complaints included intense fear and discomfort around separation from his parents, stemming from multiple worries regarding being alone and abandoned. He also presented with mildly impairing comorbid disorders including GAD and specific phobia—animal type (dogs).

Child participant 5 (P5) was a 9-year-old Caucasian female in the third grade. Her primary complaints included intense fear and discomfort around

Table 1
Demographic and treatment characteristics for each participant

Child	Gender	Age	Diagnosis	Parent participant (s)
1	F	8.5	SAD, GAD, SP	Mother
2	F	7.5	SAD, GAD, SOCANX, SP	Mother & Father
3	M	7.5	SAD, GAD, SOCANX, DYS	Mother
4	M	9.5	SAD, GAD, SP	Mother & Father
5	F	9.0	SAD, GAD, SP	Mother
6	M	9.5	SAD, GAD, ADHD	Mother & Father

Note. SAD=Separation Anxiety Disorder; GAD=Generalized Anxiety Disorder; SP=Specific Phobia; SOCANX=Social Anxiety Disorder; DYS=Dysthymia; ADHD=Attention-Deficit Hyperactivity Disorder—Predominantly Inattentive Subtype.

separation from her mother, especially at bedtime and during her mother's business trips. She also presented with moderately impairing comorbid disorders including GAD and specific phobia-natural environment type (heights).

Child participant 6 (P6) was a 9-year-old Caucasian male in the fourth grade. His primary complaints included intense fear and discomfort around separation from his parents, stemming from nighttime fears and being abandoned. He also presented with moderately impairing comorbid disorders including specific phobia-blood-injection-injury type (medical procedures) and attention-deficit/hyperactivity disorder, predominantly inattentive type (previously diagnosed as part of a comprehensive psychiatric evaluation).

MEASURES

Principal and comorbid diagnoses were based on a composite from separate child (ADIS for DSM-IV-C) and parent (ADIS for DSM-IV-P) semistructured interviews (see Silverman & Albano, 1996, for deriving composite diagnoses). The ADIS for DSM-IV: C/P has been shown to possess excellent reliability for deriving composite diagnoses of SAD ($\kappa = .84$) and related symptom scales ($ICC = .85$ and $.86$ for child and parent interviews, respectively) in children 7 to 11 years age (Silverman, Saavedra, & Pina, 2001). Interrater reliability for SAD for the current study was excellent ($\kappa = .88$). Clinician ratings (0 to 8 scale; 0 = *none*, 8 = *very severely disturbing*) from the ADIS for DSM-IV: C/P were used to determine the severity of the composite diagnoses. ADIS for DSM-IV: C/P clinician ratings have been found to be reliable as well as sensitive to treatment outcome for anxious youth (see Saavedra & Silverman, 2002).

In addition to interviews, children were administered the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985), a widely used child self-report measure of general anxiety. The RCMAS contains 37 items (e.g., *I worry a lot of the time*) rated on a yes-no basis. The scale yields an overall rating, a lie scale, and distinguishes three factors including physiological anxiety, worry/oversensitivity, and fear/concentration. The RCMAS possesses established test-retest reliability, internal consistency (Reynolds & Paget, 1983), and construct validity (Mattison, Bagnatto, & Brubaker, 1988). For purposes of the present study, the overall RCMAS-total, RCMAS-Phy, and RCMAS-W/O subscales were used as treatment outcome measures to determine end-state functioning status (to be discussed).

Although child participants were largely responsible for *reporting* the frequency of separation-

anxious events per day, this process was made a family endeavor to enhance accuracy and reliability (Beidel, Neal, & Lederer, 1991). Parents, however, were fully responsible for *recording* these events via daily diaries (DD; Eisen & Silverman, 1998; see Eisen & Schaefer, 2005).

For instance, each DD included columns for parent participants to record their children's descriptions of separation-anxious "incidents" and accompanying "fear" ratings on a 0-to-4 scale (0 = *none*; 4 = *very much*). Parent participants utilized a Fear Thermometer (Silverman, 1989) to help facilitate accurate recording. In addition, the DD also included a column for "parent interference" ratings for each child-reported separation-anxious incident. These ratings using a similar 0-to-4 scale, took into account the degree of disruptions to family, peer, and/or school-related functioning. Finally, the last column of the DD allowed parent participants to record their "reactions" (positive or negative) to their child's separation-anxious incidents (see Fig. 1).

For purposes of the present study, the DD provided baseline data, information that guided ongoing assessment and treatment, as well as a means for monitoring extra-therapeutic progress. Reductions in child-reported separation-anxious events and parent interference ratings were used to determine end-state functioning (to be discussed).

Parent participants were administered self-report measures including the Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989), Parenting Stress Index (PSI; Abidin, 1995), and the Fear Questionnaire (FQ; Marks & Mathews, 1979). The PSOC is a 16-item self-report measure that evaluates perceptions of parenting skill rated on 6-point scale: 1 = *strongly agree*; 6 = *strongly disagree*. Representative items such as *Being a parent is manageable and any problems can be solved*, contribute to the Efficacy subscale, and *Even though being a parent would be rewarding, I am frustrated now while my child is at his/her present age*, contribute to the Satisfaction subscale. The PSOC possesses solid psychometric properties (Johnston & Mash, 1989). For purposes of the present study, the PSOC Total score, Satisfaction and Efficacy subscales were used as parenting process outcome measures to determine treatment responder status (to be discussed).

The PSI is a 120-item self-report measure that assesses the amount of stress stemming from various sources in the parent-child system. The PSI consists of child and parent characteristics domains as well as subdomains including social isolation, relationship to spouse, child mood, and child adaptability. The PSI possesses excellent test-retest reliability,

NAME: _____

DATE: _____

<u>INCIDENT</u> (child's report)	<u>FEAR (0-4)</u> (child's rating)	<u>INTERFERENCE (0-4)</u>	<u>REACTION</u>
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SCALE: 0 - 4 (0: None; 1: A little bit; 2: Some; 3: A lot; 4: Very much)

FIGURE 1 Daily diary of separation-anxious events.

internal consistency, and construct validity (Abidin, 1995). For purposes of the present study, the PSI total score was used as a parenting process treatment outcome measure. The Phobic Avoidance and Anxiety-Depression subscales of the FQ were used to monitor parental levels of anxiety and depression before and after treatment.

Parent participants also completed weekly Parent Ratings of Severity (PROS; Eisen & Silverman, 1998), a measure that required parents to rate the degree of impairment of their child's overall anxiety (0 to 8 scale; 0=*none*, 8=*very severely disturbing*). The PROS afforded an examination of each child's anxiety from both clinician (ADIS for DSM-IV) and parent perspectives. Parent participants were also responsible for rating the degree of interference of their child's separation-anxious events from the DD on a 0 to 4 scale (0=*none*; 4=*very much*). These ratings served as baseline data as well as a means for evaluating end-state functioning.

PROCEDURE

Parents and children referred to the CADC were first scheduled for an assessment session. Written informed consent/assent for study participation was obtained from both parents and their children. Following consent, the ADIS for DSM-IV: C/P was administered separately to each relevant party. Interviews were administered by the authors and advanced doctoral students in clinical psychology. Interviewers were trained to a criterion that consisted of first observing at least five sets of interviews, and then utilizing an interviewer-observer paradigm. Following the observation period, each interviewer was required to match all of the observer's diagnoses and clinician ratings (0-to-8 scale) within one point on five separate occasions.

Within 1 week to 10 days of the initial assessment, parent participants were scheduled for a consultation session. Following a discussion of the assessment findings, written treatment consent was obtained from appropriate and interested parents.

A refundable \$100 deposit was secured, portions of which would be returned upon completion of specified intervals (e.g., pretreatment, posttreatment, 6-month follow-up) throughout the study. Families failing to meet criteria for the study ($n=3$) were referred for alternate treatment at the Center for Psychological Services or other appropriate community agencies.

During the consultation, parent participants received information and training in completing the DD and PROS and were provided with forms and pre-addressed, stamped envelopes for recording baseline data for up to 6 weeks. Following the consultation, parent participants were contacted and scheduled for treatment when sufficient stability emerged in their DD baseline data.

Following the pretreatment assessment session, neither the authors nor CADC clinicians had any further contact with child participants during the 10-week treatment program. At posttreatment and 6-month follow-up, however, child participants returned to the CADC to complete self-report measures and ADIS for DSM-IV-C interviews. The two youngest children (P2 and P3) received assistance in completing the RCMAS from doctoral students in clinical psychology. Posttreatment and 6-month follow-up interviews were administered by independent clinicians who were uninformed regarding the nature of the study as well as the presenting problems of the participants. These clinicians were doctoral students in clinical psychology who were fully trained in the administration of the ADIS for DSM-IV-C/P. Their role in this study was limited to conducting either posttreatment or 6-month follow-up interviews, but not both.

INTERVENTION

The PT intervention was conducted according to a written treatment manual (Raleigh et al., 2002; see Eisen & Schaefer, 2005). The protocol drew from previously established cognitive-behavioral methods (see below). Unlike other formats, however, that primarily target children and/or utilize parents as adjuncts in the treatment process, only parents received education and training. The second author served as the therapist for all parent participants to help standardize the delivery of treatment. The treatment protocol consisted of 10 individualized weekly sessions, approximately 1.5 hours each. Any missed sessions were made up within 1 week. The format for each session was as follows: administration of PROS, homework and DD review, didactic lesson, in-session practice, and assigning homework. Sessions were recorded via audiotape for purposes of treatment integrity (to be discussed).

Sessions 1 and 2 emphasized education (e.g., information about fears, phobias, and separation anxiety, definitions of separation anxiety from biological, psychodynamic, and social learning perspectives, and description of common parent traps such as overprotection). Sessions 3 to 6 focused on skills building (e.g., constructing separation anxiety hierarchy, teaching of progressive relaxation and cognitive methods, and principles of contingency management). For example, parents were taught to help their children identify evidence for and against distorted separation-anxious beliefs and to decatastrophize worrisome thoughts (Beck, Emery, & Greenberg, 1985). In addition, parents were taught to teach their children self-control skills through the use of the STOP acronym (Eisen & Schaefer, 2005; Eisen & Silverman, 1998; Silverman, 1989): Scared, Thoughts (worrisome), Other thoughts (coping), and Praise (self-evaluation). Cartoons with empty thought bubbles were used to identify separation-anxious and coping self-talk (Kendall, 1990). Finally, parents were instructed in how to teach their children an 11-body-part (e.g., hands, arms, shoulders) progressive muscle relaxation script (Ollendick & Cerny, 1981).

Sessions 7 to 9 involved practicing the skills (i.e., imaginal exposures in session, parent-guided in vivo exposure out of session). Sessions 9 and 10 additionally addressed relapse prevention (e.g., expectation of slips, need for continued practice), reviewed progress, examined termination issues, and discussed plans for follow-up visits. Parents were provided with session-by-session checklists, illustrations to explain concepts, a pocket-size magnetic stop sign, a relaxation audiotape, and contingency contracting forms to help ensure the effective implementation of the program.

DESIGN

A multiple-baseline design across participants was employed. The number of child-reported days per week with at least one separation-anxious event was computed as well as the mean parental severity rating for these events (0-to-4 scale; 0 = none, 4 = very much). Baseline monitoring was conducted for 3 to 6 weeks, as determined by the stability of data and/or practical constraints (e.g., family's willingness to remain at baseline before beginning treatment).

END-STATE FUNCTIONING

A two-pronged approach to end-state functioning was utilized. Parent participants were classified as treatment responders by demonstrating improvement on at least two of four parenting process measure subscales (PSOC-Total, PSOC-Satisfaction, PSOC-

Efficacy, PSI-Total) at posttreatment and/or 6-month follow-up. Improved status was defined as positive score changes of one or more *SDs* in the direction of functionality (e.g., Eisen & Silverman, 1998). Child participants were classified as achieving high end-state functioning if they failed to meet a *DSM-IV-TR* diagnosis of SAD at posttreatment and evidenced improvements of one or more *SDs* on one of the following key measures: RCMAS (total or at least one subscale scores), child-reported number of separation-anxious days per week, or parent-reported interference ratings.

TREATMENT CREDIBILITY AND INTEGRITY

At consultation, following the description (script) of the treatment protocol, parent participants were asked to rate its credibility (Silverman modification of Borkovec & Nau, 1972; Eisen & Silverman, 1998). Parent participants were asked to respond to four questions (e.g., *How sure are you that this treatment will help your child become less separation-anxious?*) on a 10-point scale (0 = *not at all helpful*; 10 = *very helpful*). All parent participants rated the intervention as highly credible (mean = 9.3, range = 8 to 10). Regarding treatment integrity, two doctoral students in clinical psychology, uninformed as to the nature of the study or its participants, independently reviewed 25% of randomly selected treatment session audiotapes. It was determined that the therapist faithfully adhered to the PT protocol 100% of the time.

Results

The impact of PT was examined in four ways: (a) parenting process measures, (b) child anxiety measures, (c) child-reported frequency and parent-reported interference of separation-anxious events, and (d) clinician and parent ratings.

PARENTING PROCESS MEASURES

Five of six parent participants achieved treatment responder status by scoring one or more *SDs* on at least two parent process measure subscales following the PT intervention and/or at 6-month follow-up. Four of six parent participants achieved this status at posttreatment (P3: PSOC-Total, PSOC-Satisfaction, PSOC-Efficacy; P4: PSOC-Total, PSOC-Satisfaction, PSOC-Efficacy, PSI-Total; P5: PSOC-Total, PSOC-Efficacy; P6: PSOC-Total, PSOC-Satisfaction, PSOC-Efficacy). P1 achieved one *SD* change in the direction of functionality on the PSI-Total at posttreatment and at 6-month follow-up, and did so, as well, on the PSOC-Total and PSOC-Efficacy subscales. Several parent participants in the clinical range at pretreatment scored within normal limits at

posttreatment (P3: PSOC-Total, PSOC-Satisfaction, PSOC-Efficacy; P4: PSOC-Total, PSOC-Satisfaction; P5: PSOC-Efficacy). Only P2 failed to experience satisfactory changes as a result of the PT intervention. In fact, P2 worsened on all parenting process measures and scored in the clinical range on the PSI-Total at posttreatment (see Table 2).

CHILD ANXIETY MEASURES

At pretreatment, all child participants scored in the normative range on the total score of the RCMAS. Child participants 4 (from 18 to 8) and 5 (from 19 to 9) evidenced improvements of one *SD* at posttreatment. On the Physiological subscale of the RCMAS, three of six child participants (P4, P5, and P6) scored in the clinical range at pre-treatment. Following PT,

Table 2
Parent process measures for pre-, post-, and FU across participants

Measure	Pre	Post	FU
<i>PSOC</i>			
Total	Normative sample: $M=64$, $SD=9.5$; Clinical range < 55		
P1	71	74	86
P2	64	60	65
P3	54	78*	69
P4	57	72*	73
P5	63	74	79
P6	70	86	88
Satisfaction			
Total	Normative sample: $M=38.8$, $SD=6$; Clinical range < 33		
P1	42	43	47
P2	36	34	33
P3	35	46*	41
P4	33	42*	41
P5	42	46	45
P6	39	48	47
Efficacy			
Total	Normative sample, $M=25.3$, $SD=6$; Clinical range < 20		
P1	29	31	39
P2	28	26	28
P3	19	32*	28
P4	24	30	32
P5	21	28*	34
P6	31	38	41
<i>PSI</i>			
Total	Normative sample, $M=222.8$, $SD=36.6$; Clinical range > 259		
P1	211	171	151
P2	241	275	251
P3	258	245	255
P4	270	231	245
P5	190	170	158
P6	222	214	214

Note. Pre=Pretreatment; Post=Posttreatment; FU=6-month follow-up; PSOC=Parenting Sense of Competence Scale; PSI=Parenting Stress Index.

Norms for PSOC (Johnston & Mash, 1989).

Norms for PSI (Abidin, 1990).

* Clinically significant change (normal range).

these children reported improvements of one *SD* and scored within normal limits. On the Worry/Oversensitivity subscale of the RCMAS, one child scored in the clinical range at pretreatment (P5). Child participants 4 (from 6 to 3) and 5 (from 9 to 5) reported improvements of one *SD* at posttreatment and scored within normal limits (see Table 3).

FREQUENCY AND INTERFERENCE OF SEPARATION-ANXIOUS EVENTS

Relative to the 3-to-6 week baseline interval, child participants on average reported 2 less separation-anxious days per week, a 60% improvement, over the last 4 weeks of treatment. Four of six child participants (P1, P4, P5, P6) reported reductions in the frequency of separation-anxious events of one or more *SDs* at posttreatment, which were maintained at 6-month follow-up (see Fig. 2). Child P3, on average, reported 1 less separation-anxious day per week. Only child P2 failed to report appreciable change.

Parent participants, relative to the baseline period, reported a 30% reduction in their interference ratings (0 to 4 scale) over the last 4 weeks of treatment, which was maintained at 6-month follow-up. Four of six parent participants (P1, P3, P5, P6)

reported reductions in the intensity of their child's separation-anxious events of one or more *SDs* at posttreatment, which was maintained at 6-month follow-up (see Fig. 3). Although the parent of P4 reported a 25% reduction in the intensity of her child's separation-anxious events, because of range restriction (baseline average=1.6), the one *SD* criterion was not obtained. Only the parent of P2 reported elevated interference ratings of her child's separation-anxious events (from 1.75 to 3), which remained unchanged at 6-month follow-up.

CLINICIAN AND PARENT RATINGS

At pretreatment, all child participants received a principal diagnosis of SAD based on clinician ratings of composite parent and child interviews. At posttreatment, 5 of 6 child participants no longer met criteria for SAD according to independent clinician ratings of composite parent and child interviews. Child participant 2 still met criteria for SAD. However, she received a severity rating of 3 (0 to 8 scale), which reflects sub-clinical status.

With regard to severity ratings, at pretreatment, parent and clinician reports were similar across participants. Although child participants evidenced improvements on both parent and clinician ratings at posttreatment and 6-month follow-up, parent ratings were slightly higher than clinician ratings on both occasions (see Table 4).

Table 3
Child anxiety measures for pre-, post-, and FU across participants

Measure	Pre	Post	FU
RCMAS			
Total	Normative sample: $M=16.31$, $SD=6.22$; Clinical range >22		
P1	7	10	14
P2	11	8	10
P3	10	9	16
P4	18	8	12
P5	19	9	12
P6	13	10	6
Phy			
	Normative sample: $M=4.64$, $SD=2.29$; Clinical range >6		
P1	2	3	2
P2	4	3	3
P3	4	3	3
P4	7	4*	2
P5	7	4*	2
P6	7	3*	2
W/O			
	Normative sample: $M=4.48$, $SD=2.91$; Clinical range >7		
P1	5	5	4
P2	6	4	3
P3	5	4	4
P4	6	3	3
P5	9	5*	2
P6	6	7	2

Note. Pre=Pretreatment; Post=Posttreatment; FU=6-month follow-up; RCMAS=Revised Children's Manifest Anxiety Scale; Phy=Physiological Index; W/O=Worry/Oversensitivity Index. Norms for RCMAS (Reynolds & Richmond, 1985).

* Clinically significant change (normal range).

END-STATE FUNCTIONING

Five of six (83%) child participants achieved high end-state functioning by failing to meet *DSM-IV-TR* criteria for SAD and by demonstrating child-reported reductions in anxiety (RCMAS and/or frequency of separation-anxious events) or parent-reported reductions in interference. Child participants 5 and 6 evidenced reductions of one or more *SDs* across all measures and scored within normal limits at posttreatment which was maintained at 6-month follow-up. Child participants 1 (frequency and interference ratings) and 4 (RCMAS and frequency ratings) evidenced these reductions on two measures, whereas child P3 did so on one (interference ratings). Child P2 still met criteria for SAD at posttreatment (subclinical) and did not evidence reductions of one or more *SDs* on any of the child or parent-reported measures.

CLINICAL OBSERVATIONS

Clinical observations and reports from each participant's family supported the overall results. For example, child P1 became less demanding at bedtime, was more comfortable staying at friends' houses, and participated in a sleepover, where, according to her mother, "She didn't even call to say good-night!" Although child P2 reported occasionally playing at

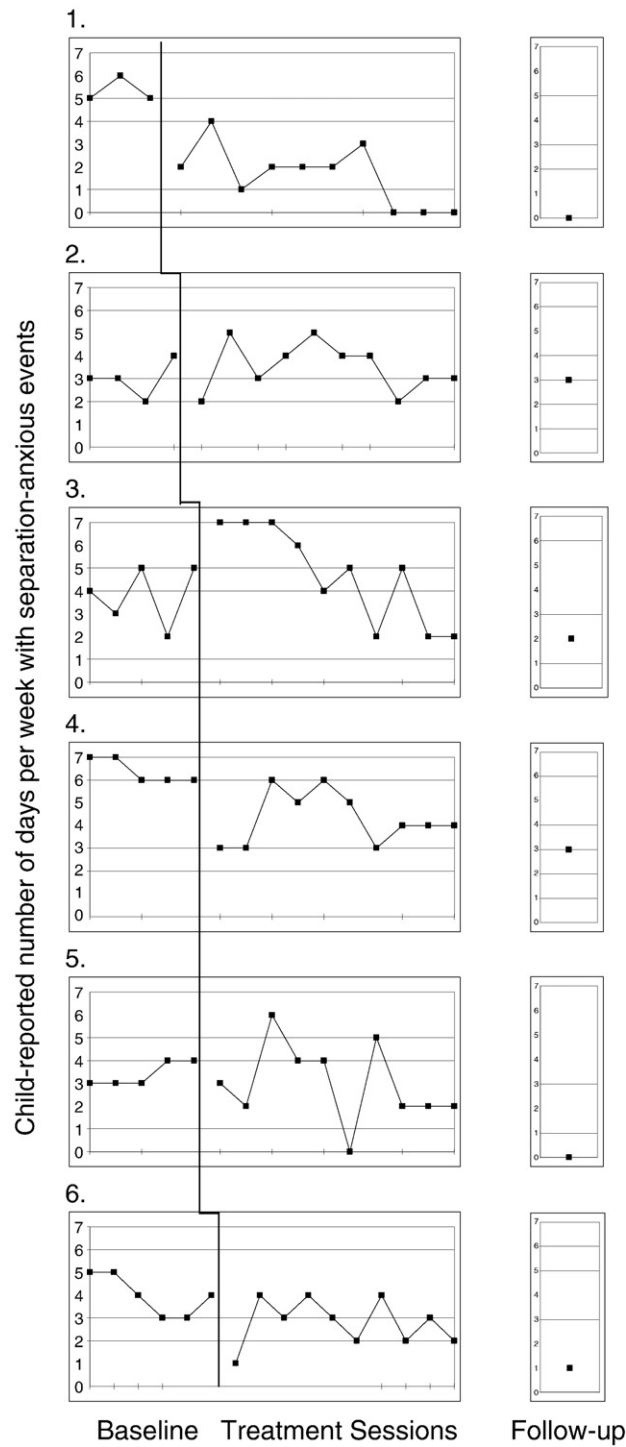


FIGURE 2 Child-reported number of days per week with separation-anxious events across baseline, treatment sessions, and 6-month follow-up.

her friends' houses, the independent clinician conducting the posttreatment interview reported significant problems regarding her ability to separate from her parents during the interview.

Child P3 was now staying alone in the downstairs playroom, as well as separating from his mother's

side during both family and peer gatherings. Parent P4 proudly reported that she learned a great deal about the parenting process and was "thrilled" that yelling at her son was no longer necessary. She reported that he was now more comfortable being alone somewhere in the house (others present) and

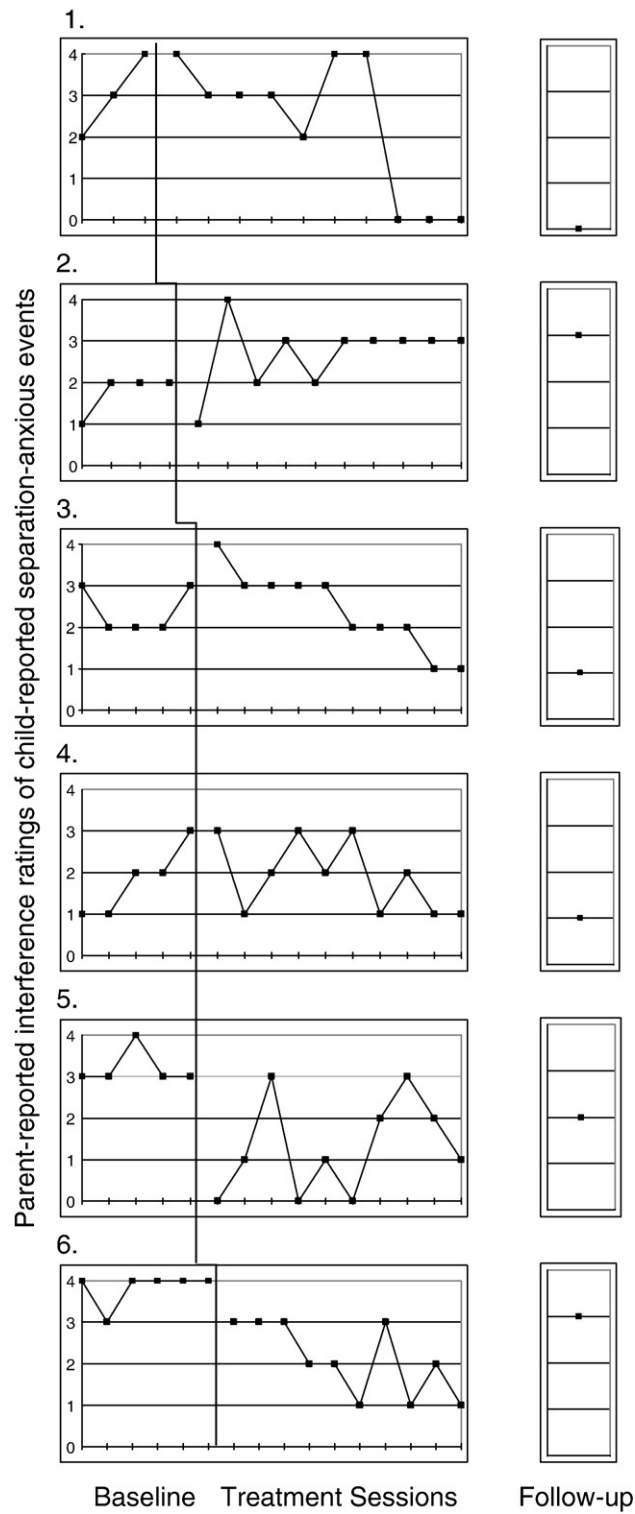


FIGURE 3 Parent-reported interference ratings of child-reported separation-anxious events (mean) across baseline, treatment sessions, and 6-month follow-up.

could even read “Goosebumps” books. Child P5 was now sleeping in her own room and had a successful sleepover with a friend while her mother was away on a business trip. Finally, child P6 was

overcoming his abandonment fears. He was now able to attend sports events without his parents being present. His mother and father reported that the PT program gave them the tools to help their son

Table 4
Parent ratings of severity and independent clinician ratings for pre-, post-, and FU across participants

Participant	Parent ratings (0-8)			Clinician ratings (0-8)		
	Pre	Post	FU	Pre	Post	FU
P1	4	2	0	4	0	0
P2	6	4	4	6	3	3
P3	5	1	2	5	0	0
P4	5	2	2	5	0	0
P5	7	1	3	5	0	0
P6	7	1	3	6	0	0

Note. Pre= Pretreatment; Post= Posttreatment; FU= 6-month follow-up. Parent ratings refer to parental assessments of child's overall anxiety. Clinical ratings refer to principal diagnosis based on composite scores from the Anxiety Disorders Interview Schedule for DSM-IV: C/P. Ratings of 0 reflect an absence of an SAD principal diagnosis.

cope with separation anxiety, and at the same time, helped them minimize their overprotective stance.

Discussion

This investigation represents the first examination of the efficacy of a PT protocol designed specifically for parents of separation-anxious youth. The results provide preliminary support for the investigation's hypotheses. First, the PT intervention led to important parental process changes, i.e., enhanced self-efficacy and/or satisfaction, and reduced stress levels as measured by PSOC and PSI subscales, respectively. Five of six parent participants achieved treatment responder status following the PT intervention and/or at six-month follow-up.

Second, and most importantly, only those child participants whose parents obtained treatment responder status achieved high end-state functioning. Five of six child participants experienced sufficient improvements by failing to meet *DSM-IV-TR* criteria for SAD and by demonstrating child-reported reductions in anxiety (RCMAS, DD) and/or parent-reported reductions in interference. These findings lend further support to the efficacy of family-based programs for childhood anxiety in general (Barrett et al., 1996; Manassis, K., Mendlowitz, S. L., Scapillato, D., Avery, Fiksenbaum, L., Freire, M., et al., 2003; Wood et al., 2006) and for SAD in particular. Future research is warranted regarding how family processes affect child treatment outcome.

Participant 2's lack of improvement may be explained by both parent and child factors. For example, parent P2's self-reported anxiety, as measured by the FQ, was in the clinical range at pretreatment and remained so at posttreatment. Previous research has demonstrated that elevated parental anxiety diminishes child treatment out-

come (Barrett, et al., 1996; Crawford & Manassis, 2001; Dadds, Barrett, Rapee, & Ryan, 1996; Rapee, 2000), unless addressed as part of the program.

For example, when both child and parent were highly anxious, 38.9% of children were diagnosis-free following a child-focused CBT intervention. However, when four sessions of parent anxiety-management training were included, 76.5% of children were diagnosis-free at posttreatment (Cobham et al., 1998). Given the high rate of anxiety disorders among parents of anxious youth (e.g., Last, Hersen, Kazdin, Orvaschel, & Perrin, 1991), assessment of parental anxiety should become an integral part of the evaluation process.

In addition to parental anxiety, parent P2's stress levels, as measured by the PSI, were elevated at pretreatment and were in the clinical range at posttreatment. Perhaps because of her own emotional distress, parent P2 was not able to take full advantage of the PT intervention. Clinical observations supported her sporadic implementation of the program. Parents who are emotionally distressed are also more likely to report higher levels of child anxiety (Krain & Kendall, 2000). This may partially explain child P2's lack of improvement and/or heightened interference based on parental report.

Regarding child factors, P2 was the only child who experienced several *severe* comorbid disorders. This finding is consistent with previous research suggesting that severity (rather than number) of children's additional disorders and/or emotional experiences is related to poorer treatment outcome (Eisen & Silverman, 1998; Kendall, Brady, & Verduin, 2001; Rapee, 2000; Southam-Gerow, Kendall, & Weersing, 2001; Verduin & Kendall, 2003).

In addition, developmental constraints may have been operating. For example, most cognitive-behavioral treatment studies target children 7 years and older (Albano & Kendall, 2002; Ollendick & King, 2004). Given that child P2 was at the lower end of this typical age range, it is possible that she had difficulty learning the cognitive self-control strategies. For this reason, Parent-Child Interaction Therapy (Eyberg, 1998), the treatment of choice for preschoolers with disruptive behaviors (e.g., Nixon, Sweeney, Erickson, & Touyz, 2003), is becoming the recommended intervention for young children experiencing SAD (see Choate et al., 2005; Eisen, Pincus, Hashim, Cheron, & Santucci, in press).

The results of this investigation should be considered preliminary for several reasons. For example, the PT protocol's integrated nature makes the specific ingredients responsible for behavior change difficult to determine. In addition, since only a small number of participants was utilized, replication studies are needed to confirm the present findings.

Finally, even though the treatment was introduced across participants in a staggered fashion, experimental control was not always amply demonstrated.

Given that childhood anxiety disorders in general, and SAD in particular, are heterogeneous in nature, targeting separation anxiety at the level of the symptom may be more meaningful than focusing on separation anxiety as a disorder (e.g., Kendall, Kortlander, Chansky, & Brady, 1992). For instance, in the present investigation, some children only feared being alone (somewhere in the house), others feared sleeping alone, and some simply feared being abandoned. Thus, we need more individualized approaches to assessment and treatment that take into account each child's unique presenting problems, maintaining factors, and family characteristics (see Chorpita, 2006; Eisen & Schaefer, 2005; Kearney, 2001).

Finally, additional work is needed to test the utility of the PT protocol for other anxiety and related disorders, as well as compare its efficacy to predominantly child-focused approaches and placebo control conditions. With continued clinical and research efforts, the specific circumstances in which family-based treatments exert the most power will ultimately be realized.

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