Family Cognitive Behavioral Therapy for Child Anxiety Disorders

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ABSTRACT

Objective: This study compared family-focused cognitive behavioral therapy (CBT; the Building Confidence Program) with traditional child-focused CBT with minimal family involvement for children with anxiety disorders. **Method:** Forty clinically anxious youth (6–13 years old) were randomly assigned to a family- or child-focused cognitive-behavioral therapy (CBT). Conditions were matched for therapist contact time. Both interventions included coping skills training and in vivo exposure, but the family CBT intervention also included parent communication training. Independent evaluator, parent, and child report measures with demonstrated validity and reliability were used to assess child anxiety symptom outcomes at pre- and posttreatment. The data analytic strategy involved an evaluable patient analysis. **Results:** Compared with child-focused CBT, family CBT was associated with greater improvement on independent evaluators' ratings and parent reports of child anxiety—but not children's self-reports—at posttreatment. **Conclusions:** Both treatment groups showed improvement on all outcome measures, but family CBT may provide additional benefit over and above child-focused CBT. These findings provide preliminary support for the efficacy of the "Building Confidence" program and encourage further research in parental participation in treatment for childhood anxiety. *J. Am. Acad. Child Adolesc. Psychiatry*, 2006;45(3):314–321. **Key Words:** cognitive-behavioral therapy, child anxiety disorders, parent–child communication, parent training.

Cognitive-behavioral therapy (CBT) has been found to be efficacious in the treatment of child anxiety disorders in recent randomized, controlled trials (RCTs; e.g., Flannery-Schroeder and Kendall, 2000; Kendall et al., 1997). Modern CBT interventions are based on the "Coping Cat" program for youths with anxiety disorders, which emphasizes identification and reappraisal of catastrophic cognitions, relaxation, rewards, and graded exposure to feared situations (Kendall et al., 1990). When this program is administered individually to children (with minimal parent involvement in treatment), more than 50% of patients no longer meet criteria for their intake primary anxiety disorder diagnosis. However, across clinical trials, one third to one half of children continue to have clinically significant anxiety problems when treated with child-focused CBT without family participation.

Several investigators have augmented child-focused CBT (CCBT) with family involvement (FCBT; e.g., Barrett et al., 1996; Cobham et al., 1998). In these programs, parents typically assist with the child's acquisition of coping skills and support the child's in vivo exposures (i.e., facing fears). Despite variations in type and amount of parent involvement in these FCBT programs, the incremental benefits of FCBT over CCBT in previous trials have not been entirely clear. To date, six studies have compared FCBT with CCBT for children presenting with separation anxiety disorder (SAD), social phobia, or generalized anxiety disorder (GAD; Barrett, 1998; Barrett et al., 1996; Cobham

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et al., 1998; Mendlowitz et al., 1999; Nauta et al., 2003; Spence et al., 2000). Nauta et al. (2003) and Spence et al. (2000) found no difference between FCBT and CCBT on any outcome measure. In the other trials, a minority of outcome measures favored FCBT over CCBT, with equivocal outcomes for the majority of measures.

This pattern of results suggests that either the addition of family involvement in CBT may not be sufficient to substantially improve children's outcomes or perhaps that the FCBT interventions tested thus far have not targeted the critical controlling variables in the family affecting children's anxiety. Previous FCBT programs have typically focused on educating parents and engaging them as models and coaches of CBT skills. Some programs have also included parent anxiety management, coparenting, problem solving, psychoeducation, and child behavior management training. However, these programs have not focused on the specific parenting practices that are hypothesized to contribute to anxiety development and maintenance. It is possible that direct intervention with the parenting practices associated with child anxiety may lead to more substantial improvement over traditional child-focused CBT than has been found in other FCBT trials.

If parenting practices are to be primary targets of treatment in FCBT, what parenting behaviors should be addressed? Recent theoretical work and observational research have specified a central role for parental intrusiveness and autonomy granting in the maintenance of children's anxiety disorders (Chorpita and Barlow, 1998; Whaley et al., 1999; Wood, in press; Wood et al., 2003). Parental intrusiveness involves taking over tasks that children are (or could be) performing independently, thereby limiting children's mastery experiences and impairing their self-efficacy. When confronted with novel situations, children with anxiety disorders who have low self-efficacy (caused by a history of intrusiveness) are likely to experience anxiety, as they have little basis for believing in their ability to succeed and remain safe (without parental assistance) in such unfamiliar situations (Wood et al., 2003). Because children are frequently confronted with unfamiliar situations in their daily lives (i.e., new people, new places, new kinds of class work), poor self-efficacy regarding these situations may increase anticipatory anxiety and fearful responses and, thus, tend to maintain or even exacerbate anxiety disorders. In comparison, parents who grant autonomy facilitate mastery experiences for their children, enhancing self-efficacy and making children with anxiety disorders more confident in novel situations (e.g., Chorpita and Barlow, 1998).

Consistent with this theory, naturalistic research has found that parents of children with anxiety disorders are more likely to intrude on their children's problem-solving efforts (Hudson and Rapee, 2001) and less likely to acknowledge their child's autonomy during conversations (Moore et al., 2004; Whaley et al., 1999) than are parents of typically developing children. These studies were of high methodological rigor, relying on structured diagnostic interviews and direct observations of parenting behavior using reliable coding systems. If intrusiveness and autonomy granting are major controlling factors in child anxiety disorders, then perhaps FCBT directly addressing these parenting practices would demonstrate a clearer advantage over CCBT on posttreatment outcomes than existing FCBT interventions.

Our research group has developed an FCBT treatment manual that combines traditional CCBT with techniques that specifically target intrusiveness and autonomy granting. Here we report the results of an RCT comparing the "Building Confidence" FCBT program to a CCBT program with limited parent involvement.

METHOD

Participants

The intent-to-treat sample included 40 children with anxiety disorders living in a major metropolitan area of the western United States, ranging in age from 6 to 13 years (mean, 9.83 years, SD = 2.19), and their primary parent (defined as the parent who was primarily responsible for overseeing the child's daily activities). Children were referred by local school psychologists and principals (who received a letter about the study) and by a medical center–based child anxiety clinic that provides assessment and treatment for children from the community.

Participants met the following inclusion criteria: (1) The child met *DSM-IV* criteria for a diagnosis of one of the following anxiety disorders: SAD, social phobia, or GAD based on a semistructured interview (see below); (2) the child was not taking any psychiatric medication at the initial assessment or was taking a stable dose of psychiatric medication (i.e., at least 1 month at a stable dose before the baseline assessment); and (3) if medication was being used, families stated an intention to maintain that dose throughout the study (see, e.g., Mendlowitz et al., 1999). This study was approved by a university-based institutional review board. Parents gave written informed consent and children gave written assent to participate in the study.

Families were excluded if (1) the child was currently in child-focused psychotherapy, (2) the family was currently in family therapy or a parenting class, (3) either the child or the parents evidenced psychotic symptoms, (4) the child began taking psychiatric medication or increased his or her dose of medication during the intervention, or (5) for any reason the child or parents appeared unable to participate in the intervention program.

Table 1 presents descriptive information for children in the two treatment conditions. Thirty-three primary parents also reported their annual family income. Four (12.1%) reported an income <$40,000, 13 (39.4%) reported an income between $40,001 and $90,000, and 16 (48.5%) reported an income of >$90,000/year.

Measures

Trained independent evaluator (IE) diagnosticians (i.e., clinical psychology graduate students) who were blind to the intervention condition of each family conducted diagnostic interviews before and immediately after treatment. Children's *DSM-IV* disorders were assessed by the IE on the basis of a structured diagnostic interview with the caregiver(s) and the child using the Anxiety Disorders Interview Schedule for *DSM-IV*: Child and Parent Versions (ADIS-C/P; Silverman and Albano, 1996). The ADIS-C/P is a semistructured interview assessing the major anxiety, mood, and externalizing *DSM-IV* disorders experienced by school-age children and possesses favorable psychometric properties (Silverman et al., 2001; Wood et al., 2002). IEs were trained under the auspices of a university child anxiety clinic using procedures recommended by the ADIS-C/P authors. Training involved attending a presentation on the administration of the interview, observing and coding a videotaped interview, corating multiple live interviews conducted by a trained diagnostician, and, finally, assuming satisfactory completion of the earlier steps, conducting at least one interview using the ADIS-C/P while under the supervision of an expert diagnostician. Details of the ADIS-C/P interviewing procedures and evidence of the reliability of this interview with a subsample of the children in this study is discussed elsewhere (Wood et al., 2002). IEs made ratings on the ADIS-C/P Clinician Severity Rating (CSR; 0 = not at all, 4 = some, 8 = very, very much) for each assigned diagnosis. Diagnoses with ratings of ≥4 are considered to be of a clinical level.

TABLE 1
Descriptive and Diagnostic Information on Families in the CCBT and FCBT Intervention Groups

	CCBT No. (%)	FCBT No. (%)	χ^2
Intervention completers	19 (95)	19 (95)	—
Child sex (male)	13 (65)	11 (55)	0.42
Parent sex (female)	17 (85)	18 (90)	0.23
Parent graduated college	12 (63)	14 (70)	3.37
Parent married/remarried	17 (85)	18 (90)	3.03
Child ethnic background			4.14
White	13 (65)	11 (58)	
Latino/Latina	3 (15)	1 (5)	
African American	1 (5)	0	
Asian/Pacific Islander	0	1 (5)	
Mixed/other	3 (15)	6 (32)	
Child anxiety diagnoses			
SAD	13 (65)	14 (70)	0.11
Social phobia	13 (65)	7 (35)	3.60
GAD	6 (30)	5 (25)	0.13
OCD	0	2 (10)	2.11
Simple phobia	1 (5)	2 (10)	0.36
Child using SSRI	2 (10)	2 (10)	0.68

Note: None of the group differences were statistically significant. Valid *n* ranged from 18–20/group. CCBT = child-focused cognitive-behavioral therapy; FCBT = family involvement cognitive-behavioral therapy; SAD = separation anxiety disorder; GAD = generalized anxiety disorder; OCD = obsessive-compulsive disorder; SSRI = selective serotonin reuptake inhibitor.

The Clinical Global Impressions (CGI)-Improvement Scale (e.g., RUPP Anxiety Group, 2001) provided a global rating of improvement in anxiety symptoms ranging from 1 (completely recovered) to 5 (no change) to 8 (very much worse). The IE provided a rating on this scale at the postintervention assessment only. The IE conducted the posttreatment diagnostic interview first, made a diagnosis, and then reviewed the pretreatment ADIS-C/P interview materials for comparison with current symptoms and impairment. Then, the IE gave a CGI rating.

The primary parent's diagnostic status was assessed using the ADIS-IV for *DSM-IV* (Brown et al., 1994). The ADIS-IV is a semistructured interview providing differential diagnoses among the adult anxiety disorders. In the present study, only current anxiety disorders and use of psychiatric medication were assessed (in the case of medications, parents were asked whether they used any medications for their own emotional or behavioral problems, and, if so, which ones). Trained IEs blind to treatment condition conducted all interviews.

The Multidimensional Anxiety Scale for Children (MASC; March, 1998) was administered to children. The MASC is a 39-item, 4-point Likert-type scale with robust psychometric properties (March et al., 1997). A parallel parent-report version of the MASC (see, e.g., Wood et al., 2002) was also administered. Pretreatment α values were .86 for the child MASC and .79 for the parent MASC total score. *T* scores are not available for the parent MASC; thus, raw scores are reported for both parent and child MASC. However, clinical cut scores are available for anxious samples for both the parent and child MASC (Wood et al., 2002) and were used to evaluate clinically significant improvement in this study.

Procedure

Initial contact was made by phone. Families reporting significant child anxiety symptoms were scheduled for an assessment. On the day of the assessment, consent forms were reviewed and signed, and the diagnostic interview and self-report measures were conducted. Children who met inclusion/exclusion criteria were randomized by a research assistant to either the CCBT or FCBT condition using a computer randomization program (the randomization sequence was concealed from investigators until interventions were assigned). Children were then randomly assigned to an available therapist. Therapists treated children in both conditions, and alternated between treating children in the FCBT and CCBT intervention conditions. Families were blind to group assignment. Follow-up assessments occurred in the middle of treatment (session 7) for self-report and parent-report measures only, and at posttreatment for all measures.

Intervention Programs

The amount of therapist contact was equal in both conditions: 12–16 therapy sessions lasting 60–80 minutes each (following

Barrett et al. [1996], who used 12 sessions 60–80 minutes long, and Kendall [1994], who included four optional sessions depending on the degree of symptom remission).

In the CCBT intervention, therapists met with the child alone for the majority of each session. This treatment was guided by an empirically supported CCBT manual (Kendall et al., 1990), but the eight initial cognitive skills training sessions in the Kendall et al. manual were covered in as few as four sessions, depending on the child's demonstration of understanding and ability to use the coping skills. The CCBT program was composed of two phases: (1) skills training and (2) application and practice (i.e., graded exposure). During the skills training phase, children were taught numerous techniques for coping with anxiety, such as relaxation, reappraisal of the danger of feared situations, and self-reward. In the skills application and practice phase (involving at least eight sessions), a hierarchy was created in which feared situations were ordered from least to most distressing. Children worked their way up the hierarchy and were rewarded as they attempted increasingly difficult activities. Children and therapists worked together to devise plans for children to cope at each step of the hierarchy. In accordance with typical CCBT programs (e.g., Kendall et al., 1990), parents were provided with information about their child's intervention program throughout treatment. Contact with the parents in the CCBT condition typically consisted of (1) a 30-minute parent meeting (occurring only once, scheduled within the first four sessions) to summarize goals and methods of therapy and set realistic expectations for children's rate of improvement and (2) approximately 5 minutes at the end of each session in which children and therapists discussed the skills that were learned with the parents. To avoid contamination between treatment groups (Waltz et al., 1993), therapists were instructed not to provide advice to parents on parenting techniques or interventions for children's anxieties. As discussed below, treatment differentiation between CCBT and FCBT was tested directly, with results showing that proscribed parent-training techniques were not used in CCBT.

The FCBT intervention employed the ''Building Confidence'' program, a treatment manual developed for this study. Building on previous FCBT programs (e.g., Barrett et al., 1996), ''Building Confidence'' combines CCBT strategies—emphasizing in vivo exposure procedures and rewards—with parent training. The manual goes beyond previous FCBT programs in its emphasis on changing parental communication patterns hypothesized to maintain child anxiety, particularly intrusiveness and autonomy granting. The content of the child-focused component of FCBT was similar to the CCBT condition and was composed of two phases: skills training and graded in vivo exposures. However, FCBT sessions were structured differently from CCBT sessions: individual meetings with the child were scheduled for the initial 15–30 minutes. Skills were reviewed less thoroughly with the child than in the CCBT condition to permit time for the parent-training lesson, typically 25–30 minutes. The final 10–15 minutes was used for a family meeting. Parents were taught communication techniques to facilitate children's mastery of new skills; these techniques included (a) giving choices when children are indecisive (rather than making choices for the children), (b) allowing children to struggle and learn by trial and error rather than taking over for them, (c) labeling and accepting children's emotional responses (rather than criticizing them), and (d) promoting children's acquisition of novel self-help skills. Following Barrett et al. (1996), a behavioral rewards system was also initiated to reinforce target behaviors, and planned ignoring was taught to reduce anxious behaviors (e.g., crying, repetitive questions). Overall, the parent-training lessons were intended to enhance children's self-efficacy and support children's implementation of CBT skills. (The manual is available upon written request from the first author.)

Therapists included nine clinical psychology doctoral students and one clinical psychologist. All of the therapists were at least in their third year of clinical training, with extensive previous CBT experience. Therapists received specific training in the CCBT and FCBT interventions in workshops led by the study authors before seeing cases for the study. Group supervision was provided to all therapists on a weekly basis. Supervisors were doctoral-level clinical psychologists (M.S.G., B.C.C., J.C.P., and M.S.). By necessity, therapists were aware of group assignment.

Therapy sessions were recorded on audiotape or videotape. Adherence ratings were made using the Therapy Process Observational Coding System (TPOCS) Specific Therapy Process Scale (McLeod and Weisz, 2005). The TPOCS is composed of macroanalytic ratings of therapy techniques during sessions. Specific scales used in the present study were Cognitive Focus, Behavioral Focus, Family Focus, and Parenting Style Focus. TPOCS scores estimate the extent to which therapists engage in each intervention category during an entire session on a 7-point Likert-type scale with the following anchors: 1 = not at all, 3 = somewhat, 5 = considerably, and 7 = extensively. A coder who had been accepted into our doctoral program in clinical psychology at the time of coding and who had extensive experience with adherence ratings in child anxiety RCTs was trained to reliability on the TPOCS coding system. This coder rated two randomly selected tapes per child: one tape from the early phase of therapy (sessions 1–6) and one from the late phase (sessions 7–16). A second graduate student coder independently rated 15% of these tapes, randomly selected, to test for reliability. Interrater agreement was acceptable, with an average intraclass correlation coefficient of 0.71 per scale (range 0.52–0.90).

Data Analysis

Simple between-group tests (e.g., of pretreatment differences) were conducted with t tests and χ^2 statistics. Two (time) $\times$ two (group) tests of treatment outcome were conducted with repeated-measures analyses of variance for the ADIS-C/P CSR scores. For paper-and-pencil measures with three time points of data (i.e., pre-, mid-, and posttreatment), data were examined using hierarchical linear modeling (HLM) because of the ability of HLM to take therapist effects into account, to model change over time in more than two data points, and to include incomplete longitudinal cases (i.e., cases with only two of three repeated measures). When significant between-groups differences were found, effect size was computed comparing posttreatment means ($\text{mean}_{\text{CCBT}} - \text{mean}_{\text{FCBT}}/\text{SD}_{\text{pooled}}$ [Cohen, 1988]).

RESULTS

Forty children met inclusion/exclusion criteria and were randomized to treatment; one child from each group was dropped from the program because of inability to participate (unexpected schedule changes and family health problems prevented these families from continuing to travel to the university for treatment). Three 6-year-olds participated; two were

randomized to FCBT and one was randomized to CCBT; however, she was one of the two children who dropped out (in her case, before treatment began). The intent-to-treat sample size was 40 children, and 38 children received the intended treatment, completed the study protocol, and were analyzed for the primary outcome. Recruitment began in March 2000 and ended in December 2002; posttreatment assessments were completed by 3/2003.

Table 1 presents diagnostic information for children in the two treatment conditions. Two children in each condition (10%) were on a stable dose of a selective serotonin reuptake inhibitor (e.g., paroxetine) at intake. None of these children changed their selective serotonin reuptake inhibitor dose over the course of CBT.

Additional comorbid, secondary diagnoses included attention-deficit/hyperactivity disorder (n = 5; 12.5%), dysthymia or major depressive disorder (n = 4; 10%), and selective mutism (n = 3; 7.5%).

Pretreatment Comparability

Pretreatment group differences were assessed with χ^2 tests and t tests. There were no statistically significant treatment group differences on any of the demographic, child diagnostic, or child medication use variables presented in Table 1. There were also no significant pretreatment group differences on the parent anxiety disorder/medication use variables.

Intervention Adherence

The two intervention conditions were compared using t tests (α = .95; n = 38) on the presence of cognitive, behavioral, family, and parenting treatment techniques on the TPOCS adherence scale. It should be noted that these are tests of treatment adherence and differentiation between the two treatment conditions, not tests of treatment outcome. Both groups received high ratings on the Cognitive Focus scale (mean = 4.80 and 4.91, SD = 1.11 and 0.83 for the FCBT and CCBT interventions, respectively), and Behavioral Focus scale (mean = 5.20 and 4.73, SD = 1.20 and 1.10, for the FCBT and CCBT groups, respectively); there was no difference between the groups on these two scales. In contrast, the FCBT group scored higher than the CCBT group on Family Focus (mean = 4.90 and 1.55, SD = 1.33 and 0.82; t = 7.56, $p < .001$), and Parenting Style Focus (mean = 4.75 and 1.00; SD = 1.84 and 0, for the FCBT and CCBT groups, respectively; t = 5.63, $p < .001$). The Family Focus and Parenting Style Focus scales assess the therapist's use of a session for facilitating family discussions, and the therapist's teaching parents specific parenting skills (e.g., giving choices) to use with the patient. Therefore, both intervention groups evidenced extensive use of CBT techniques, but only the FCBT group incorporated family and parenting interventions. Despite the inclusion of minimal parent contact in the CCBT condition, there was no evidence that proscribed family intervention techniques were used by therapists in that condition.

Treatment Outcome

Diagnostic Outcomes. The IE's ratings on the ADIS-C/P CSR anxiety severity scale yielded a statistically significant time by treatment group interaction effect, $F_{1,36} = 6.31$, $p < .05$, in a 2 × 2 analysis of variance. The means, presented in Table 2, suggest that there was a greater decline in anxiety severity for children in FCBT than in CCBT (effect size = 0.92, a "large" effect [Cohen, 1988]).

Positive diagnostic status at posttreatment was defined as a child meeting criteria for any of the three primary anxiety disorder diagnoses (i.e., SAD, social phobia, GAD) based on an ADIS-C/P CSR score ≥4. In the CCBT condition, 10 of 19 (52.6%) treatment

TABLE 2
Means and SDs for Anxiety Outcome Measures for the CCBT and FCBT Intervention Groups

	Pretreatment		Midtreatment		Posttreatment	
Scale	CCBT	FCBT	CCBT	FCBT	CCBT	FCBT
ADIS anxiety severity						
Mean	4.95	4.79			3.21	1.68
SD	0.71	0.71			1.27	2.06
Parent MASC						
Mean	62.71	64.69	62.22	58.44	58.82	50.95
SD	13.17	12.01	13.58	15.52	10.73	18.86
Child MASC						
Mean	49.99	54.24	46.45	49.25	40.04	44.30
SD	13.20	16.43	16.36	21.86	13.95	22.33

Note: Raw scores are reported for the parent and child MASC. Means are based on all available data for treatment completers. n ranged from 17–19/group. ADIS = Anxiety Disorders Interview Schedule for *DSM-IV*; MASC = Multidimensional Anxiety Scale for Children.

completers were diagnosis-free at posttreatment compared to 15 of 19 (78.9%) completers in the FCBT condition. This difference was not statistically significant, $\chi^2 = 2.92$, $df = 1$, $p = .087$.

CGI. A rating of 1 or 2 (completely recovered or very much better) on the CGI was used as the criterion for treatment response. In the FCBT condition, 15 of 19 (78.9%) children met the criterion, as compared to only 5 of 19 (26.3%) children in CCBT ($\chi^2 = 10.56$, $p < .001$).

Paper-and-Pencil Measures. The fully unconditional HLM model for the parent MASC showed that therapist effects accounted for 9.3% of the total variance (Raudenbush and Bryk, 2002). In the unconditional HLM model, there was a significant effect for time ($t = -2.74$, $p < .05$), reflecting a reduction over time in parent MASC scores irrespective of treatment group. A conditional HLM model tested the hypothesis that there was greater improvement over time in the FCBT group. In this model, the slope by treatment group interaction was statistically significant ($t = 2.25$, $p < .05$). The means in Table 2 show that the nature of this interaction effect was a faster decline over time in parent's MASC ratings in FCBT as compared with CCBT (effect size = 0.53, a ''medium'' effect [Cohen, 1988]).

In parallel analyses for the child MASC, <1% of the total variance was explained by therapist effects in the fully unconditional model, and there was also a statistically significant decline in child MASC scores over time ($t = -4.87$, $p < .01$), representing a main effect for the slope. The conditional model failed to show a significant slope by treatment group interaction effect ($t = 0.24$, not significant [ns]), suggesting that the treatment groups did not differ in their rate of change over time on this measure (Table 2). Thus, both treatment groups demonstrated approximately equivalent improvement on the child MASC over time.

To examine clinically significant improvement, parent and child MASC scores were compared with the clinical cut scores for the MASC derived in Wood et al. (2002). At pretreatment, 14 of 17 (82.4%) of children in CCBT and 17 of 19 (89.5%) of children in FCBT scored at or above the parent MASC cut scores. At posttreatment, most children in CCBT ($n = 15/17$; 88.2%) still scored at or above the cut scores, whereas only about half of the children in FCBT ($n = 10/19$; 52. 8%) did so, $\chi^2 = 5.36$, $df = 1$, $p < .05$.

For the child MASC, 13 of 18 (72.2%) of children in CCBT and 10 of 16 (62.5%) of children in FCBT scored at or above the cut scores at pretreatment. At posttreatment, less than half of children in both CCBT ($n = 6/18$; 33.3%) and FCBT ($n = 6/18$; 37.5%) scored above the cut scores on the child MASC ($\chi^2 = 0.06$, $df = 1$, ns).

Parental Anxiety and Medication Use. A subsample of parents ($n = 32$) completed an ADIS-IV interview about their own anxiety and psychiatric medication use. There were no significant group differences in anxiety status or medication use. Parents were grouped according to whether they did not meet criteria for an anxiety disorder and did not use psychiatric medication ($n = 15$; 46.9%) or they met criteria for an anxiety disorder or they used psychiatric medication ($n = 17$; 53.1%). Repeated-measures analyses of variance were employed to determine whether parental anxiety/medication status predicted children's treatment outcomes. There were no statistically significant effects, suggesting that children's improvement in treatment was not influenced by their parent's anxiety status or use of psychotropic medication.

DISCUSSION

The present findings illustrate the efficacy of a family-based cognitive-behavioral intervention that includes parent training focusing on parenting skills. When compared with a CCBT program, the family treatment was associated with greater improvement on several measures of children's anxiety, including ratings made by an IE diagnostician blind to treatment condition and study hypotheses. Youths receiving FCBT also demonstrated a more rapid rate of change based on parent report of child anxiety symptoms. Effect sizes were in the medium to large range.

Both treatment groups improved on all measures of anxiety at posttreatment. However, there was an additional beneficial effect of the family treatment approach over and above the effects of the individual child-focused treatment approach. IE ratings of anxiety disorder severity, reflecting children's distress and impairment in school functioning, social relations, and family relationships, were significantly lower in the FCBT condition than in the CCBT at posttreatment. Also, significantly more children in FCBT (79%) than

in CCBT (21%) were rated as very much better or completely recovered by the IE, and parents' ratings of children's anxiety symptoms declined more rapidly over the course of treatment in the FCBT group.

Several other RCTs comparing FCBT and CCBT treatments have yielded rates of posttreatment child anxiety disorder remission that are comparable to the present results. Barrett et al. (1996) reported that 84% of children in FCBT had no anxiety disorder diagnosis at posttreatment, versus 57% of children in CCBT (as compared with 79% and 53%, respectively, in the present study). In addition, one of three previous studies (i.e., Barrett et al., 1996, but not Barrett, 1998 or Cobham et al., 1998) found statistically significant differences favoring FCBT on IE ratings of global anxiety improvement, and two of six studies (i.e., Barrett, 1998 and Mendlowitz et al., 1999, but not Barrett et al., 1996, Cobham et al., 1998, Nauta et al., 2003, or Spence et al., 2000) found significantly greater improvement on parent reports of child anxiety symptoms in FCBT groups. Other FCBT programs have primarily focused on training parents to support the child's CBT skills or to manage their own anxiety. In contrast, the ''Building Confidence'' program emphasizes communication training, with the specific goal of affecting parental autonomy granting and intrusiveness. The results reported herein suggest that such an FCBT program may yield robust, clinically significant improvements in child anxiety symptoms from the perspective of both parents and impartial diagnosticians. The next step will be to see whether FCBT changed parenting practices as expected and to test for a mediating role of parenting practices in the reduction of youth anxiety.

In contrast to parent and IE ratings, there was no evidence of a superior FCBT treatment effect for children's self-reports of anxiety. Rather, both groups improved equally. All six previous studies comparing FCBT with CCBT for anxiety disorders also failed to show group differences on children's ratings of their own anxiety. Thus, from the child's perspective, CCBT and FCBT may be equally efficacious. Children are capable of reporting on their internal mood state, while parents and IEs are not privy to such experiences. However, they are attuned to the behavioral aspects of children's anxiety, for example, avoidant behavior, clinginess, and somatic complaints. It is plausible that FCBT has a particularly beneficial effect on observable anxiety symptoms rather than on children's internal experiences. Alternatively, perhaps children's anxiety-related behavior must change first before they begin to feel less anxious and more confident—an effect that might be seen over the course of time. A longer term follow-up assessment (e.g., 1 year or more) could test for such an effect.

Parents' anxiety disorder status and psychiatric medication use did not prove to be predictive of children's anxiety improvement in this investigation. However, the differential impact of parental anxiety and medication use in FCBT versus CCBT requires further study (see, e.g., Cobham et al., 1998).

Limitations

This sample was composed of children in the elementary or middle school age group, the majority of whom were middle class and from educated two-parent families. These characteristics may limit generalizability to other types of families. Although the sample was racially/ethnically diverse, the sample size was inadequate to test for group-specific effects of treatment. Also, clinical work with an acute outpatient population necessitated a small amount of contact with parents in the CCBT group, as discussed above. However, blinded coders of treatment techniques revealed a marked difference in family involvement and parent training between the two conditions, showing that ''proscribed'' family interventions were not provided to the CCBT families, and suggesting that the two conditions were highly differentiated on the key independent variable of the study.

Clinical Implications

FCBT adds to CCBT specific family communication strategies designed to increase family participation and teach parents techniques that lead to greater child anxiety reduction. Overall, parent reports and independent evaluator ratings suggest that, when compared with an individual child-focused treatment, FCBT produced greater symptom reduction and improved functioning at posttreatment. Future research might investigate whether FCBT specifically targets family factors that are hypothesized to maintain anxiety and avoidant behaviors in youths. For example, does FCBT help parents increase autonomy granting or decrease intrusive behaviors? Such research may help clinicians

make decisions about when to implement a protocol with more or less family involvement and focus.

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