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Therapist Factors and Outcomes in CBT for Anxiety in Youth

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Abstract

This study examined the relationship between therapist factors and child outcomes in anxious youth who received cognitive-behavioral therapy (CBT) as part of the Child-Adolescent Anxiety Multimodal Study (CAMS). Of the 488 youth who participated in the CAMS project, 279 were randomly assigned to one of the CBT conditions (CBT only or CBT plus sertraline). Participants included youth (ages 7–17; $M = 10.76$) who met criteria for a principal anxiety disorder. Therapists included 38 cognitive-behavioral therapists. Therapist style, treatment integrity, and

therapist experience were examined in relation to child outcome. Child outcome was measured via

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Dr. MARCH has served as a consultant to Pfizer, Lilly, BMS, and Attention Therapeutics. He received a study drug for an NIMH-funded study from Eli Lilly Pharmaceuticals and from Pfizer Pharmaceuticals. He is an equity holder in MedAvante. He receives royalties from MultiHeath Systems. He has received research support from Pfizer Pharmaceuticals and the National Institutes of Health. Dr. Albano receives royalties from Oxford University Press for Anxiety Disorders Interview. Dr. Rynn receives grants or funding from the National Institutes of Health, Eli Lilly Pharmaceuticals, Pfizer Pharmaceuticals, Merck, and Shire Pharmaceuticals. Drs. Podell, Kendall, Gosch, Compton, Walkup, Sherrill, Ginsburg, Keeton, Birmaher, and Placentini have no conflict of interest.

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child, parent, and independent evaluator report. Therapists who were more collaborative and empathic, followed the treatment manual, and implemented it in a developmentally appropriate way had youth with better treatment outcomes. Therapist “coach” style was a significant predictor of child-reported outcome, with the collaborative “coach” style predicting fewer child-reported symptoms. Higher levels of therapist prior clinical experience and lower levels of prior anxiety-specific experience were significant predictors of better treatment outcome. Findings suggest that although all therapists used the same manual-guided treatment, therapist style, experience, and clinical skills were related to differences in child outcome. Clinical implications and recommendations for future research are discussed.

Keywords

cognitive-behavioral therapy; child anxiety; therapist factors; collaboration; coach style

Anxiety disorders are common psychological disorders experienced by youth with reported rates of 10–20% in the general population and primary care settings (Chavira, Stein, Bailey, & Stein, 2004; Costello, Mustillo, Keeler, & Angold, 2004). Anxiety disorders in youth are highly comorbid with one another as well as with other disorders such as attention-deficit/hyperactivity disorder, major depression, and dysthymia (Costello, Egger, & Angold, 2005), and they are associated with impairments at home, in school, and with peers (Van Ameringen, Mancini, & Farvolden, 2003). Research indicates that most anxiety disorders do not abate with time, and if left untreated, youth are at a greater risk for anxiety disorders in adulthood (Pine, Cohen, Gurley, Brook, & Ma, 1998), future depression (Biederman, Faraone, Mick, & Lelon, 1995), and potential substance abuse (Kendall, Safford, Flannery-Schroeder, & Webb, 2004).

An advance in the area of anxiety in youth has been the development of empirically supported treatments and a focus on evidence-based practice (American Psychological Association, 2006). Randomized clinical trials (RCTs) support the efficacy of cognitive-behavioral therapy (CBT) for anxious youth (e.g., Barrett, Dadds, & Rapee, 1996; Kendall, Hudson, Gosch, Flannery-Schroeder, & Suveg, 2008; Walkup et al., 2008) and reviewers have concluded that CBT is an effective treatment for anxious youth (e.g., Cartwright-Hatton, Roberts, Chitsaben, Fothergill, & Harrington, 2004; Silverman, Pina, & Viswesvaran, 2008). Nevertheless, approximately one third of youth do not respond to treatment.

Among the topics examined to help explain differential treatment response are client diagnoses and comorbidities (e.g., Berman, Weems, Silverman, & Kurtines, 2000; Kendall, Brady, & Verduin, 2001), family variables (e.g., Crawford & Manassis, 2001; Hughes, Hedtke, & Kendall, 2008; Ginsburg, Siqueland, Masia-Warner, & Hedtke, 2004; Southam-Gerow, Kendall, & Weersing, 2001), and child in-session variables (e.g., Chu & Kendall, 2004; Shirk & Karver, 2003). A relatively neglected area is the relationship between therapist variables and child outcome. Although therapist variability may be somewhat attenuated by manual-guided therapy, in actuality, therapists’ flexibility, interpersonal style, level of experience, and overall competence does vary and may impact effective outcomes.

Therapist variables examined with adult patients include demographics (e.g., Bowman, Scogin, Floyd, & McKendree-Smith, 2001; Maramba, Nagayama, & Gordon, 2002; Zlotnick, Elkin, & Shea, 1998), training and experience (e.g., Blatt, Sanislow, Zuroff, & Pilkonis, 1996; Huppert et al., 2001), and empathy (e.g., Sexton, Ridley, & Kleiner, 2004; Shadish & Baldwin, 2002). For example, in a study of the relationship between therapist characteristics and outcome of in vivo exposure treatment for agoraphobics, Williams and Chambless (1990) found that clients who rated their therapists as more empathic, caring, and involved were significantly more likely to improve. Huppert et al. (2001) examined data from the Multicenter Collaborative Study for the Treatment of Panic Disorder in adults and reported significant therapist effects. Treatment was manualized, and therapists were trained and monitored for adherence. For patients who received CBT, Huppert et al. found that therapists with more general experience were more likely to have patients whose anxiety sensitivity decreased, and older therapists were associated with more change in overall patient panic severity.

Some studies of therapist factors have been conducted with youth samples. Huey, Henggeler, Brondino, and Pickrel (2000) examined multisystemic therapy for substance abusing adolescent offenders and found that therapist adherence to the protocol was associated with improved family relations and decreased delinquent peer affiliation. With substance-using adolescents, Hogue and colleagues (2008) examined treatment adherence and therapist competence, and found that stronger adherence predicted greater declines in drug use.

A prominent difference between youth and adult clients is the way each come to treatment: Youth typically do not refer themselves. The fact that children are sent for treatment suggests that therapists have to take special care to promote the youth's involvement and collaboration on treatment goals. This highlights the importance of identifying specific therapist behaviors and interaction styles with child clients that lead to a good working relationship. Diamond, Liddle, Hogue, and Dakof (1999) measured therapist behaviors associated with improving initially poor therapist—adolescent alliance. Results suggested that by the third session, therapists attended to the adolescent's experience, presented themselves as an ally, and helped the adolescent formulate personally meaningful goals more extensively in cases in which the alliance improved than in cases in which the alliance did not improve. Creed and Kendall (2005) identified specific therapist behaviors that contributed to the youths' perception of a good therapeutic relationship. Sessions were rated for therapist behaviors and alliance was assessed via child, therapist, and observer ratings. Therapist "collaboration" positively predicted child ratings of a positive alliance and "pushing the child to talk" negatively predicted ratings of alliance. Certain therapist behavior (e.g., collaboration) may contribute to both the formation of a good alliance and enhanced outcome in youth. Is there a particular style that the therapist who works with youth with anxiety should employ to be optimally effective? In CBT for anxiety, the therapist is a *coach* (Kendall, 2012), where the coach is someone who is collaborative and does not tell the child what to do but helps him/her discover the skills that accomplish the collaborative goal. In contrast, a teacher may be more formal and didactic. One can posit that a collaborative "coach" style may be more effective than a didactic "teacher" style.

There is initial evidence to suggest that therapist flexibility may be related to increases in child engagement in therapy, which in turn can be linked to improvements. Chu and Kendall (2009) found that child involvement and therapist flexibility (in a sample of 63 anxious youth who received CBT) predicted improvement in post-treatment diagnostic status and levels of child impairment. Therapist flexibility, which was defined therein as therapist attempts to adapt treatment to a child's needs, is also a hallmark feature of collaboration and the "coach" style. Research is needed to examine such therapy variables as related to outcomes.

Investigators searching for predictors of treatment response have appropriately examined outcomes from RCTs. In the Child–Adolescent Anxiety Multimodal Study (CAMS), Walkup et al., (2008) compared CBT (a modified version of the *Coping Cat*; Kendall, 1990), pharmacotherapy (sertraline), and their combination (COMB) to pill placebo in 488 youth (ages 7–17) who had a primary diagnosis of separation anxiety disorder (SAD), generalized anxiety disorder (GAD), or Social Phobia (SP). Results indicated that the combination of CBT and sertraline produced the highest responder rates, with a significant percentage of children (80.7%), found to be much or very much improved. CBT (60%) and sertraline (55%) were also effective and demonstrated greater improvement than placebo (24%). Remission rates reflected this same order of outcomes by condition (Ginsburg et al., 2011). The present study examined the relationship between therapist factors and outcome in the sample of anxious youth who received CBT as part of CAMS.

It was hypothesized that higher ratings of therapist competence, treatment integrity, and experience would be positively correlated with outcome. It was also hypothesized that therapist competence, integrity, and style would be significant predictors of outcome above and beyond therapist general clinical and anxiety specific clinical experience. In addition, we explored the relationship between therapist professional degree, secondary theoretical orientation, caseload, and treatment outcome.

Method

The study used data from the CAMS multisite treatment evaluation (Walkup et al., 2008). The methods are described in Compton et al. (2009). In CAMS, 488 youth (ages 7–17) (see Kendall et al., 2010 for detailed description of the participants) were randomly assigned to 12 weeks (14 sessions) of CBT (the *Coping Cat* for children, Kendall & Hedtke, 2006, and the corresponding *C.A.T. Project* for teens Kendall, Choudhury, Hudson & Webb, 2002), sertraline (at a dose of up to 200 mg per day), a combination of CBT and sertraline (COMB), or pill placebo. Youth who were assigned to CBT conditions participated in 14 sessions over 12 weeks.

CAMS used the age-appropriate *Coping Cat* protocol. Guidelines assisted the therapist in flexible applications (Compton et al., 2010). For example, the *C.A.T. Project* is the teen version of *Coping Cat*. Across both child and adolescent CBT protocols, the 14 sessions were scheduled over 12 weeks (to be consistent with 12 weeks of medication). The 14 sessions included twelve 60-min weekly individual (e.g., child/adolescent) sessions and two parent sessions (scheduled immediately after the individual session at weeks 3 and 5). The

first six taught new skills (e.g., the FEAR plan), whereas the second six provided opportunities to practice newly learned skills (exposure tasks) within and outside of the sessions. The overall goal of CBT was to teach youth to recognize the signs of unwanted anxiety, let these signs serve as cues for the use of more effective anxiety management strategies, and face rather than avoid anxiety-provoking situations.

Procedure

Informed consent/assent for treatment/videotaping was obtained from parents and youth. All youth and parents completed self-reports and were interviewed by reliable diagnosticians (Independent Evaluators: IEs), blind to treatment condition. For youth in CBT and COMB, CBT supervisors rated therapist competency at the completion of the study. Quality assurance (QA) raters assessed therapist treatment integrity by examining the degree to which the therapists adhered to the content of the treatment manual and how they implemented that content throughout the study.

CAMS CBT

Youth received the age appropriate version of the *Coping Cat* program over 12 weeks. The program combines behavioral (e.g., relaxation, exposure tasks) and cognitive (e.g., problem-solving, change self-talk) strategies. Parents received two sessions (#s 4, 9). The first half focuses on psychoeducation, and the second on exposure tasks. Early sessions help the child identify anxiety and introduce strategies to ameliorate anxiety. In exposure tasks, the child approaches, rather than avoids, anxiety-provoking situations. Parents were included in exposure tasks as appropriate. Youth in COMB received identical CBT, along with pharmacotherapy (up to 200 mg of Sertraline). Youth in COMB met with psychiatrists weekly for 30-minute sessions (excluding CBT). Although manual-based, therapists were flexible and tailored the treatment to the youth's developmental level and/or individual characteristics.

Therapist Training

Therapists (38) had a minimum of 2 years experience with anxious youth. Therapists (a) studied written materials (e.g., manual); (b) participated in CBT-supervisor-led workshops (i.e., didactics, role-plays, and videotape playback); (c) passed a CBT knowledge test; and (d) completed a supervised pilot case. Therapists participated in weekly cross-site group telephone supervision and, when appropriate, individual site-level supervision. Supervision was led by licensed clinical psychologists with at least 5 years experience with the treatment protocol.

Participants

Study participants included (a) CAMS youth who completed CBT, (b) the therapists who provided CBT, and (c) supervisors of the CBT therapists.

Client (youth) participants—Youth (279) were randomized to CBT or COMB (see Table 1). Youth represent diverse ethnic/minority backgrounds and came from clinics, schools, and local community organizations. Youth met criteria for a principal diagnosis of

SAD, GAD, or SP based on the composite of the Anxiety Disorders Interview Schedule for *DSM-IV*, Child and Parent Version (Silverman & Albano, 1996). Children were excluded for an unstable medical condition, IQ <80, refusing to attend school due to anxiety, or had not had a response to two adequate trials of selective serotonin-reuptake inhibitors (SSRIs) or an adequate trial of CBT.

Therapist participants (see Table 2)—Therapists (doctoral candidates, social workers, psychologists) were female (84%) and Caucasian (92%), and held either a PhD (58%) or a master's degree in psychology (37%) (*M* age 30.08 year; *SD* = 4.4 years). The majority identified their primary theoretical orientation as cognitive-behavioral, with secondary theoretical orientations of behavioral, family systems, and eclectic. Therapists had an average of 5.59 (*SD* = 2.42) years of clinical experience and treated an average of 14.71 (*SD* = 8.39) anxious youth. The modal study caseload for therapists was eight youngsters.

Supervisor participants (see Table 1)—CBT supervisors included nine PhD psychologists and one LCSW (average clinical experience 13.5 years; average of 91.5 cases of youth anxiety). Supervisors had experience with the treatment manual and supervising its implementation.

Measures

Treatment outcome measures—(Clinical Global Impression-Severity and Improvement Scales (CGI-S and I; Guy, 1976). The CGI-S provides a global rating of baseline severity ranging from 1 (*not at all ill*) to 7 (*extremely ill*), and the CGI-I provides a global rating of improvement ranging from 1 (*very much improved*) to 7 (*very much worse*). The CGI-I was the primary categorical measure of treatment response: defined as 1 (*very much improved*) or 2 (*much improved*). Such scores (1 or 2) reflect substantial, meaningful improvement in anxiety severity (Walkup et al., 2008). Treatment responders were rated with CGI-I of a 1 or 2 by the IE.

Global Assessment Scale for Children (CGAS; Shaffer et al., 1983). The CGAS (1–100) measures global impairment and functioning over the previous month. The IE completed the CGAS at pre- and posttreatment based on child and parent input.

Pediatric Anxiety Rating Scale (PARS; Research Units on Pediatric Psychopharmacology Anxiety Study, 2002). The PARS is a clinician-administered anxiety severity scale. Scores are calculated by summing items assessing anxiety severity, frequency, distress, avoidance, and interference during the previous week. Total scores range from 0 to 30, with scores above 13 indicating clinically meaningful anxiety. The PARS has excellent interrater reliability (>0.97).

Child Behavior Checklist (CBCL; Achenbach, 1991; Achenbach & Edelbrock, 1991). The 118-item CBCL is a parent report of their youth's behavioral problems and social competencies. CBCL items are rated 0 to 2. The CBCL has normative scores (Achenbach & Rescorla, 2001) and yields Internalizing and Externalizing scores, and narrowband subscales. The CBCL Internalizing and Anxiety/Depression subscales were used to measure parent-reported child symptomatology. Internal consistency on the subscales range from .

54–.96. Retest reliability on the subscales range from .86–.89 (Achenbach & Rescorla, 2001).

Multidimensional Anxiety Scale for Children (MASC; March, Parker, Sullivan, Stallings, & Conners, 1997). The MASC is a 39-item self-report rating scale assessing anxious symptoms in youth ages 8–19. Items are rated on a 4-point scale (0 = *Never true about me*, 3 = *Often true about me*). The MASC provides a Total score and factor scores. The MASC has high internal consistency (e.g., $r = .90$ for Total score and $r = .74$ –.85 for subscales; March et al., 1997; March, Sullivan, & Parker, 1999) and retest reliability in clinic samples ($r = .79$; March et al., 1997) and school samples ($r = .88$; March et al., 1999). The MASC discriminates anxiety-disordered and non-anxiety-disordered adolescents (Dierker et al., 2001; Villabø, Gere, Torgersen, March, & Kendall, 2012).

Therapist measures—Therapist Information Form (TIF; Podell & Kendall, 2008a). The 16-item TIF is a self-report questionnaire completed by therapists. The TIF assessed therapist demographics (age, gender, ethnicity), professional training, practice experience, primary and secondary theoretical orientations, and study caseload. The TIF (a) includes the therapist variables examined in the literature, (b) takes into account criticisms of how these variables have been measured in previous studies, and (c) includes new variables. Consistent with Beutler et al. (2004), therapists reported the number of years during which they conducted individual therapy and the number of anxious youth they have worked with (rather than time since they obtained their degree).

CBT Checklist (CBTC; Kendall, Gosch, Albano, Ginsburg, & Compton, 2001). The 24-item CBTC assessed therapist treatment integrity (adherence to the manual, treatment implementation, and overall CBT skill). Items were rated by independent quality assurance (QA) raters with extensive experience in the treatment of anxious youth (4-point scale ranging from *superior* to *failed to attempt*). Videotaped CBT sessions were rated by comparing therapist integrity against a checklist of session content, as well as examining therapist verbalizations to ensure that the protocol was being followed and delivered in a developmentally appropriate manner. This measure yields a total therapist integrity score. Item 19, which relates to the parent sessions, was excluded. The mean treatment integrity score was 33.40 ($SD = 8.39$).

Supervisor Rating Form (SRF; Podell & Kendall, 2008b). The SRF is a 30-item scale assessing the supervisor's global impression of the therapist's competence with CBT for anxious youth as well as the therapist's in-session style. Supervisors at each site completed the SRF once the therapist completed treatment with his or her last client. Ratings ranged from 1 to 5 (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *always*). Ratings of therapist competence were based on general therapist characteristics and qualities (e.g., levels of empathy, warmth) and clinical skills (e.g., case conceptualization, session structure); therapist style was rated on the therapists' level of collaboration and flexibility used in session with the child. The SRF yields a total therapist competence score, and a therapist style score. Higher therapist style ratings indicate a more collaborative "coach" style; lower ratings indicate a more rigid style. The mean competence score was 119.44 ($SD = 14.54$); the mean style score was 30.72 ($SD = 3.01$).

Data Analysis

Using small to medium effect sizes, 279 participants, and alpha at .05, power was .94 (Cohen, 1988). Chi-square and *t* tests compared youth assigned to CBT and COMB on age, gender, and ethnicity. Multicollinearity was assessed and nonsignificant. Analyses were conducted using a generalized linear mixed model with patients nested within clinicians who were then nested within site. Estimates of fixed effects examined the relationship between therapist factors and outcome measures. Correlations were also calculated between therapist factors and outcome measures for all youth who completed 12 weeks of treatment.

Treatment outcome was measured using: (1) CGI-I; Responder Status Scores of 1 or 2 indicating “very much improved” or “much improved.” (2) CGAS; higher scores indicate better overall functioning. (3) PARS; lower PARS scores indicate less impairment from anxiety. (4) MASC; lower scores indicate less anxiety symptoms. (5) CBCL-Internalizing and Anxiety/Depression scores; lower scores indicate less symptomatology.

Results

Preliminary Analyses

Descriptive/preliminary analyses (e.g., chi square; *t* tests) assessed differences (age, diagnosis, symptom severity) between youth assigned to CBT and COMB. No significant differences were found, with the exception of previously reported outcomes (Walkup et al., 2008). Youth in both conditions experienced significant treatment gains. Due to differences in treatment outcome, treatment condition was controlled in all subsequent analyses. In addition, an interaction term between treatment condition and independent variables (style, integrity, experience) was examined and not found to be significant. Multicollinearity was not found.

Primary Analyses

Significant positive correlations (see Table 3) were found between therapist style and the following variables: therapist prior clinical experience, therapist study caseload, therapists with a master’s degree, and therapist age. Higher ratings of a therapist “coach” style were correlated with higher levels of clinical experience, higher study caseload, therapists with a master’s degree, and older therapist age. Therapist treatment integrity was correlated with lower number of prior anxiety experience. Therapist prior clinical experience was positively correlated with prior anxiety experience and therapist age and negatively correlated with degree.

There were significant correlations between therapist variables and child treatment outcome (Table 4). High ratings of therapist style were correlated with lower MASC scores, high ratings of therapist treatment integrity were correlated with lower CBCL Internalizing and CBCL Anxiety/Depression scores. More prior clinical experience was correlated with lower CBCL Internalizing and CBCL Anxiety/Depression scores. Higher study caseloads were correlated with higher PARS scores and nonresponder status. Higher levels of therapist prior anxiety experience were correlated with higher PARS scores and nonresponder status.

Tables 5 and 6 present estimates of fixed effects for the general linear hierarchical models. Analyses were conducted using HLM with patients nested within therapists who were in turn nested within site. Results indicate significant effects for therapist style and MASC scores, and significant effects for therapist treatment integrity and CBCL Internalizing and CBCL Anxiety/Depression. Results in Table 6 indicate significant effects for therapist prior anxiety experience and responder status.

Discussion

Therapist treatment integrity, therapist style, and therapist prior clinical experience and anxiety-specific experience were significant predictors of child outcome. Therapists who followed the guidelines of the manual and implemented it in a developmentally appropriate and supportive manner had youth with better outcomes. Therapist “coach” style was a significant predictor of child-reported outcome, with the collaborative “coach” style predicting fewer child-reported symptoms. More years of prior clinical experience predicted better outcome whereas more anxiety-specific experience was, surprisingly, linked to less optimal outcomes. Although all therapists used the manual-guided treatment, therapist experience and clinical skills were related to child outcome. The findings of Walkup et al. (2008) support the efficacy of CBT for anxious youth, and the present findings suggest that therapist factors contribute to differences in child outcome.

Therapist treatment integrity was a significant predictor of outcome on parent-rated measures. This finding indicates that the quality of the therapist’s implementation of the treatment (the adapted *Coping Cat* program) is related to the child’s outcome. Therapists who were knowledgeable of CBT principles, covered required session content, and did so collaboratively were more likely to have clients who responded favorably. These findings are consistent with data from adult depression samples (DeRubeis & Feeley, 1990; Huey et al., 2000; Shaw et al., 1999; Trepka, Rees, Shapiro, Hardy, & Barkham, 2004). Strunk, Brotman, DeRubeis, and Hollon (2010) examined therapist cognitive therapy competence as a predictor of symptom change and found that competence was a significant predictor of evaluator-rated end-of-treatment depression severity. Competence was also found to be more highly related to outcomes for patients with earlier age of onset and comorbid anxiety. Akin to the present results, the Strunk et al. (2010) results support the relationship between outcome and therapist competence in a specific treatment (cognitive therapy) with a specific population (adult depression).

A meta-analysis of therapist adherence/competence and treatment outcome found that neither the mean weighted adherence-outcome nor competence-outcome effect size estimates were significantly different from zero (Webb, DeRubeis, & Barber, 2010), suggesting that therapist adherence and competence do not contribute to meaningful differences in client outcome. However, these results require caution given the heterogeneity of treatments (e.g., dynamic, interpersonal, CBT), problems (e.g., depression, panic, bulimia), and adherence/competence measures. There are also issues related to a restricted range of competence and adherence scores. In RCTs, therapists are trained and monitored and competence and adherence are required. This reduces that range of competence and adherence scores, which in turn makes it difficult to examine the relationship between

therapist competence and adherence to outcome. Therapist factors may nevertheless be associated with differential outcomes.

In line with our hypotheses, a more collaborative therapist style was a significant predictor of outcome. A higher “coach” style predicted fewer child-reported anxiety symptoms. Creed and Kendall (2005) found that higher ratings of collaboration (part of the “coach” style) were associated with better alliance ratings. It is interesting that therapist competence and style were related to child-reported outcome, but not parent- or IE-rated outcome. A more collaborative style was also predictive of better child-rated outcomes, and higher ratings of treatment integrity and therapist prior clinical experience were predictive of parent-rated outcomes.

Results indicated that clinical experience predicted improved outcome for youth as rated by parents and IEs. These findings are consistent with our hypothesis and with prior research. For example, in Huppert et al. (2001) where patients received CBT, those who had therapists with more clinical experience showed greater improvement on panic symptoms than those seen by less experienced therapists. In CAMS and other RCTs (Keijsers, Schaap, Hoogduin, & Lammers, 1995; Nauta, Scholing, Emmelkamp, & Minderaa, 2003; Ollendick, Hagopian, & Huntziger, 1991; Vocisano, Klein, & Arnou, 2004), therapists received the same training and followed session-by-session guidelines with ongoing supervision and adherence checks. This methodology probably reduces therapist variability. It remains, however, that therapists with more experience may have a deeper understanding of CBT principles and more skill in implementation, as well as more skill in developing an alliance. Knowledge of CBT and a strong therapeutic alliance were significant predictors of outcome for anxious and depressed samples (Shirk & Karver, 2003).

Prior clinical experience may be related to a comfort and familiarity with the use of manuals and structured treatments. More experienced therapists may have had more opportunities to implement manual-based treatments and may be able to implement these programs with more adaptive flexibility. Manuals are not cookbooks but guides that require “flexibility within fidelity” (Kendall & Beidas, 2007; Kendall, Gosch, Furr, & Sood, 2008). The *Coping Cat* program has specific content and strategies, but the manner in which they are implemented can vary across therapists. Therapists with more clinical experience may be better able to flexibly implement the treatment.

Surprisingly, therapist prior anxiety-specific experience significantly predicted poorer child outcomes (the more anxiety-specific experience the therapist had, the more anxiety symptoms and the lower functioning the child had at posttreatment). Although speculative, it is possible that therapists with more anxiety-specific experience may have felt that they “already know how to do the treatment” and therefore did not adhere to the manual as closely. It is also possible that the therapists with more anxiety-specific experience had cases that were more severe, so the finding is linked to client-specific factors. Additional investigation is needed to replicate and potentially better understand the unanticipated relationship.

Among the strengths of the study are the large well-characterized sample of anxious youth (Kendall et al., 2010), the use of a manualized treatment program, well-trained therapists, conditions with and without medication, and the monitoring of therapist adherence. Study limitations include the unequal number of clients assigned to each therapist and the lack of a measure of the therapeutic alliance. The present results may also be limited by the measures used to assess treatment integrity and therapist competence, since the psychometric properties of these measures have yet to be established.

The importance of high levels of treatment integrity and a collaborative therapist style have clinical implications. Given that youth do not self-refer to treatment, collaboration between the therapist and the client may be especially important. Anxious youth are self-critical and have frequent negative thoughts (Kendall & Treadwell, 2007). A collaborative style may allow the child the freedom to talk and become involved, and experiment without the fear of criticism. Although CBT for anxious youth is a manual-based efficacious treatment, it may be best delivered in a flexible and collaborative manner. The use of a “coach” style may be the ideal manner to implement this type of treatment.

Results from the present study help delineate therapist features related to treatment outcome. Specifically, therapists who were more collaborative and empathic, followed the treatment manual, and implemented it in a developmentally appropriate way had youth with better treatment outcomes. The findings highlight the importance of therapists using an individualized collaborative and flexible approach, while maintaining fidelity to the treatment manual. Some have emphasized the value of manuals to disseminate empirically supported treatments (Kendall & Beidas, 2007), but others are hesitant to use manual-based treatments (Cohen, Sargent, & Seachrest, 1986). One reason may be the perception that manuals must be followed rigidly and without concern for interpersonal processes. Our findings underscore the merits of “flexibility within fidelity” (Kendall, Gosch et al., 2008). Last, as highlighted by Chu and Kendall (2009), therapy process research may help bridge the gap between clinical research and clinical practice by documenting elements of how best empirically supported treatments can be delivered (Chu & Kendall, 2009).

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Table 1

Baseline Characteristics of Child Participants

	Combination therapy (<i>N</i> = 140)	Cognitive-Behavioral therapy (<i>N</i> = 139)	All subjects receiving CBT (<i>N</i> = 279)
Child age in years (<i>SD</i>)	10.8 (2.82)	10.71 (2.76)	10.76 (2.79)
Child's gender (% female)	72 (51.4)	72 (51.8)	144 (51.6)
Child's race/ethnic group (%)			
Caucasian	116 (82.9)	106 (76.3)	222 (79.6)
Hispanic	16 (11.4)	21 (15.1)	37 (13.3)
African American	11 (7.9)	14 (10.1)	25 (9)
Asian	6 (4.3)	1 (0.7)	7 (2.5)
Pacific Islander	1 (0.7)	—	1 (0.4)
American Indian	1 (0.7)	3 (2.2)	4 (1.4)
Low socioeconomic status (%)	35 (25)	33 (23.7)	68 (24.4)
Primary anxiety diagnosis (%)			
Separation anxiety disorder	3 (2.1)	4 (2.9)	7 (2.5)
Social phobia	11 (7.9)	14 (10.1)	25 (9.0)
Generalized anxiety disorder	8 (5.7)	14 (10.1)	22 (7.9)
SAD and SoP	14 (10.0)	9 (6.5)	23 (8.2)
SAD and GAD	12 (8.6)	13 (9.4)	25 (9.0)
SoP and GAD	41 (33.6)	43 (30.9)	90 (32.3)
SAD, SoP, GAD	45 (32.1)	42 (30.2)	87 (31.2)

Note. *SD* = Standard deviation; Low socioeconomic status was defined as a score of 3 or less on the Hollingshead Two-Factor Scale, which ranges from 1–5; SAD = separation anxiety disorder; SoP = social phobia; GAD = generalized anxiety disorder.

Table 2

Descriptives of Study Therapists and Supervisors

	CBT Therapists (<i>N</i> = 38)	CBT Supervisors (<i>N</i> = 10)
Age in years (<i>M</i> ± <i>SD</i>)	30.08 (4.40)	37.8 (7.44)
Gender (% female)	32 (84.2)	7 (70)
Race/Ethnic group (%)		
Caucasian	35 (92.1)	10 (100)
Asian	2 (5.3)	—
Other	1 (2.6)	—
Professional Degree (%)		
PhD	22 (57.9)	9 (90)
PsyD	1 (2.6)	—
MA/MS	14 (36.8)	—
LCSW	1 (2.6)	1 (10)
Prior clinical experience in years (<i>M</i> ± <i>SD</i>)	5.59 (2.42)	13.5 (6.17)
Prior # of anxious youth cases treated (<i>M</i> ± <i>SD</i>)	14.71 (8.39)	91.5 (59.35)

Table 3**Bivariate Correlations Among Therapist Variables**

	1	2	3	4	5	6	7	8
1. Therapist style	—							
2. Therapist treatment integrity	.11	—						
3. Therapist prior clinical experience	.12*	.02	—					
4. Therapist prior anxiety cases	.04	-.13*	.40**	—				
5. Therapist study caseload	.12*	-.10	.04	.43**	—			
6. Therapist degree [†]	.23**	-.04	-.49**	.12	.28**	—		
7. Therapist age	-.20*	-.04	.66**	.28**	-.19**	-.38**	—	
8. Therapist secondary theoretical orientation ^{††}	.07	-.09	-.12	.15*	.36**	.33**	-.10	—

Note.

[†] = Therapist master's degree.

* = $p < .05$.

** = $p < .01$.

^{††} Therapist secondary theoretical orientation refers to a secondary orientation other than CBT

Table 4

Correlations Between Therapist Variables and Child Treatment Outcome

Therapist variable	Responder	CGAS	PARS	MASC	CBCL Int	CBCL Anx/Dep
Therapist style	.07	-.01	-.02	-.16*	-.04	-.01
Therapist treatment integrity	.05	-.08	-.01	-.03	-.16*	-.14*
Therapist prior clinical experience	.04	.02	-.10	-.06	-.15*	-.16*
Therapist prior anxiety cases	-.19**	-.03	.13*	.07	.05	-.03
Therapist study caseload	-.13*	-.05	.14*	.12	-.08	-.05
Therapist degree [†]	-.04	.04	.07	.03	.07	.09
Therapist age	.02	.06	-.10	-.05	-.10	-.12
Therapist secondary theoretical orientation ^{††}	-.07	-.05	.10	-.08	.07	.04

Note.

*
= $p < .05$.**
 $p < .01$.[†]
= Therapist master's degree.^{††}
Therapist secondary theoretical orientation refers to a secondary orientation other than CBT. Responder = CGI-I scores < 2; CGAS = Children's Global Assessment Scale; PARS = Pediatric Anxiety Rating Scale; MASC = Multidimensional Anxiety Scale for Children; CBCL Int = Child Behavior Checklist Internalizing Scale; CBCL Anx/Dep = CBCL Anxiety/Depression Scale.

Table 5

Estimates of Fixed Effects: Therapist Style and Treatment Integrity

	Therapist style				Therapist treatment integrity			
	Estimate	SE	t	p	Estimate	SE	t	p
Treatment responder	.00	.01	.30	.76	-.01	.00	-.18	.86
CGAS	-.09	.28	-.32	.75	-.14	.08	-1.7	.09
PARS	.11	.18	.60	.55	.04	.05	.83	.41
MASC	-.87	.45	-1.9	.05	-.03	.13	-.23	.82
CBCL Internalizing	.12	.32	.38	.71	-.18	.09	-2.1	.03
CBCL Anxiety/Depression	.24	.24	.99	.33	-.13	.07	-2.1	.04

Note. Responder = CGI-I scores < 2; CGAS = Children's Global Assessment Scale; PARS = Pediatric Anxiety Rating Scale; MASC = Multidimensional Anxiety Scale for Children; CBCL = Child Behavior Checklist- Internalizing and Anxiety Subscale.

Table 6

Estimates of Fixed Effects: Therapist Prior Experience

	Therapist clinical experience				Therapist anxiety experience			
	Estimate	SE	t	p	Estimate	SE	t	p
Treatment responder	.03	.02	1.7	.10	-.01	.00	-3.0	.00
CGAS	.60	.49	1.2	.22	-.19	.10	-1.8	.07
PARS	-.50	.29	01.7	.09	.12	.06	1.8	.07
MASC	-.40	.77	-.52	.61	.07	.17	.45	.66
CBCL Internalizing	-.88	.52	-1.7	.09	.19	.16	1.6	.11
CBCL Anxiety/Depressioonon	-.74	.40	-1.9	.07	.05	.09	.56	.58

Note. Responder = CGI-I scores < 2; CGAS = Children's Global Assessment Scale; PARS = Pediatric Anxiety Rating Scale; MASC = Multidimensional Anxiety Scale for Children; CBCL = Child Behavior Checklist- Internalizing and Anxiety Subscale.