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Changes in Rejection and Psychological Control During Parent–Child Interactions Following CBT for Children’s Anxiety Disorder

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This study examined changes in mothers’ and fathers’ rejection and psychological control during parent–child interactions after cognitive–behavioral therapy (CBT) for children’s anxiety disorders. We studied whether family CBT reduced rejection (vs. warmth) and psychological control (vs. autonomy-granting) more than child CBT, and whether parents own anxiety disorders resulted in smaller decreases in these parenting behaviors. Participants were 128 clinically referred children and adolescents ($M_{\text{age}} = 12.4$, $SD_{\text{age}} = 2.7$) with anxiety disorders and their parents, randomly assigned to either family CBT ($n = 64$) or child CBT ($n = 64$). The Anxiety Disorders Interview Schedule was used to assess children’s and parents’ anxiety disorders. Before and after treatment, parents’ rejection and psychological control toward their child was rated during conflict and anxiety discussions of mother–child dyads, father–child dyads, and mother–father–child triads. As expected, during dyadic and triadic interactions, mothers’ and fathers’ rejection toward their child decreased after child and family CBT. Unexpectedly, during triadic conflict interactions, mothers, after child CBT and family CBT, as well as fathers, after child CBT, displayed increased psychological control. During triadic anxiety interactions, only mothers, after child CBT, showed increased psychological control. Changes in parenting did not depend on whether or not parents had anxiety disorders themselves. Thus, CBT for anxiety-disordered children can successfully reduce parents’ rejection. The unexpected findings of increased psychological control after treatment, particularly by mothers in the presence of the father, suggests potential benefits of mothers’ psychological control with anxious children.

Keywords: parent–child interactions, cognitive–behavioral therapy (CBT), child anxiety disorders, rejection, psychological control

Anxiety disorders are the most common psychiatric illnesses in children worldwide, with an estimated prevalence of 6.5% (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015). Research shows that parents of clinically anxious children tend to engage in more rejective and psychological controlling behavior during interactions than parents of nonanxious children (e.g., McLeod, Wood, & Weisz, 2007; Möller, Nikolić, Majdandžić, & Bögels, 2016; van der Bruggen, Stams, & Bögels, 2008). Parental rejection is parenting behavior that is hostile, critical, negative, and low in warmth and acceptance (Chorpita & Barlow, 1998; Wood, McLeod, Sigman, Hwang, & Chu, 2003). Because of high parental rejection and low parental warmth, children might perceive the environment as hostile and threatening, and this may lead to a negative self-view and undermine children’s emotion regulation,

thereby increasing sensitivity to child anxiety (Bögels & Brechman-Toussaint, 2006; McLeod et al., 2007). Psychologically controlling parenting is characterized by excessive intrusion in children’s thoughts and feelings, and by discouragement of autonomy, which is thought to increase children’s anxiety by minimizing opportunities to perceive independence, individuality, and autonomy (Barber, 1996; Chorpita & Barlow, 1998; Wood et al., 2003). Despite the importance of these so called “anxiety enhancing” parenting behaviors in the development and maintenance of child anxiety, there is a paucity of research investigating whether interventions for child anxiety reduce parental rejection and psychological control expressed in parent–child interactions, and whether interventions for child anxiety that focus on changing anxiety-enhancing parenting behaviors do that to a greater extent.

Cognitive–behavioral therapy (CBT) has been consistently demonstrated to be an efficacious and effective treatment for childhood anxiety disorders (e.g., Kendall, 1994; Reynolds, Wilson, Austin, & Hooper, 2012). Because evidence suggests that rejection and psychological control by parents play an important role in the etiology of child anxiety (e.g., McLeod et al., 2007; van der Bruggen et al., 2008), researchers have tried to enhance treatment efficacy by involving parents or the whole family (i.e., parents and siblings) in CBT for child anxiety (e.g., Barrett, Dadds, & Rapee, 1996; Bögels & Siqueland, 2006). It is thought that children’s treatment outcome might improve by targeting parenting behaviors (i.e., rejection and control) that are related to child

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anxiety. When parents learn to minimize criticism and hostility toward their child, and instead be warm and supportive to their child, this might help to promote the child's feelings of safety and positive self-view, thereby reducing the child's anxiety. Similarly, when parents learn to avoid controlling children's thoughts and emotions, and encourage their child's autonomy instead, this might foster children's perceptions of mastery and control, which may decrease child's anxiety (Bögels & Siqueland, 2006; Chorpita & Barlow, 1998; Wood et al., 2003). However, most meta-analyses of randomized controlled trials (RCTs) that compared child-alone CBT with parent CBT and family CBT (i.e., parents and siblings) for child anxiety disorders showed that when parents or the family were involved in CBT, this did not lead to larger improvements in children's anxiety than when only children were involved in CBT (e.g., Manassis et al., 2014; Reynolds et al., 2012; Thulin, Svirsky, Serlachius, Andersson, & Öst, 2014). Additionally, one study showed that involving the family (i.e., parents and siblings) in CBT was even less effective (Bodden, Bögels, et al., 2008) and less cost-effective (Bodden, Dirksen, & Bögels, 2008). Finally, a recent study using pooled data also found no differences between individual CBT, group CBT, and guided parent-led CBT for children with primary social anxiety disorder, generalized anxiety disorder, and separation anxiety disorder, and that individual CBT led to better symptom improvement and remission rates than guided parent-led CBT for specific phobia (McKinnon et al., 2018). In conclusion, evidence suggests that child CBT is enough to reduce children's anxiety disorders, and parental or family involvement does not add a significant effect.

Studies targeting the efficacy of child CBT and family CBT have mainly examined effects on children's treatment outcome and have not evaluated the effects the type of CBT on observed parenting. It is still unknown whether involving parents or even the whole family in CBT actually decreases observed parental rejection and psychological control during parent-child interactions more so than when parents are not involved. We do know from studies using parents' and children's reports of rejection and psychological control that child CBT is just as effective in improving parents' and children's perceptions of parental rejection and psychological control as parent and family CBT (e.g., Jongerden & Bögels, 2015; Silverman, Kurtines, Jaccard, & Pina, 2009; Wood, McLeod, Piacentini, & Sigman, 2009). However, because family CBT specifically targets parent-child communication, one would expect that compared with child CBT, family CBT more strongly affects observed parental rejection versus warmth and psychological control versus autonomy granting during interactions than perceptions of such parenting. Moreover, there is growing consensus that observational paradigms provide more valid reflections of anxiety-enhancing parenting than self- and parent reports (Ginsburg, Grover, Cord, & Ialongo, 2006; McLeod et al., 2007). As such, it is possible that although child CBT and family CBT both affect perceptions of parental rejection and psychological control, family CBT more strongly changes observed parental rejection and psychological control, which participants are unaware of and cannot report on, compared with child CBT.

To the best of our knowledge, only two observational studies examined whether interventions aimed at reducing child anxiety also altered rejection and psychological control in real-life interactions. First, Lafreniere and Capuano (1997) showed that a parenting skills home-based intervention for mothers of anxious-

withdrawn preschoolers ($n = 43$) was associated with a decrease from pre- to posttreatment in observed maternal emotional intrusiveness and behavioral control during a problem-solving task of mother and child, but there was no comparison intervention directed at the preschoolers, and fathers were not included in the intervention and the observation. Second, Gar and Hudson (2009) found that parent CBT for anxious children ($n = 48$) resulted in decreases from pre- to posttreatment in maternal expressions of criticism and emotional overinvolvement (i.e., psychological control) toward their children during a 5-min interview, but there was no condition or a child-focused intervention for comparison, no assessment of parenting during a parent-child interaction, and no fathers included. Overall, the question remains whether including parents in CBT is necessary to establish changes in observed maternal as well as paternal rejection and psychological control during parent-child interactions.

Parental anxiety has been argued to lead to anxiety-enhancing parenting behaviors such as rejection and psychological control in parent-child interactions (Bögels & Brechman-Toussaint, 2006; Ginsburg & Schlossberg, 2002). Anxious parents tend to perceive challenging new situations for their anxious children as threatening and might therefore execute more parental rejection and psychological control and grant children less autonomy to avoid threatening situations to minimize feeling anxious (Borelli, Margolin, & Rasmussen, 2015; Drake & Ginsburg, 2012; Lebowitz, Leckman, Silverman, & Feldman, 2016). However, evidence is mixed as to whether anxious parents display more rejection and psychological control during interactions compared with nonanxious parents (Teetsel, Ginsburg, & Drake, 2014; van der Bruggen et al., 2008). To the best of our knowledge, there is only one observational study ($n = 22$) that shows that mothers with an anxiety disorder displayed, from pre- to posttreatment, a pattern of increased emotional overinvolvement and fear expression toward their child during a public speaking task (Creswell, Willetts, Murray, Singhal, & Cooper, 2008). This study, however, was limited in several ways—namely, changes in maternal behavior were not significant, changes in maternal rejection were not examined, and fathers were not included. Given the potential importance of parental anxiety on parental rejection and psychological control, and the lack of evidence to support this, it is important to study whether parents' own anxiety predicts changes in observed parental rejection and psychological control after treatment. This would inform intervention efforts as to whether targeting parental anxiety would be an adequate strategy to promote decreases in parental rejection and psychological control following treatment.

Finally, the few studies (e.g., Creswell et al., 2008; Gar & Hudson, 2009; Lafreniere & Capuano, 1997) that examined changes in observed parental rejection and psychological control after treatment for child anxiety mostly used dyadic parent-child tasks that assessed parental reactions of one parent to the child in a stressful situation (e.g., public speaking, grocery task). Studies that included dyadic as well as triadic interactions showed that parents of children with anxiety disorder display more rejection and psychological control during emotional discussion (Bögels, Bamelis, & van der Bruggen, 2008; Siqueland, Kendall, & Steinberg, 1996). Emotional discussions are structured, challenging, and require interaction and cooperation, which has been found to elicit increased activation, emotional arousal, and anxiety-related parenting behaviors (psychological control and rejection) for both

anxious and nonanxious children and parents (Ginsburg et al., 2006; Gonzalez, Moore, Garcia, Thienemann, & Huffman, 2011). Because families are considered to consist of multiple subsystems affecting each other (Minuchin, 1974), and because coparenting relations have been suggested to be bidirectionally related to child anxiety (Majdandžić, de Vente, Feinberg, Aktar, & Bögels, 2012), it is important to examine parenting during dyadic as well as triadic interactions. For instance, it is thought that coparenting conflicts might directly affect child anxiety by creating a conflictual and unsafe environment for children. They may also indirectly affect child anxiety via parenting behavior; if one parent is not, or does not feel, supported by the other parent, he or she may become more rejecting or psychologically controlling toward the child or compensate the lack of coparent closeness by child closeness by displaying more warmth toward the child (Bögels, Lehtonen, & Restifo, 2010). In turn, child anxiety may also lead to problematic coparenting engagement between parents, such as criticism, undermining, and withdrawal (Majdandžić et al., 2012). Taken together, fathers' and mothers' parenting behaviors during emotional discussions with their anxious child might be different when both parents are present compared with when only one parent is present. To fill the gap in the literature, the current study is the first that assessed changes in rejection and psychological control by both fathers and mothers during both dyadic as well as triadic emotion-provoking discussions over the course of treatment for child anxiety.

The Current Study

For intervention efforts, it is important to identify dysfunctional parenting behaviors that remain unaltered following treatment and that could be targeted more specifically in treatment programs. There is a great need to observe changes in rejection and psychological control by fathers as well as mothers during interactions. Additionally, there is still limited knowledge concerning whether changes in rejection and psychological control can be observed in dyadic as well as triadic parent-child interactions. The first aim of the current study was to examine whether parental rejection and psychological control during parent-child interactions decreased after child anxiety treatment. We expected decreases in parental rejection and psychological control after treatment. Differences between fathers and mothers, and between dyadic and triadic interactions about everyday conflict issues and anxiety issues, were explored.

The second aim was to investigate the effects of type of CBT on changes in rejection and psychological control during parent-child interactions. We investigated whether family-focused CBT (FCBT) versus child-focused CBT (CCBT) differently affected changes in rejection and psychological control. Because parenting and communication patterns were explicitly targeted in FCBT, we hypothesized that changes in paternal and maternal rejection and psychological control during interactions would be more pronounced in FCBT than CCBT. Finally, we explored whether parents' own anxiety disorders affected changes in rejection and psychological control over the course of treatment. Because parental anxiety is related to higher levels of rejection and psychological control, parents with an anxiety disorder may find it more difficult to lessen their psychological control and rejection toward their anxious child during treatment. Therefore, decreases after

treatment in rejection and psychological control might be smaller when parents also have an anxiety disorder themselves.

Method

Participants

Participants were 128 children aged 8 to 18 years referred by their general practitioner to one of eight community mental health centers in the Netherlands because of a primary anxiety disorder. There were 76 girls (59%) and 52 boys (41%) aged 8 to 17 years ($M = 12.44$, $SD = 2.70$). Fifty-eight children (45%) attended primary education, and 70 children (55%) attended secondary education. Children and their families were part of an RCT in which the efficacy of CCBT versus FCBT was studied (Bodden, Bögels, et al., 2008). Families were randomly assigned to either CCBT ($n = 64$) or FCBT ($n = 64$). Inclusion criteria were aged 8 to 18, a primary anxiety disorder (no obsessive-compulsive disorder or posttraumatic stress disorder, conform *DSM-5*), IQ above 80, and at least one parent willing to participate. Children were excluded when they suffered from substance abuse, current suicide attempts, untreated attention-deficit hyperactivity disorder, pervasive developmental disorders, or psychosis. They were also excluded when they used anxiety-reducing medication, unless they kept a constant dosage during treatment or ended the medication use before start of treatment.

Every effort was made to have both the mother and father participate in the study. When a biological and a stepparent were available, we invited the biological parent if that parent had regular contact with the child. Even when parents did not want to participate in therapy, we asked them to fill out the questionnaires and to participate in the diagnostic interviews and the observations. Eventually, in CCBT, there were 51 (80%) families in which both father and mother participated in the interaction tasks, four (6%) families in which only mother participated, one (2%) family in which only father participated, and eight (12%) families in which neither father nor mother participated. In FCBT, there were 49 (77%) families in which both father and mother participated in the interaction tasks, eight (12%) families in which only mother participated, one (2%) family in which only father participated, and six (9%) families in which neither father nor mother participated. Most families were Caucasian (98%). In a minority of families, 10 (8%) in CCBT and 11 (9%) in FCBT, parents were separated.

Procedure

The current study used data of father-mother-child interactions from the larger RCT study for secondary analyses. The observational data were only available at pre- and postmeasurement. This study was approved by the Medical Ethical Committee of Maastricht University. All families meeting inclusion criteria signed informed consents at intake. Measurements were administered at pretreatment, posttreatment, 3-month follow-up, and 1-year follow-up by research assistants who were blind to treatment condition. Bodden, Bögels, et al. (2008) provide a description of the randomization procedure, training of the research assistants and therapists, assessment, and treatment integrity.

Measurements

Children's and parents' diagnostic status. The child and parent Dutch version of the Anxiety Disorders Interview Schedule for Children (ADIS-C/P, Siebelink & Treffers, 2001; Silverman & Albano, 1996) was used to assess children's anxiety disorders and related psychopathology according to the *DSM-IV*. Parents and children were interviewed separately and were asked to rate each diagnosis on a severity ranging from 0 to 8, with a score of 4 or more indicating a clinical diagnosis. According to ADIS instructions, child and parent reports were combined to determine diagnosis. Children's primary and comorbid disorders ($n = 300$) were social anxiety disorder ($n = 88$; 29%), separation anxiety disorder ($n = 55$; 18%), generalized anxiety disorder ($n = 68$; 23%), specific phobia ($n = 73$; 24%), agoraphobia ($n = 9$; 3%), and panic disorder ($n = 7$; 2%).

Parents' own diagnostic status in the past and present was assessed with the adult version of the ADIS (ADIS-A; DiNardo, Brown, & Barlow, 1994) by the same interviewers. According to the ADIS instructions, past and present diagnoses were combined to determine lifetime diagnosis of parents. This resulted in 78 families with parents (i.e., father, mother, or both) with a lifetime anxiety diagnosis and 50 families with parents without an anxiety diagnosis. Parents' primary and comorbid lifetime disorders ($n = 176$) were social anxiety disorder ($n = 47$; 27%), generalized anxiety disorder ($n = 44$; 25%), specific phobia ($n = 49$; 28%), agoraphobia ($n = 20$; 11%), and panic disorder ($n = 16$; 9%). The ADIS-C/P and the ADIS-A have good psychometric properties (Brown, Di Nardo, Lehman, & Campbell, 2001; Silverman, Saavedra, & Pina, 2001). Interrater reliabilities (kappa) in the current study were high, namely, .89 for ADIS-C, .83 for ADIS-P, and .94 for ADIS-A (Bodden, Bögels, et al., 2008).

Parent-child interaction tasks. At pre- and postmeasurement, four 5-min video-taped parent-child interactions were available. Children participated in random order in two dyadic interactions: a father-child conflict discussion and a mother-child conflict discussion. They also took part in a triadic conflict discussion and a triadic anxiety discussion (in random order). The *conflict discussions* were about a "hot issue" (Siqueland et al., 1996). To determine the conversation topic, father, mother, and child filled in the Issue Checklist (Robin & Weiss, 1980), which assesses how often 44 issues, such as cleaning up the bedroom, were discussed during the last 2 weeks within the father-child, mother-child, and father-mother-child dyad, and how calm or angry the discussion was. The three conflict issues that had the highest frequency and intensity ratings, averaged across father, mother and child, were selected. The *anxiety discussion* was about a severe "fear issue" of the child. This issue was selected from a list of five idiosyncratic situations the child feared and avoided most. The child and both parents rated the five situations on fear (0–8) and avoidance (0–8). The situation with the highest total fear and avoidance level, averaged across father, mother, and child, became the fear issue.

Observations were coded by two clinical psychologists, who were experts in observing family interactions. Coders were blind to measurement wave and the treatment condition of child and parents. A coding system (Bögels et al., 2008) was developed based on existing rating scales for parenting behavior by Ginsburg, Grover, and Ialongo (2005), Hudson and Rapee (2001, 2002), and

Siqueland et al. (1996). For rejection, every minute the level of verbal and nonverbal rejection versus warmth was judged on a 4-point Likert scale for mothers and fathers separately (Bögels et al., 2008). Lower scores indicated that parents showed more rejection toward the child, such as criticism, hostility, frustration, and indifference that was communicated verbally (e.g., humiliating the child, cursing) and nonverbally (e.g., looking away, sarcastic tone of voice). Higher scores indicated that parents showed more warmth toward the child, such as support, positivity, and love that was communicated verbally (e.g., expressing affection) and nonverbally (e.g., smiling, touching). Nonverbal and verbal scores of rejection showed medium to large correlations across interactions and measurements (ranging from $r = .37$ to $.74$, $p < .001$) and therefore were averaged. This composite measure of rejection was inverted. As such, higher scores indicated more rejection by parents, whereas lower scores indicated more warmth by parents. For sake of brevity, the rejection versus warmth dimension is called *rejection* and represents the average amount of nonverbal and verbal rejection versus warmth by parents.

Similarly, for psychological control, every minute the level of verbal and nonverbal psychological control versus autonomy encouragement was judged on a 4-point Likert scale for mothers and fathers separately (Bögels et al., 2008). Lower scores indicated that parents showed more psychological control toward the child, such as intrusiveness, constraining verbal expression, guilt induction, invalidating feelings, and love withdrawal that was communicated verbally (e.g., speaking for the child, discounting expressed feelings) and nonverbally (e.g., hovering over the child, interrupting). Higher scores indicated that parents showed more autonomy encouragement toward the child, such as encouragement of and accepting thoughts and emotions that was communicated verbally (e.g., asking about the child's feelings and opinions) and nonverbally (e.g., nodding, following the child's lead). Nonverbal and verbal scores of psychological control showed medium to large correlations across interactions and measurements (ranging from $r = .57$ to $.81$, $p < .001$) and therefore were averaged. This composite measure of psychological control was inverted. As such, higher scores indicated more psychological control by parents, whereas lower scores indicated more autonomy encouragement by parents. The psychological control versus autonomy encouragement dimension is called *psychological control* and represents the average amount of nonverbal and verbal psychological control versus autonomy encouragement by parents.

Finally, during triadic interactions, coders also scored whether father or mother was talking most, thereby dominating the conversation. Higher scores indicated that fathers dominated the conversation. A random 38% of the videotaped interactions were independently coded by two coders to provide estimates of reliability. Coders were unaware which sessions were used to assess observer agreement. Intraclass correlations (ICCs; Bartko, 1966) were calculated to assess the agreement in ratings of coders. Interrater reliability for maternal and paternal rejection and psychological control during dyadic and triadic discussions was satisfactory: ICCs ranged from .76 to .91 at pretreatment and from .78 to .94 at posttreatment. Also, for conversation dominance, ICCs (ranged from .90 to .94) were excellent during the triadic discussions at pretreatment and posttreatment.

Treatment

The CCBT and FCBT each contained 12 sessions of 60 to 90 min and one session 12 weeks after the end of treatment. A child workbook was available for the CCBT, a child and parent workbook were available for the FCBT, and a detailed therapist manual was available for both conditions.

The CCBT is comparable with other manualized CCBTs (e.g., Coping Cat; Kendall, 1994) but puts more emphasis on challenging dysfunctional thoughts and behavioral experiments and includes task concentration (Bodden, Bögels, et al., 2008; van Steensel & Bögels, 2015). It is suitable for children aged 8 to 18 years. Parents were involved as little as possible and joined only at the start of the therapy in order to collect information from them and explain the treatment rationale, in Session 4 to conduct the fear hierarchy and explain the reward system, and in Session 12 to evaluate the therapy. In CCBT, the face-to-face time for children was 19.5 hr and for parents not more than 2.5 hr. The program encompasses psychoeducation, identifying and challenging anxiety-provoking dysfunctional thoughts, behavioral experiments to test such thoughts, coping behavior including relaxation and task concentration, exposure in vivo according to a fear hierarchy and a reinforcement system, and relapse prevention (Bodden, Bögels, et al., 2008; Bögels et al., 2008). Three months after CCBT, 73% of the children had recovered from their primary anxiety disorder, and 58% of the children recovered from all anxiety disorders (Bodden, Bögels, et al., 2008).

The FCBT was developed based on (Barrett et al., 1996), piloted by Bögels and Siqueland (2006), and evaluated in an RCT (Bodden, Bögels, et al., 2008; Bodden, Dirksen, et al., 2008). The treatment was aimed at teaching children, parents, and siblings several skills to manage the children's anxiety symptoms and related behaviors. The whole family (including both parents and the siblings) participates in the first session, in which a systemic formulation of the child anxiety problem is made and the treatment rationale explained. Subsequently, the treatment consists of three phases of four sessions each. In Phase 1, children and parents learn CBT skills, each to overcome their own fears. Parents learn how to assist their child in his or her CBT and to be a "courageous model" for their child, that is, by doing things that make them anxious and by talking about their own anxiety and how they cope. In Phase 2, dysfunctional beliefs between parents and child that may hinder the process of change are targeted. These are parents' beliefs about their child's anxiety, their parenting, and the safety of the child's world, often based on parents' own upbringing and anxiety. Also, children's beliefs about the communication with their parents are targeted and adapted. In Phase 3, communication and problem solving between the spouses about their child's anxiety, and between all family members, including siblings, is improved, and relapse prevention is rehearsed. In FCBT, the face-to-face time for children was 13.5 hr, for parents was 18 hr, and for siblings was 4.5 hr. Three months after FCBT, 61% of the children recovered from their primary anxiety disorder and 54% of the children recovered from all anxiety disorders (Bodden, Bögels, et al., 2008).

No differences were found at pretreatment between children and their families who were randomized to CCBT versus FCBT with regard to the demographic variables child age and gender, parental marital status, parental age, parental educational and professional

level, and number and severity of children's and parents' anxiety diagnosis, indicating that randomization succeeded.

Data Preparation and Analyses

Figure 1 provides a flowchart describing treatment and observational dropout. Treatment dropout was 22% (3% for CCBT; 19% for FCBT), and observational measurement dropout was 23% (3% for CCBT; 20% for FCBT). Overall, chi-square and *t*-test analyses revealed no significant differences at pretreatment in gender, age, educational level, and severity of child's diagnoses between (a) participants who completed treatment and participants who dropped out of treatment, and (b) between dyads who completed observational measurements and participants who did not complete observational measurements at pretest and/or posttest. It was only found that children who did not complete observational measurements were significantly older than children who completed observational measurements, $t(126) = -2.22, p = .028$. In addition, in families that dropped out of FCBT parents were more often separated, $\chi^2(1) = 8.02, p = .012$, and mothers were more often not employed, $\chi^2(1) = 5.65, p = .029$, compared with families that dropped out of CCBT. Little's missing completely at random test produced a normed $\chi^2(\chi^2/df)$ of 1.20, which indicates that data are missing completely at random. If triadic or dyadic observations were not available, missing values were imputed. Multiple imputation is recommended as an efficient missing data handling technique (Baraldi & Enders, 2010). Missing values were therefore imputed using multiple imputation techniques (LISREL 9) with an EM algorithm (maximum of 200 iterations and convergence criterion of .00001). After convergence is reached, LISREL generated one imputed data file based on all iterations, which was used in further analyses in SPSS. To examine robustness of the results, analyses were repeated only with families that completed treatment, only with families that completed observational measurements, and only with married/intact families.

Repeated measure ANOVA analyses were conducted in SPSS 21 to examine (a) changes in observed parenting behavior from pre- to postmeasurement, and (b) whether these changes depended on parents' gender, parental anxiety status, and type of CBT. We used time (before and after treatment) and gender of the parent (mother and father) as within-subjects factors, and type of CBT (CCBT and FCBT) and parental anxiety disorders (yes-no) as between-subjects factors. Analyses were performed separately for rejection and psychological control and for dyadic conflict interactions, triadic conflict interactions, and triadic anxiety interactions. To compare mean effects for significant interactions, adjusted SIDAK comparisons were used. The effect sizes for the ANOVAs were presented in terms of partial eta squared (η^2 : .01 = small, .06 = medium, .14 = large).

Results

Table 1 presents the means and standard deviations of parents' rejection and psychological control before and after treatment during dyadic and triadic interactions. Although the age range (8 to 18 years) of our sample was quite wide, parents' rejection and psychological control in dyadic and triadic interactions was not consistently associated with children's age (ranging from $r[127] = -.20$ to $.12$; $.027 < p < .844$). Only two of 24

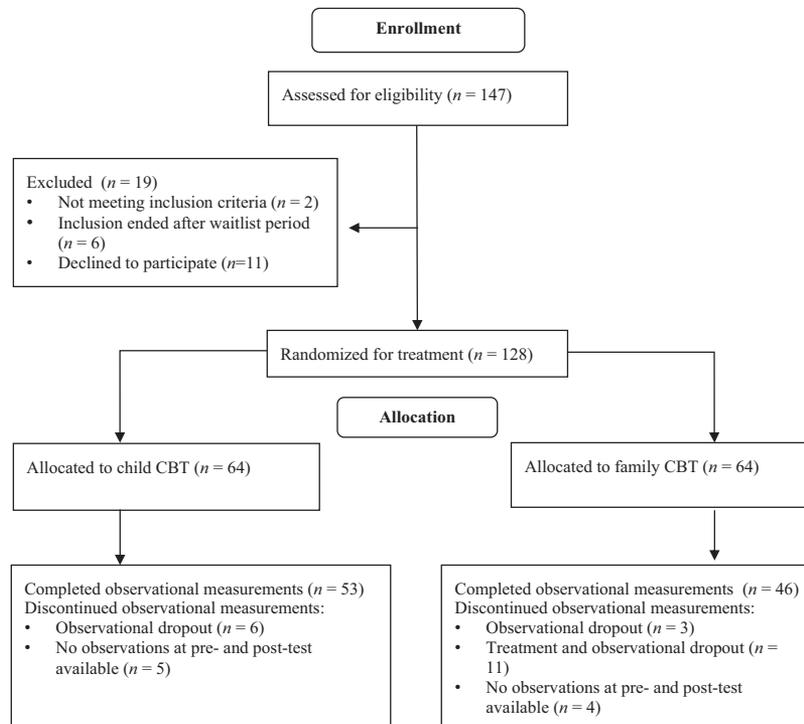


Figure 1. Flow chart of randomization and dropout rates observational measurements. CBT = cognitive behavioral therapy.

correlations were significant; when children were younger, mothers showed more control posttreatment in triadic conflict interactions, $r(127) = -.19$, $p = .035$, and triadic anxiety discussions, $r(127) = -.20$, $p = .027$, than when children were older. In addition, children's age was not significantly associated with change scores in parents' psychological control and rejection (ranging from $r[127] = -.12$ to $.12$, $.162 < p < .882$). Therefore, it was not necessary to control for children's age in further analyses.

Table 2 presents the repeated measures ANOVA results. For rejection, a significant main effect of time occurred for dyadic as

well as triadic conflict and anxiety interactions, indicating decreases in rejection by parents from pre- to posttreatment. No significant interaction effects were found with type of CBT, parents' gender, or parental anxiety disorders, suggesting that improvements in observed rejection were not different between CCBT and FCBT, for fathers and mothers, and for parents with and without anxiety disorders at pretreatment.

For psychological control during dyadic interactions, for the most part, no significant main and interaction effects were found. As such, no changes in parents' psychological control were observed during dyadic parent-child interactions over the course of

Table 1
Estimated Means and Standard Deviations of Observed Rejection and Psychological Control During Parent-Child Interactions

Observed parenting	Mothers		Fathers	
	Pretreatment <i>M</i> (<i>SD</i>)	Posttreatment <i>M</i> (<i>SD</i>)	Pretreatment <i>M</i> (<i>SD</i>)	Posttreatment <i>M</i> (<i>SD</i>)
Dyadic conflict interaction				
Rejection	.96 (.22)	.92 (.25)	1.02 (.26)	.98 (.26)
Psychological control	1.28 (.31)	1.28 (.33)	1.33 (.36)	1.31 (.30)
Triadic conflict interaction				
Rejection	.99 (.19)	.94 (.21)	1.02 (.24)	.98 (.21)
Psychological control	1.23 (.33)	1.29 (.31)	1.16 (.37)	1.14 (.36)
Triadic anxiety interaction				
Rejection	.96 (.16)	.91 (.22)	1.01 (.18)	.96 (.21)
Psychological control	1.11 (.35)	1.14 (.32)	1.08 (.40)	1.02 (.34)

Note. A higher score on psychological control and rejection indicates more psychological control and rejection, or less autonomy encouragement and warmth.

Table 2

Repeated Measures ANOVAs for Parental Rejection and Psychological Control During Parent-Child Interactions ($N = 128$, $df = 1$, 125)

Effects	Dyadic conflict interactions				Triadic conflict interactions				Triadic anxiety interactions			
	Rejection		Psychological control		Rejection		Psychological control		Rejection		Psychological control	
	F	η_p^2	F	η_p^2	F	η_p^2	F	η_p^2	F	η_p^2	F	η_p^2
Time	7.93**	.06	1.56	.01	5.92*	.05	13.05**	.10	14.00***	.10	5.83*	.05
CBT type	1.42	.01	.07	.01	1.37	.01	3.13	.02	1.73	.01	1.19	.01
Anxiety parent	.39	.00	.11	.01	.54	.00	.09	.00	.02	.00	.02	.00
Time \times CBT Type	.49	.00	3.38	.03	.54	.00	.02	.00	.23	.00	1.00	.01
Time \times Gender Parent	3.26	.03	.68	.01	.01	.00	4.62*	.04	.06	.00	6.06*	.05
Gender Parent \times Anxiety Parent	.05	.01	5.82*	.01	.72	.01	.12	.01	.50	.00	.91	.01
Gender Parent \times CBT Type	.08	.01	1.42	.04	2.12	.02	.08	.01	.01	.00	3.06	.02
Time \times Anxiety Parent	.15	.00	.25	.00	2.35	.01	1.30	.01	.01	.00	.35	.00
Time \times Gender Parent \times CBT Type	1.00	.01	1.44	.01	1.27	.01	10.31**	.08	1.83	.01	6.52*	.05
Time \times Gender Parent \times Anxiety Parent	.40	.00	.50	.00	2.79	.02	1.16	.01	1.77	.01	.16	.00

Note. All analyses were performed with imputed data. df = degrees of freedom; η_p^2 = effect size, and .01 = small, .06 = medium, .14 = large; Time = before and after treatment; Anxiety parent: 0 = no lifetime parental anxiety disorder, 1 = maternal and/or paternal lifetime anxiety disorder; CBT type = cognitive behavioral therapy; 0 = child-focused CBT, 1 = family-focused CBT; Gender parent: 0 = father, 1 = mother.

* $p < .05$. ** $p < .01$. *** $p < .001$.

treatment, and changes in psychological control did not depend on the type of CBT that was delivered or on the presence of a parental anxiety disorder. A significant interaction was found only between parents' gender and parental anxiety disorder. Adjusted Sidak comparisons revealed that, in general, fathers with a parental anxiety disorder showed significantly higher levels of psychological control than mothers with a parental anxiety disorder ($p = .025$, $\eta^2 = .04$). Because no significant interaction with time appeared, this finding was found irrespective of measurement occasion (pretest or posttest) and did not change over the course of treatment.

During triadic conflict and anxiety interactions, a significant main effect of time was revealed for parents' psychological control, indicating that, in contrast to our hypothesis, parents in-

creased their psychological control toward their child after treatment. In addition, a significant interaction effect between time and parents' gender occurred, indicating that during triadic conflict and anxiety interactions, changes in psychological control from pretest to posttest depended on parents' gender. But findings revealed a significant three-way interaction between time and parents' gender and CBT type during triadic conflict as well as triadic anxiety interactions. Figure 2 includes graphical representations of these interaction effects. For triadic conflict interactions (Figure 2a), from pre- to posttreatment, adjusted Sidak comparisons revealed a significant increase in psychological controlling behavior by mothers ($p < .001$, $\eta^2 = .14$) and fathers ($p = .017$, $\eta^2 = .05$) in CCBT. There was also a significant increase in psychological control by mothers in FCBT ($p = .046$, $\eta^2 = .03$) but not by fathers.

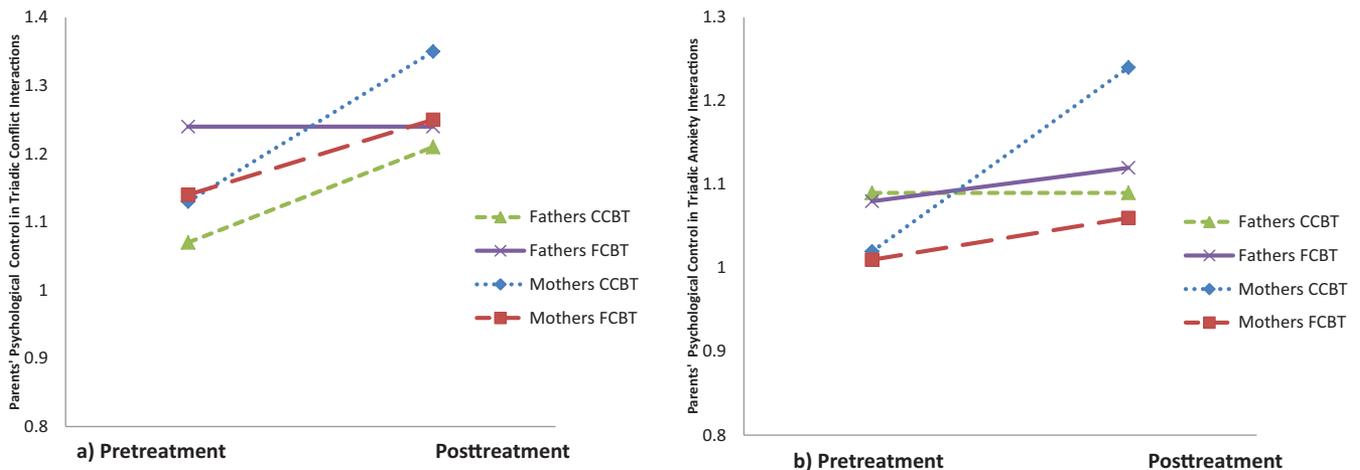


Figure 2. Estimated means of the three-way interaction between parents' psychological control, CBT type, and parents' gender during (a) the triadic conflict interaction, and (b) the triadic anxiety interaction. CCBT = child-focused cognitive behavioral therapy; FCBT = family-focused cognitive behavioral therapy. See the online article for the color version of this figure.

Significant differences between psychological control by mothers and fathers in CCBT were found at pretreatment ($p = .023$, $\eta^2 = .04$) and posttreatment ($p = .007$, $\eta^2 = .06$), with mothers showing higher levels of psychological control than fathers. Finally, fathers in FBCT showed higher levels of psychological control pretreatment than fathers in CCBT ($p = .011$, $\eta^2 = .05$), and mothers in CCBT showed higher levels of psychological control posttreatment than mothers in FBCT ($p = .046$, $\eta^2 = .03$). For triadic anxiety interactions (Figure 2b), from pre- to posttreatment, adjusted Sidak comparisons revealed a significant increase during triadic anxiety interactions only in psychological control by mothers in CCBT ($p < .001$, $\eta^2 = .13$). For CCBT, in posttreatment, mothers showed more psychological control during anxiety discussions than fathers ($p = .002$, $\eta^2 = .08$). Finally, Sidak comparisons showed that at posttreatment, psychological control by mothers in CCBT was higher than that by mothers in FBCT ($p < .001$, $\eta^2 = .08$). No interaction effects occurred with parental anxiety disorder for triadic analyses, indicating that changes in psychological control did not depend on the presence pretreatment of a parental anxiety disorder.

Because differences between mothers' and fathers' changes in psychological controlling behavior were found in triadic interactions, we explored who dominated the conversations. Therefore, post hoc, we examined changes in conversation dominance in the triadic conflict interactions from pretest ($M = 2.02$, $SD = 0.67$) to posttest ($M = 1.63$, $SD = 0.71$), and the triadic anxiety interaction ($M = 1.91$, $SD = 0.80$) to posttest ($M = 1.74$, $SD = 0.71$), to test whether fathers or mothers talked more during triadic interactions before and after treatment. A repeated measures ANOVA showed a significant decrease in conversation dominance during the conflict, $F(1, 127) = 41.02$, $p < .001$, $\eta^2 = .24$, and anxiety, $F(1, 127) = 5.11$, $p = .025$, $\eta^2 = .04$, interactions, indicating that, compared with pretreatment, mothers became relatively more dominant than fathers during the triadic interactions after treatment. Moreover, during both triadic interactions, more conversation dominance by fathers was significantly associated with more psychological control by fathers, ranging from $r(127) = .38$ to $r(127) = .50$, $p < .001$, and more conversation dominance by mothers was associated with more psychological control by mothers, ranging from $r(127) = .22$ to $r(127) = .37$, $p < .001$.

Considering that treatment effectiveness might be related to changes in parenting (e.g., Settapani, O'Neil, Podell, Beidas, & Kendall, 2013), we tested post hoc whether changes in child anxiety might be related to parenting after treatment and whether it affected changes in parenting following treatment. Parenting behavior after treatment, rather than difference scores between pretest and posttest parenting, might be the best way to capture whether reductions in child anxiety affected parenting, as it comprises parents who showed lower levels of rejection or psychological control before treatment and therefore did not need to change as well as parents showing higher levels of rejection or psychological control before treatment who have reduced their rejective or controlling behaviors because of treatment. In order to assess children's treatment effectiveness, a total anxiety disorder severity score was calculated using the ADIS by summing the severity scores of all anxiety disorders of children before and after treatment (Simon, Bögels, & Voncken, 2011; van Steensel & Bögels, 2015). To evaluate the change of anxiety severity over time (i.e., treatment effectiveness), a difference score between pretreatment

and posttreatment scores was calculated, with higher values indicating larger decreases in anxiety severity over time.

First, no consistent significant associations were found between treatment effectiveness and mothers' and fathers' psychological control before and after treatment in dyadic and triadic interactions; only one of 24 associations was significant. In dyadic interactions, we found that higher psychological control by mothers after treatment was significantly associated only with smaller decreases in children's anxiety severity, $r(127) = -.20$, $p = .021$. Furthermore, parental rejection was also not consistently associated with treatment effectiveness (three of 24 associations were significant). We found a significant negative association between treatment effectiveness and maternal rejection in dyadic conflict interactions after treatment, $r(127) = -.18$, $p = .039$, maternal rejection in triadic anxiety interactions after treatment, $r(127) = -.18$, $p = .038$, and paternal rejection in triadic anxiety interactions after treatment, $r(127) = -.19$, $p = .036$. These results indicate that in these three instances, higher levels of rejection after treatment were related to smaller decreases in children's anxiety severity. Second, we reran all analyses including treatment effectiveness as a covariate. Results were analogous, indicating that mean-level changes in child anxiety severity were not related to changes in parenting over the course of treatment.

All analyses were repeated with (a) only families that completed treatment ($n = 100$, 78%), (b) only families that completed observational measurements ($n = 99$, 77%), (c) only married or intact families ($n = 107$, 84%), (d) present parental anxiety disorders ($n = 52$, 41%), (e) present parental anxiety and depressive disorders ($n = 57$, 44%), and (f) lifetime parental anxiety and depressive disorders ($n = 89$, 69%). Results of these analyses were similar, indicating that findings presented are robust.

Discussion

The current observational study was one of the first studies examining changes in parenting behavior following treatment for children's anxiety disorders. Specifically, we observed maternal and paternal rejection and psychological control during dyadic as well as triadic parent-child interactions. We investigated whether changes in observed parental rejection and psychological control depended on treatment modality (CCBT or FBCT condition) and on parents' own anxiety disorder. Regarding rejection, in line with expectations, findings revealed posttreatment decreases in rejection by both fathers and mothers during both dyadic and triadic interactions. Decreases in rejection did not depend on parents' anxiety disorder or on treatment modality. Regarding psychological control, findings revealed unexpected increases in parents' psychological control during triadic interactions after treatment, which depended on parents' gender and treatment modality. During triadic conflict interactions, mothers and fathers in CCBT and mothers in FBCT displayed increases in psychological control toward their children. During triadic anxiety interactions, only mothers in CCBT showed increases in psychological control toward their children. Changes in parents' psychological control were not found during dyadic interactions, and changes did not depend on parents' anxiety disorder.

Decreases in paternal and maternal rejection during dyadic as well as triadic interactions following both child and family CBT were observed. These findings extended theory (e.g., Bögels &

Brechman-Toussaint, 2006; Chorpita & Barlow, 1998; Wood et al., 2003) and earlier research (Gar & Hudson, 2009; Jongerden & Bögels, 2015). This is showing that parental rejection is probably an anxiety-enhancing parenting behavior that can be reduced because of treatment, and that after treatment, parents showed more warm, supportive, and accepting behavior toward their child. Although causal inferences cannot be made, the fact that we did not find differences between treatment modalities (i.e., CCBT and FCBT) might suggest that reductions in children's anxiety after treatment contributed to the changes in parental rejection from pretreatment to posttreatment (e.g., Settapani et al., 2013; Silverman et al., 2009). Possibly, when fathers and mothers notice even the smallest improvements in the child's behavior after treatment, parents who showed higher levels of rejection before treatment might experience less frustration with the child, and as a result, may have less negative and more warm interaction patterns after treatment when discussing anxiety and conflict issues of the child. Children might perceive the environment as less hostile and threatening, which may make them feel more safe and protected, which then reduces their anxiety (Bögels & Brechman-Toussaint, 2006; McLeod et al., 2007; Wood et al., 2003). Nevertheless, including treatment effectiveness as a covariate did not affect changes in parental rejection, which might be related to relatively low absolute levels of rejection (and, thus, higher levels of warmth) and the relatively small but meaningful changes in rejection versus warmth. Relatedly, it is possible that only in families in which parents show high levels of rejection before treatment and need to decrease their levels of rejection toward their child, changes in parental rejection are related to reductions in child anxiety. Future studies should therefore disentangle the direction of effects (Settapani et al., 2013) between observed parental rejection and child anxiety following treatment, and should examine whether these processes of change differ between families.

Our hypothesis that parents would become less psychologically controlling after treatment, especially when parents were involved in treatment (Barrett et al., 1996; Gar & Hudson, 2009; Lafreniere & Capuano, 1997), was not supported. Unexpectedly, findings showed that mothers and fathers in CCBT and mothers in FCBT became *more* psychologically controlling during triadic conflict interactions following treatment. Also, mothers in CCBT became more psychologically controlling after treatment during triadic anxiety discussions. According to the widespread view that psychological control is an anxiety-enhancing parenting behavior (Chorpita & Barlow, 1998; Wood et al., 2009), and because psychological control has been found to be higher in parents of anxious children (Bögels et al., 2008; Borelli et al., 2015; McLeod et al., 2007; van der Bruggen et al., 2008), it was expected that parents would diminish their psychological control toward their child after treatment. As such, our findings might suggest that our treatment of anxious children, with or without including the family, has aversive effects on parents' parenting, and particularly on mothers' psychological control when the father is present during triadic interactions. There is still relatively little attention in research and clinical practice for the potential iatrogenic effects of treatments (Lilienfeld, 2007). One could speculate that because of treatment of their child, mothers in particular might feel that they have done something wrong, feel blamed, or threatened because they get the feeling (from the professional and/or the

father) that they need to change and become emotionally overreactive in conflict situations as a result. Thus, mothers might try to gain more control over the child's emotions and thoughts during emotionally arousing conversations, especially when the father is also involved. Another explanation is that because mothers' psychological control appears to be an individual difference across mothers rather than a response to children's anxiety (Hudson & Rapee, 2002), and because maternal psychological control has been found to be the mechanism underlying the association between mother and child anxiety (Borelli et al., 2015), mothers might perceive an imbalance in the parent-child relationship when child anxiety diminishes because of treatment and therefore try to exert even more control over the child's feelings and emotions during triadic interactions. Thus, mothers in particular may experience difficulty adapting levels of psychological control to the changing needs of their child during triadic interactions and may therefore display more psychological control after treatment.

Another alternative explanation for this unexpected increase in psychological control is that parents may become more emotionally stringent during triadic discussions with anxious children after treatment. It might mean that parents, and particularly mothers, become more psychologically controlling in order to "toughen them up" for the emotional challenges these anxious children are facing in daily life. Parents who are more emotionally stringent might also show lower levels of family accommodation, meaning that these parents do not longer facilitate children to avoid emotionally arousing thoughts and feelings (e.g., Lebowitz et al., 2016). More psychological control might reflect more sensitive encouragement by mothers during discussions of how to approach and interpret novelty when children are anxious, as they often need more help doing this (Kiel, Premo, & Buss, 2016). As children's anxiety reduces because of treatment, parents might find it easier to confront the child's feelings and emotions, particularly when the other parent is present, which might be an important way to overcome anxiety and to deal with disagreements. Increases in psychological control were most consistently found for mothers during triadic interactions, which is line with our finding that compared with pretreatment, mothers talked more during the triadic conversations at posttreatment than fathers, supporting the more leading role of mothers during the emotional discussions after treatment and also supporting the potential effects of treatment on communication patterns of the family system (Majdandžić et al., 2012; Minuchin, 1974). Thus, mothers may have become systemically stronger and more sensitive communication partners as a result of treatment, and mothers may therefore display more psychological control during anxiety and conflict discussions when father is present.

Although the current study examined psychological control during conflict and anxiety discussions of dyads and triads, different studies have used a variety of definitions (e.g., overcontrol, overprotection, intrusiveness, behavioral control, psychological control), observational tasks (e.g., anxiety discussions, public-speaking tasks), and parent-child systems (e.g., dyads, triads, families) to measure control, which might have led to different associations with child anxiety and different implications for targeting parental control through CBT. One could imagine that when parents/mothers display more psychological control after treatment

by continuously exposing children to opposing viewpoints, thoughts and ideas during emotional discussions around conflict as well as anxiety issues would be beneficial, whereas physically restricting children's opportunities to experience new and challenging situations would be less adaptive (Lamb & Lewis, 2010; Möller et al., 2016). It is also possible that psychological control of one parent might be less problematic, and even beneficial, in triadic interactions than in dyadic interactions, as the other parent might compensate by displaying more autonomy encouragement and more warmth toward the child (Bögels et al., 2010; Majdandžić et al., 2012). Therefore, future research should carefully consider whether, why, when, what type, and how parental control needs to be assessed and targeted in child anxiety treatment.

Overall, we did not find support for the idea that including parents in CBT is beneficial for establishing changes in maternal and paternal behaviors, as FCBT did not result in stronger or different changes in parental rejection and psychological control than CCBT. For triadic interactions, most changes in parenting behavior were even found in CCBT. These results are in line with studies using self- and parent reports of parenting behavior comparing CCBT and FCBT (e.g., Jongerden & Bögels, 2015; Silverman et al., 2009; Wood et al., 2009). One explanation is that although parental involvement in CCBT was minimal, it was not completely ruled out. For example, parents played a role in CCBT in rewarding children's exposures, which might have been sufficient to trigger observed changes in rejection. On the other hand, as mentioned earlier, reductions in children's anxiety following treatment might have contributed to the changes in rejection and psychological control after treatment (e.g., Settapani et al., 2013; Silverman et al., 2009). These results might suggest different pathways by which parental behavior during interactions changes. From a systemic point of view, changes in one family member will influence the whole family (Minuchin, 1974), and children may affect their parents as much as parents affect their children. Therefore, we need to know under which conditions an intervention might enhance parenting behaviors and under which conditions changes in parenting is induced by anxiety improvement of the child. Future studies should gain knowledge about why, how, and when changes are produced in parenting behaviors after anxiety treatment for children (Silverman et al., 2009). We might also need to look beyond the role of parents' rejection and psychological control and investigate different parent as well as child behaviors that are related to (overcoming) child anxiety in the long run, such as challenging parenting (Majdandžić et al., 2012), emotional flexibility (Van der Giessen & Bögels, 2018), family accommodation (Lebowitz et al., 2016), courageous modeling (Bögels & Siqueland, 2006), or contingency management and transfer of control (Manassis et al., 2014).

Present findings suggest that changes after treatment in parental rejection and psychological control did not depend on whether or not parents had an anxiety disorder. Although these findings are consistent with earlier studies showing weak or no associations between parenting and parental anxiety (e.g., Drake & Ginsburg, 2011; van der Bruggen et al., 2008), it is inconsistent with theoretical notions on anxiety-enhancing parenting (Bögels & Brechman-Toussaint, 2006; Chorpita & Barlow, 1998; Wood et al., 2003), as well as a study showing a pattern of increased overinvolvement from pre- to posttreatment

only among mothers with an anxiety disorder (Creswell et al., 2008). An explanation may be that parental anxiety mostly has an effect on changes in parenting perceptions instead of parenting observations. Although anxious mothers have been found to describe themselves as less warm compared with nonanxious mothers, this difference has not been found when observing parent-child interactions (Drake & Ginsburg, 2011; Lindhout et al., 2006). Anxious parents might feel more self-critical or less satisfied with parent-child interactions, also after treatment, and do not notice visible changes in their parenting behaviors. Finally, based theories on different roles of fathers and mothers, with fathers being more challenging and mothers being more caring (Bögels & Perotti, 2011), anxious fathers in particular are found to show more controlling and rejective behaviors toward their children (Bögels et al., 2008; Teetsel et al., 2014). Unfortunately, the number of fathers with an anxiety disorder ($n = 14$) prevented us from examining differential effects of maternal versus paternal anxiety disorder on parenting.

In addition, future studies would particularly benefit from using both dyadic and triadic interactions when examining changes in maternal and paternal behaviors, as triadic interactions resulted in different outcomes regarding psychological control than dyadic interactions. Yet the question remains how the presence and behavior of mothers and fathers affected each other's as well as the child's behavior during these triadic interactions (Minuchin, 1974). Particularly, reciprocal relations exist between coparenting quality and child anxiety (Majdandžić et al., 2012), and fathers are more likely to be less engaged toward their children than mothers (Cabrera, Fitzgerald, Bradley, & Roggman, 2014; Lamb & Lewis, 2010). It is possible that although children's behavior changes because of treatment, mothers specifically may become more emotionally involved with their child, whereas fathers might become less engaged and let mothers deal with the child during triadic interactions. Future research should extend the current study by investigating such (co)parenting dynamics during dyadic versus triadic interactions, thereby revealing underlying moment-to-moment emotional and behavioral changes of the whole system (i.e., mother, father, and child) after CBT for child anxiety.

Major strengths of the current study were that we observed both fathers' and mothers' parenting behaviors, assessed parents' anxiety disorders, used dyadic and triadic emotional discussions, compared CCBT and FCBT, and employed a sample of clinically referred children. Several limitations should also be mentioned. First, we did not include a waitlist condition, which prevented us from examining whether observed parenting would have changed without treatment. Second, we had limited power to detect three-way interactions between time, parents' gender, and diagnostic status of parents. Future studies should be pursued with larger samples. Third, our sample was mainly Caucasian, and future studies should examine the generalizability of our results to more culturally and ethnically diverse populations. Fourth, the higher dropout in FCBT than in CCBT might be related to treatment condition. Because more complexity in families (e.g., broken families) and unemployment of mothers was associated with FCBT dropout, it is likely that FCBT took too many resources from such families, or CCBT may give mothers more space from their anxiety disordered child, as they do not need to get involved.

Fifth, effect sizes in this study ranged from small to medium, and results should be interpreted with caution. Sixth, our coding system was developed based on existing rating scales for parenting behavior (e.g., Ginsburg et al., 2005) and coded rejection versus warmth and psychological control versus autonomy encouragement. Despite meaningful changes in rejection and psychological control, our data showed that absolute levels of rejection and psychological control were relatively low, indicating relatively high levels of warmth and autonomy encouragement during the interactions. Also, studies seem to indicate that rejection and warmth (e.g., Sentse, Lindenberg, Omvlee, Ormel, & Veenstra, 2010; Skinner, Johnson, & Snyder, 2005) as well as psychological control and autonomy granting (e.g., Soenens, Vansteenkiste, & Sierens, 2009; Soenens & Vansteenkiste, 2010) are conceptually and empirically distinct constructs. As such, future studies should also examine changes in these parenting behaviors separately. Finally, parent-child dyads solely discussed conflict issues (e.g., bed time, chores) and not an anxiety issue of the child as father-mother-child triads did. Future research should therefore also examine changes in parenting behaviors during anxiety discussion of parent-child dyads.

Conclusion

This study showed that CBT for children with anxiety disorders has an impact on parenting behaviors. Changes during parent-child interactions in mothers' and fathers' rejection and psychological control for treatment-seeking families were observed, apart from the targeted anxiety symptom reduction in children. CBT seems to effectively reduce criticism and hostility toward children, which is assumed to be an anxiety-enhancing parenting behavior. However, the unexpected findings regarding decreases in parents' psychological control during triadic interactions suggested either potential adverse effects of treatment on psychological control or that parents, and particularly mothers, need to become more psychologically controlling in order to help their children overcome anxiety disorders. Therefore, we need to gain more knowledge on what parenting behaviors should exactly change in which direction in real-life parent-child interactions. Future studies should continue to explicate the precise nature, direction, and underlying processes of changes in anxiety-enhancing parenting throughout the course of therapy for child anxiety.

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