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Child Perceived Parenting Behavior: Childhood Anxiety and Related Symptoms

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Abstract

The current study examined the relationship between child-reported parenting behaviors and children's anxiety, depressive, and externalizing symptoms. Youth ages 7 – 14 ($N = 175$; 52.6% male) and their parents seeking treatment for child anxiety were evaluated. The parenting behaviors that were measured separately included father's and mother's acceptance, psychological control, and firm/behavioral control. Children's symptoms were assessed using diagnostic interviews, self-reports, parent-reports, and teacher-reports. Independent *t*-tests revealed that children diagnosed with a primary anxiety disorder perceived higher parental control than children without an anxiety disorder. Results from regression analyses indicated that child-reported maternal acceptance was associated with lower symptoms of child anxiety, depression, and externalizing behavior, whereas psychological control predicted higher symptoms. Further, child-reported depressive symptoms moderated the relationship between maternal psychological control and children's anxiety, such that the relationship was weaker for anxious children with more depressive symptoms. The current findings support that children's perception of parenting behavior is associated with anxiety, and children's depressive symptoms moderate this relationship.

Keywords

anxiety; children; depression; externalizing behavior; parenting behavior

Beginning with Baumrind (1966, 1967), research has addressed permissive, authoritarian, and authoritative parenting styles. Permissive parenting style is characterized by non-punitive measures, high acceptance, low demands, and low control/high autonomy-granting in children, whereas authoritarian parents exert punitive measures, provide low acceptance/warmth, and place high demands as well as high control/restriction of autonomy. Authoritative parents are non-punitive. They express high acceptance, warmth, and support, and meanwhile, exert high demands as well as high control on their children. Authoritative parents also value autonomy and avoid placing restrictions. Early work (Baumrind, 1966, 1967) suggested that authoritative parenting is preferred, and studies (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Steinberg, Elmen, & Mounts, 1989; Steinberg, Lamborn, Dornbusch, & Darling, 1992) supported that authoritative parenting was

positively correlated with favorable child assertiveness, academic success, and school engagement. In contrast, authoritarian and permissive parenting styles were found to be negatively associated with youth's performance.

Research has expanded to consider specific dimensions of parenting such as acceptance/rejection, psychological control/autonomy, and behavioral control (Schaefer, 1965). Parental acceptance is considered positive parenting practices where parents express warmth and approval of the child and are responsive towards them (Clark & Ladd, 2000; McLeod, Wood, & Weisz, 2007). Parental psychological control involves lack of encouragement of the child's psychological autonomy, including constraints, invalidation, and manipulation of the child's emotional experience (Barber, 1996), whereas parental behavioral control has to do with excessive management of the child's behavior (Barber, Olsen, & Shagle, 1994; Steinberg, Elmen, & Mounts, 1989). Studies (Steinberg et al., 1989; Steinberg et al., 1992) found that parental warmth/support, psychological autonomy, and clear and firm expectations of behavioral boundaries were linked to youth's adjustment, wellbeing, and achievement. Furthermore, the dimensions of parenting behaviors (i.e., acceptance, psychological control, and behavioral/firm control) demonstrated independent contribution to youth's wellbeing.

In addition to children's overall wellbeing, parental influence has been argued to play a role in the etiology and/or maintenance of childhood psychopathology (Charman, 2008; Davies, Cummings, & Winter, 2004; Schermerhorn et al., 2010). Among all familial factors, family interaction and parenting behaviors have garnered the most investigation. Parental rejection and control appeared to be related to the development of anxiety and depression in children (Rapee, 1997). Non-physical punishment was found to be associated with some child disorders (e.g., conduct disorders), whereas rewarding and non-punitive parenting predicted an absence of child mental health problems (Vostanis et al., 2006).

Are parenting behaviors linked with specific childhood disorders? With respect to externalizing problems, research indicates that authoritative parenting with emotional warmth and adequate monitoring is associated with less aggression, delinquency, and hyperactivity (Buschgens et al., 2010; McKee, Colletti, Rakow, Jones, & Forehand, 2008; Pettit, Laird, Dodge, Bates, & Criss, 2001; Sentse, Veenstra, Lindenberg, Verhulst, & Ormel, 2009). Regarding children's anxiety and depression, research has found that both families of anxious and depressed children exhibited higher parental control and lower parental warmth/support, although among families of children with anxiety, it seems that parental control shows a more notable effect. According to a recent meta-analysis (van der Bruggen, Stams, & Bogels, 2008), compared to a non-clinical population, parents of children with an anxiety disorder tended to exhibit excessive parental control. They also demonstrated overprotection and overinvolvement (Ginsburg, Siqueland, Masia-Warner, & Hedtke, 2004; van Gastel, Legerstee, & Ferdinand, 2009) and encourage avoidant behavior rather than autonomous and independent behavior in their children (Hudson & Rapee, 2001). Another meta-analysis (McLeod, Wood, & Weisz, 2007) concluded that parental autonomy-granting behavior accounted for 18% of the variance in the association between parenting and children's anxiety symptoms. In contrast, parental warmth accounted for less than 1% of the variance. Perhaps parental over-control promotes childhood anxiety by

taking away the child's opportunity for developing healthy autonomy and creating a lack of control, factors associated with vulnerability for anxiety disorder (Chorpita & Barlow, 1998). Parental rejection may also be associated with childhood anxiety disorders, though less so than parental control (Lindhout et al., 2009; McLeod, Wood, & Weisz, 2007). Parental rejection is more strongly associated with youth depression (Rapee, 1997).

Data suggest that parenting behavior is relevant to childhood anxiety, but it remains unclear whether the associations are specific to anxiety or psychopathology in general (Bogels & Brechman-Toussaint, 2006; Siqueland, Kendall, & Steinberg, 1996). In addition, research has yet to determine how comorbid depression and externalizing behavior in youth may affect the relationship between parenting and child anxiety. The current study investigated the relationships between parenting behavior and youth's anxiety, depressive, and externalizing symptoms. In addition, the potential moderating effect of youth's depressive symptoms and externalizing behavior on the relationship between their anxiety and parenting behaviors were examined. It was hypothesized that parental acceptance would predict less anxiety, depressive, and externalizing behavior in youth, whereas parental control would predict more symptoms. It was also hypothesized that parental control would be more strongly associated with youth's anxiety symptoms, whereas parental acceptance would be more associated with youth's depressive symptoms. Last, we examined to assess whether children's depression or externalizing problems moderated the relationships between parenting and child anxiety.

Method

Participants

Participants were 175 children ages 7–14 ($M = 10.2$, $SD = 1.8$) and their parents who were referred for treatment at the Child and Adolescent Anxiety Clinic (CAADC) at Temple University. Children with psychotic symptoms, mental retardation, or participation in concurrent treatment were excluded. At least one parent was English-speaking. Children were either living with both parents ($n = 154$) or with their mothers only ($n = 21$). Of the 175 children, 52.6% were male, 89.7% were Caucasian, 6.9% were African American, 1.7% were Hispanic, and 1.7% were self-identified as mixed race or "other." Family income was reported as below \$40,000 (13.7%), \$40,000 – \$80,000 (46.3%), and above \$80,000 (36.6%), with 3.4% of the families did not report their income. Parental education was reported as follows: fathers and mothers did not complete high school (2.9% and 0%, respectively), were high school graduates without college (25.7% and 22.3%), had some college education (18.9% and 25.7%), completed a 4-year college education (26.9% and 32%), obtained graduate school training (21.1% and 18.9%), or self-identified their education as "other" (0.6% and 1.1%).

Of the 175 children, using the Anxiety Disorders Interview Schedule for Children (ADIS-C; Silverman & Albano, 1996), 33 did not meet criteria for an anxiety diagnosis and 56 met for a principle diagnosis of generalized anxiety disorder, 48 social phobia, 34 separation anxiety disorder, 3 specific phobia, and 1 obsessive compulsive disorder. Among the 142 anxiety disordered children, 23 had no comorbidity, 58 had comorbid anxiety disorders (one or more), and 61 had at least 1 comorbid non-anxiety disorder.

Measures

Parenting Behavior—Parenting behaviors were measured by child-reports using the 30-item Children's Report of Parent Behaviour Inventory (CRPBI-30, Schludermann & Schludermann, 1988), derived from a longer version (Scheafer, 1965; Schludermann & Schludermann, 1970). Factor analyses (Schludermann & Schludermann, personal communication, September 12, 2010) of the longer CRBPI consistently revealed three major factors, acceptance/rejection, psychological control/autonomy, and firm control/lax control that hold across parent and child gender. The 30 identical questions describe the father and the mother separately (with pronoun modifications for gender), with which children rate his/her parent on a 3-point scale, 1 = *not like*, 2 = *somewhat like*, and 3 = *a lot like*. Scales measure parental (a) acceptance (AC)/rejection, (b) psychological control (PC)/psychological autonomy, and (c) firm control (FC)/lax control. The AC scores describe parental warmth, nurturance, and expression of affection (e.g., "my father/mother is a person who makes me feel better after talking over my worries with him/her"). The PC scale captures psychological pressure relevant to guilt-induction and manipulation (e.g., "my father/mother is a person who tells me of all the things s/he has done for me") and parent-centered rearing behavior (e.g., "my father/mother is a person who only keeps rule when it suits him/her"). The FC scale assesses authoritarian parenting (strict discipline and punishment, e.g., "my father/mother is a person who is very strict with me"). The psychometric properties have been supportive (Alderfer et al., 2008) and the subscales demonstrated satisfactory internal consistency of $\alpha = .75 - .80$ (McKernon et al., 2001).

Child Symptoms—The measurement of children's symptoms included multiple informants: clinician, child self-report, parent report, and teacher report.

Clinical interview: The ADIS-C/P (Silverman & Albano, 1996) follows the Diagnostic and Statistical Manual (4th ed.; DSM-IV American Psychiatric Association, 2000). The ADIS-C/P is a semi-structured interview administered independently to the child and the parent to obtain information about symptoms and severity (0 = *not at all*, 4 = *some*, and 8 = *very, very much*) of anxiety, mood, and externalizing disorders in the child. The measures has inter-rater (Lyneham, Abbott, & Rapee, 2007), retest reliability (Silverman, Saavedra, & Pina, 2001), and concurrent validity (Wood, Piacentini, Bergman, McCracken, & Barrios, 2002) for childhood anxiety disorders and other common childhood disorders. Diagnosticians met reliability of .80 (Cohen's k) prior to administering the interviews.

Children's self-reports: The Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985), a 37-item child self-report, measures chronic anxiety using a "Yes"/"No" format. Psychometric data suggest adequate reliability and validity (Wisniewski, Mulick, Genshaft, & Coury, 1987) including internal consistency ($\alpha = .83$, Reynolds & Richmond, 1985) and retest reliability ($r = .68$; Reynolds & Richmond, 1985). In addition, the RCMAS demonstrated good discriminant validity when identifying children with or without anxiety disorders (Perrin & Last, 1992; Seligman, Ollendick, Langley, & Baldacci, 2004).

The Social Phobia and Anxiety Inventory for Children (SPAI-C; Beidel, Turner, & Morris, 1995) is a 26-item child self-report of their somatic, cognitive, and behavioral symptoms on social anxiety and phobia. The respondent provides ratings of 0 = *never or hardly ever*, 1 = *sometimes*, and 2 = *most of the time or always*. Psychometric data include high internal consistency, retest reliability, and validity (Beidel, Turner, & Morris, 1995; Morris & Masia, 1998; Storch, Masia-Warner, Dent, Roberti, & Fisher, 2004). Additional data suggest that the measure differentiates children with social phobia from children with externalizing problems or without any disorder (Beidel, 1996). The measure also differentiated children with social phobia from those with other anxiety disorders (Peters, 2000).

The Children's Depression Inventory (CDI; Kovacs, 1992) is a 27-item self-report measure of depressive symptoms. The child rates his/her depressive symptoms on a 3-point scale (from 1 = *low* to 3 = *high*). The scale has acceptable psychometric properties (Kovacs, 1992). Timbremont, Braet, and Dressen (2004) reported that a cutoff score of 13 on the CDI successfully discriminated children with clinically elevated depressive symptoms from those without.

Parent and Teacher Report: The Child Behavior Checklist (CBCL) and Teacher Report Form (TRF) are empirically-derived parent and teacher reports (Achenbach, 1991; Achenbach & Edelbrock, 1986). The CBCL assesses children's behavior and emotional problems based on parents' ratings of 118 items scored on a 3-point scale (0 = *not true*, 1 = *somewhat or sometimes true*, and 2 = *very true or often true*). The CBCL provides scores on eight syndromes of children's problems (Achenbach & Rescorla, 2003) including: Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Rule-Breaking Behavior, Aggressive Behavior, Social Problems, Thought Problems, and Attention Problems. The CBCL provides two broadband subscales: Internalizing behavior problems and externalizing behavior problems. A *T* score of 65 suggests need for treatment (Aschenbrand, Angelosante, & Kendall, 2005). Internal consistency and retest reliability have been documented (Achenbach & Rescorla, 2001).

The TRF parallels the parent CBCL, but is completed by the teacher. It evaluates children's functioning in classroom, including aspects of academic performance, if available, and adaptive functioning as well as behavioral/emotional problems. The TRF has high retest reliability and moderate inter-teacher agreement and discriminates between referred and non-referred children (Achenbach, 1991).

Procedure

Participants were referred for treatment by professionals or schools, or they responded to media notices. All procedures were internal review board approved. After a brief telephone screen with the parents, eligible families were invited to participate. Parents provided written consent and their children gave written assent. Doctoral candidates in clinical psychology conducted the diagnostic interviews and assessments, and children and their parents completed self-report measures.

Results

Preliminary Analyses

Based on the ADIS-C/P, participants were identified as children with at least one principle anxiety disorder (AD group, $N = 142$) or children without an anxiety disorder (NAD group, $N = 33$). No group differences were found between AD and NAD youth on child's age, parent's average age, gender, ethnicity, parent's education level, and estimated household income.

Pearson correlations for the CRPBI subscales indicated that for each parenting behavior, the child's reports on mother and father were significantly correlated (see Table 1). Child's report on mother's acceptance was inversely correlated with firm control, and psychological control was positively correlated with firm control.

Primary Analyses

Regarding parenting behavior and child symptoms (Table 1), Pearson correlations indicated that child-report of mother's acceptance was inversely correlated with the child anxiety (RCMAS), depression (CDI), and externalizing behavior (father's and mother's CBCL, externalizing behaviors). Child report of mother's psychological control was significantly correlated with these same measures, but also with child-report of social anxiety and phobia (SPAI-C) and teacher's report of Internalizing (TRF). Inverse correlations were found between child-report of father's acceptance and RCMAS, CDI, and mother's CBCL report of externalizing. Child-report of father's psychological control was significantly correlated with RCMAS and CDI.

Independent t -tests indicated that child-report of mother's psychological control was significantly higher in the AD group (see Table 2) than in the NAD group. Compared to NAD children, AD children also rated father's psychological control and behavior control significantly higher.

Multiple regression analyses tested whether child-perceived parenting behavior significantly predicted child's symptoms of anxiety, depression, and externalizing behavior. Child's age, sex, and ethnicity were entered as covariates because literature suggests that these factors may impact the child's perception of parenting behavior. Because child's reports on mother and father were significantly correlated, and because the data on mothers were more complete (as mothers serve as the primary care-taker in most cases), maternal parenting behaviors were analyzed. Child-report of mothers' acceptance, psychological control, and firm control were examined as predictors of the child's symptoms. The RCMAS and SPAI-C served as the child's anxiety measure, while the CDI served as the measure of depressive symptoms. Mother's CBCL Externalizing served as the measure of externalizing problems. Regression analyses (Table 3) indicated that (after controlling for demographic variables) lower child-reports of mother's acceptance significantly predicted higher RCMAS, CDI, and CBCL externalizing scores. On the contrary, higher child-reports of mother's psychological control significantly predicted higher RCMAS, SPAI-C, CDI, and CBCL externalizing scores. Child-report of maternal firm control did not predict child symptoms (all p 's $> .10$).

Moderator Analyses

Research has indicated differences in the interaction of families with a depressed versus anxious child (e.g., Rapee, 1997). To examine whether depressive symptoms influence the relationship between child-perceived parenting and child anxiety and child externalizing symptoms, child depressive symptoms (CDI) was entered into hierarchical regression to examine the relationship between parenting behavior (Table 4).¹ Because mother's firm control did not significantly predict child symptoms, only maternal acceptance and psychological control were included. Child age, gender, and ethnicity were controlled/entered first. Maternal acceptance and psychological control as well as child depression (CDI) were entered second, with the exception that only maternal psychological control and CDI were entered in the SPAI-C model because maternal acceptance did not significantly predict SPAI-C in the primary analyses. The interactions of maternal acceptance X CDI and maternal psychological control X CDI were entered third, with the exception that only the interaction of maternal psychological control X CDI were entered in the SPAI-C model.

Results indicated that the interaction of child depressive symptoms (CDI) and maternal psychological control significantly predicted children's anxiety (RCMAS and SPAI-C, see Figure 1 and 2). The interaction did not significantly predict child's externalizing symptoms. Lastly, the interaction between child's report of maternal acceptance and CDI did not predict child's RCMAS scores or externalizing symptoms.

Discussion

Congruent with previous research, the current study found that when children perceived higher acceptance and affection from parents, they exhibited less anxiety, depressive, and externalizing symptoms. Parental control demonstrated a different relationship: when children perceived more psychological control from their parents, they were likely to have more anxiety and depressive symptoms and have more externalizing behavioral problems. Overall, the results suggested that the impact of these parenting behaviors might not be specific to one aspect of children's symptomology. Rather, the results suggest the possibility that a parenting style consisting of high acceptance and low psychological control worked in child's favor, facilitating child's overall psychological wellbeing and a lower rate of externalizing behavior.

Compared to children's general anxiety, their social anxiety was less related to their perception of parental acceptance. Only maternal psychological control was linked – the higher perceived parents' psychological control, the higher their social anxiety. Research shows a link between parenting behavior and childhood anxiety, yet surprisingly little research has investigated parenting and children's social anxiety (Bogels, Stevens, & Majdandzic, 2010). One explanation for the relationship between children's social anxiety

¹To examine how externalizing symptoms may influence relationships between child perceived parenting behaviors (maternal acceptance and psychological control) and child anxiety and depressive symptoms, the level of child's externalizing (CBCL, M_EXT) symptoms was used as a moderator in hierarchical regression models to examine the relationship between parenting behaviors and child's anxiety (RCMAS), social anxiety (SPAI-C), and depressive symptoms (CDI). Results of these analyses indicated that the interaction between child's externalizing behaviors and maternal acceptance as well as psychological control did not significantly predict child's RCMAS, SPAI-C, and CDI scores.

and maternal psychological control could be the information processing biases observed in youth with social anxiety (Crick & Dodge, 1996; Ehrenreich & Gross, 2002; Rapee & Heimberg, 1997). Studies have found that anxious children interpret ambiguous scenarios as more threatening and adopt avoidant behaviors to cope, and that parents facilitate the avoidance (Dadds, Barrett, Rapee, & Ryan, 1996; Rapee, 1997). Perhaps by exhibiting more control and granting less autonomy, parents send children the signal that “the world is dangerous,” which consequently leads to children’s anxiety. Some studies suggest that father’s versus mother’s control might impact children of social anxiety differently (Bogels et al, 2010; Raikes & Thompson, 2008). Yet the current study did not include father data, and hence, further work is needed to draw a more definite conclusion.

Interestingly, the present finding indicated that children’s depressive symptoms moderated the relationship between perceived parental psychological control and anxiety. More specifically, parental control was more relevant to children’s anxiety when the children endorsed lower depressive symptoms than when they endorsed higher depression. How is this finding to be explained? Based on the work cited, the consensus is that child perceived parental psychological control is positively correlated with child anxiety, and that parental accommodation, overprotection, and over-involvement are often seen in families of children with anxiety disorders and are linked to less favorable outcomes (Barrett, et al., 1996; Bogels & Brechman-Toussaint, 2006; Hudson & Rapee, 2001; Muris, Meesters, Merckelbach, & Hulsenbeck, 2000; van Gastel, et al., 2009). Some research suggests that this observation is particularly true for severe anxiety disorders (Albert, et al., 2010; Amir, Freshman, & Foa, 2000; Barrett, Healy-Farrell, & March, 2004; Storch, et al., 2007; Storch, et al., 2010). However, when anxious children also endorse higher depression, it could simply reflect more severe pathology and greater overall impairment. It is possible that in these cases, parental control demonstrates a “ceiling effect” in its association with children’s anxiety, and that factors other than parenting may account for more variance in the contribution to children’s anxiety at this point. Therefore, no apparent association between parenting and child anxiety is detected in these cases.

Study limitations merit consideration. The current study did not investigate other potential moderating factors (e.g., cultural context of the family). Future research should include children and families from diverse ethnic backgrounds. Research to date has indicated a strong link between parental anxiety and child anxiety (Biederman et al., 2007; Burstein, Ginsburg, & Tein, 2010; Connell & Goodman, 2002). It is possible that parenting plays a role in this association since parenting practice is likely influenced by parents’ psychopathology. It is important that future research further investigate this relationship. The study did not examine complex interactions among parenting behaviors nor gather observations of parenting interactions. Future research including observations of parenting behavior is needed. Family involvement and parent training are considered important in effective treatment for children with anxiety disorders (Kendall, Hudson, Gosch, Flannery-Schroeder, & Suveg, 2008; Khanna & Kendall, 2009; Suveg, et al., 2009). Future studies could examine parenting behavior as a way to improve the efficacy of its treatment.

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Figure 1.

CDI = Children's Depression Inventory; RCMAS = Revised Children's Manifest Anxiety Scale; PC_M = Child's report of maternal psychological control.

Figure 2.
CDI = Children's Depression Inventory; SPAI-C = Social Phobia and Anxiety Inventory for Children; PC_M = Child's report of maternal psychological control.

Table 1
Correlation among CRPBI Subscales and Correlation between CRPBI Subscales and Child Symptom Measures

CRBPI Subscales					Child Symptom Measures									
					CBCL						TRF			
	AC_M	PC_M	FC_M	AC_F	PC_F	RCMAS	SPAI-C	CDI	M_INT	M_EXT	F_INT	F_EXT	INT	EXT
AC_M	-					-.24**	-.14	-.26**	-.09	-.24**	.04	-.24**	-.09	-.13
PC_M	-.14	-				.24**	.22**	.23**	.13	.28**	.08	.22**	.16*	.12
FC_M	-.18*	.19*	-			.067	.01	.07	.12	.14	.13	.07	.16*	.05
AC_F	.50**	.04	-.07	-		-.25**	-.14	-.33**	-.19*	-.23**	-.09	-.20*	-.21	-.06
PC_F	.07	.59**	.02	.01	-	.22**	.11	.30**	.14	.18*	.10	.15	.13	.10
FC_F	.12	.16*	.30**	.01	.13	.16*	.03	.07	.15	.11	.15	.10	.04	.06

Note. CRPBI = Children's Report of Parent Behaviour Inventory; AC_M or F = acceptance of mother or father; PC_M or F = psychological control of mother or father; FC_M or F = firm control of mother or father; RCMAS = Revised Children's Manifest Anxiety Scale; SPAI-C = Social Phobia and Anxiety Inventory for Children; CDI = Children's Depression Inventory; CBCL, M_INT = Child Behavior Checklist internalizing behavior, mother; CBCL, M_EXT = Child Behavior Checklist externalizing behavior, mother; CBCL, F_INT = Child Behavior Checklist internalizing behavior, father; CBCL, F_EXT = Child Behavior Checklist externalizing behavior, father; TRF, INT = Teacher Report Form internalizing behavior; TRF, EXT = Teacher Report Form externalizing behavior.

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

Table 2

Means and Standard Deviations for Children's Ratings on Parenting Behavior

CRBPI	NAD (N=33)	AD (N=142)	CRBPI	NAD (N=31)	AD (N=139)
AC_M	25.48 (3.08)	25.24 (2.98)	AC_F	25.09 (3.74)	24.05 (3.65)
PC_M	16.52 (3.95)	18.20 (3.67)*+	PC_F	14.23 (2.84)	15.98 (4.00)**++
FC_M	21.97 (2.53)	22.09 (2.35)	FC_F	20.90 (1.60)	21.96 (2.40)**++

Note. Standard deviations are in parentheses. CRBPI = Children's Report of Parent Behaviour Inventory; AC_M = mother's acceptance; PC_M = mother's psychological control; FC_M = mother's firm control; AC_F = father's acceptance; PC_F = father's psychological control; FC_F = father's firm control; NAD = children without any anxiety disorders; AD = children with a primary anxiety disorder.

+ $t(175) = -2.35, p < .05, d = .44$.

++ $t(170) = -2.86, p < .05, d = .50$.

+++ $t(170) = -3.01, p < .05, d = .52$.

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

Table 3
Multiple Regression for Child-Reported Maternal Parenting Behavior and Child Symptoms (N=170)

Variable	RCMAS ⁺			SPAI-C ⁺⁺			CDI ⁺⁺⁺			CBCL, M_EXT ⁺⁺⁺⁺		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Step 1												
Age	.73	.54	.10	-.45	.43	-.08	.10	.33	.02	.19	.48	.03
Gender	1.09	1.89	.04	-.39	1.52	-.02	.37	1.15	.03	-1.61	1.71	-.01
Ethnicity	-5.93	3.09	-.15	-1.10	2.49	-.03	-3.50	1.89	-.14	-5.52	2.80	-.15
Step 2												
Age	.80	.53	.12	-.38	.43	-.07	.12	.32	.03	.27	.47	.04
Gender	-.08	1.88	-.003	-1.14	1.53	-.06	-.33	1.15	-.02	-1.61	1.67	-.07
Ethnicity	-3.02	3.16	-.07	.75	2.57	.02	-1.56	1.92	-.06	-2.24	2.81	-.06
X1 AC_M	-.71	.32	-.17*	-.47	.26	-.14	-.53	.20	-.21**	-.65	.29	-.17*
X2 PC_M	.73	.25	.22**	.55	.20	.21**	.41	.15	.21**	.75	.22	.25**
X3 FC_M	-.09	.41	-.23	-.17	.33	-.04	-.08	.25	-.02	.24	.31	.50

Note. RCMAS = Revised Children's Manifest Anxiety Scale; SPAI-C = Social Phobia and Anxiety Inventory for Children; CDI = Children's Depression Inventory; CBCL, M_EXT = Child Behavior Checklist externalizing behavior, mother; AC_M = acceptance of mother; PC_M = psychological control of mother; FC_M = firm control of mother.

⁺ $R^2 = .04$, $F(3,170) = 2.30$ for Step 1 ($p = .08$); $R^2 = .08$, $F(3,167) = 5.01$ for Step 2 ($p < .001$).

⁺⁺ $R^2 = .09$, $F(3,170) = .45$ for Step 1 ($p = .72$); $R^2 = .06$, $F(3,167) = 3.80$ for Step 2 ($p < .05$).

⁺⁺⁺ $R^2 = .02$, $F(3,170) = 1.31$ for Step 1 ($p = .28$); $R^2 = .09$, $F(3,167) = 5.43$ for Step 2 ($p < .05$).

⁺⁺⁺⁺ $R^2 = .02$, $F(3,170) = 1.42$ for Step 1 ($p = .24$); $R^2 = .09$, $F(3,167) = 6.73$ for Step 2 ($p < .001$).

* $p < .05$.

** $p < .01$.

Table 4

Hierarchical Regression for Moderation of Child Depressive Symptoms (CDI) on the Relationship between Maternal Parenting Behavior and Child Symptoms (N=170)

Variable	RCMAS ⁺			SPALC ⁺⁺			CBCL, M_EXT ⁺⁺⁺		
	B	SE B	β	B	SE B	β	B	SE B	β
Step 1									
Age	.73	.54	.10	-.45	.43	-.08	.19	.48	.03
Gender	1.09	1.89	.04	-.43	1.51	-.02	-.15	1.71	-.01
Ethnicity	-5.93	3.09	-.15	-1.13	2.48	-.04	-5.52	2.80	-.15
Step 2									
Age	.68	.41	.10	-.45	.36	-.08	.24	.46	.04
Gender	.24	1.46	.01	-.98	1.27	-.05	-1.29	1.60	-.06
Ethnicity	-1.42	2.45	-.04	1.81	2.08	.06	-1.98	2.70	-.05
X ₁ AC_M	-.17	.26	-.04	-----	-----	-----	-.48	.28	-.13
X ₂ PC_M	.31	.20	.10	.25	.17	.10	.63	.22	.21**
X ₄ CDI	1.02	.10	.62***	.72	.09	.55***	.37	.11	.25***
Step 3									
Age	.66	.39	.09	-.46	.35	-.08	.21	.46	.03
Gender	.25	1.39	.01	-1.25	1.22	-.06	-1.07	1.64	-.05
Ethnicity	-.79	2.29	-.02	2.35	2.02	.07	-1.88	2.72	-.05
X ₁ AC_M	-.14	.26	-.03	-----	-----	-----	-.54	.30	-.15
X ₂ PC_M	.24	.19	.07	.22	.17	.08	.60	.22	.20**
X ₄ CDI	1.20	.10	.73***	.83	.09	.63***	.38	.12	.26**
X ₁ *X ₄ (AC_M*CDI)	.04	.03	.08	-----	-----	-----	.03	.03	.06
X ₂ *X ₄ (PC_M*CDI)	-.10	.02	-.30***	-.07	.02	-.24***	-.01	.02	-.02

Note. RCMAS = Revised Children's Manifest Anxiety Scale; SPALC = Social Phobia and Anxiety Inventory for Children; CBCL, M_EXT = Child Behavior Checklist externalizing behavior, mother; AC_M = acceptance of mother; PC_M = psychological control of mother.

⁺ $R^2 = .04$, $F(3,170) = 2.30$ for Step 1 ($p = .08$); $R^2 = .42$, $F(3,167) = 42.72$ for Step 2 ($p < .001$); $R^2 = .08$; $F(2,165) = 13.59$ for Step 3 ($p < .001$).

⁺⁺ $R^2 = .01$, $F(3,170) = .45$ for Step 1 ($p = .72$); $R^2 = .33$, $F(2,168) = 41.15$ for Step 2 ($p < .001$); $R^2 = .05$, $F(1,167) = 13.19$ for Step 3 ($p < .001$).

+++ $R^2 = .02$, $F(3,170) = 1.42$ for Step 1 ($p = .24$); $R^2 = .16$, $F(3,167) = 10.69$ for Step 2 ($p < .001$); $R^2 = .003$, $F(2,165) = .30$ for Step 3 ($p = .74$),
* $p < .05$.
** $p < .01$.
*** $p < .001$.