Journal of Clinical Psychology / Volume 76, Issue 7 / pp. 1390-1407

REGULAR ARTICLE | Full Access

Parent and child emotion and distress responses associated with parental accommodation of child anxiety symptoms

Erin E. O'Connor, Lindsay E. Holly, Lydia L. Chevalier, Donna B. Pincus, David A. Langer

First published: 15 February 2020
https://doi-org.revproxy.brown.edu/10.1002/jclp.22941
Citations: 26

Findit @ Brown

Abstract

Objective

Parental accommodation contributes to the maintenance of child anxiety and related symptoms. The current study examines the contributions of parent and child factors to parental accommodation in a sample of anxious youth.

Methods

Sixty-four treatment-seeking youth (6–16 years) and their mothers, as well as a subset of fathers ($N = 41$) reported on parental accommodation, parental distress and emotion regulation, child psychopathology, child externalizing behaviors, and child intolerance of uncertainty.

Results

Parental accommodation was not related to parental distress or emotion regulation. Parents who viewed their child as being more symptomatic (e.g., anxious, externalizing, and intolerant of uncertainty) were more likely to engage in accommodation. For mothers, child anxiety and externalizing symptoms were notable predictors of accommodation.

Parent perceptions of child symptomology may be an important factor significantly related to accommodation behaviors. This finding can be used to inform programming designed to target parental responses to child anxiety and related disorders.

1 INTRODUCTION

Parental accommodation refers to the involvement of caregivers in facilitating child avoidance of anxiety-provoking stimuli or in alleviating the distress caused by anxiety (Calvocoressi et al., 1995; Jones, Lebowitz, Marin, & Stark, 2015). A majority of parents of youth with an anxiety disorder report engaging in at least one type of accommodation in response to their child's anxious behavior (Benito et al., 2015). Frequent forms of parental accommodation include providing reassurance, allowing the child to skip activities when distressed, modifying family routines, and adhering to child-assigned rules around anxiety-provoking stimuli (Benito et al., 2015; Lebowitz, Panza, Su, & Bloch, 2012; Thompson-Hollands, Kerns, Pincus, & Comer, 2014). These accommodating behaviors negatively reinforce child anxiety symptoms, such that parental accommodation allows a child to mentally or physically avoid a feared stimulus, reducing the child's distress, and increasing the likelihood that the child will seek to avoid the feared stimulus in the future (Kagan, Frank, & Kendall, 2017). Although accommodation may decrease child distress in the moment, this parental response may reinforce the child's perception that the feared situation or stimulus warranted their anxious response (Kagan et al., 2017). Avoiding a feared stimulus (as opposed to approaching the feared stimulus) interferes with the natural extinction of the fear (i.e., habituation) and increases the likelihood of heightened anxiety in the future (Foa & Kozak, 1986; Kagan et al., 2017).

A number of studies have identified accommodation as an important treatment target for child anxiety and addressing parental accommodation results in positive treatment outcomes (Lebowitz, Marin, Martino, Shimshoni, & Silverman, 2019; Merlo, Lehmkuhl, Geffken, & Storch, 2009). However, though we have substantial evidence that accommodation plays an important role in child anxiety disorders, we know relatively less about factors that may predict the likelihood of a parent engaging in accommodation. By knowing specific parent and child characteristics that relate to accommodation, we may be able to better understand the way in which accommodation contributes to the maintenance of anxious symptoms to inform interventions that target child symptom trajectories.

Several parent characteristics relate to parental accommodation. Prior research has consistently identified a positive association between maternal internalizing psychopathology and accommodation (e.g., Jones et al., 2015; Kerns, Pincus, McLaughlin, & Comer, 2017;

Kerns et al., 2017; Thompson-Hollands et al., 2014). Moreover, maternal accommodation has been found to partially account for the relationship between maternal and child anxiety (Jones et al., 2015), providing preliminary evidence that parental accommodation may play a part in the intergenerational transmission of anxiety. In addition to anxiety, preliminary evidence also suggests that other forms of internalizing psychopathology may relate to accommodation. For instance, interference related to accommodation and the impact it has on parents has been observed to positively relate to parental depression (Benito et al., 2015; Thompson-Hollands et al., 2014). In addition, maternal stress has been found to relate to the extent to which mothers accommodate as well as the interference associated with the accommodation (Thompson-Hollands et al., 2014).

Taken together, the literature linking parental anxiety, depression, and stress to increased accommodation behaviors suggests that parents experiencing increased negative emotions may be at heightened risk for accommodating when their child is experiencing anxiety. Parental distress may compromise a parent's ability to effectively manage their own emotions and preliminary research supports the notion that parents who report using adaptive emotion regulation strategies to manage their own emotions are more likely to utilize positive and supportive responses in the context of a distressed youth (Remmes & Ehrenreich-May, 2014). In addition, a study of young children and their mothers found that maternal anxiety predicted ineffective maternal emotion regulation use (use of multiple emotion regulation strategies with no positive change in affect) in the face of child distress, which in turn predicted greater maternal accommodation and subsequently higher levels of child anxiety (Kerns et al., 2017). Given that difficulties with emotion regulation are often associated with psychopathology and distress (Mennin & Fresco, 2013; Sloan et al., 2017; Wirtz, Hofmann, Riper, & Berking, 2014), it could be useful to consider these factors together in the prediction of parental accommodation. This may be especially true for parents of anxious youth who often have higher levels of anxiety and depression (Cooper, Fearn, Willetts, Seabrook, & Parkinson, 2006), difficulties with emotion regulation (Kerns et al., 2017), and increased distress when faced with child negative emotion (Aschenbrand & Kendall, 2012; Cheron, Ehrenreich, & Pincus, 2009; Turner, Beidel, Roberson-Nay, & Tervo, 2003).

Because parental accommodation typically, if not always, occurs in the context of child distress, child psychopathology and markers of heightened distress are also relevant to understanding accommodating behaviors. Studies have repeatedly linked child anxiety symptoms to increased levels of parental accommodation, such that parents engage in more accommodating behaviors when children show higher levels of anxious distress (Settipani & Kendall, 2017) and children who exhibit greater anxious distress responses elicit more accommodation from

symptoms (e.g., temper outbursts) have also been associated with the use of parental accommodation. That is, higher levels of youth externalizing symptoms have been associated with higher levels of parental accommodation among youth with obsessive-compulsive disorder (OCD; Caporino et al., 2012; Wu, Lewin, Murphy, Geffken, & Storch, 2014) and anxiety (Storch et al., 2015), although one study looking at anxious youth did not find this association (Benito et al., 2015). As externalizing behaviors are common among anxious youth (Johnco, Salloum, Lewin, McBride, & Storch, 2015; Kendall et al., 2010), examining the potential for these symptoms to uniquely contribute to parental accommodation will provide further information in a new sample on the types of child behaviors that increase the likelihood of parental accommodation.

In addition to anxious and externalizing behaviors, child distress relating to child sensitivity to ambiguity and uncertainty may also prompt parents to accommodate. Intolerance of uncertainty, which is a cognitive vulnerability for excessive worry with a tendency to react negatively (physically, emotionally, and cognitively) to uncertain situations or events (Comer et al., 2009; Dugas, Buhr, & Ladouceur, 2004), has been linked to elevated levels of child anxiety (Comer et al., 2009), especially symptoms of generalized anxiety disorder (Cowie, Clementi, & Alfano, 2018; Read, Comer, & Kendall, 2013). Research also shows that elevated intolerance of uncertainty is related to reassurance seeking from caregivers and anxious avoidance of novel situations and/or situations in which the outcome is unknown (Comer et al., 2009; Cornacchio et al., 2018). Thus, it is possible that parents of youth who experience this heightened sensitivity to uncertain circumstances might respond to signs of distress in their child with accommodation behaviors such as providing excessive levels of reassurance and allowing escape. However, research has yet to investigate this potential link.

Taken together, extant theoretical and empirical literature indicates a bidirectional process; parental accommodation may be the result of emotion and distress factors (e.g., distress and/or emotion regulation difficulties) experienced by the child, by the parent, or by the child and the parent. Thus, the present study aims to advance understanding about parent and child emotion and distress factors thought to result in parental accommodation by examining the relative contributions of parental distress, parental emotion regulation difficulties, child anxiety, child externalizing symptoms, and child intolerance of uncertainty to parental use of accommodating behaviors. To this end, three hypotheses were developed. First, we hypothesized that each of these factors (parental distress, parental emotion regulation difficulties, child anxiety, child externalizing symptoms, and child intolerance of uncertainty) would be positively associated with parental accommodation in the current sample of anxious children and their parents. Second, we hypothesized that the results of the current study would

relevance of parent factors together and child factors together, as well as each factor individually. Given that this is the first known study to evaluate the unique contribution of these parent and child factors to parental accommodation, no specific predictions were made. Third, we hypothesized that there would be differences in the prediction of mother versus father accommodation. Prior research points to possible differences in the correlates of accommodating behaviors across parent gender (Futh, Simonds, & Micali, 2012; Thompson-Hollands et al., 2014), but research to date is scant. Preliminary data suggest that when father use of accommodation is specifically examined, associations between parental psychopathology and accommodation behaviors do not emerge (Futh, Simonds, & Micali, 2012; Thompson-Hollands et al., 2014). It may be that mothers are more likely to accommodate to manage their own distress whereas fathers do so for other reasons, such as mitigation of child behavior dysregulation. Given the dearth of research examining differences between mother and father accommodation, this hypothesis is also considered exploratory.

2 METHODS

2.1 Participants

The current sample included 64 children (*M* age = 11.33, standard deviation [*SD*] = 3.3; 50% female) and their mothers (*N* = 64, *M* age = 45.68, *SD* = 4.9) and fathers (*N* = 41, *M* age = 46.73, *SD* = 4.46) presenting to a university-based anxiety specialty clinic for treatment. Families with mother-reported data on the measures of interest were selected for the current study to ensure at least one parent had responded to the relevant measures (mothers were the most frequent parent reporter). When families in the sample also had father-reported data on the measures of interest, fathers were also included in the current study (*N* = 41). Based on the parent report, 87.5% of youth were White, 1.6% Asian, 1.6% African American, 6.3% other, and 3.1% missing. Youth met criteria for the following principal anxiety and related diagnoses (including coprincipal diagnoses): generalized anxiety disorder (*N* = 26); specific phobia (*N* = 11); OCD (*N* = 10); social anxiety disorder (*N* = 6); selective mutism (*N* = 4); unspecified anxiety disorder (*N* = 6); panic disorder/agoraphobia (*N* = 2); posttraumatic stress disorder (*N* = 1), and adjustment disorder (*N* = 1). The majority (61%) of children came from families in which parents reported household incomes of $100,000 or greater (13 families [20.3%] did not report income data). Most children had married parents (81%).

2.2 Measures

The Anxiety Disorders Interview Schedule Child/Parent Version (ADIS-IV-C/P) is a widely used semi-structured interview that collects information from both parents and children and is

the assessment of anxiety disorders in youth (Silverman & Ollendick, 2005; Silverman, Saavedra, & Pina, 2001; Wood, Piacentini, Bergman, McCracken, & Barrios, 2002). The ADIS-IV-C/P was administered by a trained clinician (i.e., licensed clinical psychologist or graduate student/postdoctoral fellow supervised by a licensed clinical psychologist). Diagnoses were determined via consensus with the clinical team (i.e., all clinicians at the child specialty clinic).

The Family Accommodation Scale-Anxiety (FASA) is a 13-item parent-report of family accommodation of anxiety symptoms (Lebowitz et al., 2013). The FASA consists of a total scale score, as well as two subscales: (a) frequency of accommodation and (b) modification of routines and schedules. The total accommodation score consists of the nine items reflecting the frequency of accommodation (e.g., “how often did you reassure your child?” “how often did you participate in behaviors related to your child's anxiety?”). Items are rated on a five-point scale from 0 (no accommodation or never) to 4 (daily accommodation). The FASA has demonstrated strong reliability and validity and internal consistency (Lebowitz et al., 2013). The FASA has been used in both clinical and nonclinical samples of youth, and in line with other studies examining accommodation in child anxiety, the total accommodation score was used in analyses (Jones et al., 2015; Lebowitz et al., 2013). The internal consistency in the current study was acceptable for the mother (Cronbach's $\alpha = .89$) and father (Cronbach's $\alpha = .96$) report.

The Depression Anxiety Stress Scales (DASS) is a 42-item adult self-report questionnaire that assesses individual difficulties with negative emotional states (Lovibond & Lovibond, 1995). The DASS consists of a total scale score and three subscales: (a) depression, (b) anxiety, and (c) stress. The total score is generated by adding the three subscales. Mothers and fathers are asked to indicate the degree to which they felt negative affect symptoms over the past week ranging from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time). The DASS has demonstrated excellent internal validity and consistency (Antony, Bieling, Cox, Enns, & Swinson, 1998; Lovibond & Lovibond, 1995). Internal consistency in the current study ranged from acceptable to excellent for mother total scale (Cronbach's $\alpha = .94$), depression subscale (Cronbach's $\alpha = .86$), anxiety subscale (Cronbach's $\alpha = .79$), and stress subscale (Cronbach's $\alpha = .93$). Internal consistency ranged from acceptable to excellent for father total scale (Cronbach's $\alpha = .95$), depression subscale (Cronbach's $\alpha = .90$), anxiety subscale (Cronbach's $\alpha = 0.90$), and stress subscale (Cronbach's $\alpha = .89$).

The Difficulties in Emotion Regulation Scale (DERS) is a 36-item adult self-report measure of difficulties in multiple domains of emotion regulation (Gratz & Roemer, 2004). The DERS consists of a total scale score and five subscales: (a) awareness and understanding of emotions; (b) acceptance of emotions; (c) ability to engage in goal-directed behavior, and refrain from impulsive behavior when experiencing negative emotions; and (d) access to emotion regulation

Likert scale from 1 (almost never or 0–10%) to 5 (almost always or 91–100%), with higher scores indicating greater difficulties with emotion regulation. The DERS has demonstrated excellent internal consistency, good test–retest reliability, and adequate convergent validity (Gratz & Roemer, 2004). Internal consistency in the current study was excellent for the mother (Cronbach's $\alpha = .95$) and father (Cronbach's $\alpha = .92$) report.

The Multidimensional Anxiety Scale for Children (MASC) is a 39-item self and/or parent-report measure that assesses child anxiety in terms of behavioral, emotional, cognitive, and physical symptoms (March, Parker, Sullivan, Stallings, & Conners, 1997). The MASC consists of a total scale score and four subscales: (a) physical symptoms (tense/restless and somatic/autonomic), (b) harm avoidance (anxious coping and perfectionism), (c) social anxiety (humiliation/rejection and public performance fears), and (d) separation anxiety. Items are rated on a four-point scale (0 = "never true," and 3 = "often true"). This study uses the total score as a measure of child anxiety. The MASC has been found to effectively predict anxiety disorders, has good internal consistency, has high test–retest reliability, and good convergent and divergent ability (March et al., 1997). Internal consistency in the current study was acceptable for the mother (Cronbach's $\alpha = .90$), father (Cronbach's $\alpha = .87$) and child (Cronbach's $\alpha = .84$) report.

The Intolerance of Uncertainty Scale for Children (IUSC) is a 27-item parent- and child-report of a child's tendency to react negatively to uncertain situations and events (Comer et al., 2009). Mothers, fathers, and children rate the extent to which they agree with each item on a five-point scale (1 = "not at all," 3 = "somewhat," and 5 = "very much"). The IUSC has demonstrated high convergent validity and has also shown adequate sensitivity and specificity in distinguishing youth with and without anxiety disorders (Comer et al., 2009). Internal consistency in the current study was excellent for the mother (Cronbach's $\alpha = .97$), father (Cronbach's $\alpha = .96$) and child (Cronbach's $\alpha = .94$) report.

The Child Behavior Checklist (CBCL/6-18; Achenbach, Howell, Quay, & Conners, 1991) is a 112-item parent-report measure consists of internalizing, externalizing, and total problem scales. The Externalizing subscale (35 items; raw scores) was used in the current study. The Externalizing scale is composed of behavior and conduct problems such as oppositional behavior, aggression, hyperactivity, and delinquency. The CBCL is a widely used measure of child behavior and has demonstrated good convergent and discriminant validity (Clarke, Lewinsohn, Hops, & Seeley, 1992) and has excellent test–retest reliability (McConaughy, 1993). Internal consistency was strong for the current sample for mother report (Cronbach $\alpha = .92$) and father report (Cronbach $\alpha = .90$).

2.3 Procedures

Review Board. Children completed an assessment at the clinic if a brief phone screen deemed them eligible for care. Assessments included the clinician-administered ADIS-IV-C/P to determine diagnoses. Children and parents also completed a variety of self- and parent-report measures including those used in this study. Informed consent was obtained from all adult individual participants included in the study (assent was obtained for children 12 years and older). Given that data were collected as part of routine clinic intake procedures, participants were not compensated.

2.4 Data analysis

A series of preliminary analyses were run to ensure data integrity (e.g., checking for outliers), determine if the assumptions of our analyses were met (e.g., normality), and characterize the bivariate relationships between study variables (i.e., correlations). We then examined associations between mother and father accommodation, demographic variables, and emotion and distress-related child and parent variables. To account for item-level missing data, mean item scores were imputed for any scale with at least 80% of the item-level data present. Sample sizes vary based on the inclusion of mother-reported, father-reported, or child-reported measures. Hierarchical regression analyses were used to investigate the contributions of parent factors (distress and emotion regulation) and child factors (anxiety, externalizing symptoms, and intolerance of uncertainty). Based on theory and preliminary bivariate correlations, variables were entered in regression models in multiple steps. To determine the contribution of parent emotion factors (i.e., parent distress and difficulties with emotion regulation) these variables were entered into the model together first. Parent-reported child anxiety, child intolerance of uncertainty, and child externalizing symptoms were entered in the next step to examine the unique contributions of child factors to parental accommodation. Given that parents and children often have differing perspectives on symptoms (Comer & Kendall, 2004), additional regression analyses were conducted using child reports of child anxiety and intolerance of uncertainty (instead of parent report). Analyses did not include child reports of child externalizing symptoms because no measure was available. A Bonferroni corrected α level (.05/number of tests) was used to account for multiple hypothesis testing and correcting for Type I errors within each regression analysis (Armstrong, 2014). Separate regression analyses were conducted for mother and father accommodation.

3 RESULTS

3.1 Preliminary results

In response to observed violations of normality on father and mother DASS anxiety subscale scores and mother DERS scores, logarithmic (log) transformations were computed. Transformed scores for these variables were used in all subsequent analyses. We identified univariate outlying data points by examining the distribution of each variable and removed those data points with *z*-scores above 3.29 or below −3.29 (Tabachnick & Fidell, 2007). One data point (Father DERS) was removed as a result. Raw means and *SD*s of study measures are presented in Table 1. Results showed no significant differences in parental accommodation across child gender (mother: $t_{62} = 0.62$, $p = .54$; father: $t_{39} = -1.48$, $p = .20$), or child age (mother: $r(62) = -0.11$, $p = .40$; father: $r(39) = -.23$, $p = .14$). For study variable correlations, see Tables 2 and 3. An evaluation of correlations showed a notable degree of overlap among DASS subscale scores for both mothers and fathers (i.e., *r*s ranged from .48 to .91, $p < .01$) and correlations between subscale scores and parental accommodation were not markedly different across mothers and fathers. As such, mother and father DASS total scores were used in primary analyses to evaluate the contribution of parental distress to accommodation behaviors.

Table 1. Descriptives for child and parent study measures

Variable	*N*	Range	Mean (*SD*)
FASA			
Mother	64	1.13–35.00	13.69 (9.2)
Father	41	1.00–36.00	10.25 (7.5)
MASC			
Mother	64	14.00–98.03	48.99 (18.4)
Father	41	13.34–80.05	43.89 (14.4)
Child	55	12.32–87.75	54.18 (16.0)
DASS Total			
Mother	64	0–54.29	16.65 (14.4)
Father	41	0–51.00	13.21 (12.6)
DERS			
Mother *	64	40.00–137.00	65.60 (20.6)

Father	41	36.00–113.00	65.80 (16.7)
IUSC			

Abbreviations: CBCL Ext, Child Behavior Checklist Externalizing Subscale; DASS Total, Depression Anxiety Stress Scales Total Scale; DERS, Difficulties in Emotion Regulation Scale; FASA, Family Accommodation Scale-Anxiety; IUSC, Intolerance of Uncertainty Scale for Children; MASC, Multidimensional Anxiety Scale for Children; *SD*, standard deviation.

* Log transformed scores used in analyses; nontransformed scores reported for ease of interpretability.

Table 2. Correlations of mother and child variables

	1	2	3	4	5	6	7	8	9	10	11
1. Mother FASA	1.00										
2. Mother MASC	.61**	1.00									
3. Child MASC	−.21	−.11	1.00								
4. Mother DASS Tot.	.18	.32**	.13	1.00							
5. Mother DASS Dep.	.08	.20.	.12	.84**	1.00						
6. Mother DASS Anx[a]	.12	.26*	.15	.78**	.48**	1.00					

Anxiety Subscale; DASS Dep., Depression Anxiety Stress Scales Depression Subscale; DASS Str., Depression Anxiety Stress Scales Stress Subscale; DASS Tot., Depression Anxiety Stress Scales Total Scale; DERS, Difficulties in Emotion Regulation Scale; FASA, Family Accommodation Scale-Anxiety; IUSC, Intolerance of Uncertainty Scale for Children; MASC, Multidimensional Anxiety Scale for Children.

* $p < .05$.

** $p < .01$.

[a] log transformed.

Table 3. Correlations of father and child variables

	1	2	3	4	5	6	7	8	9	10	11
1. Father FASA	1.00										
2. Father MASC	.41**	1.00									
3. Child MASC	−.11	.26	1.00								
4. Father DASS Tot.	.08	.20	.24	1.00							
5. Father DASS Dep.	.06	.19	.22	.91**	1.00						
6. Father DASS Anx[a]	.03	.17	.41*	.84**	.71**	1.00					

Scale; DASS Anx., Depression Anxiety Stress Scales Anxiety Subscale; DASS Dep., Depression Anxiety Stress Scales Depression Subscale; DASS Str., Depression Anxiety Stress Scales Stress Subscale; DERS, Difficulties in Emotion Regulation Scale; FASA, Family Accommodation Scale-Anxiety; IUSC, Intolerance of Uncertainty Scale for Children; MASC, Multidimensional Anxiety Scale for Children.

* $p < .05$.

** $p < .01$.

[a] log transformed.

3.2 Primary results

3.2.1 Mother accommodation

Mother emotion regulation (DERS) and mother distress (DASS) were entered in Step 1 and mother-reported child anxiety (MASC), mother-reported child externalizing symptoms (CBCL Ext), and mother-reported child intolerance of uncertainty (IUSC) were entered in Step 2 of the hierarchical regression model (see Table 4). The results of Step 1 indicated that mother DERS and DASS scores accounted for 4.9% of the variance in mother-reported accommodation ($F(2, 61) = 1.58$, $p = .22$). Mother-reported MASC, mother-reported CBCL Ext., and mother-reported IUSC added in Step 2 explained an additional 41.9% of the variance in mother-reported accommodation (ΔF ($F(3, 58) = 15.22$, $p < .001$)). In the final model, mother-reported MASC and CBCL Ext. were the only significant unique predictors of mother accommodation after applying the Bonferroni correction.

Table 4. Hierarchical regression analysis for mother reported variables contributing to mother reported accommodation

	Step 1				Step 2			
	B	SE	*β*	*p*	*B*	*SE*	*β*	*p*
Mother DASS	.02	.12	.03	.87	−.06	.09	−.09	.53
Mother DERS	14.85	13.75	.20	.28	2.51	10.83	.03	.82
Mother reported child MASC					.20	.07	.41	.003 †
Mother reported child IUSC					.04	.06	.11	.45
Mother reported CBCL Ext.					.35	.13	.31	.008 †

	B	SE	*β*	*p*	*B*	*SE*	*β*	*p*
R^2				.05				.47
F for change in R^2				1.58				15.22*

Abbreviations: CBCL Ext., Child Behavior Checklist Externalizing Subscale; DASS, Depression Anxiety Stress Scales Total Scale; DERS, Difficulties in Emotion Regulation Scale; IUSC, Intolerance of Uncertainty Scale for Children; MASC, Multidimensional Anxiety Scale for Children; *SE*, standard error.

N = 64.

* $p < .05$.

† $p < .01$ (.05/5 using Bonferroni correction).

As described above, to explore potential variations in the predictive ability of parent- versus child-reported factors, the above regression analysis was run using child report of child anxiety (MASC) and child intolerance of uncertainty (IUSC) in the second step (Table 5) on the subsample that had child-report data. Externalizing symptoms were not included in this regression as the current study did not include a child-reported measure of this construct. The results of Step 1 indicated that mother DASS and DERS scores accounted for 4.9% of the variance in mother-reported accommodation ($F(2, 41) = 1.06$, $p = .36$). Child-reported MASC and child-reported IUSC added in Step 2 explained an additional 11.2% of the variance in mother accommodation (ΔF ($F(2, 39) = 2.60$, $p = .09$). In the final model, no factor was uniquely significant after taking into account the Bonferroni correction.

Table 5. Hierarchical regression analysis for mother reported variables and child reported child variables contributing to mother reported accommodation

	Step 1				Step 2			
	B	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Mother DASS	.02	.14	.03	.89	.03	.14	.04	.85
Mother DERS	14.85	16.77	.20	.38	6.09	16.79	.08	.72
Child reported child MASC					−.20	.09	−.34	.04

	B	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Child reported child IUSC					.13	.08	.30	.11
R^2				.05				.16
F for change in R^2				1.06				2.60

Abbreviations: DASS, Depression Anxiety Stress Scales Total Scale; DERS, Difficulties in Emotion Regulation Scale; IUSC, Intolerance of Uncertainty Scale for Children; MASC, Multidimensional Anxiety Scale for Children; *SE*, standard error.

$N = 44$, $^{*}p < .05$, $^{\dagger}p < .013$ (.05/4 using Bonferroni correction).

To examine the additional variance accounted for by mother report of child symptoms in a parallel analysis to that used for child report of symptoms (no child externalizing symptoms), a regression analysis was run with mother-report variables excluding mother report of child externalizing symptoms. Mother-reported MASC and Mother-reported IUSC added in Step 2 explained an additional 35% of the variance in mother accommodation (*F* change ($F(2, 59) = 17.21$, $p < .001$)).

3.2.2 Father accommodation

Father DERS and DASS scores were entered in Step 1 and father-reported MASC, father-reported CBCL Ext., and father-reported IUSC were entered in Step 2 of the hierarchical regression model (see Table 6). The results of Step 1 indicated that father DERS and DASS scores accounted for 5.1% of the variance in father-reported accommodation ($F(2, 38) = 1.03$, $p = .37$). The results of Step 2 indicated that father-reported MASC, father-reported CBCL Ext., and father-reported IUSC accounted for an additional 19.7% of the variance in father-reported accommodation (ΔF ($F(3,35) = 3.05$, $p = .04$). In the final model, no predictor was uniquely significant.

Table 6. Hierarchical regression analysis for father reported variables contributing to father reported accommodation

	B	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Father DASS	.20	.15	.33	.19	.14	.15	.24	.35
Father DERS	−.15	.11	−.33	.18	−.17	.11	−.38	.14
Father reported child MASC					.14	.11	.26	.21
Father reported child IUSC					.05	.08	.15	.52
Father reported CBCL Ext.					.16	.20	.15	.43
R^2				.05				.25
F for change in R^2				1.03				3.05

Abbreviations: CBCL Ext., Child Behavior Checklist Externalizing Subscale; DASS, Depression Anxiety Stress Scales Total Scale; DERS, Difficulties in Emotion Regulation Scale; IUSC, Intolerance of Uncertainty Scale for Children; MASC, Multidimensional Anxiety Scale for Children; *SE*, standard error.

$N = 41$, $^{*}p < .05$, $^{\dagger}p < .01$ (.05/5 using Bonferroni correction).

The above regression analysis was run using child-report of child MASC and child IUSC in the second step (see Table 7). The results of Step 1 indicated that Father DERS and DASS scores accounted for 5.1% of the variance in father-reported accommodation ($F(2, 25) = 0.68$, $p = .52$). In Step 2, child-reported MASC and child-reported IUSC accounted for an additional 3.0% of the variance in father-reported accommodation (ΔF ($F(2, 23) = 0.38$, $p = .69$). In the final model, no predictor was uniquely significant.

Table 7. Hierarchical regression analysis for father reported variables and child reported child variables contributing to father reported accommodation

	Step 1				Step 2			
	B	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Father DASS	.20	.18	.33	.29	.25	.21	.42	.24
Father DERS	−.15	.14	−.33	.28	−.17	.14	−.39	.24
Child reported child MASC					−.08	.11	−.18	.47

	B	SE	β	p	B	SE	β	p
Child reported child IUSC					−.01	.10	−.02	.95
R^2				.05				.08
F for change in R^2				.68				.38

Abbreviations: DASS, Depression Anxiety Stress Scales Total Scale; DERS, Difficulties in Emotion Regulation Scale; IUSC, Intolerance of Uncertainty Scale for Children; MASC, Multidimensional Anxiety Scale for Children; *SE*, standard error.

$N = 28$, $^{*}p < .05$, $^{\dagger}p < .012$ (.05/4 using Bonferroni correction).

To examine the additional variance accounted for by father report of child symptoms in a parallel analysis to that used for child report of symptoms (no child externalizing symptoms), a regression analysis was run with father-report variables excluding father report of child externalizing symptoms. Father-reported MASC and Father-reported IUSC added in Step 2 explained an additional 18.3% of the variance in father accommodation (F change ($F(2, 36) = 4.29$, $p = .02$).

4 DISCUSSION

The present study provides new insight into parent and child factors that may be particularly important in contributing to higher levels of parental accommodation in the context of child anxiety. Consistent with past research and current study hypotheses, preliminary analyses showed that higher levels of parental accommodation were moderately associated with higher levels of child anxiety (Jones et al., 2015; Thompson-Hollands et al., 2014), externalizing symptoms (Storch et al., 2015), and intolerance of uncertainty. Contrary to expectations, parental accommodation was not related to parental distress or difficulties with emotion regulation, despite past research demonstrating a positive link between parental accommodation and parent anxiety (Jones et al., 2015; Thompson-Hollands et al., 2014), depression (Benito et al., 2015), stress (Thompson-Hollands et al., 2014), and emotion regulation (Kerns et al., 2017). When examining the relative contribution of parent and child factors in predicting parental accommodation, child emotion, and distress factors were found to have a greater impact on the use of accommodating behavior compared with parent emotion and distress factors, but only when child factors were reported by parents (not children).

degree of parental accommodation. That is, mothers who viewed their child as being broadly symptomatic (e.g., anxious, externalizing, and intolerant of uncertainty) were more likely to engage in accommodation. Such findings are consistent with previous studies indicating that parents are more likely to accommodate in the context of higher levels of child distress and anxiety (Lebowitz et al., 2014; Selles et al., 2018) and extend prior work examining parents' own distress and emotion regulation in relation to accommodation (Jones et al., 2015; Kerns et al., 2017; Thompson-Hollands et al., 2014). The current study provides preliminary evidence that when examined together, maternal accommodation may be more of a reaction to child distress than mother distress. This supports a growing field of literature in which parent beliefs about the ramifications of child distress (e.g., child loss of emotional or behavior control and ability to handle anxious feelings) relate to parental accommodation and child avoidance behaviors (Feinberg, Kerns, Pincus, & Comer, 2018; Meyer et al., 2018; Wolk et al., 2016). It may be that regardless of a mother's own distress or emotion regulation capabilities, mothers who anticipate their child reacting to a given situation or stimuli with a high degree of distress are more likely to take measures to prevent such distress.

When examining the unique effects of child emotion and distress factors on maternal accommodation, child anxiety, and externalizing symptoms were independently predictive of maternal accommodation. These findings replicate and extend prior research linking child anxiety and externalizing symptoms to parental accommodation (Storch et al., 2015). Although the association between child anxiety and parental accommodation is well-established (Jones et al., 2015; Thompson-Hollands et al., 2014), prior research examining the association between externalizing problems and parental accommodation in samples of mixed OCD and anxiety or predominately anxious samples of youth have been inconsistent, with some findings suggesting that comorbid externalizing symptoms lead to more accommodation while other studies suggest no relation (Benito et al., 2015; Storch et al., 2015). The current findings provide additional evidence that anxious children with comorbid externalizing behaviors may be more likely to experience maternal accommodation than their nonexternalizing counterparts. This finding is important as many clinically anxious youth also experience comorbid externalizing disorders or elevated externalizing symptoms (Johnco et al., 2015; Kendall et al., 2010). As such, the relation between this comorbidity and parental use of accommodation could inform understanding of parental motivations for engaging in accommodating behaviors. For instance, recent research suggests that parental use of accommodating behaviors may relate to parent believes that accommodation prevents a child from losing behavioral or emotional control (Meyer et al., 2018). To the extent that parents of anxious youth with higher levels of externalizing symptoms expect youth to react to anxious stimuli with intense behavioral reactions or oppositional behavior, parental attributions may be one mechanism explaining the

interact to predict parental accommodation in samples of anxious youth.

Unlike child anxiety and externalizing symptoms, maternal perceptions of child intolerance of uncertainty did not uniquely contribute to maternal accommodation. One reason for this finding may be that intolerance of uncertainty was more strongly associated with child anxiety compared with externalizing symptomatology and thus may not have been distinct enough from anxiety to independently affect accommodation. In fact, intolerance of uncertainty is highly correlated with anxiety in youth, particularly symptoms of worry (Comer et al., 2009). Alternatively, it may be that intolerance of uncertainty has an impact on maternal accommodation, but only insofar as it contributes to behaviors that may be better captured by externalizing symptoms. For instance, youth who perceive uncertainty negatively and are prone to externalizing symptoms may react to uncertainty with outward expressions of anger. In turn, the child's anger outbursts maybe a stronger predictor of accommodation compared with the child's intolerance of uncertainty (Fracalanza, Koerner, Deschênes, & Dugas, 2014). Given the relatively large association between accommodation, anxiety, intolerance of uncertainty, and externalizing symptoms found in the current sample, future research should explore the potential of intolerance of uncertainty and externalizing symptoms to serve as pathways linking child anxiety and accommodation.

In contrast to child emotion and distress factors, the current study found that maternal distress and emotion regulation difficulties were not related to maternal accommodation. It is possible that a mother's own distress and her capacity to regulate her own emotions play a less important role in predicting the use of accommodation than previously thought (Jones et al., 2015; Kerns et al., 2017; Thompson-Hollands et al., 2014). It may be that in the face of child distress, mothers are less aware of their own emotions and more focused on alleviating child distress. It may also be that other factors not included in the current study relate to maternal emotional experience and better account for accommodating behavior.

However, the lack of association between maternal factors and accommodation may be explained by unique sample characteristics and the measurement approach. For example, mothers in the current sample experienced relatively low levels of distress. Specifically, only 7.8% of mothers reported at least moderate levels of anxiety and only 6.3% of mothers reported at least moderate levels of depression. Previous research has demonstrated that mothers of anxious youth tend to have higher rates of internalizing symptoms (e.g., anxiety and depression) compared with mothers of nonanxious youth (Cooper et al., 2006). Therefore, it might be that our parent sample is not representative of other anxious youth samples and too few mothers reached the symptom threshold needed to have their own clinical distress impact their accommodating behaviors in a meaningful way. In addition, previous research

during a lab-task (Kerns et al., 2017). This may indicate that maternal emotion regulation difficulties are particularly relevant to a parent's use of accommodation when experienced in the context of child distress. Therefore, although the self-report measure used in the current study has robust psychometric properties (Gratz & Roemer, 2004), it may not capture all relevant aspects of emotion regulation abilities across all contexts (Aldao, 2013). Future research on predictors of accommodation would benefit from multimodal assessment of parental emotion regulation, particularly in the context of parenting and child distress.

When examining the relative effects of parent and child emotion and distress factors on fathers' use of accommodation, the pattern of results was largely consistent with mother models. Like mothers, fathers' perceptions of child emotion and distress factors significantly contributed to father accommodation over and above father emotion and distress factors. However, differences emerged across mothers and fathers in regard to the unique effects of individual child factors. For mothers, perception of child anxiety and externalizing symptoms appeared to be particularly important in predicting accommodation whereas, for fathers, no single factor emerged as significant. It may be that fathers are less discriminating between different types of child distress and consequently, they engage in similar levels of accommodation in response to any expression of child distress. In addition, father report of child distress predicted less variance in accommodation compared with mothers (i.e., 47% vs. 25%) and so it may be that there are other factors driving fathers' accommodation not measured in the current study, such as distress tolerance, broader parenting styles, or family burden (Kagan et al., 2017).

Similar to mothers, fathers' reports of their own distress and emotion regulation difficulties did not predict accommodation. Paternal rates of distress were also low in the current sample, with 4.8% of fathers reporting at least moderate levels of anxiety and 7.3% fathers reporting at least moderate levels of depression. Interestingly, research has found that unlike mothers of anxious youth, fathers do not tend to differ in anxiety or depression compared with fathers of nonanxious youth (Cooper et al., 2006). It may be that rates of paternal psychopathology are generally lower in samples of anxious youth and, therefore, clinical distress levels are less likely to contribute to accommodation generally, as was found in the current study. However, given the small father sample size, findings should be replicated before conclusions are drawn.

A strength of the current study is the inclusion of child report when possible; however, child-reported anxiety and intolerance of uncertainty together or separately did not predict parental accommodation. This supports the notion that it is parent *perception* of child distress that may be most important in predicting parental accommodation. In fact, how children report on their own distress may relate to the degree of parental accommodation. For instance, children may

parental accommodation. Additionally, the lack of unique associations found between child-reported factors and parental accommodation may be partly driven by poor child insight into their symptoms or increased parent knowledge of more observable behaviors compared with less observable behaviors, a discrepancy often observed in anxious samples (Comer & Kendall, 2004). Lastly, this study did not include a child report of externalizing symptoms and it is possible, as was seen in the maternal report of the same constructs, that child reported externalizing symptoms would contribute to a greater extent than intolerance of uncertainty.

4.1 Limitations

Several limitations warrant comment. First, sample characteristics may limit the generalizability of our findings. The majority of participants self-identified as White and reported a family income of over $100,000. Because parenting has been shown to vary across ethnicity, race, socioeconomic status, single-parent status, and child clinical status (Bøe et al., 2014; Griffin, Botvin, Scheier, Diaz, & Miller, 2000; Hudson & Rapee, 2001; Luis, Varela, & Moore, 2008), it is likely parental accommodation may also vary across these contexts. In addition, family values, parenting beliefs, and views on child anxiety also differ across diverse family environments, which may affect rates of parental accommodation. For example, research suggests that parent mental health stigma may affect the utilization of services and caregiver-burden, particularly among Latino parents of anxious children (Chavira et al., 2017), which may impact parent responses to child anxious distress. Therefore, additional research is needed to determine whether current findings apply to diverse and nonclinical samples. Second, the cross-sectional nature of the study precludes our ability to draw casual inferences between parent and child emotion and distress factors and parental accommodation, although significant relations discussed provide important directions for future studies using a longitudinal design to evaluate directionality of effects. In addition, the small sample size likely restricted power to detect small effects (Maxwell, 2000), particularly in the father and child samples. As such, replication with larger sample sizes is needed to determine the robustness of current findings.

In addition, our primary findings were based on measures that may be somewhat limited. For example, our assessment of parental distress and emotion regulation consists entirely of self-report. The relatively low rates of distress and emotion regulation difficulties observed in the current sample could be the result of social desirability bias. Future research would benefit from multimodal measurement approaches including lab-based paradigms, ecological momentary assessment, and psychophysiology. Similarly, when it comes to parental accommodation, parents may under-report accommodation due to a lack of insight or understanding about developmentally appropriate responses to child distress, calling into question their ability to be objective on self-report measures of accommodation (Kagan et

use of self-report measures of accommodation (e.g., agreement between clinician- and self-rated measures; Benito et al., 2015), future research would benefit from including child and spouse reports of accommodation behaviors as well as observational measures to avoid mono-reporter bias or misreporting.

It should also be noted that the significant findings largely emerged in models consisting only of mother-reported (as opposed to child-reported) measures. Thus, findings may have been influenced by mono-reporter bias. However, parent-child reporting discrepancies are common and well-documented (Comer & Kendall, 2004; De Los Reyes, & Kazdin, 2005) as parents and children may perceive child emotions and emotion-related behaviors differently (De Los Reyes, & Kazdin, 2005). In the current sample of clinically anxious youth, parents may be more aware of the various signs and symptoms of their child's anxiety because they are more aware of the ways in which the child's anxious presentation has developed and changed over time. In contrast, children may be more likely to complete questionnaires based on current mood states and less on a broader pattern of problematic behaviors/symptoms (De Los Reyes, & Kazdin, 2005). As such, parent-child reporting discrepancies on symptoms may provide meaningful information regarding the expression of behaviors across contexts (De Los Reyes, 2011; De Los Reyes, Alfano, & Beidel, 2010). Therefore, the link between discrepancies between parent and child reports of symptoms and parental use of accommodation may be a worthwhile area of future research.

5 CONCLUSION

The current study advances understanding regarding the relative contributions of parent and child factors to parental accommodation in a sample of anxious youth. The present study expands on previous literature by examining commonly studied constructs (parent distress and child anxiety) as well as broader indices of emotional distress/experience (parent emotion regulation, child externalizing behaviors, and child intolerance of uncertainty) in relation to parental accommodation. Findings suggest that mothers' perception of their child's distress may be more relevant to accommodation compared with their experience of their own emotions and distress. That is, mothers who viewed their child as being symptomatic were more likely to engage in accommodation and that the severity of child anxiety and externalizing symptoms were particularly notable predictors of accommodation. The finding that parent perception of child distress may be particularly relevant to the degree of parental accommodation may aid in the identification of parents most at risk for engaging in accommodating behavior and inform programming designed to target parental responses to child anxiety and related disorders.

This research was supported in part by a grant from the National Institute of Mental Health (MH101238, principal investigator David A. Langer).

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

ETHICAL APPROVAL

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from the research participants after the nature of the experimental procedures was explained.

REFERENCES

Achenbach, T. M., Howell, C. T., Quay, H. C., & Conners, C. K. (1991). National survey of problems and competencies among four- to sixteen-year-olds: Parents' reports for normative and clinical samples. *Monographs of the Society for Research in Child Development*, **56**(3), 1–131. **https://doi-org.revproxy.brown.edu/10.2307/1166156**

CAS | **PubMed** | **Web of Science®** | **Google Scholar** | **Findit @ Brown**

Aldao, A. (2013). The future of emotion regulation research: Capturing context. *Perspectives on Psychological Science*, **8**(2), 155–172. **https://doi-org.revproxy.brown.edu/10.1177/1745691612459518**

PubMed | **Web of Science®** | **Google Scholar** | **Findit @ Brown**

Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological Assessment*, **10**(2), 176–181. **https://doi-org.revproxy.brown.edu/10.1037/1040-3590.10.2.176**

Web of Science® | **Google Scholar** | **Findit @ Brown**

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Aschenbrand, S. G., & Kendall, P. C. (2012). The effect of perceived child anxiety status on parental latency to intervene with anxious and nonanxious youth. *Journal of Consulting and Clinical Psychology*, **80**(2), 232–238. https://doi-org.revproxy.brown.edu/10.1037/a0027230

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Benito, K. G., Caporino, N. E., Frank, H. E., Ramanujam, K., Garcia, A., Freeman, J., … Storch, E. A. (2015). Development of the pediatric accommodation scale: Reliability and validity of clinician- and parent-report measures. *Journal of Anxiety Disorders*, **29**, 14–24. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2014.10.004

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Bøe, T., Sivertsen, B., Heiervang, E., Goodman, R., Lundervold, A. J., & Hysing, M. (2014). Socioeconomic status and child mental health: The role of parental emotional well-being and parenting practices. *Journal of Abnormal Child Psychology*, **42**(5), 705–715.

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Calvocoressi, L., Lewis, B., Harris, M., Trufan, S. J., Goodman, W. K., McDougle, C. J., & Price, L. H. (1995). Family accommodation in obsessive-compulsive disorder. *The American Journal of Psychiatry*, **152**(3), 441–443. https://doi-org.revproxy.brown.edu/10.1176/ajp.152.3.441

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

Caporino, N. E., Morgan, J., Beckstead, J., Phares, V., Murphy, T. K., & Storch, E. A. (2012). A structural equation analysis of family accommodation in pediatric obsessive-compulsive disorder. *Journal of Abnormal Child Psychology*, **40**(1), 133–143. https://doi-org.revproxy.brown.edu/10.1007/s10802-011-9549-8

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Review, **76**, 237–242. https://doi-org.revproxy.brown.edu/10.1016/j.childyouth.2017.03.013

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Cheron, D. M., Ehrenreich, J. T., & Pincus, D. B. (2009). Assessment of parental experiential avoidance in a clinical sample of children with anxiety disorders. *Child Psychiatry and Human Development*, **40**(3), 383–403. https://doi-org.revproxy.brown.edu/10.1007/s10578-009-0135-z

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Clarke, G. N., Lewinsohn, P. M., Hops, H., & Seeley, J. R. (1992). A self- and parent-report measure of adolescent depression: The Child Behavior Checklist Depression Scale (CBCL-D). *Behavioral Assessment*, **14**(3–4), 443–463.

Google Scholar | Findit @ Brown

Comer, J. S., & Kendall, P. C. (2004). A symptom-level examination of parent-child agreement in the diagnosis of anxious youths. *Journal of the American Academy of Child & Adolescent Psychiatry*, **43**(7), 878–886. https://doi-org.revproxy.brown.edu/10.1097/01.chi.0000125092.35109.c5

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Comer, J. S., Roy, A. K., Furr, J. M., Gotimer, K., Beidas, R. S., Dugas, M. J., & Kendall, P. C. (2009). The Intolerance of Uncertainty Scale for children: A psychometric evaluation. *Psychological Assessment*, **21**(3), 402–411. https://doi-org.revproxy.brown.edu/10.1037/a0016719

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Cooper, P. J., Fearn, V., Willetts, L., Seabrook, H., & Parkinson, M. (2006). Affective disorder in the parents of a clinic sample of children with anxiety disorders. *Journal of Affective Disorders*, **93**(1–3), 205–212. https://doi-org.revproxy.brown.edu/10.1016/j.jad.2006.03.017

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Cornacchio, D., Sanchez, A. L., Coxe, S., Roy, A., Pincus, D. B., Read, K. L., … Comer, J. S. (2018). Factor structure of the intolerance of uncertainty scale for children. *Journal of Anxiety Disorders*, **53**, 100–107. h

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Cowie, J., Clementi, M. A., & Alfano, C. A. (2018). Examination of the intolerance of uncertainty construct in youth with generalized anxiety disorder. *Journal of Clinical Child and Adolescent Psychology*, **47**(6), 1014–1022. https://doi-org.revproxy.brown.edu/10.1080/15374416.2016.1212358

PubMed | Web of Science® | Google Scholar | Findit @ Brown

De Los Reyes, A. (2011). Introduction to the special section: More than measurement error: Discovering meaning behind informant discrepancies in clinical assessments of children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, **40**(1), 1–9. https://doi-org.revproxy.brown.edu/10.1080/15374416.2011.533405

PubMed | Web of Science® | Google Scholar | Findit @ Brown

De Los Reyes, A., Alfano, C. A., & Beidel, D. C. (2010). The relations among measurements of informant discrepancies within a multisite trial of treatments for childhood social phobia. *Journal of Abnormal Child Psychology*, **38**(3), 395–404. https://doi-org.revproxy.brown.edu/10.1007/s10802-009-9373-6

PubMed | Web of Science® | Google Scholar | Findit @ Brown

De Los Reyes, A., & Kazdin, A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin*, **131**(4), 483–509. https://doi-org.revproxy.brown.edu/10.1037/0033-2909.131.4.483

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Dugas, M. J., Buhr, K., & Ladouceur, R. (2004). The role of intolerance of uncertainty in etiology and maintenance. In R. G. Heimberg, C. L. Turk & D. S. Mennin (Eds.), *Generalized anxiety disorder: Advances in research and practice* (pp. 143–163). New York, NY: Guilford Press.

Google Scholar | Findit @ Brown

Feinberg, L., Kerns, C., Pincus, D. B., & Comer, J. S. (2018). A preliminary examination of the link between maternal experiential avoidance and parental accommodation in anxious and non-anxious

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Flessner, C. A., Freeman, J. B., Sapyta, J., Garcia, A., Franklin, M. E., March, J. S., & Foa, E. (2011). Predictors of parental accommodation in pediatric obsessive-compulsive disorder: Findings from the pediatric obsessive-compulsive disorder treatment study (POTS) trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, **50**(7), 716–725. https://doi-org.revproxy.brown.edu/10.1016/j.jaac.2011.03.019

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, **99**(1), 20–35. https://doi-org.revproxy.brown.edu/10.1037/0033-2909.99.1.20

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

Fracalanza, K., Koerner, N., Deschênes, S. S., & Dugas, M. J. (2014). Intolerance of uncertainty mediates the relation between generalized anxiety disorder symptoms and anger. *Cognitive Behaviour Therapy*, **43**(2), 122–132. https://doi-org.revproxy.brown.edu/10.1080/16506073.2014.888754

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Futh, A., Simonds, L. M., & Micali, N. (2012). Obsessive-compulsive disorder in children and adolescents: Parental understanding, accommodation, coping and distress. *Journal of Anxiety Disorders*, **26**(5), 624–632. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2012.02.012

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, **26**(1), 41–54. https://doi-org.revproxy.brown.edu/10.1023/B:JOBA.0000007455.08539.94

Web of Science® | Google Scholar | Findit @ Brown

family structure and gender. *Psychology of Addictive Behaviors*, **14**(2), 174–184.

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

Hudson, J. L., & Rapee, R. M. (2001). Parent–child interactions and anxiety disorders: An observational study. *Behaviour Research and Therapy*, **39**(12), 1411–1427. https://doi-org.revproxy.brown.edu/10.1016/S0005-7967(00)00107-8

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

Johnco, C. J., Salloum, A., Lewin, A. B., McBride, N. M., & Storch, E. A. (2015). The impact of comorbidity profiles on clinical and psychosocial functioning in childhood anxiety disorders. *Psychiatry Research*, **229**(1–2), 237–244. https://doi-org.revproxy.brown.edu/10.1016/j.psychres.2015.07.027

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Jones, J. D., Lebowitz, E. R., Marin, C. E., & Stark, K. D. (2015). Family accommodation mediates the association between anxiety symptoms in mothers and children. *Journal of Child and Adolescent Mental Health*, **27**(1), 41–51. https://doi-org.revproxy.brown.edu/10.2989/17280583.2015.1007866

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Kagan, E. R., Frank, H. E., & Kendall, P. C. (2017). Accommodation in youth with OCD and anxiety. *Clinical Psychology: Science and Practice*, **24**(1), 78–98. https://doi-org.revproxy.brown.edu/10.1111/cpsp.12186

Web of Science® | Google Scholar | Findit @ Brown

Kendall, P. C., Compton, S. N., Walkup, J. T., Birmaher, B., Albano, A. M., Sherrill, J., … Piacentini, J. (2010). Clinical characteristics of anxiety disordered youth. *Journal of Anxiety Disorders*, **24**(3), 360–365. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2010.01.009

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Kerns, C. E., Pincus, D. B., McLaughlin, K. A., & Comer, J. S. (2017). Maternal emotion regulation during child distress, child anxiety accommodation, and links between maternal and child anxiety. *Journal of Anxiety Disorders*, **50**, 52–59. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2017.05.002

Lebowitz, E. R., Marin, C., Martino, A., Shimshoni, Y., & Silverman, W. K. (2019). Parent-based treatment as efficacious as cognitive-behavioral therapy for childhood anxiety: A randomized noninferiority study of supportive parenting for anxious childhood emotions. Journal of the American Academy of Child & Adolescent Psychiatry. https://doi-org.revproxy.brown.edu/10.1016/j.jaac.2019.02.014

Google Scholar | Findit @ Brown

Lebowitz, E. R., Panza, K. E., Su, J., & Bloch, M. H. (2012). Family accommodation in obsessive-compulsive disorder. *Expert Review of Neurotherapeutics*, **12**(2), 229–238. https://doi-org.revproxy.brown.edu/10.1586/ern.11.200

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Lebowitz, E. R., Scharfstein, L. A., & Jones, J. (2014). Comparing family accommodation in pediatric obsessive-compulsive disorder, anxiety disorders, and nonanxious children. *Depression and Anxiety*, **31**(12), 1018–1025. https://doi-org.revproxy.brown.edu/10.1002/da.22251

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Lebowitz, E. R., Woolston, J., Bar-Haim, Y., Calvocoressi, L., Dauser, C., Warnick, E., … Leckman, J. F. (2013). Family accommodation in pediatric anxiety disorders. *Depression and Anxiety*, **30**(1), 47–54. https://doi-org.revproxy.brown.edu/10.1002/da.21998

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, **33**(3), 335–343. https://doi-org.revproxy.brown.edu/10.1016/0005-7967(94)00075-U

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

Luis, T. M., Varela, R. E., & Moore, K. W. (2008). Parenting practices and childhood anxiety reporting in Mexican, Mexican American, and European American families. *Journal of Anxiety Disorders*, **22**(6), 1011–1020. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2007.11.001

March, J. S., Parker, J. D. A., Sullivan, K., Stallings, P., & Conners, C. K. (1997). The Multidimensional Anxiety Scale for Children (MASC): Factor structure, reliability, and validity. *Journal of the American Academy of Child & Adolescent Psychiatry*, **36**(4), 554–565. https://doi-org.revproxy.brown.edu/10.1097/00004583-199704000-00019

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

Maxwell, S. E. (2000). Sample size and multiple regression analysis. *Psychological Methods*, **5**(4), 434–458. https://doi-org.revproxy.brown.edu/10.1037/1082-989x.5.4.434

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

McConaughy, S. H. (1993). Evaluating behavioral and emotional disorders with the CBCL, TRF, and YSR cross-informant scales. *Journal of Emotional and Behavioral Disorders*, **1**(1), 40–52. https://doi-org.revproxy.brown.edu/10.1177/106342669300100107

Google Scholar | Findit @ Brown

Mennin, D. S., & Fresco, D. M. (2013). What, me worry and ruminate about DSM-5 and RDoC? The importance of targeting negative self-referential processing. *Clinical Psychology: Science and Practice*, **20**(3), 258–267. https://doi-org.revproxy.brown.edu/10.1111/cpsp.12038

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Merlo, L. J., Lehmkuhl, H. D., Geffken, G. R., & Storch, E. A. (2009). Decreased family accommodation associated with improved therapy outcome in pediatric obsessive–compulsive disorder. *Journal of Consulting and Clinical Psychology*, **77**(2), 355–360. https://doi-org.revproxy.brown.edu/10.1037/a0012652.

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Meyer, J. M., Clapp, J. D., Whiteside, S. P., Dammann, J., Kriegshauser, K. D., Hale, L. R., … Deacon, B. J. (2018). Predictive relationship between parental beliefs and accommodation of pediatric anxiety. *Behavior Therapy*, **49**(4), 580–593. https://doi-org.revproxy.brown.edu/10.1016/j.beth.2017.11.004

PubMed | Web of Science® | Google Scholar | Findit @ Brown

s://doi-org.revproxy.brown.edu/10.1037/a0032392

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Remmes, C. S., & Ehrenreich-May, J. (2014). Parental emotion regulation strategy use and responses to youth negative affect. *Journal of Cognitive Psychotherapy*, **28**(1), 34–47. https://doi-org.revproxy.brown.edu/10.1891/0889-8391.28.1.34

PubMed | Google Scholar | Findit @ Brown

Selles, R. R., Franklin, M., Sapyta, J., Compton, S. N., Tommet, D., Jones, R. N., … Freeman, J. (2018). Children's and parents' ability to tolerate child distress: Impact on cognitive behavioral therapy for pediatric obsessive compulsive disorder. *Child Psychiatry and Human Development*, **49**(2), 308–316. https://doi-org.revproxy.brown.edu/10.1007/s10578-017-0748-6

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Settipani, C. A., & Kendall, P. C. (2017). The effect of child distress on accommodation of anxiety: Relations with maternal beliefs, empathy, and anxiety. *Journal of Clinical Child and Adolescent Psychology*, **46**(6), 810–823. https://doi-org.revproxy.brown.edu/10.1080/15374416.2015.1094741

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Silverman, W. K. (1996). *Anxiety disorders interview schedule for DSM-IV.: Parent interview schedule*. Oxford, UK: Oxford University Press.

Web of Science® | Google Scholar | Findit @ Brown

Silverman, W. K., & Ollendick, T. H. (2005). Evidence-based assessment of anxiety and its disorders in children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, **34**(3), 380–411. https://doi-org.revproxy.brown.edu/10.1207/s15374424jccp3403_2

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Silverman, W. K., Saavedra, L. M., & Pina, A. A. (2001). Test-retest reliability of anxiety symptoms and diagnoses with anxiety disorders interview schedule for DSM-IV: Child and parent versions. *Journal of*

CAS | PubMed | Web of Science® | Google Scholar | Findit @ Brown

Sloan, E., Hall, K., Moulding, R., Bryce, S., Mildred, H., & Staiger, P. K. (2017). Emotion regulation as a transdiagnostic treatment construct across anxiety, depression, substance, eating and borderline personality disorders: A systematic review. *Clinical Psychology Review*, **57**, 141–163. https://doi-org.revproxy.brown.edu/10.1016/j.cpr.2017.09.002

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Storch, E. A., Salloum, A., Johnco, C., Dane, B. F., Crawford, E. A., King, M. A., … Lewin, A. B. (2015). Phenomenology and clinical correlates of family accommodation in pediatric anxiety disorders. *Journal of Anxiety Disorders*, **35**, 75–81. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2015.09.001

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn & Bacon/Pearson Education.

Google Scholar | Findit @ Brown

Thompson-Hollands, J., Kerns, C. E., Pincus, D. B., & Comer, J. S. (2014). Parental accommodation of child anxiety and related symptoms: Range, impact, and correlates. *Journal of Anxiety Disorders*, **28**(8), 765–773. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2014.09.007

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Turner, S. M., Beidel, D. C., Roberson-Nay, R., & Tervo, K. (2003). Parenting behaviors in parents with anxiety disorders. *Behaviour Research and Therapy*, **41**(5), 541–554. https://doi-org.revproxy.brown.edu/10.1016/S0005-7967(02)00028-1

PubMed | Web of Science® | Google Scholar | Findit @ Brown

West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 56–75). Thousand Oaks, CA: Sage Publications, Inc.

Wirtz, C. M., Hofmann, S. G., Riper, H., & Berking, M. (2014). Emotion regulation predicts anxiety over a five-year interval: A cross-lagged panel analysis. *Depression and Anxiety*, **31**(1), 87–95. https://doi-org.revproxy.brown.edu/10.1002/da.22198

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Wolk, C. B., Caporino, N. E., McQuarrie, S., Settipani, C. A., Podell, J. L., Crawley, S., … Kendall, P. C. (2016). Parental attitudes, beliefs, and understanding of anxiety (PABUA): Development and psychometric properties of a measure. *Journal of Anxiety Disorders*, **39**, 71–78. https://doi-org.revproxy.brown.edu/10.1016/j.janxdis.2016.03.001

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Wood, J. J., Piacentini, J. C., Bergman, R. L., McCracken, J., & Barrios, V. (2002). Concurrent validity of the anxiety disorders section of the Anxiety Disorders Interview Schedule for DSM-IV: Child and parent versions. *Journal of Clinical Child and Adolescent Psychology*, **31**(3), 335–342. https://doi-org.revproxy.brown.edu/10.1207/153744202760082595

PubMed | Web of Science® | Google Scholar | Findit @ Brown

Wu, M. S., Lewin, A. B., Murphy, T. K., Geffken, G. R., & Storch, E. A. (2014). Phenomenological considerations of family accommodation: Related clinical characteristics and family factors in pediatric obsessive–compulsive disorder. *Journal of Obsessive-Compulsive and Related Disorders*, **3**(3), 228–235. https://doi-org.revproxy.brown.edu/10.1016/j.jocrd.2014.05.003

Web of Science® | Google Scholar | Findit @ Brown

Citing Literature