15 Family Components of Child and Adolescent Anxiety Disorders

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The relationship between the parenting environment and the development and maintenance of anxiety disorders has received substantial scientific attention for the past four decades (Last et al., 1987). The present chapter outlines the current state of knowledge regarding family factors and their relationship to childhood anxiety, starting with historical context and a summary of traditional theoretical models. Finally, a review of the progress made by more recent literature is presented.

Childhood anxiety disorders have unique temperamental underpinnings (Caspi et al., 1995; Crawford et al., 2011). For example, biologically based differences in emotional reactivity predict childhood internalizing symptoms (Caspi et al., 1995; Eisenberg et al., 2017), and having a difficult temperamental profile (i.e., slow adaptability, high affective intensity, and negative emotionality (Bates, 1980)) has been found to predict onset of anxiety symptoms (Miner & Clarke-Stewart, 2008). Yet, not all children with difficult temperaments develop internalizing pathology, underscoring the need to study other layers of risk, including family factors and the family environment.

Studies assessing the prevalence of anxiety disorders among families reveal up to seven times higher rates of anxiety disorders among children of clinically anxious parents, compared to families in which no family members have problematic anxiety symptoms (e.g., Biederman et al. (1991), Last et al. (1987), and Turner et al. (1987)). These results have been replicated in both small and large samples, and findings have remained consistent over time as genetic study methodology advances (Telman et al., 2018). Although these studies provide useful insight on the heritability of anxiety, they do not explain the specific relative contributions (i.e., amount of variance) of genetic and environmental factors or the mechanisms by which the family environment may maintain or exacerbate anxiety. Taken together, etiological models of anxiety must consider other transdiagnostic factors that contribute to risk.

Given the universally central role of the family environment among children (Henderson & Berla, 1994), researchers have studied family factors that may elucidate the development of child anxiety for over four decades. In the following sections, we summarize the findings of this literature, including problematic parenting behaviors and temperamental vulnerabilities that may contribute to onset of anxiety among youth.

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Review of Literature

The parenting environment has a robust role in the development of childhood internalizing symptoms (Cummings et al., 2003; Jaffee et al., 2002). A review of landmark studies in the 1990s (Wood et al., 2003) and more recent reviews exploring the parenting environment of clinically anxious youth have consistently identified parental overcontrol and modeling of anxious behaviors as key in the development and maintenance of childhood anxiety symptoms (McLeod et al., 2007; Ollendick & Benoit, 2012).

Maternal Overcontrol

Maternal overcontrol (also known as overprotection, intrusiveness, overinvolvement, or psychological control in the literature) is characterized by excessive regulation of the activities of youth, intrusive parental overprotection, and intrusive influence on youths' decision-making. Maternal overcontrol also includes influencing children's natural emotional reactions with instructions on how to feel or what to think in situations (especially situations characterized by difficult emotions; Barber (1996) and Barber et al. (2012)). Compared to mothers of nonanxious children, mothers of clinically anxious children demonstrate more overcontrolling behaviors, solicit children's ideas less, and are less likely to accept children's opinions (Moore et al., 2004; Siqueland et al., 1996; Whaley et al., 1999).

Maternal overcontrol is problematic in the context of childhood anxiety because when parents encourage reliance on adults for information on how to feel and what to do in difficult situations, perceived mastery over children's own environments is gradually diminished. Lack of mastery over the environment is linked to a cognitive bias for interpreting everyday events as out of their control (Chorpita & Barlow, 1998), which is associated with cognitive biases relevant in anxiety disorders. Research suggests that when children are in environments that allow them to navigate their own decisions, including in challenging situations, opportunities to self-regulate and cope are increased, which facilitates development of autonomy (Ollendick & Grills, 2016). Learning to self-regulate in the context of experiencing difficult emotions facilitates worldviews in which conflicts are solvable and challenges can be overcome. Finally, environments that teach the value in attempting to problem-solve can provide the opportunity for increased perceived mastery over situations (including difficult ones), thereby encouraging children to approach opportunities to problem-solve, rather than avoid them.

A recent population-based study found that among preschool-aged behaviorally inhibited children, parent's mental health, harsh discipline, and overcontrolling parenting practices were significantly associated with the likelihood of having an anxiety disorder by age 5 years, with maternal overcontrol the strongest predictor of these three (Bayer et al., 2019). In this longitudinal investigation, approximately half of behaviorally inhibited youth developed a clinical level of anxiety by the age of six (Bayer et al., 2019).

Traditionally in the literature, constructs including parental overcontrol, overintrusiveness, overinvolvement, and overprotection were grouped together as one construct (McLeod et al., 2007; van der Bruggen et al., 2008). More recently, evidence suggests that the specific type of controlling parental behavior matters. Psychological control refers to parenting techniques including guilt or shaming in response to the child not behaving according to parental expectations (Barber & Harmon, 2002). Consistent with traditional (behavioral) conceptualizations of maternal overcontrol, psychological overcontrol appears to reduce perceived mastery, potentially leading to perceived helplessness and lack of mastery over the environment (perspectives known to be associated with internalizing symptoms (Garber & Flynn, 2001)). Pinquart (2017) conducted a meta-analysis of 1015 studies, of which 344 included assessments of behavioral overcontrol and 163 included psychological control. Results indicated that behavioral control was associated with lower internalizing symptoms, while psychological control was related to increased internalizing

symptoms with very small to small effect sizes. Of note, baseline child anxiety predicted increases in psychological control and declines in warmth, providing evidence for bidirectional influences within the parent-child relationship.

Neglectful and authoritarian parenting practices (each characterized by low parental warmth (Maccoby & Martin, 1983)) were associated with elevated levels of internalizing symptoms, while permissive parenting was not significantly related (Pinquart, 2017). The authors hypothesize that low parental warmth may explain the increases in internalizing symptoms, and given lack of any observed deficits in parental warmth in permissive parenting, it is possible that the negative effects of lack of parental behavioral control may be compensated by positive effects of parental warmth.

Parental Modeling of Anxious Behaviors

The cognitive model of anxiety posits that cognitive misinterpretations lead to an exacerbation of anxiety symptoms via disrupted or inaccurate thinking patterns, and a large body of work has shown that cognitive risk factors for anxiety aggregate within families (Biedel & Tuner, 1997; Last et al., 1987). Fortunately, children can learn to regulate their own thoughts – however, this depends largely on learning experiences, which typically occur in the presence of parents. Several lines of research in parenting and anxiety have suggested that parents' own modeling of anxious behaviors increases the likelihood of children cognitively misappraising a situation. This is problematic, given that anxious children are already prone to cognitive biases which overestimate the actual level of danger in a given situation. These cognitive biases are related to subsequent anxiety manifestations (Chorpita et al., 1996; Micco & Ehrenreich, 2008).

For example, Gerull and Rapee (2002) found that toddlers showed greater fear and avoidance of an aversive stimulus when mothers showed a negative reaction. After seeing their mother's reaction, avoidance was observed up to 10 minutes following exposure to the negatively paired stimulus. Although cross-sectional in nature, this study demonstrated that a mother's affective response toward novel stimuli has a clear impact on her infant's subsequent behavior toward that stimulus. These findings have been replicated in similar experimental designs showing that maternal avoidance of distressing stimuli (e.g., spiders) moderates the relationship between fear of certain stimuli in mothers and children (Askew et al., 2014; Lebowitz et al., 2015).

Another experiment examining maternal anxiety and maternal emotion regulation during a distressing task where mothers listened to an audio recording of a child in distress pleading for help found that displays of maternal anxiety predicted ineffective maternal emotion regulation during the exposure task, which in turn predicted greater maternal accommodation and higher child anxiety (Kerns et al., 2017). This finding suggests that displays of ineffective emotion regulation may mediate the relationship between maternal and child anxieties.

Temperament and Parenting

Temperament refers to heritable and moderately stable traits that serve as the "building blocks" for adult personality (Auerbach et al., 2008; Rothbart 1981). Temperament is a robust predictor of later personality traits (e.g., impulsivity, extraversion (Rothbart et al. 2000a, b)), even after accounting for gender and socioeconomic status. Infant temperament demonstrates moderate stability and continuity into middle childhood (Carey & McDevitt, 1978; Rothbart et al., 2000a, b), and its role in the emergence of anxiety symptoms has been of considerable scientific interest for decades (Goldsmith & Campos, 1982).

Behavioral inhibition (BI) refers to a temperamental trait characterized by fear and apprehension in novel situations (Degnan et al., 2008). BI has been shown to predict anxiety symptom severity over time (Mian et al., 2011) as well as anxiety disorders in general (Biederman et al., 2001; Turner et al., 1996; van Brakel et al., 2006) and particularly social anxiety disorder

(Chronis-Tuscano et al., 2009; Muris et al., 2011). The parenting environment is thought to interact with temperamental risk factors like behavioral inhibition and level of emotional reactivity. Children high in temperamental traits such as frustration and impulsivity, yet low in effortful control, are more vulnerable to the adverse effects of negative parenting and elicit parental responses that reinforce such traits (Kiff et al., 2011). Research has also found that among children with temperamental profiles characterized by high reactivity and negative emotionality, adaptive behavioral development depends, in part, on their experiences with caregivers (Wachs, 2000). For instance, children with high negative emotionality are more likely to exhibit elevated anxiety symptoms if their mothers react with disproportionately high sensitivity to the child's behaviors (Davis et al., 2015). Likewise, parental overprotection and overcontrolling behaviors are associated with increased internalizing problems (Bayer et al., 2019; McLeod et al., 2007), particularly among youth high in behavioral inhibition. Manassis and Bradley (1994) proposed a theoretical model in which temperament and parent-child attachment both equally confer risk for the development of childhood anxiety, but the level of risk is greater for children who have both BI and an insecure attachment bond with the caregiver. Unfortunately, the relationship among these and other risk factors remains poorly understood.

Notable limitations of this body of literature include the absence of data on the directionality of the relationships and overlap between constructs. It is likely that factors unique to each child, such as temperament, personality, and anxiety expressed to the parent, shape parenting behaviors and ultimately the attachment relationship (Hudson et al., 2009; Moore et al., 2004; Whaley et al., 1999). One mechanism of how parenting may contribute to child internalizing problems is lack of opportunities to face and overcome fears, and parents of shy/inhibited children likely mean well when they attempt to shelter their child from the potential for failure. In addition, it is important to consider the extent to which BI, difficulties with insecure attachment, and anxiety are separate constructs. To illustrate, BI is associated with chronic and excessive arousal and avoidance, and an insecure attachment is associated with frustration intolerance, difficulty being soothed, and distress when faced with novel situations (Manassis, 2001) – all characteristics of anxiety disorders.

In light of these challenges and limitations, temperament and parent/child attachment bonds remain important constructs to consider when evaluating risk level for anxiety. Childhood behavioral inhibition and signs of an insecure attachment signal future risk for an anxiety disorder. Indeed, there is emerging evidence that children with BI respond to early intervention strategies aimed at reduction of anxiety symptoms (Rapee et al., 2005) and that improving the quality of the parent-child attachment relationship may also be effective in minimizing internalizing anxiety symptoms (Choate et al., 2005; Siqueland et al., 2005).

The literature to date focusing on the link between parenting and child anxiety has provided important insights and advanced our theoretical understanding of this relationship, and modern multimodal studies have advanced our understanding of the transactional nature of child and parent behaviors. Still, this literature base has a number of important limitations (Lawrence et al., 2019; McLeod et al., 2011). First, studies vary significantly in the operationalization of parenting constructs studied, which has made it difficult to compare results across studies. In addition, relatively little attention has been paid to the relationship between parenting behaviors and the development of specific anxiety disorders, as opposed to more general measures of anxiety. Research in this area can help identify risk factors for specific anxiety disorders in youth and can inform prevention and treatment interventions. Further, there is a long-standing focus on the behavior of mothers within the research base, such that comparatively little is known about the importance of fathers' behaviors when it comes to the development of child and adolescent anxiety disorders. In terms of identifying causal links, the literature base would benefit from increased use of experimental studies, especially more

longitudinal experimental designs (McLeod et al., 2011). Importantly, there has also been difficulty assessing developmental considerations related to the appropriateness of specific parenting behaviors based on the age of the child (e.g., more parental control and involvement may function differently with preschoolers as compared to adolescents), and studies have focused heavily on adolescents. The childhood anxiety literature has traditionally focused heavily on middle childhood to adolescence because anxiety commonly emerges during the teenage years; however, there is currently a particular need to assess parental behaviors that promote adaptive emotion regulation during the early childhood years (i.e., teaching language for expression of emotions, emotion coaching (Roben et al., 2013)). Since the first edition of this text, the literature has moved to address some of these limitations; what follows is a discussion of the role of fathers in the development of child anxiety disorders, the association between parenting behaviors and the development of specific anxiety disorders, and discussion of challenging parenting behavior, a relatively new construct.

Fathers and Child Anxiety Disorders

Historically, the vast majority of the research examining parenting and child anxiety symptoms has focused on mothers (Bogels & Phares, 2008; Teetsel et al., 2014). In the last decade, there have been increased efforts to include fathers in these studies, as previously very little was known about the role they play in the development of child anxiety disorders. Interestingly, one meta-analysis found that the association between parenting behaviors and child anxiety symptoms was stronger for fathers than mothers (Moller et al., 2016). In contrast, a previous meta-analysis by McLeod et al. (2007) found that parent's gender did not moderate the relationship between parenting and child anxiety symptoms.

Research suggests that fathers of anxious children demonstrate more controlling and less helpful behavior toward their children (Bogels & Phares, 2008). Additional studies have focused on fathers' overcontrolling behaviors, with mixed findings. Specifically, some studies suggest that paternal overcontrol (but not maternal overcontrol) is associated with increased anxiety in infants (Moller et al., 2015), middle-aged children (Pereira et al., 2014), and adolescents, with this association being stronger among older adolescents in particular (Verhoeven et al., 2012). In contrast, others have found no association between paternal anxiety or paternal parenting behaviors and child social anxiety symptoms (Bogels et al., 2001). For instance, Verhoeven et al. (2012) found that among 8- to 12-year-old children, paternal overcontrol did not significantly predict child anxiety symptoms, whereas maternal overcontrol did.

Others have examined the parenting behaviors of anxious fathers in particular to determine the extent to which they engage in parenting behaviors that are associated with child anxiety. Teetsel et al. (2014) found that among a sample of non-anxious children, fathers with a DSM-IV anxiety diagnosis demonstrated more controlling behaviors (e.g., intrusive and unsolicited help, completing the task for the child, over-instructing the child) than anxious mothers during a difficult parent-child laboratory task. In contrast, anxious fathers demonstrated less reinforcement of the child's dependence on his/her parent and utilized less punishment than anxious mothers. Of note, these researchers found no difference between the levels of autonomy-granting behaviors, warmth, hostility, and anxious behavior between anxious mothers and fathers during the interaction task.

Another study examining the parenting behaviors of anxious parents of 10- to 15-month-old infants found that fathers with social anxiety disorder reported more overinvolvement and less challenging parent behavior (i.e., behavior that encourages the child to go outside his/her comfort zone (Moller et al., 2015)). Others have found that fathers' (but not mothers') PTSD symptoms predicted whether their children developed PTSD following a natural disaster (Kilic et al., 2003). In another study, paternal somatization negatively predicted children's self-reported anxiety symptoms following treatment

(Crawford & Manassis, 2001). Taken together, this evidence suggests that anxious fathers may engage in behaviors which could impact child anxiety development.

Parental expressions of anxiety as well as encouragement have also been examined for mothers and fathers. In a study by Moller and colleagues (2014), 10- to 15-month-old infants were randomly assigned to complete the visual cliff task with either their mother or their father. Results indicated that expressed anxiety from fathers, but not mothers, was related to increased expressions of anxiety and avoidance for infants. Of note, this association was moderated by infant anxious temperament; specifically, fathers' expressed anxiety was more strongly associated with infant avoidance and anxiety when infants were temperamentally anxious.

There has also been interest in looking at the transactional relationship between parents in relation to the development of child anxiety. To do this, one study utilized the actor-partner interdependence model, which takes into account the notion that parents' relationships with one another are interdependent and transactional, with each parents' anxiety influencing not only their own parenting behaviors but also the parenting behaviors of their partner (Gibler et al., 2018). Parents completed self-report measures of anxiety and parenting behaviors, and their 12- to 30-month-old infant participated in a laboratory task assessing anxiety risk. Results indicated that although there was no direct association between parent anxiety and child anxiety, paternal anxiety was indirectly associated with child anxiety risk via its influence on maternal encouragement of independence. Specifically, paternal anxiety was associated with decreased maternal encouragement of independence, which in turn was related to child anxiety risk.

In recent years, the increasing inclusion of fathers in child anxiety research has empirically highlighted the important role that fathers play in the development of child anxiety symptoms. Although results to date are somewhat mixed, it is clear that continued investigation of fathers' roles, as well as further examination of potential mediators and moderators, is warranted.

The Role of Parenting in Specific Anxiety Disorders

Social Anxiety Disorder

In the last decade, research has increasingly examined parenting influences on the development of specific anxiety disorders in children and adolescents. A variety of studies have examined parenting and social anxiety disorder in youth, with results highlighting a number of potentially relevant parenting factors. For example, there is evidence that parents of socially anxious children demonstrate more overinvolvement and controlling behaviors during tasks with their child (Asbrand et al., 2017; Greco & Morris, 2002). Mothers of children with more social anxiety symptoms were less flexible and less responsive to their child's needs during a puzzle task than mothers of healthy control children, whose behavior was more responsive to their child's needs (e.g., increasing maternal involvement in the task if the child requested it (Asbrand et al., 2017)). Another study found that the specific combination of maternal overprotection, paternal rejection, and paternal lower emotional warmth was uniquely related to social phobia among adolescents (Knappe et al., 2012). Further, among parents with social anxiety disorder, parenting behaviors including overcontrol, low levels of warmth, and transfer of threat information via parental modeling are more common, and these behavioral tendencies are theorized to increase child social anxiety symptoms by reducing opportunities to learn and practice effective social skills, increasing child avoidance of social situations, and reducing children's self-efficacy (Garcia et al., 2021).

Some studies have examined moderators and mediators of the relationship between parenting and social anxiety symptoms in children. In a study involving 9- to 12-year-olds who completed an origami task with both of their parents, Morris and Oosterhoff (2016) found that increased maternal verbal instruction during the task was associated with lower levels of child social anxiety symptoms. In contrast, increased paternal verbal instruction was associated with

higher social anxiety for male children and lower social anxiety for female children. This study also found that children with higher levels of social anxiety symptoms had fathers who made more critical statements and mothers who more frequently physically took over the task. Another study found an indirect effect of psychological control on child social anxiety; specifically, among mothers (but not fathers), higher anxiety about their daughters' well-being was associated with more use of psychological control, which in turn was related to higher levels of child social anxiety symptoms (Bynion et al., 2017). In addition, Gomez-Ortiz and colleagues (2019) found that parenting practices including low levels of affection and communication, humor, reduced autonomy promotion, and increased psychological control predicted negative self-esteem among children, which predicted social anxiety symptoms.

Studies utilizing experimental designs have increasingly been conducted. One study presented a community sample of 8- to 12-year-old Dutch children with vignettes depicting ambiguous social situations in which the parent responded either anxiously or confidently (Bogels et al., 2011). Children were then asked to rate their level of social anxiety versus confidence in the fictional situation. Results indicated that among more socially anxious children, the father's response in the vignette influenced the children's level of confidence more than the mother's vignette response. This finding was not consistent among subclinical youth. Among children with no or low levels of social anxiety, the mother's response in the vignette relative to the father's response influenced the child's response more. In another study, researchers manipulated infants' mothers' response style (i.e., confident or socially anxious) when interacting with a stranger (de Rosnay et al., 2006). Results indicated that behaviorally inhibited infants responded with more socially anxious behavior toward the stranger when their mother also demonstrated socially anxious behavior toward the stranger.

Overall, the literature on parenting influences and social anxiety disorder in children has highlighted several important parenting behaviors, as well as a number of moderators and mediators which warrant further examination.

Generalized Anxiety Disorder

A number of studies have also examined parenting practices in relation to generalized anxiety disorder (GAD) and/or worry among children. Parenting practices that have been found to be related to increased levels of worry in children and adolescents include increased levels of rejection (Brown & Whiteside, 2008; Hale et al., 2006; Muris et al., 2000), anxious rearing behaviors (Muris, 2002; Muris et al., 2000), parental control (Muris, 2002), and parental alienation (Hale et al., 2006). With respect to GAD specifically, Muris and Merckelbach (1998) found that among 8- to 12-year-old children, both parental control and anxious child-rearing practices were associated with GAD symptoms. Similar results were found by Morris and Oosterhoff (2016), who found that observed measures of parental rejection (i.e., denying reassurance) and control (i.e., physical takeovers during an origami task) were associated with increased levels of GAD symptoms among children. In contrast, Wilson et al. (2011) found no significant associations between self- and child-reported parenting behavior and child worry.

There is much discussion about the direction of effects between children and parents when it comes to the development of anxiety symptoms. One study attempted to examine this and found evidence supporting the notion that children evoke different parenting practices depending on the level of anxiety they experience (Wijsbroek et al., 2011). Specifically, this study found that adolescents with high levels of self-reported GAD and separation anxiety disorder symptoms at the first time point reported increases in parental control over time.

Overall, the literature to date examining parenting practices and their relation to GAD in youth has highlighted many of the same parenting practices which have been implicated in the development of other anxiety disorders, as well as anxiety symptoms more generally.

Challenging Parenting Behavior

Challenging parenting behavior represents a relatively new construct within the parenting and anxiety literature. This construct builds upon theoretical work related to the potentially differing roles that mothers and fathers may play in parenting. Paquette (2004) postulated that fathers "seem to have a tendency to surprise children, to destabilize them momentarily, and to encourage them take 'risks,' thus enabling children to learn to be brave in unfamiliar situations and to stand up for themselves" (p. 212). Challenging parenting behavior (CPB) is defined as parenting behavior that "promotes assertiveness, taking chances, and overcoming limits" (Majdandzic et al., 2016, pp. 424), with examples of CPB including rough and tumble play, tickling, and encouraging the child to push their limits physically or socio-emotionally.

Several studies have examined the relationship between CPB and childhood anxiety, finding some evidence for a relationship between maternal and paternal CPB and lower levels of anxiety in preschool-aged children (Lazarus et al., 2016; Majdandzic et al., 2018b). Another study found that among preschool-aged children, having at least one parent with high CPB predicted fewer anxiety symptoms, even when the co-parent demonstrated lower levels of CPB (Majdandzic et al., 2018a). However, Majdandzic and colleagues (2014) found a difference in the relationship between mothers' and fathers' CPB and child social anxiety symptoms, with fathers' CPB negatively predicting observed social anxiety symptoms in their 4-year-old children and mothers' CPB predicting higher observed social anxiety symptoms in their child.

One study has examined CPB retrospectively in a sample of undergraduate college students. Undergraduates completed a retrospective measure of their perception of their parents' CPB from ages 7 to 12, as well as a measure of current social anxiety symptoms (Lazarus et al., 2018). An exploratory factor analysis identified three constructs comprising CPB, including parental encouragement of social assertion, parental encouragement to engage in new situations, and intentional teasing. Results indicated that mothers' and fathers' encouragement of social assertion and engagement in new situations was associated with lower levels of social anxiety symptoms in early adulthood. Further, higher levels of paternal intentional teasing predicted higher levels of adult social anxiety symptoms. Another study examined CPB in emerging adulthood (i.e., ages 18–25) and found that higher paternal social CPB was associated with lower levels of social anxiety symptoms (Smout et al., 2020).

CPB has been examined in early childhood as well as emerging adulthood and has some early support as a potential protective parenting factor when it comes to the development of child and adolescent anxiety. Aspects of CPB, including encouragement of social assertion and encouragement to engage in new situations, may serve to reduce youth avoidance of anxiety-provoking situations, which would theoretically buffer against the development or maintenance of anxiety symptoms. Given findings to date, additional research focused on CPB may provide further insight into how to protect against the development of anxiety symptoms in youth.

Parenting and Childhood Anxiety Prevention and Intervention

Intervention and prevention studies can also shed light on parenting factors that impact the development and maintenance of child anxiety. In particular, some studies have explicitly targeted parenting practices as a means of reducing child anxiety symptoms, while others have measured parenting practices to determine whether treatment has had an impact on these. Although a full exploration of child anxiety prevention and intervention literature is beyond the scope of this chapter, the following section discusses this literature as it pertains to parenting behaviors.

Many studies have examined whether parental involvement in CBT for youth anxiety disorders yields additional benefit beyond child-focused treatments alone, with mixed results overall. Some studies have suggested that there is no

significant benefit to including parents in treatment compared to child-focused CBT (Breinholst et al., 2012; Peris et al., 2021; Thulin et al., 2014), while others have found that parent's involvement is associated with improved outcomes (Manassis et al., 2014; Sun et al., 2018). Silverman et al. (2021) shed additional light on this issue. In this study, families with a child meeting criteria for an anxiety disorder were randomly assigned to one of three treatment groups: individual child CBT, CBT with parent's involvement focused on reinforcement training (i.e., teaching parents to not allow their child to avoid anxiety-provoking situations, CBT + reinforcement), or CBT with parent involvement focused on improving the parent-child relationship (i.e., improving acceptance and reducing psychological control, CBT + relationship). Parents randomized to the CBT + reinforcement treatment had lower self-reported ratings of negative reinforcement (i.e., allowing their child to avoid anxiety-provoking situations) at post-treatment compared to parents in the CBT + relationship or child-focused CBT conditions, suggesting treatment specificity. In other words, simply involving the parent in treatment did not significantly reduce negative reinforcement; rather, this was only found when the parent-focused treatment specifically targeted this component. At post-treatment, results indicated no significant difference between the three treatment conditions based on parent's report of child anxiety; however, children randomized to one of the two parent-focused treatment conditions had lower self-reported anxiety scores at post-treatment. In addition, at the 12-month follow-up, parent's reports of child anxiety symptoms were significantly lower for children in the CBT + relationship condition. Further, lower levels of parent's negative reinforcement at post-treatment were significantly associated with lower levels of parent-reported child anxiety symptoms. Lastly, reductions in parents' negative reinforcement were associated with reductions in parents' use of psychological control, which partially mediated anxiety reduction. Overall, conclusions from this study suggest that parent involvement in treatment for child anxiety disorders is beneficial, particularly when treatment specifically helps parents reduce children's avoidance of anxiety-provoking stimuli.

Similarly, in acknowledging that parental involvement in youth CBT for anxiety can be defined in a number of ways, a meta-analysis by Manassis et al. (2014) sought to compare child anxiety outcomes across three groups: child-focused CBT with limited parental involvement, CBT with family involvement focused on contingency management (CM) or transfer of control (TC) from therapist to parent, and CBT with family involvement with low emphasis on CM or TC. Results indicated that while all three forms of treatment led to reductions in child anxiety symptoms, those who received CBT with family involvement with a strong emphasis on CM and/or TC continued to experience increased rates of anxiety disorder remission during the period of time between post-treatment and 1-year follow-up, compared with children in the other two intervention groups, whose gains were simply maintained. These results further demonstrate that more clearly defining the specific focus of parent-based components of CBT for child anxiety is important when attempting to evaluate whether parent involvement yields additional benefit beyond child-focused CBT alone.

Others have attempted to investigate the direction of effects between children and parents or how parents and children may impact change in one another as a result of treatment. One study by Settipani et al. (2013) assessed child anxiety symptoms as well as parent variables, including maternal anxiety, maternal psychological control, family affective involvement, and family behavioral control among children ages 7–14 who completed CBT treatment for anxiety. Results suggested that decreases in child anxiety, as rated by mothers, led to decreases in maternal anxiety. In addition, decreases in maternal psychological control and family affective involvement from pre- to post-treatment preceded decreases in clinician-rated child anxiety from the post-treatment to follow-up period. Taken together, results suggest a bidirectional influence between parents and children during the treatment process.

In addition to the treatment literature, the literature regarding prevention programs for youth anxiety disorders has provided insight into the role parenting behaviors may play in the development of child anxiety disorders. In particular, a program developed by Ginsburg (2009) has shown promise in preventing the development of child anxiety disorders in children of anxious parents. The program, Coping and Promoting Strength (CAPS) Program, specifically targets malleable anxiety risk factors in children (i.e., anxiety symptoms, maladaptive cognitions, and poor coping/problem-solving skills) and parents (anxious modeling, anxiety-enhancing parenting practices such as overcontrol, and criticism/family conflict). The program is delivered across 6–8 weekly sessions and includes parents alone for the first two sessions, though any family member can join for the remaining sessions. Interventions include CBT strategies targeting anxiety, cognitive restructuring, building communication and problem-solving skills, and contingency management. Participants in the pilot study, which compared CAPS to a wait-list control group, included 40 nonanxious children, ages 7–12, and their family, where one parent met criteria for an anxiety disorder. Results indicated that 30% of the children in the wait-list control group developed an anxiety disorder by the 1-year follow-up assessment, while none of the 20 children who received CAPS developed an anxiety disorder (2009).

Ginsburg et al. (2015) later conducted a randomized controlled trial comparing CAPS to an information-monitoring control condition, in which families received a pamphlet about anxiety disorders and treatment. Participants included nonanxious children, ages 6–13, from families in which one parent had an anxiety disorder diagnosis. Results indicated that across the 1-year study period, rates of anxiety disorder diagnosis were 5% in the CAPS condition and 31% in the information-monitoring control condition. In addition, children who received CAPS both had significantly lower anxiety scores at the post-treatment assessment, as well as at the 6- and 12-month follow-up time points, compared to the control group. Interestingly, results also suggested that baseline child anxiety symptoms moderated CAPS treatment effects, with children with higher levels of anxiety benefitting more from the intervention than those with lower baseline anxiety levels. Further, parental anxious modeling and global parental distress mediated effects on outcomes among children who received CAPS. Specifically, CAPS led to reductions in parental anxious modeling and global parent distress, which led to reduced anxiety symptoms among youth. Notably, results suggested that both child maladaptive cognitions and parent anxiety did not serve as moderators of treatment outcome. Given these results, the authors argue that interventions and/or prevention programs targeting parent anxious modeling as well as parent distress may be beneficial in preventing the development of anxiety disorders in children.

Taken together, the results of recent prevention and intervention studies addressing the link between parenting behaviors and child anxiety disorders suggest several areas of potential promise. Although the larger literature base has mixed results in terms of whether parent involvement in CBT for youth anxiety improves outcomes beyond those gained from child-focused CBT, recent literature suggests that when interventions specifically target parenting practices associated with child anxiety development, results are more promising. Specifically, parent-focused interventions targeting improving contingency management, reducing parent psychological control, and reducing anxious parental modeling may increase effectiveness of CBT treatment for youth anxiety.

Summary and Future Directions

The field of child anxiety and parenting is currently making exciting progress. We have expanded our understanding of the specificity of traditional theoretical models, such as maternal anxiety as a risk factor for child anxiety, and increased our understanding of new risk factors and influences, such as fathers' role in childhood anxiety disorders.

Although many questions remain, recent research in this area continues to point toward parenting practices as a key research focus. The parenting and anxiety literature will benefit from studies which increase the breadth of experimental and intervention designs including parents, particularly fathers, who have been understudied in the current literature. As with the majority of studies in the field of psychology, recent studies would benefit from replication in naturalistic study settings. Additionally, future studies should work to further increase our understanding of moderators and mediators impacting the relationship between parenting and child anxiety development.

Another focus of the literature moving forward should be directionality of change, namely, the possibility that heightened child anxiety states may actually elicit parental overcontrol and anxious behavioral modeling. The reciprocal influence of child and parental traits has become part of the standard child anxiety model (e.g., Rapee (2001)); however, few experimental designs have tested the reciprocal nature of such traits. Such focus on these traits will continue to inform childhood anxiety interventions, increasing the efficacy of our current gold standard treatments.

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