



CHILDHOOD ANXIETY - THE ROLE OF PARENTING: A REVIEW

HARGUN KAUR[1], BIANCA MODI[1], MAHIRA MORSHED[1], JUSTINE RODRIGUEZ[1], NICOLE SHEN[1], NICK TELLER[1]

[1] BACHELOR OF HEALTH SCIENCES (HONOURS), CLASS OF 2023, MCMASTER UNIVERSITY

ABSTRACT

This article intends to review the influences of parenting on the development of childhood anxiety disorders. The literature cites acceptance of anxious behaviours as a parental behaviour that mitigates childhood clinical anxiety. Alternatively, controlling parental behaviours, and modelling of controlling parental behaviours are associated with high clinical anxiety in children. Some parental climates that exaggerate a child's psychological arousal may instill negative perceptions in the maintenance of an anxiety disorder. The article also looks into stress-mediated pathways that explain how an anxious familial climate may result in a child 'inducing' anxiety. Recent developmental psychopathology perspectives consider causal relationships in development, maintenance and persistence of anxiety disorders. Furthermore, the Craske model provides a real-life application of the developmental psychopathology perspective to explain the role of parenting in childhood anxiety. Current limitations and research gaps in the literature pertaining to the influences of parenting in childhood anxiety disorders are also discussed.

INTRODUCTION

Anxiety is characterized as an experience of "intense unease, fear, and, often, physical discomfort." [1] When anxiety causes a child extreme distress and prevents them from achieving developmental milestones, such as attending school and participating in social relationships, it may become an anxiety disorder. [1] Anxiety disorders are among the most common mental disorders in children and adolescents. [2] About 3% of children and adolescents in Canada experience an anxiety disorder. [2] Different ages exhibit different trends in the diagnosis rate of anxiety disorders.

For instance, separation anxiety disorder and specific phobias are most commonly seen in children below the age of 15. [3] Generalized anxiety disorder has a mean age of onset of 8.5 years. [4] A large body of literature focuses on the influences of different familial climates on a child with an anxiety disorder, that may signify the influence of parental climates on a child. [5-8] This article provides an informative review of the parental influences on clinical anxiety in children and adolescents. Additionally, it highlights perspectives regarding the reciprocal relations between parent and child factors in the context of environmental stressors.

ACCEPTANCE, CONTROL, AND MODELING OF ANXIOUS BEHAVIOURS

From the 1990s onwards, there have been three prominent groupings in the literature that tie parenting styles/behaviours and childhood anxiety: acceptance, control, and modeling of anxious behaviours.

In terms of acceptance, children's sensitivity to anxiety is reduced if they have parents who do not criticize, and instead help the child regulate their emotions by being accepting. This approach to parenting involves warmth during interactions and involvement in a child's life and activities. [9] Parental warmth allows a child to learn how to cope and decrease the chance of developing anxiety disorders. [10]

On the contrary, children raised by parents who adopt a non-authoritative type of parenting have an increased likelihood of developing anxiety disorders. [11-12] This kind of parenting involves an exaggerated, harsh, or inconsistent control over their children which reduces autonomy. [11] When parents do not enable their child to autonomously think or feel, they may hinder the child's ability to develop independence. [9,11] This can ultimately affect the child's own sense of control and lead to feelings of helplessness. [9,11]

One explanation for a parent's controlling behavior over their children lies in the parent's own anxious feelings. [11] Anxious parents may behave in overprotective and fearful ways, which then becomes reinforced in their child.[11] Parents may instill a catastrophic view of problems in their children, wherein they promote their child to believe that problems are irresolvable and difficult, and discourage problem-solving behaviours and positive coping mechanism strategies.[9] This is known as modeling, where the child imitates the anxious behaviours of their parents.[11] Especially with the recent pandemic, it has been found that the stresses put on caregivers have reduced their ability to act as buffers for their children.[13]

THE "STRESS MEDIATED" PROPOSED PATHWAY

Parent-dependent stressors and parent-dependent chronic adversities have been found to influence the development of anxiety in children.[14] Chronic adversity includes issues with no set start or end, such as family conflict or bullying. This adversity-anxiety relationship is explained by the ability of chronic adversities to produce long term changes that increase a child's vulnerability, even after that adversity or stressor has been removed.[15] Models have also proposed that contextual elements, such as genetic vulnerability, cognitive biases, and parental modeling of anxious behaviors, may interact with external stressors, to influence the development of anxiety in children.[15] Additionally, stressful events may influence parental stress, feelings of incompetence, dissatisfaction with the child or parent-child relationship, and frustration, which in turn may increase child anxiety. [16] This supports the proposed "stress mediated" pathway, in which stress responses are transmitted from parent to child.[16]

ENVIRONMENTAL RISK FACTORS

As a parent's own anxious behaviors can impact the child's behaviours, this evidence suggests that one's environment may have a larger influence on anxiety disorder development compared to genetic influences. [11] However, recent literature discusses the interplay between genetics and environment.[17] Environmental factors may themselves be heritable as genetic expression is shaped by the environment and life experiences. As a result, observed environmental influences may involve a genetic component.[17]

THE DEVELOPMENTAL PSYCHOPATHOLOGY PERSPECTIVE[18]

Other than the three aforementioned groupings of acceptance, control, and modeling of anxious behaviours, some of the literature highlights a framework called the developmental psychopathology perspective. This considers multiple perspectives when understanding child and youth mental disorders; not only focusing on risk factors that promote the development of a specific psychopathology, but also analyzes risk factors that promote its maintenance. This perspective functions

under four core principles.

Its first principle regards the processes of typical and atypical development as mutually informative. Mental disorders are often neither simply present or simply absent and deviations from what is considered normal exist on a continuum. Understanding what is considered normal development is an imperative first step in recognizing deviations in its processes. In the same way, understanding normal development informs us about abnormal development, and conversely, abnormal development informs us about normal development.

Second, this perspective acknowledges that development processes are reciprocal and transactional. Environmental factors influence other factors and contexts within a child's life (for example, family relationships, home dynamics) and vice versa. Because of the reciprocal and transactional nature of influence, the child and the environment change with respect to one another.

The next core element is the developmental pathway principle. A developmental pathway refers to the sequence and timing of behaviors and transformations seen within development. Each child is inclined to uniquely progress along their own developmental pathway with variance. More specifically, equifinality and multifinality are other key ideas within developmental pathways. Equifinality emphasizes the possibility that multiple different pathways can lead to the development of childhood clinical and trait anxiety. Multifinality is similar, wherein there is recognition that a singular risk factor can lead to myriad outcomes in the way a child experiences and develops anxiety.

Lastly, the developmental psychopathology perspective requires consideration of contexts such as family as family relationships, educational background, and social experience. Developmental psychopathology examines these areas of analysis together, in a comprehensive, multidisciplinary way.

CRASKE'S 1999 THEORETICAL MODEL[19]

A theoretical model developed by Craske (1999) utilizes the developmental psychopathology perspective and engages with emotion theory and learning theory to outline two ways in which parenting plays a role in childhood anxiety. Craske differentiates between parenting style and parenting behaviors. Parenting "style" is an environmental context that influences the development of childhood trait anxiety. Parenting "behaviors" or "practices" offer reinforcement of a child's anxiety experiences. Certain parenting behaviors can act as stimuli which the child responds to through psychological and physiological arousal (e.g., a parental behavior may contribute to a child's perception and belief about what is deemed threatening); this contributes to the progression of anxiety disorders.

ATTACHMENT THEORY

Attachment encourages the proximity between a child

and their caregiver. Attachment behaviors such as crying serve to encourage the caregiver to care for and protect the child. Secure attachment styles are when caregivers are continuously sensitive to these behaviors and result in a child having a secure base from which they can grow and explore. Insecure attachment occurs when caregivers either exhibit a lack of sensitivity or inconsistent response to a child's attachment behaviors. Ambivalent attachment is characterized by inconsistent or unreliable response to attachment behaviors.[20]

For the first time in 1973, both John Bowlby, a British psychologist, psychiatrist, and psychoanalyst, and Mary Ainsworth, an American-Canadian developmental psychologist, and her student, Donelda Stayton, independently hypothesized a link between attachment and anxiety. In an updated meta-analysis of 46 studies, there was a similar conclusion of attachment being moderately associated with anxiety. Ambivalent attachment were found to be the most strongly associated with anxiety.[21] The association between attachment and anxiety was stronger in studies in which the outcomes were reported by a child, anxiety and attachment were elicited through questionnaires, a cross-sectional study design was employed, and Europe was chosen as the location of study.[21]

ACCOMMODATION

Several studies have linked parental attachment style to accommodation. Parental accommodation involves behaviours parents engage in to reduce a child's distress or prevent exposure to anxiety triggers.[22] Common examples of accommodation include providing items to reduce anxiety, providing reassurance, facilitating avoidance, taking over a child's duties, and modifying a family routine due to the child's anxiety.[22] Accommodation restricts a child's opportunity to learn that they can cope with anxiety or that a feared outcome is unlikely to occur.[23] Hence, accommodation can produce a so-called "protection trap"[24] that increases the severity of anxiety symptoms.[25-26]

An emerging focal has been the relationship between parental beliefs about anxiety and accommodation. Settapani and Kendall's 2017 study looked at the intentions of parental responses to vignettes of youth with anxiety disorders and discovered that parents exhibiting negative beliefs about anxiety were more likely to engage in accommodation.[27] Moreover, a 2018 study by Feinberg et al. found that negative maternal beliefs about anxiety mediated the relationship between maternal experiential avoidance, which refers to mothers' attempts to avoid distressing emotions, and accommodation.[28] These two studies substantiate the existence of a recent focal point on the role of parental beliefs about anxiety in the accommodation literature. This is further corroborated by Johnco et al.'s 2021 study on attachment, parental beliefs, and accommodation, which indicates that attachment and accommodation continue to serve as fruitful topics for emerging research. [23] Johnco et al looked at 139 parents

of children with a primary anxiety disorder, and discovered that anxious attachment moderated the relationship between parental beliefs and accommodation.[23] More specifically, negative beliefs about anxiety were associated with higher levels of accommodation in parents with more secure attachment, while accommodation was high in parents with less secure attachment regardless of belief.[23] Thus, accommodation has been suggested as a principal mechanism for parents' influence on anxiety disorders in children, and continues to be a promising area of research in child anxiety.

DISCUSSION

I. Current Research Gaps

There are multiple gaps in the current literature regarding parental influence on anxiety disorders including: the breadth of knowledge, measurement of the disorder, generalizability, and assessment of directionality and risk factors. In terms of specific knowledge gaps, since the age of onset of anxiety disorders can be as early as age 3, there is a need for more studies among early ages to better understand parental influence.[17] Challenges remain due to the ongoing cognitive development in young children, which makes it difficult to communicate and identify emotions.[29] Furthermore, although the majority of the evidence points to non-authoritative parenting having an association with child anxiety disorders, some recent literature suggests that more anxiety disorder symptoms are associated with authoritative parenting.[30] As such, there are inconsistencies in the current literature that would necessitate further research to confirm.

In addition, measurement of anxiety disorders often relies on self-report or clinician diagnosis, both of which involve biases. Self-reported measures are subject to response bias, where there is a tendency to answer questions untruthfully due to reasons such as social stigma.[31-32] Clinician diagnosis may also be influenced by personal biases and assumptions that can lead to misdiagnosis.[33-34]

Limited generalizability of results further reflectss gaps in the literature. Studies have employed samples that were primarily Caucasian and ethnic differences regarding "acceptable" parenting styles are rarely considered. This can skew results to fit a predominantly Western context and thus limits their applicability to other settings.

Finally, there is often an issue with assessing the directionality of the relationship between parenting and child anxiety.[31] Due to cross-sectional study designs, it becomes difficult to demonstrate whether the risk factor comes before the onset of the anxiety disorder.[29] Additionally, many studies examine parenting styles in isolation, failing to assess the moderating effects of other risk factors. Thus, it remains unclear the mechanisms through which parenting behaviors/styles may impact childhood anxiety.[9]

II. Potential Future Developments in the Field

Future developments in the field may target current research gaps. Intervention designs and longitudinal studies are encouraged as future study designs to better assess the directional relationship between parenting and child anxiety.[35] Intervention designs seek to alter family interaction patterns, assessing the resulting children's behavior before and after. Although this may not provide knowledge regarding its initial causes, such study designs may reveal the impact of current family interactions on childhood anxiety.[9,36] Further, while longitudinal studies can be expensive and time consuming, they provide crucial insight into the temporality of the factors surrounding child anxiety. Additional future directions may include focusing on Craske's 1999 model, and the assessment of specific parental behaviors rather than styles, as this can help better child specialists advise parents.⁹ Greater questioning regarding "typical" relationships between parenting styles and child behavior can also help contribute to advances in the field. For example, high levels of parental control may inhibit children's sociability. However, in some cases, it may positively influence child development by providing structure.³⁷ The impact of several facets of parenting on child anxiety also remain poorly understood. For example, one fruitful avenue for future research is parental punitive responses in anxious children. A 2021 study suggested that increased parental punitive responses could actually reduce social anxiety symptoms in children with fearful temperament.[38] However, the authors note that the motivations, frequency, situational factors, and child perceptions of punitive responses need to be examined further in future research to understand the role that punitive responses play in the development and

enhance of child anxiety.[38] Another interesting evolution in parenting and anxiety is the influence of technology. Although the concept of "technofence", referring to parental preoccupation with technology, recently emerged in the literature through a 2018 study by McDaniel and Radesky, the role of technology in the parenting and child anxiety literature remains poorly understood.[39] McDaniel and Radesky offer a preliminary investigation that suggests "technofence" can increase child anxiety; however, future studies will have to examine the role of technology in greater detail. [39] For example, future studies may examine other impacts of parental reliance on technology, or child technology use, on child anxiety and the relationship between the parent and the child. Overall, the relationship between parenting and child anxiety is multifaceted and there are still several areas of research that need to be explored and clarified.

CONCLUSION

This review examined the influences of parenting styles and behaviours on the development of childhood anxiety disorders. Accepting parental behaviours reduce the likelihood of anxiety disorders, while controlling behaviours may increase chances of anxiety disorders in children. Other risk factors included children inducing stress from parent-related adversities and stressors. The article also reviews models and theories including the developmental psychopathology perspective and Craske's theoretical model. Further research on anxiety disorders in younger-aged children is required to better understand parental influences and this review highlights potential future developments that can target these research gaps.

1. Bryden P, Szatmari P. Start Here: A Parent's Guide to Helping Children and Teens through Mental Health Challenges. Toronto: Simon & Schuster Canada; 2020.
2. Children, Youth and Anxiety [Internet]. CMHA National. 2016. Available from: <https://cmha.ca/brochure/children-youth-and-anxiety/>
3. de Lijster JM, Dierckx B, Utens EM, Verhulst FC, Zielhuis GA, Dieleman GC, Legerstee JS. The age of onset of anxiety disorders: a meta-analysis. *Canadian journal of psychiatry. Revue canadienne de psychiatrie*. 2017 Apr;62(4):237.
4. Keeton CP, Kolos AC, Walkup JT. Pediatric generalized anxiety disorder. *Pediatric Drugs*. 2009 Jun;11(3):171-83.
5. Brown SM, Doom JR, Lechuga-Peña S, Watamura SE, Koppels T. Stress and parenting during the global COVID-19 pandemic. *Child Abuse & Neglect* 2020;110:104699.doi:10.1016/j.chiabu.2020.104699.
6. Yue J, Zhang X, Le Y, An Y. Anxiety, depression and PTSD among children and their parents during 2019 novel coronavirus disease (COVID-19) outbreak in China. *Current Psychology* 2020. doi:10.1007/s12144-020-01191-4.
7. Cameron EE, Joyce KM, Delaquis CP, Reynolds K, Protudjer JL, Roos LE. Maternal psychological distress & mental health service use during the COVID-19 pandemic. *Journal of Affective Disorders* 2020;276:765-74. doi:10.1016/j.jad.2020.07.081.
8. Türk F, Kul A, Kilinc E. Depression-anxiety and coping strategies of adolescents during the Covid-19 pandemic. *Turk J Educ*. 2021 Apr 30;38-75.
9. Wood JJ, McLeod BD, Sigman M, Hwang W-C, Chu BC. Parenting and childhood anxiety: theory, empirical findings, and future directions: Parenting and childhood anxiety. *Journal of Child Psychology and Psychiatry*. 2003 Jan;44(1):134-51.
10. Erokan A. Examination of Relationship between Anxiety Sensitivity and Parenting Styles in Adolescents. *Educ Sci*. 36.
11. Yaffe V. A narrative review of the relationship between parenting and anxiety disorders in children and adolescents. *Int J Adolesc Youth*. 2021 Jan 1;26(1):449-59.
12. Wolfardt U, Hempel S, Miles JNV. Perceived parenting styles, de-personalisation, anxiety and coping behaviour in adolescents. *Personal Individ Differ*. 2003 Feb 1;34(3):521-32.
13. Courtney D, Watson P, Battaglia M, Mulsant BH, Szatmari P. COVID-19 Impacts on Child and Youth Anxiety and Depression: Challenges and Opportunities. *Can J Psychiatry Rev Can Psychiatr*. 2020 Oct;65(10):688-91.
14. Allen JL, Sandberg S, Chhoa CY, Fearn T, Rapee RM. Parent-dependent stressors and the onset of anxiety disorders in children: Links with parental psychopathology. *European Child & Adolescent Psychiatry*. 2017;27(2):221-31.
15. Allen JL, Rapee RM, Sandberg S. Severe life events and chronic adversities as antecedents to anxiety in children: A matched control study. *Journal of Abnormal Child Psychology*. 2008;36(7):1047-56.
16. Platt R, Williams SR, Ginsburg GS. Stressful life events and child anxiety: Examining parent and child mediators. *Child Psychiatry & Human Development*. 2015;47(1):23-34.
17. Ask H, Cheesman R, Jami ES, Levey DF, Purves KL, Weber H. Genetic contributions to anxiety disorders: where we are and where we are heading. *Psychol Med*. 2021 Oct;51(13):2231-46.
18. Eme R. Developmental psychopathology: A primer for clinical pediatricians. *WJP*. 2017 Sep 22;7(3):159-62.
19. Craske MG. Anxiety disorders: psychological approaches to theory and treatment. Boulder, CO: Westview Press; 1999. 425 p. (Perspectives in clinical psychology).
20. Behrens KY. Attachment in retrospect and Prospect. *Attachment & Human Development*. 2021;23(4):351-4.
21. Colonnese C, Draijer EM, Jan J, M. Stams G, Van der Bruggen CO, Bögels SM, Noom MJ. The relation between insecure attachment and child anxiety: A meta-analytic review. *Journal of Clinical Child & Adolescent Psychology*. 2011;40(4):630-45.
22. Lebowitz E. R., Woolston J., Bar-Haim Y., Calvocoressi L., Dausser, C., Warnick, E., ... Leckman, J. F. (2013). Family accommodation in pediatric anxiety disorders. *Depression and Anxiety*, 30(1), 47-54.
23. Johnco C, Storch EA, Oar E, McBride NM, Schneider S, Silverman WK, Lebowitz ER. The role of parental beliefs about anxiety and attachment on parental accommodation of child anxiety. *Research on Child and Adolescent Psychopathology*. 2022;Jan;50(1):51-62.
24. Silverman W, K., & Kurries, W. M. (1996). Anxiety and phobic disorders: A pragmatic approach. New York: NY Plenum Press.
25. 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.
26. 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.
27. Settiani CA, Kendall PC. The effect of child distress on accommodation of anxiety: Relations with maternal beliefs, empathy, and anxiety. *Journal of Clinical Child & Adolescent Psychology*. 2017 Nov 2;46(6):810-23.
28. Feinberg L, Kerns C, Pincus DB, Comer JS. A preliminary examination of the link between maternal experiential avoidance and parental accommodation in anxious and non-anxious children. *Child Psychiatry & Human Development*. 2018 Aug;49(4):652-8.
29. Beesdo K, Knappe S, Pine DS. Anxiety and Anxiety Disorders in Children and Adolescents: Developmental Issues and Implications for DSM-V. *Psychiatr Clin North Am*. 2009 Sep;32(3):483-524.
30. Romero-Acosta K, Gómez-de-Regil L, Lowe GA, Lipps GE, Gibson RC. Parenting Styles, Anxiety and Depressive Symptoms in Child/Adolescent. *Int J Psychol Res*. 2021;14(1):12-32.
31. Shenaar-Golan V, Yatzkar U, Yaffe Y. Paternal Feelings and Child's Anxiety: The Mediating Role of Father-Child Insecure Attachment and Child's Emotional Regulation. *Am J Mens Health*. 2021 Nov 1;15(6):15579883211067104.
32. Wood JJ, McLeod BD, Sigman M, Hwang W-C, Chu BC. Parenting and childhood anxiety: theory, empirical findings, and future directions. *J Child Psychol Psychiatry*. 2003;44(1):134-51.
33. Cwik JC, Papen F, Lemke J-E, Margraf J. An Investigation of Diagnostic Accuracy and Confidence Associated with Diagnostic Checklists as Well as Gender Biases in Relation to Mental Disorders. *Front Psychol*. 2016 Nov 22;7:1813.
34. Marten EC, Cwik JC, Margraf J, Schneider S. Overdiagnosis of mental disorders in children and adolescents (in developed countries). *Child Adoles Psychiatry Ment Health*. 2017 Jan 17;11(1):5.
35. Johnco C, Storch EA, Oar E, McBride NM, Schneider S, Silverman WK, et al. The role of parental beliefs about anxiety and attachment on parental accommodation of child anxiety. *Research on Child and Adolescent Psychopathology*. 2021;50(1):51-62.
36. Cowan PA, Pape Cowan C. What an intervention design reveals about how parents affect their children's academic achievement and behavior problems. *Parenting and the Child's World*. 2001;75-98.
37. Rubin KH, Cheah CSL, Fox N. Emotion regulation, parenting and display of social rectence in preschoolers. *Early Education Kamp; Development*. 2001;12(1):97-115.
38. Trent ES, Viana AG, Raines EM, Conroy HE, Woodward EC, Storch EA, Zvolensky MJ. Fearful temperament and child social anxiety symptoms: Clarifying the influence of maternal punitive responses. *Research on Child and Adolescent Psychopathology*. 2022;Jan;50(1):63-75.
39. McDaniel BT, Radesky JS. Technofence: Parent distraction with technology and associations with child behavior problems. *Child development*. 2018 Jan;89(1):100-9.