

The Role of Paternal Anxiety in Emotional Regulation and Child Anxiety

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Abstract

Most research on parental anxiety has focused on mothers, and fathers have been studied much less. Anxiety disorders are among the most common mental health concerns in children and adolescents, affecting approximately 31.9% of adolescents and nearly 10% of children in the United States. Recent research shows that fathers also experience anxiety, which may play a role in family functioning and children's emotional well-being. This study examined the relationship between paternal anxiety, fathers' ability to regulate emotions, and fathers' reports of anxiety symptoms in their children.

A quantitative, cross-sectional design was used. The sample included 50 fathers of children between the ages of 6 and 18. Fathers completed an online survey that included the Beck Anxiety Inventory (BAI), the Difficulties in Emotion Regulation Scale (DERS), and the Spence Children's Anxiety Scale-Parent Report (SCAS-P). Hierarchical multiple regression analyses were conducted, controlling for fathers' age.

Results showed that higher paternal anxiety was strongly related to greater emotion regulation difficulties in fathers and higher levels of father-reported child anxiety. Paternal anxiety accounted for over half of the variance in both outcomes (54% and 55%), while paternal age was not a significant factor. These findings suggest that fathers' anxiety is important in how emotions are handled in families and how children experience anxiety. The results also show the importance of including fathers in research and clinical work related to child anxiety and family mental health.

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Chapter 1: Introduction

Parents' mental health plays an important role in family functioning and child outcomes, influencing emotional, psychological, and behavioral outcomes (Maric & Bögels, 2019; Sahithya & Raman, 2021). Children exposed to parental anxiety may struggle to manage emotions and peer relationships and may have both internal emotional struggles and observable behavior problems, such as withdrawal or aggression (Kadoglou et al., 2023; Maric & Bögels, 2019; Rangarajan et al., 2020; Sahithya & Raman, 2021; Shenaar-Golan et al., 2021). While many studies have examined how maternal anxiety affects children, often linking it to higher child anxiety, difficulties with emotional regulation, and attachment insecurity, much less is known about the role of paternal anxiety (Ahmad et al., 2021; Du et al., 2024; Henrichs et al., 2021; Ma et al., 2022; Rees et al., 2018; Zhou & Li, 2022).

New research highlights the influence of paternal involvement in shaping children's emotional well-being and mental health (Challacombe et al., 2023; Chhabra et al., 2020; Dacruz, 2023). This is largely important during sensitive periods such as the perinatal phase, which covers the time from early pregnancy through the first year of infancy (Challacombe et al., 2023). Fathers experiencing anxiety and depression may struggle with parenting confidence and emotional engagement, increasing stress within the family system and ultimately influencing the child's emotional well-being (Baartmans et al., 2024; Seteanu & Giosan, 2021). This growing body of research calls attention to the critical need to include fathers in both preventative and intervention efforts targeting child mental health.

Research suggests that a father's anxiety uniquely affects children's anxiety development and overall well-being, often through overprotective or inconsistent parenting styles, heightened family tension, and reduced emotional availability (Azouine & Singh, 2019; Baartmans et al.,

2024; Ben David, 2021; Ren et al., 2023). With many fathers becoming more actively involved in caregiving, it is increasingly important to understand how their anxiety may influence emotional regulation, parenting, and child well-being (Fisher & Glangeaud-Freudenthal, 2023; Pleck & University of Illinois Urbana-Champaign, 2010; Ren et al., 2023; Sultan & Javed, 2020; Volling & Palkovitz, 2021; Zhou & Li, 2022).

The struggles posed by paternal anxiety are nestled in the larger context of family dynamics, in which the condition of one member affects the functioning and emotional balance across the entire family unit (Fiese et al., 2019). Fathers with anxiety may show inconsistent, authoritarian, or overprotective parenting behaviors, which may increase the risk of anxiety in their children (De Vente et al., 2022; Maric & Bögels, 2019; Sahithya & Raman, 2021). These effects can persist into adolescence and adulthood, impacting emotional regulation, internalizing issues, impaired social functioning, and difficulties forming a secure attachment (Kadoglou et al., 2023; Shenaar-Golan et al., 2021; Thompson & Henrich, 2022). This dynamic is often bidirectional, as children's anxiety can worsen paternal mental health struggles (Baartmans et al., 2024), creating cyclical patterns of emotional distress and allowing anxiety patterns to pass down from one generation to another (Fiese et al., 2019).

Family structure, socioeconomic status, and cultural norms may additionally influence how paternal anxiety is experienced and expressed (Volling & Palkovitz, 2021). For instance, single fathers may experience more stress and fewer resources, which may increase the impact of their anxiety on children (Trepjak et al., 2023). Cultural expectations and traditional gender roles may limit fathers' participation in caregiving, thus altering their parenting strategies and increasing intergenerational transmission of anxiety (Chhabra et al., 2020). Large-scale population data indicate that both younger and older paternal age are associated with increased

psychiatric risk in offspring, including anxiety (Wang et al., 2022). Therefore, paternal age was included as a covariate to more accurately assess the unique contribution of paternal anxiety to emotional regulation and child anxiety outcomes.

Practically, understanding how paternal anxiety influences parenting behaviors and child outcomes in relation to emotional regulation difficulties can inform targeted interventions that support fathers and decrease the transmission of anxiety to children. Empirically, this study addressed a meaningful and underexplored domain, as prior literature has primarily focused on maternal impact, leaving the paternal role and emotional regulation as a contributing factor to child anxiety underexplored. Theoretically, this study is grounded in Bowen's Family Systems Theory, which highlights the interconnected nature of emotional processes within families and how one member's anxiety can influence the overall family dynamics (Kerr & Bowen, 1988).

Research highlights direct and indirect pathways through which fathers' anxiety impacts child outcomes, with anxiety in fathers being correlated with overprotective and controlling behaviors that prevent children from developing autonomy and resilience (De Vente et al., 2022; Fjermestad et al., 2020; Li et al., 2022; Rasing et al., 2019). Fathers struggling with anxiety are often more likely to display emotional withdrawal or inconsistent parenting, which can make it harder for children to manage their emotions as they grow (Fjermestad et al., 2020). When parents are emotionally unavailable, they are less able to model healthy emotional responses or provide co-regulation, which is critical to children's well-being, making it more challenging for children to build effective emotional regulation skills (Zitzmann et al., 2024).

Longitudinal studies by Ahmadzadeh et al. (2019) and Trepiaik et al. (2023) show that fathers' anxiety symptoms affect children both in the short term and over time, leading to long-term emotional difficulties into adolescence. Trepiaik et al. (2023) found that paternal anxiety is

linked to child internalizing symptoms, such as anxiety and depression, through parenting behaviors like overcontrol and emotional unavailability, while Ahmadzadeh et al. (2019) showed that paternal anxiety during the child's early development predicted higher child anxiety two years later, pointing to long-term emotional regulation difficulties.

Research has also explored family and contextual factors. For example, single-father households show a heightened link between fathers' anxiety and child anxiety, most likely due to caregiving stress and less social support (Ben David, 2021; Rangarajan et al., 2020). Building on this research, the present study used two hierarchical multiple regression models to examine whether paternal anxiety predicted emotional regulation challenges and child anxiety, while controlling for paternal age. In addition, age may shape how fathers cope with anxiety and regulate their emotions and was considered in this study as a control variable.

Although research in this field is growing, there are still significant insufficiencies in understanding the association between paternal anxiety and child anxiety, particularly in relation to emotional regulation challenges. Examining the less-studied areas is critical for advancing our understanding of family dynamics and for informing interventions that support both fathers and children. This study's objective was to address this limitation by examining how paternal anxiety was related to emotional regulation challenges, parenting practices, and child anxiety.

Statement of the Problem

The problem addressed in this study was how paternal anxiety may contribute to their own emotional regulation difficulties and anxiety in their children, when controlling for paternal age. While maternal anxiety has been widely studied (Ahmad et al., 2021; Du et al., 2024; Henrichs et al., 2021), research addressing the role of fathers' anxiety in influencing child-rearing and its subsequent impact on children's well-being remains limited. Fathers experiencing anxiety

often find it challenging to maintain consistent, supportive parenting, which may lead to higher anxiety symptoms in their children (Trepiaik et al., 2023). Anxious fathers may display more controlling parenting behaviors and reduced warmth, which can increase the risk of anxiety symptoms in their children (Trepiaik et al., 2023). This perspective matters because it can shed light on the unique challenges in the father-child relationship.

By better understanding this problem, researchers and clinicians may be able to strengthen paternal functioning and disrupt maladaptive relational patterns of emotional dysregulation within families. Neglecting paternal mental health in family therapy may result in a lack of support needed to improve parenting, thereby contributing to their children's anxiety (Temmen & Crockett, 2021). Research shows that when fathers are involved, children develop better emotionally, with evidence indicating that paternal involvement helps reduce externalizing behaviors in girls and delinquency in boys (Slaughter & Nagoshi, 2020). These findings highlight the potential importance of assessing and addressing paternal anxiety within family systems.

Further research is necessary to understand whether paternal anxiety is linked to greater emotional regulation difficulties and increased anxiety symptoms in children. While some research has explored fathers' contributions (Ben David, 2021; Ren et al., 2023), there is a notable limitation in understanding the ways in which fathers' anxiety impacts family relationships and children's emotional growth. This research was designed to improve understanding in this area by investigating whether paternal anxiety predicted emotional regulation challenges and child anxiety, while controlling for paternal age, to improve the clarity and strength of the findings. Paternal age was included as a control variable because prior research has linked paternal age to psychiatric risk in offspring (Wang et al., 2022). Controlling

for age allowed the study to examine whether paternal anxiety predicted outcomes above and beyond age-related differences.

Purpose of the Study

The purpose of this quantitative study was to explore whether paternal anxiety (independent variable) predicted two outcomes: emotional regulation challenges in fathers and anxiety in their children (dependent variables), while controlling for paternal age. Using a cross-sectional correlational design, two hierarchical multiple regression analyses were conducted. The first assessed whether paternal anxiety predicted emotional regulation difficulties, while controlling for paternal age. The second examined whether paternal anxiety predicted child anxiety, controlling for paternal age. The target population for this study was fathers with children between the ages of 6 and 18 years who they perceive as experiencing anxiety. This design allowed for the examination of how paternal anxiety was linked to emotional regulation difficulties and to anxiety symptoms observed in children, while adjusting for age-related differences that may affect these outcomes.

Anxiety disorders have been widely documented in children and adolescents. According to the National Comorbidity Survey-Adolescent Supplement, about 31.9% of adolescents aged 13 to 18 have experienced an anxiety disorder, and 8.3% have had severe symptoms (Merikangas et al., 2010). The Centers for Disease Control and Prevention (CDC, 2023) also reports that around 9.4% of children ages 3 to 17 have been diagnosed with anxiety during their lifetime (2023). In addition, the Agency for Healthcare Research and Quality (AHRQ, 2023) highlights that anxiety often begins in childhood and that early treatment is important. These numbers show why it was important to focus on anxiety in the age group included in this study.

This study was conducted through CloudResearch, which functioned as a participant recruitment platform and allowed the researcher to access fathers across the United States. CloudResearch enabled the study to be posted online, apply prescreening criteria (e.g., U.S.-based fathers with children between ages 6 and 18), and distribute a secure Qualtrics survey link to eligible participants. The platform also facilitated compensation distribution upon survey completion. Access to professional and clinical networks across the United States, including CloudResearch, increased the feasibility of reaching the target population. Fathers from two-parent and single-father households were included in the sampling frame, and family structure was included as descriptive information. Eligible participants were recruited using a non-probability, purposive sampling method to ensure a diverse representation of family structures (Bornstein et al., 2013).

To ensure that there was adequate statistical power, a power analysis was conducted using G*Power for each of the two multiple regression models, assuming a fixed model with two predictors (paternal anxiety and paternal age), a one-tailed test based on the study's directional hypotheses, with a medium effect size ($f^2 = 0.15$), $\alpha = 0.05$, and power = 0.80. The minimum required sample size for each regression was 43 participants. Adjusting for a 20% attrition rate, the target recruitment became approximately 52 participants. This allowed for potential dropouts or incomplete responses. This sample size was expected to detect medium effect sizes and support statistically reliable and generalizable findings (Faul et al., 2009; Kline, 2005; MacKinnon et al., 2023).

Data were collected using validated self-report measures: the Beck Anxiety Inventory (BAI) to assess paternal anxiety (Beck et al., 1988), the Difficulties in Emotion Regulation Scale (DERS) to measure emotional regulation (Gratz & Roemer, 2004), and the Spence Children's

Anxiety Scale-Parent Report (SCAS-P) to assess child anxiety (Spence, 1997). The instruments were selected based on their recognized reliability and validity in assessing the intended constructs (Beck et al., 1988; Gratz & Roemer, 2004; Spence, 1997). Based on standard administration times, the estimated completion time for all three questionnaires was approximately 25–30 minutes, as indicated in the administration guidelines and description of the research instruments. Participants received a \$15 electronic gift card upon survey completion.

Introduction to Theoretical Framework

The theoretical framework guiding this study was Bowen Family Systems Theory (BFST), originally developed by Murray Bowen and further elaborated by scholars such as Kerr and Bowen (1988). BFST views the family as a connected emotional system in which individuals' behaviors shape and are shaped by others. It builds on systems thinking, which highlights that people are best understood through their relationship with others in the family (Brown, 1999; Kerr & Bowen, 1988). Bowen explained that anxiety often moves in families over time and is passed on through patterns like emotional reactivity, triangulation, and projection (Kerr & MacKay, 2024). In this study, paternal anxiety was viewed not as an individual issue but as a systemic factor that shaped their emotional regulation and contributed to perceived child anxiety (Knight, 2023; Tramonti et al., 2019).

At its basis, BFST provides a framework for understanding the complex interactions within families. Key concepts include:

Chronic Anxiety

A central part of BFST is chronic anxiety, which builds slowly over time through unresolved tension in relationships. It is not tied to a specific event but is often present in how families function day to day. Chronic anxiety often gives rise to patterns such as emotional

distance or overinvolvement, which may interfere with parenting and emotional connection (Kerr & Bowen, 1988; Kerr & MacKay, 2024).

Differentiation of Self

This concept defines an individual's capacity to stay emotionally grounded while staying close to others. Individuals with lesser levels of differentiation tend to react more strongly and have a harder time managing their emotions under stress. Kerr and Bowen (1988) explain that low differentiation can make it difficult to balance emotional closeness with autonomy.

Emotional Interdependence

In BFST, the family is regarded as an interconnected emotional system where no one functions in isolation. Changes in one member affect the others, and unresolved emotional stress tends to ripple through the family (Kerr & Bowen, 1988).

Family Projection Process

This process happens when parents, often unintentionally, pass their emotional struggles to their children. A parent might become overly protective or emotionally distant, and the child absorbs that anxiety. Over time, this pattern can shape the child's emotional development (Kerr & Bowen, 1988; Kerr & MacKay, 2024).

Multigenerational Patterns

BFST also examines how emotional functioning is passed down through generations. Parents may carry forward the same patterns they grew up with, especially during times of stress, without realizing it. These patterns can include how emotions are handled, how people relate, and how anxiety is managed (Kerr & Bowen, 1988).

Triangulation

Triangulation occurs when a third person is brought in to manage tension between two others. This often involves a child who is drawn into a conflict between parents. While triangles are common, they can create stress for the person caught in the middle and contribute to anxiety or behavioral issues (Kerr & Bowen, 1988; Murdock et al., 2022). While BFST identifies triangulation as a common response to relational anxiety, Kerr and Bowen (1988) clarify that triangles themselves are not inherently pathological. In well-differentiated systems, triangles can function adaptively, allowing individuals to manage tension without escalating conflict or relying on emotional reactivity.

Bowen's theory helped explain how fathers' emotional regulation challenges are shaped by family relationships and past experiences. One way these patterns get passed along is through triangulation. This happens when a third person, often a child, gets pulled into tension between the parents (Kerr & Bowen, 1988). When anxiety is high and family members are not well differentiated, this can lead to more emotional reactions and ongoing stress in the family. In families with greater emotional differentiation, triangles can work differently. In these cases, they may help manage tension in a calmer way without increasing conflict (Kerr & Bowen, 1988).

Introduction to Research Methodology and Design

The method for this study was a cross-sectional correlational design, which was used to explore relationships between variables without manipulating them (Creswell & Creswell, 2018). This design was a good fit for exploring how paternal anxiety (independent variable) related to emotional regulation challenges and fathers' perception of child anxiety (dependent variables). This design aligned with the research goal of exploring whether emotional regulation challenges and child anxiety were both predicted by paternal anxiety. Two hierarchical multiple regression

models were implemented in this study. In both models, paternal age was included as a covariate. The first model tested whether paternal anxiety predicted emotional regulation difficulties, while controlling for paternal age. The second tested whether paternal anxiety predicted child anxiety, controlling for paternal age. This approach allowed for clear interpretation of each outcome using the same sample and fit a correlational design (Creswell & Creswell, 2018; Field, 2018).

The cross-sectional correlational design was selected for this study to examine the relationship between paternal anxiety, emotional regulation challenges, and child anxiety using data collected at one time. This design was appropriate because it does not involve manipulating variables, which would be unethical when examining sensitive family dynamics (Creswell & Creswell, 2018). Instead, it allowed for the investigation of how these variables relate within everyday experiences. The selected method fits the problem statement, which explored the effects of fathers' anxiety on their emotional regulation and the potential association with child anxiety. By using correlational methods, this study highlighted important patterns (Field, 2018; Jackson, 2016, p. 140).

This design was suitable because it does not interfere with participants' natural experiences. Instead, it considered everyday interactions where fathers' difficulties with emotional regulation may be associated with their anxiety and child anxiety, an area this study aimed to explore. Applying a correlational design enabled the study to explore how paternal anxiety related to emotional regulation abilities and children's emotional outcomes, thus directly addressing the study's guiding questions. The chosen method supported ethical standards in research while gathering meaningful data that may add to family therapy interventions (Jackson, 2016).

Research Questions and Hypotheses

Research Question 1

Does paternal anxiety significantly predict emotional regulation challenges, when controlling for paternal age?

H₀. Paternal anxiety does not significantly predict emotional regulation challenges when controlling for paternal age.

H₁. Paternal anxiety significantly predicts emotional regulation challenges when controlling for paternal age.

Research Question 2

Does paternal anxiety significantly predict child anxiety, when controlling for paternal age?

H₀. Paternal anxiety does not significantly predict child anxiety when controlling for paternal age.

H₁. Paternal anxiety significantly predicts child anxiety when controlling for paternal age.

Significance of the Study

This study was impactful for it examined the underexplored role of a father's mental health, especially anxiety, in impacting family dynamics and influencing child outcomes. Although much of the existing research has concentrated on mothers' mental health, there is significantly less known about how paternal anxiety impacts emotional regulation and child anxiety. As the role of fathers has changed since the 1970s, from being seen primarily as economic providers to increasingly assuming emotionally supportive and caregiving roles, it is essential to consider how their experience of anxiety may be associated with emotional regulation challenges and children's emotional development (Aytac & Schoppe-Sullivan, 2023; Pleck & University of Illinois Urbana-Champaign, 2010). Fathers who experience anxiety may show less warmth or use less effective parenting behaviors, which can contribute to higher

anxiety in their children and affect emotional functioning within the family system (Trepiaik et al., 2023; Temmen & Crockett, 2021).

Grounded in BFST (Kerr & Bowen, 1988), this study investigated these relationships using a correlational design, examining whether paternal anxiety predicts emotional regulation challenges and child anxiety when controlling for paternal age. This study focuses on how anxiety may be transmitted from fathers to children through family relationships across generations (Kerr & Bowen, 1988; Trepiaik et al., 2023). By examining emotional regulation as one important outcome of paternal anxiety, this study sought to bring valuable insight into how paternal anxiety impacts family dynamics and identify important targets for therapeutic intervention. This included consideration for fathers in diverse family structures, including elevated stress and limited support systems (Slaughter & Nagoshi, 2020).

This research emphasizes the importance of addressing the mental health of mothers and fathers alike, contributing valuable insight to the field of marriage and family therapy. By focusing on the unique impacts of paternal anxiety, clinicians could create specific approaches to aid fathers in regulating their anxiety and offering more stable and responsive parenting. These approaches could decrease behaviors like emotional distancing or excessive control, which are frequently linked to anxiety in children (Yubaedi Siron et al., 2023).

This study explored emotional regulation challenges as a central outcome associated with paternal anxiety and as a factor that may influence broader family health and functioning. The findings of this study have informed the development of targeted therapeutic interventions that address paternal areas of struggle, such as improving emotional regulation.

In conclusion, the study was important in MFT training by highlighting the significance of fathers' mental health. Addressing paternal anxiety in training programs could better equip

future therapists to work effectively with fathers, in the end improving outcomes for entire families.

Definitions of Key Terms

Authoritarian Parenting

A strict style of parenting with many rules and little warmth. Parents focus on discipline more than emotional support. Children under this parenting style can feel pressured and be less secure (Kadoglou et al., 2023).

Authoritative Parenting

This parenting style is a balanced style that combines rules with warmth. Parents support children while also encouraging independence. Children often feel safe and valued (Kadoglou et al., 2023).

Behavioral Modeling

Behavioral modeling refers to how children observe and imitate the behaviors, attitudes, or emotional expressions of their caregivers (Burstein & Ginsburg, 2010).

Co-Parenting

For this study, co-parenting is defined as the process by which two parents in the same household coordinate caregiving, share responsibilities, and support one another in raising their child (Feinberg, 2003). This usage differs from the more common industry definition of co-parenting, which often refers to parents who are divorced or separated raising a child across households.

Emotional Withdrawal

Emotional withdrawal, also called emotional unavailability, happens when a parent pulls back emotionally and becomes less responsive or engaged with their child. This limits emotional

warmth and connection in the relationship and can negatively affect the child's emotional and developmental well-being (Clark et al., 2021).

Family Structure

Family structure refers to the composition of the household based on parental and child relationships, including whether children are raised in two-parent, single-parent, or blended family homes (Demo & Cox, 2000; Thomson, 2012).

Gender Role Expectations

Gender role expectations refer to the socially constructed beliefs and norms about how individuals should think, feel, and behave based on their identified gender, often shaped by cultural and societal values (West & Zimmerman, 1987).

Intergenerational Transmission of Anxiety

Intergenerational transmission of anxiety refers to the process through which patterns of anxious thoughts, emotions, and behaviors are passed from parents to children through both genetic influences and learned interactions within the family environment (Drake & Ginsburg, 2012).

Overprotective Parenting

Overprotective parenting refers to a parental pattern characterized by excessive control, monitoring, or involvement that limits a child's autonomy and exposure to typical challenges, often intended to prevent distress or harm (Spokas & Heimberg, 2009; Thomasgard & Metz, 1993).

Perceived Child Anxiety

Perceived child anxiety refers to a parent's observation or belief that their child experiences fear, worry, or nervousness in response to real or anticipated situations, based on the parent's interpretation of the child's behaviors and emotions (Spence, 1997; Nauta et al., 2004).

Permissive Parenting

Permissive parenting is a parenting style that is defined as lenient with few rules or boundaries. Parents avoid discipline, leaving children without enough structure and feeling insecure (Kadoglou et al., 2023).

Stress Transmission

Stress transmission is a stress experienced by the parent, including anxiety, can be transferred to children through daily interactions and emotional cues, contributing to similar emotional struggles in the child (Fiese et al., 2019; Fjermestad et al., 2020).

Summary

Family functioning and children's emotional, behavioral, and psychological well-being may be affected when fathers struggle with anxiety. Whereas maternal anxiety has been extensively studied, research on how fathers' anxiety affects emotional regulation and contributes to children's anxiety symptoms remains underexplored (Ahmad et al., 2021; Du et al., 2024; Henrichs et al., 2021). Fathers who struggle with anxiety may display inconsistent or overprotective parenting. This can worsen anxiety in children and reinforce cyclical patterns of emotional instability in the family system. Additionally, these struggles can be further complicated by socioeconomic status, cultural norms, and family structure.

Framed by BFST (Kerr & Bowen, 1988), the purpose of this study was to explore how anxiety in fathers relates to their emotional regulation challenges and child anxiety. Utilizing a correlational design, this study explored how paternal anxiety relates to emotional regulation and

child outcomes without manipulating them, while controlling for paternal age. This approach provided important insights that could help create better interventions and improve therapy, especially by supporting fathers and strengthening family well-being.

Chapter 2 expanded on this foundation by presenting BFST as the guiding conceptual framework, which serves as a lens for understanding family dynamics and emotional processing. This includes a critical analysis of the literature related to fathers psychological well-being, parenting behaviors, and child outcomes. Together, these areas provide context and justification for the present study.

Chapter 2: Literature Review

The problem addressed in this study was the limited understanding of how paternal anxiety is related to fathers' difficulties with emotional regulation and anxiety in their children. While maternal anxiety has been widely studied, far less is known about how fathers' anxiety affects children's emotional well-being (Rasing et al., 2019; Slaughter & Nagoshi, 2020). The purpose of this study was to examine whether paternal anxiety predicted emotional regulation challenges in fathers and anxiety symptoms in their children, while controlling for paternal age.

To better understand this problem, this chapter reviews the existing research on paternal anxiety, emotional regulation, and child anxiety. The literature review is organized by themes. It begins with research on how parental anxiety is passed on to children. It then looks at emotional and behavioral pathways, including parenting behaviors and parental emotional regulation processes that may affect child outcomes. The literature review then considers broader factors shaping family experiences, including family structure, co-parenting relationships, and cultural and socioeconomic conditions. The chapter ends by identifying gaps in the literature that support the need for the current study.

Multiple factors shape children's emotional development, including parental mental health, parenting behaviors, and family relationships. While maternal anxiety has been studied extensively and is strongly linked to child emotional outcomes (Walker et al., 2020), the specific impact of paternal anxiety remains less understood (Trepik et al., 2023).

This literature review explores how fathers' anxiety, emotional regulation difficulties, and parenting practices influence anxiety symptoms in children, particularly within the context of different family structures and cultural expectations. Understanding these relationships could help clarify how paternal functioning contributes to children's emotional health and highlight the

need for more inclusive family-focused research. This chapter presents a review of the existing literature on paternal anxiety, emotional regulation challenges, and child anxiety.

Parental anxiety can affect child development and has been associated with higher levels of anxiety and other internalizing symptoms in children (Trepiaik et al., 2023). While maternal anxiety has been studied a great deal, much less is known about how paternal anxiety affects children, especially when fathers have difficulty regulating their emotions (McNamara et al., 2019; Walker et al., 2020).

Although scholarly attention to parents' psychological well-being has expanded, the literature continues to focus primarily on mothers. This leaves an important gap in understanding how fathers' anxiety influences child outcomes (Rasing et al., 2019; Slaughter & Nagoshi, 2020). The research that does exist suggests that paternal anxiety can impact children in both direct and indirect ways (Fjermestad et al., 2020; Trepiaik et al., 2023). However, the pathways through which this occurs remain unclear, particularly regarding fathers' capacity to regulate their emotions (Kadoglou et al., 2023). The purpose of this study was to examine the relationship between paternal anxiety, emotional regulation challenges, and child anxiety by exploring how paternal anxiety was associated with both emotional regulation difficulties and children's anxiety symptoms while controlling for paternal age. Understanding these connections would contribute to more inclusive family therapy interventions and fill a notable gap in the current literature.

This chapter presents a review of the current research related to paternal anxiety, emotional regulation, and child anxiety to frame the study that investigates these relationships and explores how emotional regulation challenges in fathers may contribute to child anxiety. To present a comprehensive understanding of the relationship between paternal anxiety, emotional regulation challenges, and child anxiety, this chapter is organized thematically. The review

begins with foundational research on how parental anxiety is transmitted to children, both directly and indirectly (De Vente et al., 2022; Trepiaak et al., 2023). Then, the emotional and behavioral pathways through which paternal anxiety operates, with a focus on parenting behavior and the fathers' ability to regulate emotions, are explored (Bilodeau-Houle et al., 2020). Additionally, researchers have found that children's anxiety symptoms can influence their father's mental health, reflecting the ongoing exchange between parent and child (Ahmadzadeh et al., 2019; Thompson & Henrich, 2022).

This chapter examines broader contextual influences, including family structure, co-parenting, and cultural and socioeconomic stressors, which may increase or buffer the impact of paternal anxiety (Azuine & Singh, 2019; Wade et al., 2022). The discussion also examines the unique challenges and outcomes of single-parent households (Trepiaak et al., 2023). The chapter also includes information from prior research that indicates what can help children when their fathers are struggling with anxiety, such as strong emotional bonds, warmth, and support from others (Flouri et al., 2019; Shenaar-Golan et al., 2021). It ends with exploring how growing up with anxious fathers may influence children's emotional development and long-term well-being.

This review highlights the growing need to understand the pathways through which paternal anxiety and emotional regulation challenges impact child anxiety while controlling for paternal age, an area that is still underrepresented in the literature. To better understand these underexplored pathways, the next section explains how the research articles were chosen through a detailed literature search.

Search Strategies and Parameters

To identify relevant research, a systematic search was conducted across multiple academic databases to support a comprehensive and focused analysis of the topic. These included PsycINFO, PubMed, ProQuest, Google Scholar, ScienceDirect, and EBSCOhost. Searches were limited to peer-reviewed journal articles published within the last five years. However, a few foundational and theoretical works were also included to provide historical context and conceptual grounding.

Search terms were developed to reflect the study's key variables and their interrelationships. These included combinations such as "paternal anxiety AND child anxiety," "father's emotional regulation AND parenting behaviors," "intergenerational transmission of anxiety," "fathers AND child outcomes," and "parent-child mental health." Boolean operators (AND, OR) were used to refine and broaden searches when appropriate. Studies were included to determine whether they focused on paternal mental health, parenting behaviors, emotional regulation, or children's psychological and emotional outcomes.

Exclusion criteria eliminated articles that focused exclusively on maternal anxiety, were not peer-reviewed, lacked direct relevance to the variables of interest, or were older. Articles that centered on unrelated mental health diagnoses without linking to parenting or child outcomes were also excluded. A detailed list of search terms, inclusion/exclusion criteria, and search parameters is included in the Appendix. This research strategy helped ensure that the literature reviewed was recent and relevant, focusing on how paternal anxiety and emotional regulation relate to child outcomes. To help explain how these emotional patterns work, the next section introduces the theoretical perspective informing this study.

Theoretical Framework

The following section includes the theoretical framework that helped explain how paternal anxiety may impact parenting and child outcomes. This study was guided by Bowen Family Systems Theory (BFST), developed by Dr. Murray Bowen. BFST views the family not just as a group of individuals but as an emotional system in which the functioning of one member influences the entire system (Bowen, 1978). Bowen believed that people's behaviors, especially under stress, are shaped by the relationships they are part of, especially within the family (Kerr & Bowen, 1988).

BFST is built on the idea that deep, long-lasting anxiety impacts how people connect with each other. This anxiety often gets passed down through families, shaping how people think, feel, and act. One of the key concepts in the theory is differentiation of self, which refers to a person's ability to separate their thoughts and feelings and maintain their own identity in emotionally intense situations (Bowen, 1978; Kerr & Bowen, 1988). When a parent, especially a father in the context of this study, has a low level of differentiation, he may become overwhelmed by anxiety and pass this anxiety on to his child, sometimes through over-involvement or emotional withdrawal (Brown, 1999; Murdock et al., 2022).

Another central idea is the family projection process, which is how parents may unconsciously pass their anxiety to their children. For example, a highly anxious father may become overprotective, which can lead the child to internalize these fears, creating emotional distress (Brown, 1999; Kerr & Bowen, 1988; Murdock et al., 2022). Research suggests that fathers with higher levels of anxiety may engage in less effective parenting behaviors, such as reduced warmth or increased control, which may relate to higher levels of anxiety in children (Trepiaik et al., 2023).

The multigenerational transmission process explains how patterns of anxiety and emotional functioning are handed down from one generation to the next. These patterns can repeat if they are unresolved, creating a legacy of emotional struggles. Fathers who are unaware of how their anxiety influences their parenting may unintentionally continue this cycle (Bowen, 1978; Kerr & Bowen, 1988). According to Trepia et al. (2023), paternal anxiety is significantly associated with child anxiety, and patterns of parental interaction, such as excessive control or detachment, have been shown to influence this relationship.

In this study, BFST provided a foundation for understanding how paternal anxiety impacts both the father's emotional regulation and how he perceives his child's anxiety. When a father has a hard time managing his emotions, it can change how he relates to his child; he can come across as distant, unpredictable, or controlling. This can make the child feel more anxious. Previous research suggests that paternal stress and anxiety can be associated with higher levels of emotional and behavioral difficulties in children (Trepia et al., 2023).

This framework is especially useful for exploring emotional regulation challenges. BFST does not just focus on the surface behaviors of parents but explains the deeper emotional patterns that cause these behaviors. Fathers with poor emotional regulation may project their distress onto their children, especially when overwhelmed by stressors, a dynamic supported by research from Murdock et al. (2022), who found that lower differentiation was linked to greater emotional reactivity and distress.

Anxious fathers might not always realize how their emotions impact their children. Trepia et al. (2023) found that a father's anxiety can lead to anxiety in children, both through his actions and how he parents. This supports Bowen's idea that emotions can be passed down in families without anyone fully realizing it (Bowen, 1978; Kerr & Bowen, 1988).

While BFST was originally developed in Western contexts, researchers have worked to apply it in more diverse settings. For example, Erdem and Safi (2018) explored how cultural beliefs influence the expression of differentiation. In collectivist cultures, emotional closeness and family harmony may be prioritized over individual independence, meaning that differentiation may differ across families. Similarly, Calatrava et al. (2022) found that systemic emotional processes like triangulation and projection exist across cultures but are expressed differently depending on social norms. Including culturally diverse perspectives ensures that applying BFST is sensitive to various family values and norms (Calatrava et al., 2022; Erdem & Safi, 2018).

Bowen Family Systems Theory offers a helpful framework for understanding this topic by explaining how anxiety spreads within families, how emotional patterns are passed down, and how one person's functioning influences the entire system (Bowen, 1978; Kerr & Bowen, 1988). The theory emphasizes the importance of self-awareness and emotional regulation, which are key factors in this study. It also supports the exploration of how fathers' anxiety and emotional difficulties can influence their parenting and shape their children's emotional well-being (Murdock et al., 2022; Trepiaik et al., 2023). This framework helps explain how anxiety in fathers may predict struggles with managing emotions and increased anxiety symptoms in children, key areas explored in this study using multiple regression models.

Even though BFST was the primary framework guiding this study, it is worth briefly considering Attachment theory, which is often used in research on parent and child relationships and emotional development (Cassidy & Shaver, 2016). While Attachment theory helps explain how early parent-child bonds shape children's emotions and behavior, it mostly focuses on child experiences. It investigates how feeling secure or insecure with a caregiver impacts how children

manage stress and develop emotionally (Waters et al., 2019). However, it includes less about how parents regulate their own emotions. BFST takes a wider view. It considers the whole family and how patterns of stress and emotional struggles get passed down over time. Because this study focuses on how fathers manage their own emotions and how that affects their children, BFST was a better fit for exploring these family dynamics (Kerr & Bowen, 1988).

Other researchers have applied BFST to explore how family patterns shape emotional outcomes. For example, Dolz-del-Castellar and Oliver (2021) found that when families have difficulty with emotional closeness and flexibility, young adults often report lower differentiation and higher anxiety. Their findings suggest that anxiety can develop through emotional processes within the family. In a similar way, Miller and Elder (2024) proposed a parenting model based on BFST, showing that parents who are more emotionally balanced and less reactive are better able to support their children's emotional needs. These studies support the use of BFST in the current study, which focuses on how fathers manage their emotions and how that emotional functioning may influence anxiety in their children.

This study used BFST to understand how paternal anxiety and struggle with emotional regulation impacted his child's anxiety, highlighting how emotional patterns are passed down within the family. Building on this theoretical view, the following section examines existing literature on how parental anxiety, particularly paternal anxiety, impacts children's emotional and behavioral adjustment.

Parental Anxiety and Child Development

Parental mental health significantly affects child outcomes, with maternal and paternal stress influencing children's emotional responses and behavioral outcomes (Trepiaik et al., 2023). Anxiety and depression experienced by mothers during the postpartum period and early childhood have been associated with greater anxiety and depression in children aged 11–12 (Walker et al., 2020). In particular, maternal anxiety has been linked to increased anxiety, depression, emotional instability, behavioral problems such as aggression and defiance, and emotional dysregulation in children. Moreover, when mothers experience mental health difficulties and bonding during infancy is weak, children are more likely to show problems such as difficulty regulating emotions, less secure attachment, and delays in development (McNamara et al., 2019; Rees et al., 2018).

Even though much of the literature has centered on mothers' mental health, research is starting to recognize how important fathers' mental well-being is, too (Trepiaik et al., 2023). Children of fathers who reported high levels of conflict and stress displayed a higher level of anxiety and emotional distress. Paternal stress and poor father–child relationships have also been associated with behavioral and emotional problems in children, including increased anxiety and adjustment difficulties (Trepiaik et al., 2023; Sahithya & Raman, 2021). At the same time, strong father-child relationships can help protect children from the effects of a dad's stress, making it easier for them to cope emotionally and behave well (Trumello et al., 2021). In contrast, when parents feel anxious, whether they are mothers or fathers, children often show more anxiety and behavior problems. This can keep a cycle of stress and mental health struggles going within the family. On the other hand, children tend to do better when they grow up in supportive family

environments. When parents are emotionally available, warm, and responsive, children are more likely to have better psychological outcomes (Stock et al., 2019).

While a lot of the existing research emphasizes maternal influence, this body of literature highlights the need to investigate the unique contribution of fathers further. In particular, the unique role of paternal anxiety in shaping child anxiety outcomes through pathways of emotional regulation remains an underexplored but important area of study (Slaughter & Nagoshi, 2020).

Although anxiety is often linked to stronger emotional reactions in children, some studies suggest that fathers' anxiety may be more closely related to behavior regulation, especially in boys. This highlights the importance of examining paternal and maternal pathways separately when studying child outcomes (Baartmans et al., 2024; Rasing et al., 2019).

While mothers influence their children through emotional closeness and caregiving (Ren et al., 2023; Stock et al., 2019; Wang et al., 2021b), fathers may impact children in different ways, such as through controlling parenting behaviors or reduced warmth (Fjermestad et al., 2020; Trepiaak et al., 2023). These differences show why examining fathers' experiences separately was important instead of assuming that what we know about mothers will automatically apply to them.

Studies underscore the cumulative impact of parental anxiety on child anxiety, highlighting that children of highly anxious parents had the highest level of anxiety, indicating cumulative risk effects (Walker et al., 2020). Inconsistent co-parenting further heightens this negative impact on child anxiety (Zhou & Li, 2022). Moreover, collective exposure to maternal anxiety and depression from postpartum to early childhood has been found to considerably contribute to both child and paternal emotional and psychological difficulties, highlighting the interconnected nature of family emotional well-being (Walker et al., 2020). However, the

mother's anxiety appears to be more linked to the child's anxiety, potentially due to the mother's higher level of caregiving responsibilities or the child's increased exposure to maternal anxious behavior (Ahmadzadeh et al., 2019). This may be due to mothers' greater time spent in direct caregiving or differences in how mothers and fathers express anxiety, which may affect children differently depending on age and gender (Baartmans et al., 2024; Walker et al., 2020). These findings further show the importance of understanding anxiety transmission, not just through individual symptoms but through relational and cumulative ways within the family unit. This systemic perspective underlines the need to explore paternal anxiety as a rooted family process (Kadoglou et al., 2023).

Research finds a direct link between parental anxiety and child anxiety across various ages and contexts. For example, a study by De Vente et al. (2022) demonstrated a strong direct effect of parental social anxiety on the development of social anxiety in children. The transmission was especially high in younger children, as Kadoglou et al. (2023) discovered that preschoolers are particularly impacted by parental anxiety. Additionally, Rasing et al. (2019) identified that both maternal and paternal anxiety were strong predictors of higher occurrence of anxiety and depression in female adolescents. Research by Fjermestad et al. (2020) shows a clear link between internalizing difficulties experienced by mothers and fathers and child anxiety. Along similar lines, Trepiaak et al. (2023) found a direct connection between paternal anxiety and depression and higher levels of child anxiety, with a moderate effect size of 0.42. However, only a small number of studies have examined whether fathers' anxiety predicts problems with emotional regulation or increases in children's anxiety symptoms across development (Kadoglou et al., 2023; Trepiaak et al., 2023). In addition, many of these studies rely on parent self-report,

which may not fully capture fathers' emotional involvement and may introduce reporting bias (Trepiaik et al., 2023).

Altogether, the findings contribute to the growing body of literature highlighting that paternal mental health, especially when it comes to anxiety and depression, plays an important role in predicting child emotional outcomes (Fjermestad et al., 2020; Rasing et al., 2019). This evidence supports the need for research that focuses explicitly on paternal contribution to anxiety development in children. The literature presents mixed findings regarding the strength of paternal influence. Some suggest that maternal anxiety remains the dominant predictor of child anxiety even in dual-caregiver homes, potentially due to caregiving imbalance (Ahmadzadeh et al., 2019).

Parental anxiety directly influences child outcomes in context-specific ways, often through distinct pathways such as behavioral modeling and withdrawal (Uziel et al., 2023). For example, when exploring dental anxiety, children whose parents experienced dental anxiety were more likely to have dental anxiety themselves (Uziel et al., 2023). Notably, fathers' dental anxiety had a stronger impact on adolescent dental anxiety than mothers. They suggest that this might be due to fathers being the behavioral model in family dynamics. In an interesting study conducted by Bellon et al. (2022), parental mathematical anxiety (PMA) was linked to children's mathematical performance through parental behavior. Those parents were less likely to engage in math-related activities, which contributed to lower performance and confidence in their children.

Extending this idea, Stearns and McKinney (2020) found that parental anxiety and depressive symptoms were positively associated with oppositional defiant problems in emerging adults, thus highlighting how internalizing symptoms in parents can be linked to externalizing behavior in children. However, these specific findings are rarely examined through the lens of

paternal anxiety, leaving gaps in understanding how father-child interaction may shape development in a targeted context (Bellon et al., 2022). These examples reflect how parental anxiety can influence different areas of development in children through observable behavior and broader emotional dynamics, stressing the need to consider how anxiety operates in family interactions (De Vente et al., 2022; Stearns & McKinney, 2020).

High parental stress and insecure attachments contribute to inconsistent and maladaptive parenting behaviors, thus reinforcing cycles of emotional distress within families (Shenaar-Golan et al., 2021; Zvara et al., 2020). In high-chaos families where parents struggled with insecure attachment, parents had the highest disturbance in parenting behaviors, marked by reduced emotional availability, inconsistent discipline, and increased conflict (Zvara et al., 2020).

Notably, high dependency on mothers further increased emotional distress, especially in children with high insecure attachment (Zvara et al., 2020). Maternal anxiety is often connected to higher levels of anxiety in children, likely because mothers are usually more involved in daily caregiving and emotional support. Fathers, on the other hand, tend to influence the families as a whole, which can also have an impact on a child's anxiety (Baartmans et al., 2024). Additionally, families where both parents suffer from high levels of anxiety and depression have been found to have a higher occurrence of psychological and physical abuse. These patterns, in turn, are associated with increased oppositional behavior in children (Stearns & McKinney, 2020).

Taken together, these studies highlight how stress, attachment insecurity, and instability in family relationships can lead to unhealthy parenting patterns (Shenaar-Golan et al., 2021; Zvara et al., 2020). Still, we know much less about how fathers' stress shows up in their parenting and impacts their children. This indicates the need for more research on fathers' family emotional dynamics (Baartmans et al., 2024; Bellon et al., 2022). Also, much of the existing

literature has focused on Western, two-parent households, which may limit generalizability to more diverse family systems or non-Western dynamics. Building on the understanding of how family stress impacts parenting behaviors, it is vital to explore further how attachment patterns and parenting styles contribute to children's emotional development (Breinholst et al., 2019; Ren et al., 2023).

Attachment and Parenting Behaviors

Following the discussion of parental anxiety and child development, this section focuses on how paternal attachment and parenting behaviors shape fathers' emotional engagement and their children's emotional well-being.

Early Relational Patterns and Emotional Influence

Parental anxiety has an amplifying impact on children's vulnerabilities starting early in life (Aktürk et al., 2024). For example, in a study of both mothers and fathers, parental anxiety has been negatively correlated with the bonding experience during the neonatal period, possibly impacting the early attachment (Aktürk et al., 2024). Fathers who were more sensitive to anxiety tended to increase their children's anxiety through verbal and nonverbal cues, particularly when the attachment relationship between father and child was insecure (Bilodeau-Houle et al., 2020).

The parent-child relationship is also influenced by children's emotional and behavioral problems. Children who experience higher levels of emotional distress are more likely to develop a dependency on their mothers, whereas fathers tend to respond to behavioral problems in children through increased control, which can negatively impact secure attachment (Iwanski et al., 2022). In families where parents experience mental health struggles, studies suggest that mothers are more likely to engage in emotional neglect and psychological abuse, while fathers are more likely to engage in physical abuse or harsh discipline (Ben David, 2021).

Together, these findings suggest early emotional signals coming from parents or children interact with parental anxiety in ways that could impact attachment and emotional development (Bilodeau-Houle et al., 2020; Iwanski et al., 2022). Still, much of this research relies on maternal reports or combines data across both parents, making it difficult to determine the unique effects of paternal anxiety (Baartmans et al., 2024). However, there remains a limited understanding of how paternal anxiety, especially when it comes to emotional regulation difficulties, could disrupt early child attachment and contribute to child anxiety (Shenaar-Golan et al., 2021). While the findings are helpful, most of the research still centers on mothers or combined data across parents, making it difficult to isolate the father's unique impact.

Parenting Behaviors and Transmission of Anxiety

Negative parenting behaviors have been shown to be associated with both insecure attachment and higher levels of anxiety in their children (Breinholst et al., 2019). Insecure attachment in fathers has been associated with controlling or emotionally distant behaviors, both of which have been linked to increased anxiety in children (Breinholst et al., 2019). Conversely, when children's anxiety symptoms improve, parents are less likely to have rejecting or controlling parenting behaviors, thus contributing to reduced maladaptive parenting patterns (Van Der Giessen et al., 2019). Relatedly, Lavallee et al. (2019) found that parental anxiety and depression also decreased following successful treatment of child anxiety, suggesting a link between the two (Lavallee et al., 2019). These findings point to a dynamic interaction between the child and parents' mental health, with parenting behavior being a possible contributing factor to transmission (Shenaar-Golan et al., 2021). This pathway is not well understood, especially when it comes to how a father's anxiety and struggle with emotional regulation may influence his parenting and impact the child's anxiety (Shenaar-Golan et al., 2021).

Overprotection and the Transmission of Anxiety

Among parenting behaviors linked to the transmission of anxiety, overprotective parenting appears to play an important role in children's emotional regulation (De Vente et al., 2022; Fjermestad et al., 2020). Parenting behaviors strongly influence how anxiety develops and is passed from parents to children (De Vente et al., 2022; Rasing et al., 2019). Anxious parents, for example, may become overly protective and limit their child's social experiences, which can make it harder for children to develop coping skills (De Vente et al., 2022). Parents with higher levels of anxiety and depression are also more likely to show overprotective behaviors, which may reflect their own emotional difficulties and are associated with higher levels of adolescent anxiety. Additionally, excessive parental control is associated with high anxiety in adolescents, especially if both parents suffer from a mental ailment (Rasing et al., 2019).

De Vente et al. (2022) followed 174 Dutch parent-child pairs over three years and used questionnaires to track anxiety and parenting behaviors and found that parental anxiety and parenting behaviors. They found that when parents were more anxious, they were also more overprotective, making their children feel anxious. Rasing et al. (2019) collected data from 139 adolescent girls and their parents over 18 months using self-report surveys. One limitation of the Rasing et al. (2019) study was that most parents showed low levels of anxiety and depression, which may have limited how strongly the effects appeared. Still, the study supports the idea that when parents are anxious or overcontrolling, their children are more likely to experience anxiety themselves.

Similarly, Zhou and Li (2022) found that parents with high levels of worry are more likely to display overprotective behaviors, such as shielding the child from perceived risks and limiting autonomy. Anxious parents were more likely to reinforce the child's fear responses

through verbal and nonverbal cues, encourage avoidant behaviors in anxiety-provoking situations, and thus limit the child's chances of building coping skills and resilience.

Overprotection has been shown to increase children's sense of vulnerability, especially if parents display high levels of worry (Zhou & Li, 2022). Notably, fathers with internalizing symptoms were found to exhibit overprotective behaviors, which, in turn, mediated the relationship between their anxiety and their child's anxiety. When Paternal anxiety is accompanied by depression, parenting becomes more inconsistent and thus further increases the child's anxiety (Fjermestad et al., 2020). Overprotective or controlling parenting has also been identified as a mediator in the relationship between maternal anxiety and child emotional problems (Rees et al., 2018). These patterns show that when parents are overprotective, it can add to a child's anxiety (De Vente et al., 2022; Zhou & Li, 2022). However, we still do not know how this works for fathers, especially those with difficulty managing their emotions. More research is needed to understand how anxious fathers can protect their children without increasing their anxiety (Fjermestad et al., 2020; Shenaar-Golan et al., 2021).

Parenting Styles

Parents tend to use different styles when raising their children, and these parenting styles can shape how children feel and behave. The most common styles include authoritarian (strict and controlling), permissive (lenient and inconsistent), and authoritative (firm but warm and supportive). Each of these styles affects children in different ways, especially when parents are struggling with anxiety (Sahithya & Raman, 2021).

Authoritarian parenting, characterized by high control and low warmth, is often linked to parental anxiety or depression and can increase emotional distress in children (Kadoglou et al., 2023; Sahithya & Raman, 2021). High parental anxiety, when combined with child anxiety, is

often linked to an authoritarian parenting style. At the same time, authoritative parenting was found to be a protective factor in reducing the impact of parental anxiety on child anxiety (Kadoglou et al., 2023). Several studies support this. For instance, Maric and Bögels (2019) and Sahithya and Raman (2021) found that authoritarian parenting is associated with higher anxiety in children, most likely due to increased control and lower emotional warmth. High emotional reactivity increased the effects of authoritarian parenting. Parents with high levels of neuroticism are more likely to have this type of parenting style. In turn, this parenting approach has been linked to higher levels of anxiety and depression in children, most likely due to heightened emotional stress and reduced autonomy (M.Wang et al., 2021b).

Even though authoritarian parenting resulted in lower emotional adjustment and greater externalizing behavior, it also moderated academic performance, most likely due to strict discipline (Ren et al., 2023). While these findings point to some academic advantages, they also highlight emotional costs such as increased anxiety and psychological distress (Sultan & Javed, 2020; M. Wang et al., 2021b). Parents raising children with high-risk birth conditions were also more likely to demonstrate authoritarian or permissive parenting styles, possibly due to increased stress and concern for the child's well-being, which resulted in stricter control and less emotional responsiveness (Rangarajan et al., 2020). This parenting style has been strongly linked to suicidal ideation (Sultan & Javed, 2020) and higher dental anxiety (Uziel et al., 2023). Adolescents raised in authoritarian families will experience high control, low warmth, and tough disciplinary practices, which increase their worthlessness and emotional distress (Sultan & Javed, 2020). Compared to authoritarian parenting, which is often linked to emotional distress despite high academic performance (Ren et al., 2023), permissive parenting tends to lead to emotional

insecurity and poor regulation due to inconsistent boundaries and lack of structure (Sahithya & Raman, 2021; Wang et al., 2021a).

These patterns indicate that parenting styles that are shaped by anxiety, especially those involving emotional distance and high control, are strongly associated with increased emotional distress in children. Current research does not yet fully explain how paternal anxiety contributes to this dynamic, especially when emotional regulation is already a challenge (Aktürk et al., 2024; Azuine & Singh, 2019). Although the research links parenting styles to anxiety, there is still a limited understanding of how fathers specifically influence this process through their own emotional functioning.

Permissive parenting, which is characterized by inconsistent boundaries and a lack of discipline, has been linked to emotional insecurity and moderate levels of anxiety and depression in children (M. Wang et al., 2021a). The leniency and inconsistency inherent in this parenting style often contribute to emotional and behavioral difficulties. In particular, low structure and unclear expectations may contribute to children feeling less secure (Sahithya & Raman, 2021).

Permissive parenting can sometimes develop as an overcompensation for perceived vulnerabilities in children (Rangarajan et al., 2020). For example, parents in this category may exhibit lower expectations and inconsistent discipline, which can result in poor behavioral and academic performance. While adolescents raised in permissive households report mixed outcomes, with fewer internalizing symptoms, they may face challenges with emotion regulation (Ren et al., 2023). Ren et al. (2023) analyzed 930 families in China and found four parenting styles. Teens with neglectful or rejecting parents had more anxiety and depression than those with warm and involved parents. Since the study relied on self-reports and only looked at one point in time, it does not fully capture the ongoing family dynamics or how these emotional

patterns may influence one another. Still, the findings match other research showing that low parental warmth and poor parent–child relationships can contribute to emotional difficulties in adolescents (Shenaar-Golan et al., 2021). Additionally, the study did not distinguish between maternal and paternal influences, which limits our understanding of fathers' specific roles in shaping child outcomes (Ren et al., 2023).

Permissive parenting is also associated with specific behavioral patterns in children. For instance, it is more common among children diagnosed with ADHD, where low parental demands and high tolerance for disruptive behaviors can lead to hyperactivity and externalizing behaviors (Maric & Bögels, 2019). In addition, permissive parenting is associated with slightly increased anxiety in children of highly anxious parents (Kadoglou et al., 2023). Interestingly, permissive parenting has also been connected to moderate levels of dental anxiety in children, reflecting the broader impact of inconsistent parenting and emotional guidance on specific stress responses (Uziel et al., 2023).

While permissive parenting may seem less harmful than authoritarian parenting, it still has long-term emotional consequences, especially in families where one or both parents experience anxiety. More research is needed to explore how anxiety and poor emotional regulation in fathers may increase the likelihood of permissive parenting patterns, and how these behaviors might influence child anxiety.

A harsh and controlling parenting style has been associated with heightened child anxiety, particularly in socially judgmental contexts. Parents with high levels of anxiety and depression are more likely to engage in neglect, emotional abuse, or inconsistent discipline (Gao et al., 2022; M. Wang et al., 2021b). The severity of mental health problems has been shown to correlate with the frequency and intensity of maltreatment behaviors (Ben David, 2021). This

type of parenting often leads to oppositional problems in children. Psychological abuse, in particular, has been linked to higher rates of oppositional defiant disorder (ODD) in emerging adults (Stearns & McKinney, 2020).

While physical abuse was also associated with these outcomes, its effects were not as strong when compared to the effects of emotional abuse (Stearns & McKinney, 2020). Harsh parenting has also been linked to social anxiety. Both maternal and paternal harsh parenting have been associated with higher levels of adolescent social anxiety, but paternal harshness has been found to be slightly stronger (Wang et al., 2021b). Fathers experiencing high stress engaged in less sensitive or more inconsistent parenting, further impacting child anxiety (Challacombe et al., 2023).

Harsh parenting was associated with social anxiety in part through attachment insecurity, highlighting the importance of a healthy parent–child attachment (Wang et al., 2021b). In addition, the father's psychological control had a stronger link to adolescent social anxiety than the mother's control. Adolescents who were exposed to controlling parenting had higher anxiety associated with social judgment and displayed avoidance behavior. The cumulative impact of having two controlling parents resulted in adolescents demonstrating elevated social anxiety, emphasizing the strong negative impact of control-based parenting (Gao et al., 2022). The evidence so far shows how harsh parenting, especially when accompanied by anxiety and stress, can harm children's emotional and social development. More research is needed to understand how paternal stress and emotional regulation affect the patterns (Challacombe et al., 2023; Gao et al., 2022; Wang et al., 2021b).

While harsh and controlling parenting strategies are associated with increased emotional difficulties, positive parenting practices offer a critical buffer that can mitigate these risks (Flouri

et al., 2019; Shenaar-Golan et al., 2021). Authoritative parenting, characterized by warmth, responsiveness, and consistency, is associated with lower anxiety in children. High-quality parenting, such as emotional availability and support as well as consistency, lessened the negative effects of paternal distress on child outcomes (Flouri et al., 2019).

Fathers who perceived themselves as emotionally involved and effective in parenting had children with lower anxiety levels, even in the presence of external stressors. This suggests that engaged fathering serves as a protective factor, buffering the effects of insecure attachment on emotional regulation and anxiety (Shenaar-Golan et al., 2021). Paternal involvement has also been shown to be particularly important for boys, as it lowers their internalizing symptoms (Temmen & Crockett, 2021). Lower child anxiety is also associated with enhanced parent-child interaction. When emotional warmth and responsiveness increase and conflict and overprotectiveness decrease, parents reported feeling more confident in managing their children's anxiety. As children's symptoms improve, parents also report decreased symptoms of anxiety and depression themselves (Lavalley et al., 2019). This highlights the reciprocal dynamic between parental and child well-being.

Fathers who receive social support from their partners can also better manage their health challenges and maintain positive parenting behaviors (Azuine & Singh, 2019). Social support played a significant role in lowering anxiety for both parents. Support from family tends to help mothers the most, while fathers respond better to the support from friends and colleagues (Aktürk et al., 2024). As a whole, these findings show that when fathers feel supported and emotionally connected, they are better at engaging in positive parenting, even during times of stress (Aktürk et al., 2024; Azuine & Singh, 2019). More research is needed to explore how

emotional support and stability in relationships help fathers with anxiety regulate their emotions and support their children's mental health.

Paternal Emotional Functioning and Parenting Behavior

Parenting behavior, including emotional availability, consistency, and engagement, significantly shapes a child's emotional and behavioral outcomes (Baartmans et al., 2024; Flouri et al., 2019; Rees et al., 2018). Fathers with higher levels of anxiety were more likely to use an authoritarian or inconsistent parenting style, both of which are linked to increased anxiety symptoms in children. In addition, when fathers struggle with emotional regulation, they are more likely to engage in an overprotective parenting style, which also contributes to increased child anxiety (Kadoglou et al., 2023). Furthermore, fathers' anxious parenting behavior, especially overprotection and fear reinforcement, has a strong independent impact on child anxiety (Baartmans et al., 2024), separate from the mother's influence (Zhou & Li, 2022).

Fathers experiencing anxiety and depression are also more likely to engage in psychological aggression, reflecting traditional societal expectations that fathers manage stress and provide discipline (M. Wang et al., 2021a). Interestingly, paternal worry is closely related to child separation anxiety, suggesting a possible paternal protective role in creating independence (Zhou & Li, 2022). Additionally, paternal anxiety has been more strongly linked to adolescent anxiety than maternal anxiety, most likely due to the modeling of relational dynamics that are specific to father-daughter interaction (Rasing et al., 2019).

When fathers experience anxiety, it can interfere with caregiving. For example, paternal anxiety has been linked to inconsistent feeding practices, reduced infant weight gain, and affected overall child outcomes (Nawa et al., 2021). On the other hand, fathers who use positive coping strategies, such as problem-solving and seeking emotional support, tend to report lower

anxiety levels and better parenting behaviors (Aktürk et al., 2024). When child anxiety improves, it encourages greater paternal involvement, highlighting the bidirectional nature of parenting and child outcomes (Lavallee et al., 2019).

These results point to how anxious parenting, especially if emotional regulation is a challenge, can shape fathers' behavior in ways that impact their children's emotional stability. Understanding this pattern is important in identifying how paternal anxiety is associated with child anxiety and emotional regulation in everyday interactions (Baartmans et al., 2024; Kadoglou et al., 2023; Shenaar-Golan et al., 2021). These findings directly support the focus of the present study, which sought to explore how fathers' emotional regulation challenges may influence the development of anxiety in their children (Baartmans et al., 2024; Kadoglou et al., 2023; Shenaar-Golan et al., 2021)

Parenting styles, secure attachment, and emotional regulation are closely linked to child outcomes. Adolescents who receive strong support from their parents and experience authoritative parenting present the best overall adjustment (Ren et al., 2023). They are more likely to have strong emotional well-being, low occurrence of behavioral problems, and high academic achievement. (Ren et al., 2023). In contrast, adolescents raised by authoritarian parents who include moderate to high parental involvement present with high academic performance but struggle with emotional regulation and behavioral issues. Those who experience neglect, with low parental involvement and permissive and inconsistent parenting, tend to have more emotional and behavioral difficulties (Ren et al., 2023). Secure attachment to fathers has been identified as a protective factor against externalizing behaviors, most likely due to the paternal role of fostering autonomy and self-regulation (Deneault et al., 2021).

In contrast, when children struggle to regulate their emotions and lack a secure bond with their fathers, they are more likely to show anxiety symptoms (Shenaar-Golan et al., 2021). Although externalizing behaviors generally decrease from early childhood to adolescence, research suggests that these behaviors remain relatively stable over time (Flouri et al., 2019). Because of these ongoing emotional and behavioral challenges, early interventions are especially important. One effective approach is Cognitive Behavioral Therapy (CBT), which is an evidence-based approach that helps people and families understand and change unhelpful thoughts and behaviors by investigating how these patterns show up in their relationships and emotional dynamics (Lavallee et al., 2019; Van Der Giessen et al., 2019). Interventions like CBT have been shown to reduce anxiety symptoms. Studies report that about 75%-80% show a meaningful reduction in anxiety symptoms following CBT treatment, along with improved emotional regulation and better parent-child relationships (Lavallee et al., 2019; Van Der Giessen et al., 2019).

Together, these findings suggest that emotional regulation plays an important role in reducing child anxiety, especially when supported by parenting approaches and treatments such as CBT (Lavallee et al., 2019; Van Der Giessen et al., 2019). However, more research is needed to better understand how fathers' anxiety affects this process and how fathers' emotional regulation influences outcomes for their children. The next section focuses more closely on fathers' attachment styles and emotional roles in parenting and child mental health. The following section focuses more specifically on how fathers' attachment styles and emotional roles influence parenting patterns and children's mental health.

Father-Child Attachment and Role Differentiation

Secure attachment is linked to authoritative parenting, while insecure attachment, such as anxious or avoidant attachment, is associated with less helpful behaviors like overprotection or withdrawal. Fathers with secure attachment reported higher levels of enjoyment in parenting, which is associated with higher emotional sensitivity, even when dealing with difficult child behavior (Breinholst et al., 2019; Iwanski et al., 2022). Securely attached fathers are also more emotionally available and show lower levels of negative parenting behaviors (Breinholst et al., 2019).

Secure relationships with both parents have been linked to fewer emotional and behavioral problems in children. It reduces symptoms of anxiety and sadness by fostering emotional regulation and a sense of safety. Secure attachment also appears to reduce aggressive and hyperactive behaviors by encouraging impulse control and positive parent-child interaction (Iwanski et al., 2022).

In contrast, avoidant attachment produced parents with an authoritarian parenting style, which is characterized by emotional unavailability and a preference for control over protection. In chaotic homes, certain attachment styles can make parenting even more rigid or controlling. Anxious attachment, for example, is often linked to permissive parenting, where emotions run high, and rules are not as consistent when the home environment is disorganized, making it even harder for parents to be consistent or predictable (Zvara et al., 2020).

Zvara et al. (2020) studied 742 low-income, rural families using a mix of parent surveys and observed parent-child interaction. Still, these findings align with other research showing that attachment insecurity and stressful home environments make it harder for parents to stay calm and consistent (Temmen & Crockett, 2021; Trepiaak et al., 2023). One limitation of this study is

that the sample focused on rural, low-income families, which may not reflect the parenting dynamics found in more diverse or urban populations (Zvara et al., 2020).

Fathers with dismissive or preoccupied attachment styles reported less enjoyment in parenting, thereby reducing their ability to respond adequately to their children's needs (Aytuglu & Brown, 2022). Fathers with dismissive or preoccupied tendencies tend to report less enjoyment in parenting. Anxious attachment is often associated with overprotectiveness, increased control, and excessive involvement in child-related decisions, while avoidant attachment is linked to emotional distance and withdrawal, low responsiveness, and detachment from parenting responsibilities (Breinholst et al., 2019). Fathers with higher attachment anxiety often felt jealous of their partner's closeness with the baby, expressing fears of being left out or abandoned. Those with avoidant attachment usually found it more challenging to connect emotionally and were less involved in caregiving, as reported by Olsavsky et al. (2020). Even though more studies now include fathers, much research on attachment still focuses mostly on mothers. This makes it difficult to isolate the father's unique influence on emotional outcomes (Baartmans et al., 2024).

The transition to parenthood tends to heighten existing attachment insecurities, increasing feelings of jealousy or disengagement (Olsavsky et al., 2020). When viewed together, these studies indicate that father attachment often shapes how he relates to his child and how he copes with stress. Understanding these patterns is important for exploring how paternal anxiety and emotional regulation impact parenting behavior and contribute to child anxiety (Breinholst et al., 2019; Olsavsky et al., 2020).

Having a strong bond with both parents made a difference in children's emotional well-being. However, the way that bond looked often depended on the roles each parent played and

the child's gender. In many families, fathers tended to shape things like independence, behavior, and problem-solving, while mothers were more involved in providing emotional care and support (Iwanski et al., 2022; Ren et al., 2023; Sultan & Javed, 2020). Children who felt emotionally close to their mothers often showed fewer signs of anxiety, while those with a secure connection to their fathers were more likely to avoid behavior problems and take healthy risks. One study found that when fathers stayed involved, girls showed fewer behavior problems and boys got into less trouble (Slaughter & Nagoshi, 2020). When fathers showed warmth and provided structure, their children were more likely to do well in school and have fewer behavioral problems. But even with these positives, when fathers struggled with anxiety and depression, it still had an impact on their children's emotional well-being (Trepik et al., 2023).

The way parents responded to their children also shaped how children formed emotional bonds and learned to manage their feelings. Harsh or controlling behavior from fathers often caused kids to pull away or act out, especially when the relationship lacked warmth (Breinholst et al., 2019; Iwanski et al., 2022; M. Wang et al., 2021b). On the other hand, children with warm, emotionally available fathers felt more confident in social situations. When mothers were harsh or critical, it was more often linked to anxiety, sadness, or fear (Wang et al., 2021b). Researchers also found that authoritarian parenting from fathers was linked to a greater risk of suicidal thoughts in teens, while authoritative parenting from mothers helped protect against it (Sultan & Javed, 2020; Waraan et al., 2021). Permissive parenting had a moderate effect, often because emotional distance left teens feeling unsupported (Sultan & Javed, 2020). Boys seemed especially affected when fathers were emotionally distant or avoided closeness, while girls were more sensitive to anxious or inconsistent parenting from mothers (Waraan et al., 2021). The kind of attachment children had with each parent also seemed to shape their emotional and behavioral

struggles, including suicidal thoughts. This makes it important to understand how well fathers manage their own emotions, since that can impact how their children learn to cope (Sultan & Javed, 2020; Waraan et al., 2021).

Taken together, these findings show how each parent can shape a child's development in different ways, and why a father's emotional well-being matters so much to the whole family. When fathers were emotionally stable and involved, they helped reduce the effects of maternal stress and supported healthier family functioning (Rees et al., 2018; Stock et al., 2019). In many families, mothers tended to be more emotionally involved and focused on daily caregiving, while fathers were more involved in planning or financial responsibilities. How well these roles worked together played an important role in how families managed stress (Sultan & Javed, 2020; Waraan et al., 2021). Fathers who felt supported and were able to manage their own emotions often served as a calming and steady presence for their children. That directly ties into the purpose of this study, which was to explore how a father's anxiety and emotional regulation may have affected their child's anxiety and the emotional health of the family (Rees et al., 2018; Trepiaak et al., 2023).

Paternal Mental Health and Parenting Behavior

Expanding on the previous discussion of paternal attachment and parenting behaviors, this section explores how paternal mental health, especially anxiety and emotional regulation, influences their parenting behaviors and children's emotional well-being.

The Evolving Role of Fatherhood

The involvement of fathers contributes to children's emotional, social, and cognitive development, underscoring the importance of child-rearing and anxiety regulation. Over time, fatherhood has changed from traditional roles to more engaged, nurturing, and co-parenting roles

(Volling & Palkovitz, 2021). Recent research shows that a father's emotional presence and caregiving matter greatly in a child's emotional development. Fathers help support children in emotional regulation, thinking skills, friendships, and problem-solving abilities. When fathers are involved in educational activities, they promote language development and academic achievement (Volling & Palkovitz, 2021). The findings indicate that emotionally engaged fathering supports multiple areas of development. Moreover, a father's ability to regulate his own emotions may be central to helping children flourish emotionally and academically (Volling & Palkovitz, 2021).

Paternal Mental Health and Emotional Outcomes in Children

Parental mental health influences both parenting behaviors and child outcomes, shaping children's emotional and behavioral development. Paternal mental health and stability play a very important role during the perinatal period, with high levels of stress during this time being linked to emotional difficulties in children as early as two years old (Challacombe et al., 2023; Chhabra et al., 2020; Dcruz, 2023).

Both prenatal and postnatal stress in fathers is associated with children's emotional problems. Prenatal stress has been found to have a slightly stronger association with the child's emotional outcomes, thus stressing the importance of supporting paternal mental health during pregnancy (Challacombe et al., 2023). Fathers experienced strong mental health challenges during the prenatal period, with depression being prevalent in about 8-10% and anxiety being even more widespread, impacting about 10-15% of fathers (Chhabra et al., 2020; Dcruz, 2023). The symptoms are often tied to the transition into fatherhood, financial stress and societal expectations, and poor relationship quality, while postnatal depression is worsened by sleep deprivation, role strain, and marital tension (Dcruz, 2023).

Paternal anxiety has been associated with child anxiety, often coming in the form of an overprotective or inconsistent parenting style that worsens child anxiety. Father's anxiety also contributes to heightened family tension and conflict, which serves as a mediator between paternal and child anxiety (Baartmans et al., 2024). Interestingly, maternal mental health issues can contribute to increased paternal anxiety and depression, with child mental health often acting as the mediator. For example, fathers with children exhibiting high levels of anxiety or anger reported higher psychological distress. Fathers with one child experienced more stress related to anger, and those in multi-child homes reported emotional exhaustion (Wang et al., 2023).

Fathers' poor mental and physical health has been linked to unfavorable physical and mental health issues in children. These children are more likely to have emotional and behavioral problems as well as chronic physical conditions. Moreover, fathers with high levels of mental health issues are less emotionally available, which has been associated with child mental health problems, especially anxiety and depression (Azouine & Singh, 2019; M. Wang et al., 2021a). While maternal mental health often affects emotional closeness and caregiving, paternal mental health may influence parenting behaviors and children's emotional outcomes in different ways (Rees et al., 2018; Shenaar-Golan et al., 2021). There is still limited research that examines specifically how fathers' mental health affects their children's emotional development, especially in relation to anxiety and emotional regulation (Baartmans et al., 2024).

Additionally, fathers with Adverse Childhood Experiences (ACE) are more likely to engage in negative parenting behaviors, including low emotional availability and harsh or inconsistent parenting, especially when mental health problems such as depression and anxiety remain unresolved (Seteanu & Giosan, 2021). Fathers with higher symptoms of depression and anxiety reported greater difficulty in bonding with their infants, as mental health issues interfered

with emotional availability and engagement, creating a barrier to healthy bonding (Bieleninik et al., 2021). When fathers are emotionally unavailable, it can make it harder for children to handle social and emotional situations, affecting their relationships and ability to manage emotions. Fathers with physical health issues may struggle to take part in physical activities, which can impact their children's physical and emotional development (Azuine & Singh, 2019). Altogether, these findings stress the important role of paternal mental health on both parenting and child outcomes, thus highlighting the importance of understanding how paternal anxiety and emotional regulation can contribute to the development of anxiety in children (Baartmans et al., 2024; Shenaar-Golan et al., 2021).

Paternal Attachment and Emotional Regulation in Parenting

Fathers contribute uniquely to child development, shaping their children's emotional and behavioral outcomes through mental health, attachment style, and parenting behaviors. Fathers with secure attachment display considerably more sensitivity and responsiveness in their interaction with their children compared to fathers with dismissive or preoccupied attachment (Aytuglu & Brown, 2022; Deneault et al., 2021; Shenaar-Golan et al., 2021). Dismissive fathers tend to present with lower levels of warmth and responsiveness, while preoccupied fathers often display inconsistent sensitivity, making it more difficult for children to develop healthy emotional regulation (Aytuglu & Brown, 2022). The quality of father-child attachment is directly connected to child behavioral outcomes, with secure attachment associated with fewer behavioral problems and insecure or disorganized attachment associated with higher emotional and behavioral problems (Deneault et al., 2021).

Fathers who exhibit higher emotional stress and poor parental efficacy are more likely to develop insecure attachments, exacerbating child anxiety (Shenaar-Golan et al., 2021). In

addition, secure attachment to fathers has a protective role in reducing fear transmission. Children who feel emotionally secure with their fathers are less likely to internalize their fathers' fears, which helps reduce anxiety and reinforces attachment as a protective factor (Bilodeau-Houle et al., 2020). Conversely, insecure attachment (avoidant or anxious) is associated with higher levels of adolescent anxiety, weakened relational bonds, and reduced psychological flexibility, making it harder for fathers to manage emotional stress and parenting challenges (Li et al., 2022). Fathers with insecure attachment are also more likely to adopt authoritarian parenting styles, particularly in chaotic and high-stress households. In contrast, secure attachment has been shown to buffer against maladaptive parenting and lead to fewer externalized problems in children (Iwanski et al., 2022; Zvara et al., 2020).

These patterns across studies show that when fathers have a strong and secure bond with their children, it can help lower anxiety and support emotional growth. But when fathers feel anxious, it can be harder for them to stay connected and consistent. This, in turn, can make it more difficult for children to feel secure and may lead to anxiety. Understanding this connection is an essential step in helping fathers and children (Bilodeau-Houle et al., 2020; Seteanu & Giosan, 2021; Shenaar-Golan et al., 2021).

Paternal emotional regulation and stress levels play a significant role in shaping family dynamics and child development. Fathers who experienced high emotional stress and self-perceived low parental efficacy are less likely to provide consistent emotional availability (Flouri et al., 2019; Seteanu & Giosan, 2021; Shenaar-Golan et al., 2021). This can lead to insecure attachment patterns, which in turn increase anxiety in children. Emotional distance and increased stress in fathers have been strongly associated with higher anxiety in children, thus highlighting the intergenerational transmission of emotional instability (Shenaar-Golan et al., 2021). Paternal

distress can be especially strong in families with low socioeconomic status, where economic strain may increase psychological distress (Flouri et al., 2019). When fathers have unresolved mental health issues, such as anxiety and depression, the negative effects of adverse childhood experiences (ACEs) are often increased in their children, leading to harsh and inconsistent parenting that reinforces emotional distress. Conversely, fathers who seek out help are more likely to break the cycle (Seteanu & Giosan, 2021).

The research reviewed so far underscores the importance of supporting fathers' emotional health. When anxious or stressed, it can be hard for them to stay emotionally connected and present with their children. Addressing these emotional regulation challenges can help break the cycle and better explain how paternal anxiety can contribute to child anxiety, which is an area that remains underexplored.

Adverse Childhood Experiences and Intergenerational Effects

Intergenerational, rational, and epigenetic effects emphasize how paternal experiences, behaviors, and stress can biologically and behaviorally influence child outcomes. Fathers with a history of Adverse Childhood Experiences (ACEs) are more likely to engage in negative parenting behaviors, including reduced warmth and responsiveness, often due to unresolved trauma (Cunningham et al., 2021; Seteanu & Giosan, 2021). These fathers may also be more likely to use harsh discipline and replicate authoritarian parenting practices experienced in their own childhood. As a result, parenting patterns may become less consistent and contribute to difficulties within family dynamics (Seteanu & Giosan, 2021). Beyond behavioral transmission, paternal increased emotional unavailability (avoidant attachment) has been linked to a higher impact on adolescent suicidal behavior, especially in adolescent boys (Waraan et al., 2021).

Cunningham et al. (2021) found that children of stressed fathers often displayed anxious and depressive-like behaviors when compared to the children in the control group. These effects were seen in physiological markers, such as elevated cortisol levels and altered hypothalamic-pituitary-adrenal (HPA) axis function, indicating increased stress sensitivity in the child. Epigenetics helps explain how stress can be passed down from parent to child. It means that experiences like stress can change how genes work without changing the DNA itself in adulthood (Cunningham et al., 2021). Phenotypes are the traits or behaviors that show up because of those changes. Research shows that changes in a father's sperm RNA can pass stress-related traits to his children. In animal studies, when scientists altered sperm RNA from stressed fathers, it partly reversed stress-related behaviors in their offspring, supporting the idea that stress can be passed down through epigenetics. Importantly, stress experienced during the early developmental period has been found to have a stronger impact on paternal epigenetics and offspring outcomes than stress in adulthood (Cunningham et al., 2021).

The research here indicates that when fathers are experiencing long-term stress, it can impact their parenting and even their biology, which impacts their children. Understanding these patterns can explain how paternal anxiety and emotional regulation challenges are passed down from one generation to another, thus making this an important area of research (Cunningham et al., 2021; Seteanu & Giosan, 2021; Wang et al., 2021a).

Protective Role of Emotional Regulation and Supportive Parenting

Father-child relationships characterized by open communication, emotional regulation, and autonomy-supportive parenting serve as strong protective factors against child and adolescent anxiety (Baartmans et al., 2024; Gao et al., 2022; Rees et al., 2018). Secure attachments and mindfulness-based practices further enhance resilience, emphasizing the father's

important role in reducing the impact of parental mental health challenges on children (Baartmans et al., 2024; Gao et al., 2022; Rees et al., 2018). Positive family relationships, especially father-child communication, play a very important role in buffering the impact of paternal anxiety on child anxiety. Fathers who have the ability to provide emotional support and open communication despite their own anxiety reduce the risk of anxiety transmission to their children (Baartmans et al., 2024). Similarly, fathers with a secure attachment demonstrate stronger psychological flexibility and a stronger father-adolescent attachment, both of which are associated with lower adolescent anxiety levels (Li et al., 2022).

Autonomy-supportive parenting is another strong protective factor against adolescent social anxiety. Adolescents who see their fathers as encouraging independence and decision-making report lower levels of social anxiety (Gao et al., 2022). In addition, paternal involvement and emotional regulation skills can protect the children against the impact of maternal anxiety. Practices like mindfulness and CBT have also been shown to be effective in reducing anxiety and improving mother-infant interaction (Rees et al., 2018). These patterns suggest that when fathers remain emotionally connected and supportive, they can be a protective factor in the development of anxiety in their children. This highlights why emotional regulation in fathers is a vital component in understanding and addressing children's mental health (Baartmans et al., 2024; Gao et al., 2022; Li et al., 2022). Beyond mental health and parenting styles, research shows that anxiety within families often moves in both directions and may be shaped by gender and intergenerational dynamics. These patterns will be explored more in the next section (Ahmadzadeh et al., 2019; Thompson & Henrich, 2022).

Intergenerational and Gendered Patterns of Anxiety

Building on the previous discussion of parental mental health and parenting behavior, this section examines how intergenerational and gendered patterns contribute to the development and expression of anxiety within families.

Reciprocal and intergenerational Transmission of Anxiety

The bidirectional influence of anxiety underscores the reciprocal nature of parent-child mental health. Rather than moving in one direction, anxiety often flows back and forth between parents and children, mutually impacting each other, and creating cyclical patterns (Ahmadzadeh et al., 2019; Thompson & Henrich, 2022). A strong bidirectional association has been established between parental anxiety and a child with higher levels of paternal and maternal anxiety, predicting increased child anxiety over time and vice versa. Although this pattern holds true for both parents, maternal anxiety tends to have a slightly stronger influence on the child's anxiety when compared to fathers (Ahmadzadeh et al., 2019). Notably, child anxiety has also been found to increase parental anxiety over time, suggesting that child anxiety may increase stress and anxiety in parents and thus reinforce emotional cycles (Ahmadzadeh et al., 2019).

A similar cycle is seen with depression, which often occurs alongside anxiety. Parents' depression increases children's emotional problems over time, and children's distress can, in turn, increase parents' stress and depression. (Thompson & Henrich, 2022). Longitudinal research confirms that paternal anxiety increases child anxiety over time, while child anxiety also increases paternal anxiety, reflecting a cyclical pattern (Trepiaik et al., 2023). In their meta-analysis of 36 studies, Trepiaik and colleagues included both clinical and community samples across a range of child ages. Most of the studies relied on self-report questionnaires, and some used observational methods or included multiple perspectives. While the findings strongly support the bidirectional link, much of the research centers on general anxiety symptoms and

may reflect reporting bias. What is still missing is a closer analysis of how fathers manage their own emotions in the context of the cycle. Few studies have focused directly on paternal emotional regulation as a factor that may help explain how anxiety is passed down between parent and child. This remains a meaningful gap that the current study aims to address.

In some cases, child anxiety seems to have a particularly strong influence on paternal anxiety, especially in families with high levels of conflict, suggesting that family stress increases the cyclical nature of anxiety within families (Baartmans et al., 2024). Inadequate emotional regulation in parents has also been associated with child anxiety regardless of parenting style, showing that how parents manage their emotions can have an impact and shape this cycle (Kadoglou et al., 2023). From this, we can see that the stress and anxiety within families often move in both directions. To fully understand anxiety, it is vital to assess how paternal anxiety and emotional regulation challenges contribute to ongoing dynamics, especially when it comes to families that are dealing with chronic stress (Baartmans et al., 2024; Kadoglou et al., 2023).

Family Structure and Gender Differences in Parental Influence

Bidirectional dynamics may be further intensified in single-parent households, where caregiving stress and limited support can amplify emotional challenges for both parents and children (Ben David, 2021; Trepjak et al., 2023). Family structure plays an important role in shaping parental stress and child outcomes (Ben David, 2021). This is especially true for single-parent homes. Because the study included fathers from a range of family structures, it is important to note that single fathers may experience more caregiving stress and fewer resources, which can increase the risk of emotional and behavioral difficulties in their children (Ben David, 2021).

Research suggests that single-father homes have a stronger association between fathers' anxiety and depression and child anxiety, most likely due to increased caregiving stress and lack of support (Trepiaik et al., 2023). Additionally, these families showed more noticeable effects, especially from the child internalizing problems to parental depression, and thus showed the added stress of single caregiving (Thompson & Henrich, 2022). Children from single-father homes were more prone to behavioral issues, especially when fathers displayed emotional suffering (Flouri et al., 2019). However, they also had higher rates of struggle in accessing resources, but also higher motivation to seek help due to being the sole caregiver (Wade et al., 2022).

Parental mental health influences child outcomes in both direct and indirect ways, with mothers' influence having a more immediate impact, most likely due to the mother's caregiving role, while the father's influence tends to be more indirect, impacting child outcomes through relational dynamics and attachment processes (Fjermestad et al., 2020; Shenaar-Golan et al., 2021). Mothers' internalizing symptoms were more directly linked to child anxiety, possibly due to their caregiving role and regular contact with the child. In contrast, fathers' internalizing symptoms tended to affect children indirectly, mainly through parenting behaviors in the form of inconsistency and emotional withdrawal (Fjermestad et al., 2020). Paternal mental health has been found to impact child anxiety both directly and indirectly through the father-child attachment and the child's emotional regulation. In these cases, insecure attachment served as the initial pathway, disrupting children's emotional regulation, which led to higher anxiety (Shenaar-Golan et al., 2021). Psychological flexibility and the father-teen bond were more strongly linked to teen anxiety than just looking at attachment alone (Li et al., 2022; Shenaar-Golan et al., 2021).

While abuse has been associated with child emotional and behavioral outcomes, some research has shown that it only partly explains the link between parental mental health and oppositional defiant problems (ODP). The direct effects of anxiety and depression remained strong, suggesting that child outcomes were influenced by more than just abuse (Stearns & McKinney, 2020). These findings show the importance of assessing beyond surface behaviors and exploring how paternal anxiety, emotional regulation, and family dynamics were connected to child anxiety, both directly and indirectly (Kadoglou et al., 2023; Shenaar-Golan et al., 2021).

Child Development and Research Gaps

The research consistently highlighted the critical impact of early childhood on mental health outcomes, with younger children being especially vulnerable to parental mental health issues. However, studies also emphasized that as children grow older, the nature of these vulnerabilities' changes, with older children experiencing different forms of adversity. Older children may not display the same emotional sensitivity but are more likely to face different types of adversity, such as school stress, peer problems, or emotional distance from parents (Ben David, 2021; Deneault et al., 2021; Trepiaik et al., 2023). These changes show why it is important to consider a child's age when investigating how paternal anxiety and emotional regulation affect their mental health.

Building on earlier research about paternal mental health, the association between parental anxiety and depression has been found to be strongest in younger children, suggesting that early childhood is an important period for the transmission of paternal mental health struggles (Trepiaik et al., 2023). For example, the association between attachment and child mental health problems was stronger in preschool-aged children when compared to toddlers, suggesting that the impact of attachment increased as children face bigger social and emotional

challenges (Deneault et al., 2021). Their review included 16 studies on father-child attachment and behavior problems in early childhood. Most of the studies utilized parent-report tools and a cross-sectional design, which made it harder to understand the cause and effect. These limitations pointed to the need for more observational and longitudinal research focusing on fathers' emotional regulation and parenting behavior (Trepiaik et al., 2023). While the overall results showed that secure attachment to fathers could protect against behavior problems, the findings were less consistent when it came to different types of insecure attachment.

These patterns were also reflected in other research showing that fathers' involvement and the father-child relationship quality were especially important in the early years (Slaughter & Nagoshi, 2020). What remains missing is a deeper look at how fathers' emotional regulation might shape these relationships. Few studies focused on how a father's ability to manage his emotions affected how he parents and perceives child anxiety, leaving an important gap that this study aims to address. Even in studies that examined parental mental health, fathers have often been less studied than mothers, despite growing evidence that paternal mental health can influence children's emotional outcomes (Trepiaik et al., 2023). In terms of support needs, younger children and those with more severe symptoms often require a higher level of accommodation (Shimshoni et al., 2019). At the same time, they appeared more vulnerable to neglect, while older children were more likely to experience more emotional abuse and inconsistent discipline (Ben David, 2021).

Parental distress has been shown to have the strongest impact on children's internalizing problems at an earlier point, suggesting that parental mental health has a stronger impact during the child's formative years. However, over time, children's internalizing issues were also shown to predict increased parental stress and anxiety, especially during later stages of development,

possibly due to the cumulative stress of having to care for a child's mental health challenges (Thompson & Henrich, 2022). These findings showed the importance of looking beyond surface behaviors and exploring how paternal anxiety, emotional regulation, and family dynamics were connected to child anxiety, both directly and indirectly (Deneault et al., 2021; Shimshoni et al., 2019; Trepiaak et al., 2023).

Parenting Behavior and Gender Differences in Child Outcomes

Building on prior research linking paternal mental health and parenting behavior, this section explores how these factors interact with gender to shape emotional and behavioral outcomes.

Impact of Parenting Behaviors: Gender Differences Among Children

Gender plays a role in how children respond to parenting, family dynamics, and mental health (Challacombe et al., 2023). Studies found that boys were more affected by their father's stress and internalizing symptoms than girls (Challacombe et al., 2023; Fjermestad et al., 2020). Paternal anxiety had a stronger impact on boys, while paternal depression had a stronger link to depression in girls (Trepiaak et al., 2023). Some research also found that girls were more impacted by both paternal anxiety and maternal depression, suggesting that gender shaped how children experienced a parent's mental health struggles (Rasing et al., 2019).

Anxious parenting behaviors also seemed to affect boys and girls differently. Fathers who showed anxious parenting behaviors were more likely to increase anxiety in their sons, while mothers who showed anxious behaviors had a stronger effect on daughters (Zhou & Li, 2022). Similarly, overall, paternal anxiety had a stronger effect on boys, and maternal anxiety had a stronger effect on girls (Uziel et al., 2023). Zhou and Li (2022) studied 500 Chinese families using surveys, and Uziel et al. (2023) examined 100 Israeli families in a clinical setting. Both

used parent and child questionnaires. Although the findings were limited by self-reporting and short-term data, the results aligned with other research showing that a child's gender shaped how parental anxiety appeared and how it affected them (Breinholst et al., 2019; Waraan et al., 2021).

This helps explain that child gender moderates the relationship between paternal anxiety and child outcomes, highlighting that boys may be especially vulnerable to their fathers' emotional states and parenting behaviors. This underscores the importance of considering gender in studies examining emotional regulation and intergenerational anxiety patterns (Rasing et al., 2019; Uziel et al., 2023; Zhou & Li, 2022). Parenting behaviors influence boys and girls differently, shaping their emotional and behavioral development in gender-specific ways (Breinholst et al., 2019; Wang et al., 2021b). For example, boys tend to be more affected by paternal strictness and aggression, while girls are more sensitive to maternal criticism, permissiveness, and authoritarian control. The impact of paternal behavior appears to be stronger in boys, while the impact of maternal behavior tends to be stronger in girls, suggesting gender differences in anxiety development (Breinholst et al., 2019). These researchers examined 54 families with clinically anxious children and found that only fathers' behavior, especially rejection, was linked to child anxiety and that insecure attachment to fathers explained this link. While the sample was small, mostly white, and middle-class, the researchers noted that their findings add to growing evidence that fathers play a unique and important role. Other studies have shown that when fathers are anxious or emotionally distant, it can increase anxiety in children (Shenaar-Golan et al., 2021; Trepiaak et al., 2023).

These gender-based differences are also reflected in how children respond to different parenting styles. When examining parenting styles, boys were more impacted by authoritarian parenting, displaying more internalizing and externalizing symptoms (Wang et al., 2021b).

Additionally, psychological control had a stronger negative impact on boys' social anxiety than on girls', suggesting that boys may be more sensitive to paternal control in a social setting (Gao et al., 2022). Boys also reported higher levels of emotional suffering in response to fathers' emotional aggression when compared to girls (Wang et al., 2021b).

Girls, on the other hand, showed more vulnerability to permissive parenting, especially when it came to anxiety (Wang et al., 2021b). Maternal psychological control was more strongly associated with social anxiety in girls (Gao et al., 2022), and maternal verbal aggression and criticism had a higher impact on girls' emotional well-being (Wang et al., 2021b). However, one study found that girls who experienced authoritarian parenting were more affected than boys, reporting higher levels of suicidal ideation in response to strict and punitive parenting (Sultan & Javed, 2020). Conversely, boys showed more emotional distress and risky behavior when they were exposed to permissive parenting, most likely due to a lack of structure and clear boundaries (Wang et al., 2021b). What this tells us is that the emotional impact of parenting is shaped by both parental mental health and the child's gender. Understanding these patterns is important in exploring how paternal anxiety and specific parenting behaviors influence emotional outcomes differently in boys and girls (Fjermestad et al., 2020; Zhou & Li, 2022).

Gender-Specific Vulnerabilities and Development

Boys and girls respond differently to environmental stressors, with boys more likely to exhibit more externalizing responses to stress and abuse, while girls tend to show stronger internalizing responses, highlighting gender-specific vulnerabilities (Flouri et al., 2019; Stearns & McKinney, 2020; Waraan et al., 2021). Boys appear to be more impacted by paternal distress in terms of externalizing behaviors, while girls have a stronger association with internalizing behaviors (Flouri et al., 2019). For example, while the authors did not break findings down by

gender, adolescents with anxious attachment to their fathers reported more suicidal ideation, suggesting that the quality of the father-child bond may play a key role in emotional health (Waraan et al., 2021).

Boys also displayed higher levels of behavioral issues resembling depressive-like symptoms, while girls displayed higher levels of anxiety-like behaviors (Zheng et al., 2023). Supporting these findings, a study by Stearns and McKinney (2020) found that the impact of physical abuse on oppositional defiant problems (ODP) was stronger for boys, suggesting that boys may be more vulnerable to physical abuse, while psychological abuse had a more impactful effect on girls, suggesting stronger sensitivity to emotional harm. These differences suggest that boys and girls may process paternal distress differently, possibly due to socialization or biological factors (Flouri et al., 2019). Girls also showed higher sensitivity to maternal aggression, especially when it came to verbal criticism (M. Wang et al., 2021b). Insecure maternal attachment was associated with higher levels of suicidal ideation in girls, indicating the psychological impact of maternal distress on daughters (Waraan et al., 2021). In contrast, boys were more sensitive to fathers' emotional aggression, reporting higher levels of emotional suffering (Wang et al., 2021b). Together, these findings suggest that boys and girls may internalize and externalize emotional distress in different ways and that fathers' anxiety and behavior could contribute to the outcomes differently based on the child's gender. Understanding how fathers' anxiety and emotional regulation impact a child's mental health is essential in supporting families and helping children cope with anxiety (Flouri et al., 2019; Wang et al., 2021a; Waraan et al., 2021).

In addition to emotional responses, social and academic pressure shape gendered pathways of anxiety development during adolescence. Social and academic pressures impact

boys and girls differently, with societal expectations shaping both parental engagement and children's emotional outcomes (Al-Yateem et al., 2020; Diniz et al., 2023; Wang et al., 2023).

Girls tend to report a higher level of anxiety marked by academic pressure, body image, and social expectations concerning behavior and achievement. In contrast, boys display higher anxiety that was linked to peer pressure and expectation of independence, although they tend to report overall lower levels of emotional distress when compared to girls (Al-Yateem et al., 2020).

The impact of children's behavior on parental well-being also varies by gender. Fathers reported higher levels of stress and anxiety in response to boys' anger and externalizing behaviors, such as defiance and aggression. While fathers were less impacted by anger expressed by their daughters, they reported higher anxiety when it came to dealing with emotional conversations and soothing behaviors (Wang et al., 2023). Interestingly, fathers also reported more positive involvement with daughters, a dynamic more influenced by societal expectations of caregiving and emotional engagement with girls (Diniz et al., 2023).

From this, we can see that social expectation impacts how fathers respond to their children's needs, both emotionally and behaviorally. They also suggest that these patterns may contribute to gender differences in how paternal anxiety impacts children. Having a better understanding of how fathers navigate emotional stress and regulation in response to boys and girls differently can help explain how anxiety is passed on in families (Al-Yateem et al., 2020; Diniz et al., 2023; Wang et al., 2023). Warm family dynamics and early interventions are beneficial to children, but gender-specific sensitivities may require more tailored approaches to support boys and girls effectively. Preschool-aged children are especially sensitive to parental emotional states and behaviors, which highlights the importance of early intervention (Kadoglou

et al., 2023). To fully understand how paternal anxiety functions in the family, it is important to consider how co-parenting relationships and overall family dynamics influence child outcomes.

Family Dynamics and Co-Parenting Relationships

In this study, co-parenting refers to how parents within the same household coordinate caregiving and share responsibilities for raising their child, rather than the industry usage that typically refers to divorced or separated parents raising a child across households.

Effective co-parenting and family cohesion play a critical role in reducing stress and enhancing child and parental well-being, especially during high-stress periods or in families with mental health challenges (Fisher & Glangeaud-Freudenthal, 2023; Rasing et al., 2019; Trumello et al., 2021). How parents work together can shape how involved fathers can be. When co-parenting is supportive, fathers are more likely to stay present and consistent, which helps children do better overall. For example, higher levels of marital satisfaction are associated with higher levels of father involvement, and fathers also moderate sibling relationships, promoting harmony and decreasing conflict (Volling & Palkovitz, 2021). This review was drawn from 12 studies using different methods like interviews, observations, and large datasets, with fathers from many backgrounds. While the article does not report new data, it highlights how strong co-parenting can boost father involvement. Other studies also support this. Kara and Sümer (2022) found that secure father-child attachment helped parents work better together, while Aytac and Schoppe-Sullivan (2023) showed that when mothers blocked fathers from parenting, it hurt their involvement. However, findings may not generalize across cultures or same-sex partnerships, as most research reflects heterosexual, two-parent households in a Western context (Aytac & Schoppe-Sullivan, 2023; Fisher & Glangeaud-Freudenthal, 2023).

When fathers are involved, the quality of the parent-child bond improves, which in turn can support maternal bonding with the infant. Shared family roles contribute to family cohesion, thus reducing conflict and promoting stability. Increased father involvement has also been linked to improvement in children's emotional and behavioral outcomes, which indirectly benefits maternal mental health by reducing parenting stress (Fisher & Glangeaud-Freudenthal, 2023). Families with supportive co-parenting dynamics and strong communication styles were better able to adapt to the pandemic-related challenges, thus lowering stress and conflict (Trumello et al., 2021). Similarly, positive parenting in the form of warmth and consistency helps lessen the impact of parents' mental health issues even in high-risk families (Rasing et al., 2019).

Research shows that when fathers feel more emotionally supported in co-parenting, there tends to be less conflict in the family (Aytac & Schoppe-Sullivan, 2023). In contrast, when fathers experience conflict or exclusion in co-parenting, they are more likely to disengage or struggle with emotional regulation, which can increase parenting stress and negatively affect child outcomes (Aytac & Schoppe-Sullivan, 2023). Gendered dynamics and co-parenting reveal distinct roles and influences of mothers and fathers in child development and family interaction (Aytac & Schoppe-Sullivan, 2023).

In two-parent households, mothers with secure attachment are more likely to engage in supportive gatekeeping behaviors and encourage fathers' involvement in caregiving when co-parenting. These mothers are also more likely to see fathers as competent and emotionally engaged, thus reinforcing shared parenting responsibilities. In contrast, mothers with an anxious attachment style often show more restrictive gatekeeping behaviors, most likely resulting from the fear of losing control or being replaced (Aytac & Schoppe-Sullivan, 2023).

Parental anxiety is also shaped by specific social expectations that differ for mothers and fathers. For example, mothers' anxiety is influenced by social stigma and caregiving challenges, while fathers' anxiety is linked to financial concerns and perceived inadequacy (Aktürk et al., 2024). Social norms, such as the expectation for fathers to provide financially and be emotional anchors, further increase pressure and anxiety to fulfill these roles (Chhabra et al., 2020). The lack of workplace flexibility further limited fathers from engaging in caregiving tasks, thus unbalancing parenting responsibilities (Fisher & Glangeaud-Freudenthal, 2023).

While both parents shape a child's development, research shows that fathers' parenting, whether positive or negative, can have a stronger impact on teen social anxiety than the mother's. This suggests that fathers play a key role in their children's social confidence and how they contribute to others outside the home (Gao et al., 2022). Fathers showed greater behavioral changes over time, especially in reducing rejection and psychological control, while mothers demonstrated steady but less dynamic improvements over time (Van Der Giessen et al., 2019). These studies suggest that fathers experience unique pressures that shape their involvement and emotional availability. When these expectations are not addressed, they can lead to stress and anxiety that make it harder for fathers to be more emotionally available to their children. Thus, it is important to study how fathers' anxiety and struggle with emotional regulation may contribute to anxiety in children (Aktürk et al., 2024; Chhabra et al., 2020; Seteanu & Giosan, 2021). Supportive family and partner relationships serve as a critical protective factor for both parents and children. Open communication, shared caregiving, and emotional support not only reduce parental stress but also promote positive parenting behaviors and mental health outcomes, fostering family resilience (Fisher & Glangeaud-Freudenthal, 2023; Stock et al., 2019; Trumello et al., 2021).

Partner Support and Emotional Well-Being in Fathers

High-quality partner relationships, categorized by open communication and emotional closeness, are a strong buffer against stress and depressive symptoms in fathers. Fathers who engage in prenatal and postnatal care, including active participation in caregiving and attending prenatal appointments, report better mental health outcomes. Social support from family and peers in the form of emotional and informational guidance serves as a protective factor that further reduces the impact of stressors (Dcruz, 2023).

In partnered households, fathers who provide emotional validation and encouragement also play an important role in promoting maternal self-efficacy and resilience. Engaging in childcare responsibilities such as feeding, changing diapers, and attending appointments has been linked to better maternal mental health (Fisher & Glangeaud-Freudenthal, 2023). Conversely, fathers who receive high levels of partner support report less distress in managing their children's anger. Those who maintained consistent routines and disciplines also report better mental health outcomes (Wang et al., 2023).

Fathers who engage in healthy coping strategies, such as mental health treatment, are more likely to break the cycle of intergenerational trauma. Emotional support from co-parents can also lessen the impact of fathers' own adverse childhood experiences (ACEs) on parenting behaviors. Participation in parenting programs has been shown to increase emotional availability and reduce harsh discipline (Seteanu & Giosan, 2021). Couples who maintain supportive communication styles and shared caregiving responsibilities often experience higher relationship satisfaction and better adjustment to parenting challenges (Olsavsky et al., 2020).

Across the studies, a consistent pattern emerges: when fathers felt supported by their partners, they were more emotionally available to their children. This is important because

fathers who struggle with anxiety and have difficulty regulating their emotions are often less emotionally responsive, which can affect the parent-child relationship. Fathers remain underrepresented in parenting and family research, as many studies have historically focused on maternal experiences and mother-child relationships (Fisher & Glangeaud-Freudenthal, 2023; Volling & Palkovitz, 2021). As a result, fewer studies have examined fathers' emotional processes and their role within broader family dynamics. Understanding how partner support helps fathers regulate their feelings can give us more insight into how paternal anxiety impacts child anxiety (Aktürk et al., 2024; Azuine & Singh, 2019; Fisher & Glangeaud-Freudenthal, 2023). Parenting does not happen in a vacuum, and the next section explores how structural and cultural factors shape paternal anxiety and emotional regulation.

Cultural and Structural Influences on Parenting

Financial strain and life circumstances have a big impact on how families function, shaping parenting styles, relationships at home, and children's developmental outcomes. Families that are experiencing birth-related risk and low socioeconomic status (SES) often face higher levels of chronic stress and are more likely to use maladaptive parenting styles (Azuine & Singh, 2019; Rangarajan et al., 2020). However, when families have access to early intervention programs and strong parental support, the negative impacts of stress are lessened, and more authoritative parenting behaviors are more likely to develop (Rangarajan et al., 2020).

Context also plays a strong role in shaping parental involvement and child development. Ren et al. (2023) find that teens from rural areas were more likely to be neglected, which shows how limited resources and support can impact parenting. On the other hand, teens in urban areas got more help with school, which shows why support needs to match the context families are in. As a whole, the findings suggest that families facing more financial and environmental strain

often have greater parenting stress. This, in turn, can impact the parenting style and child outcomes. It is important to understand how paternal anxiety and emotional regulation are shaped by the context and how this may contribute to child anxiety (Azuine & Singh, 2019; Flouri et al., 2019; Rangarajan et al., 2020).

The Impact of Socioeconomic Status

Research consistently shows that low SES worsens the negative effects of parental mental health issues on child outcomes (Flouri et al., 2019; Walker et al., 2020). In low SES families, paternal distress has a higher impact on child behavior, which is most likely due to multiple compounded stressors (Flouri et al., 2019). Similarly, the negative impact of paternal mental health on child outcomes is more pronounced in low-income families, suggesting that SES hardship increases health-related parenting challenges (Azuine & Singh, 2019). Maternal mental health is also impacted by socioeconomic struggles. Studies show that low SES increases maternal anxiety and depression (Walker et al., 2020). These impacts are made worse by increased stress and reduced access to resources that are essential for maternal well-being and bonding (McNamara et al., 2019).

Among adolescents from lower SES homes, higher levels of anxiety are often linked to financial stress and limited access to mental health resources (Al-Yateem et al., 2020). Financial stress also impacts co-parenting dynamics. It increases the tension between parents and also raises behavioral risks in children, especially in families that have fewer resources (Yang et al., 2023). Low SES families also show a greater bidirectional effect, most likely due to higher cumulative stress and lower resources (Thompson & Henrich, 2022).

In contrast, high SES acts as a protective factor, reducing the impact of parental mental health issues. Families with greater financial stability often have access to better mental health

resources, which help reduce maternal anxiety and its impact on child outcomes (Wade et al., 2022). Fathers with higher education are more likely to seek parenting information and support. Fathers with greater work flexibility are more likely to attend parenting programs or get professional support (Wade et al., 2022). Additionally, high-SES fathers are more likely to be involved with their children, promoting positive child outcomes (Slaughter & Nagoshi, 2020). These findings indicate that economic resources play an essential role in whether fathers can access support, manage stress, and be emotionally available to their children. In contrast, fathers in higher-income families with flexible work conditions often report lower anxiety, greater parenting confidence, and more emotionally supportive interactions with their children (Diniz et al., 2023; Wade et al., 2022). This helps explain why it is critical to look at how paternal anxiety and emotional regulation impact child anxiety, especially for families that are facing financial hardship (Flouri et al., 2019; Wade et al., 2022).

The Impact of Culture on Parenting

Cultural norms play an important role, often influencing family expectations, caregiving responsibilities, and paternal involvement. In collectivist societies, fathers are often less involved in caregiving, which puts more demands on mothers and increases family pressures (Aktürk et al., 2024; Fisher & Glangeaud-Freudenthal, 2023; Volling & Palkovitz, 2021). Fathers who come from collectivist cultures may stress familial responsibilities and social expectations over direct engagement and an emotional connection, whereas fathers from individualistic cultures prioritize autonomy and emotional connection (Volling & Palkovitz, 2021). This difference comes primarily from traditional gender roles, which limit fathers' direct involvement and place disproportionate emotional and caregiving burdens on the mothers. As a result, fathers from

collectivist cultures often report higher levels of anxiety due to the expectations of the family and social pressure (Fisher & Glangeaud-Freudenthal, 2023).

In many of these families, extended families help support the caregiving, which often results in limited direct father-mother interaction and reinforces maternal caregiving. In contrast, fathers in individualistic cultures report higher societal support for their parenting role (Griffith et al., 2023). In many collectivist cultures, mothers are usually the main caregivers, which can add to their stress and anxiety. Fathers, on the other hand, are often expected to handle financial and social responsibilities, following traditional gender roles. For example, in many cultures, fathers are expected to provide while mothers are expected to nurture (Aktürk et al., 2024). The sample includes 128 Turkish parents and uses the State-Trait Anxiety Inventory. A shortcoming was that fathers' specific concerns were not measured, and the study only captures anxiety at one point in time. Similar to Trepia et al. (2023), the findings highlight that paternal mental health is often overlooked but deeply relevant to family adjustment. However, like many cross-cultural studies, this one relies on self-report and short-term data, limiting the ability to draw conclusions about long-term emotional regulation patterns (Aktürk et al., 2024; Trepia et al., 2023).

Cultural differences help explain why some fathers may feel more stressed and have less emotional involvement when it comes to parenting. This makes it important to study how cultural expectations influence paternal anxiety and emotional regulation and how these factors may contribute to a child's anxiety (Aktürk et al., 2024; Fisher & Glangeaud-Freudenthal, 2023; Volling & Palkovitz, 2021). Cultural norms influence parental roles and impact parenting style, shaping children's emotional and behavioral outcomes (Sahithya & Raman, 2021). Parenting styles in collectivist cultures often emphasize authoritarian practices, parental authority, and

hierarchical family structure, which can shape both positive and negative child outcomes (Sahithya & Raman, 2021; Sultan & Javed, 2020; M. Wang et al., 2021b).

In the Indian cultural context, authoritarian parenting is more common, reflecting traditional caregiving norms. However, this style of parenting has been linked to higher anxiety in children (Sahithya & Raman, 2021). Similarly, in Pakistan, where authoritarian parenting is common, the effects on teens can vary. It is linked to suicidal thoughts, especially when parents are emotionally unavailable or overly critical (Sultan & Javed, 2020).

In China, harsh parenting, while normalized in collectivist contexts, has been shown to negatively impact attachment security and increase social anxiety. The strong emphasis on parental authority and discipline may increase attachment insecurity and social anxiety (M. Wang et al., 2021b). At the same time, research shows that even in collectivist cultures, parenting that supports a child's independence can help lower social anxiety in teens, showing that both structure and support matter (Gao et al., 2022).

The findings show that cultural norms around authority and parenting style can shape how fathers engage with their children. They also may influence whether their emotional regulation supports or increases child anxiety. This emphasizes why understanding cultural influences is critical when studying paternal anxiety and emotional development (Sahithya & Raman, 2021; Sultan & Javed, 2020; M. Wang et al., 2021b). Mental health stigma remains a significant barrier in collectivist cultures, discouraging individuals from seeking professional help and worsening mental health struggles (Al-Yateem et al., 2020; Zheng et al., 2023).

In collectivist societies, such as the United Arab Emirates (UAE), adolescents are often discouraged from seeking professional help, which increases their anxiety and reliance on peer or family support (Al-Yateem et al., 2020). Similarly, in China, the stigma surrounding mental

health prevents many adolescents from seeking appropriate help, leading to higher rates of suicidal ideation (Zheng et al., 2023). The same stigma that keeps many teens from getting help also stops parents from reaching out, which makes anxiety and depression harder to manage in parenting (M. Wang et al., 2021b). In collectivist cultures, mental health stigma can be a major barrier, making support from extended family especially important in reducing stress (Seteanu & Giosan, 2021). The findings show that when fathers face stigma around seeking help, it can make it harder for them to manage anxiety and stay emotionally connected to their children. This increases the risk of intergenerational transmission of anxiety, making it more important to explore how paternal emotional regulation impacts a child's mental health (Al-Yateem et al., 2020; Seteanu & Giosan, 2021; Zheng et al., 2023).

Extended family support plays an important role in reducing parenting stress and mental health difficulties in collectivist cultures, where there is a strong focus on family harmony and shared caregiving (Seteanu & Giosan, 2021; Shimshoni et al., 2019; Stock et al., 2019).

In collectivist societies, family accommodations are more commonly accepted and reflect a strong value placed on family harmony (Shimshoni et al., 2019). Extended family members often take on a larger support role, which can reduce the demands placed on mothers and fathers (Stock et al., 2019). Extended family support has been shown to mitigate the effects of adverse childhood experiences (ACEs) on parenting behaviors, reducing the likelihood of a harsh or emotionally distant parenting style (Seteanu & Giosan, 2021).

Fathers in collectivist cultures often turn to extended family for parenting advice, while fathers in individualistic cultures are more likely to look for help from professionals or support networks (Wade et al., 2022). Similarly, cultural norms and expectations shape mothers' experiences of attachment in bonding. Mothers in collectivist cultures often experience greater

pressure from family, which may impact the emotional bond with their children (McNamara et al., 2019). These results show that while extended family support can help fathers manage stress, it may not always address underlying anxiety. Understanding how different support systems impact paternal mental health is key to understanding how their anxiety impacts their children (Seteanu & Giosan, 2021; Shimshoni et al., 2019; Stock et al., 2019).

The Impact of Societal and Employment Expectations

Workplace demands and societal expectations play a significant role in shaping fathers' parenting behaviors, involvement, and well-being. Fathers who report high work success were more likely to be involved in their children's lives, displaying warmth, responsiveness, and structure, quality of authoritative parenting (Diniz et al., 2023; Fisher & Glangeaud-Freudenthal, 2023; Griffith et al., 2023). In contrast, fathers with work-related stress and long hours often had authoritarian and permissive parenting styles, characterized by less involvement in parenting activities (Diniz et al., 2023).

One major challenge fathers face is workplace constraints, particularly the difficulty of balancing work responsibilities with prenatal and childbirth responsibilities (Griffith et al., 2023). Lack of workplace flexibility significantly limits many fathers' ability to engage in caregiving activities (Fisher & Glangeaud-Freudenthal, 2023). This not only reduces fathers' involvement but also contributes to higher stress levels and feelings of inadequacy (Dcruz, 2023).

In societies that strongly reinforce traditional gender roles, the stigma surrounding paternal mental health further prevents fathers from seeking emotional or psychological support. The widespread perception of child-rearing as a maternal responsibility prevents fathers even further from engaging in parenting activities (Fisher & Glangeaud-Freudenthal, 2023). The

COVID-19 pandemic highlights these challenges even further. As fathers took on a more caregiving role during the home confinement, many encountered increased stress, role overload, and balancing work, home, and caregiving responsibilities. Stress was especially high among fathers who are primary breadwinners or whose employment was impacted by the pandemic (Trumello et al., 2021).

On a positive note, stable employment and higher education levels were linked to improved parenting self-efficacy (PSE), while depression and anxiety decreased fathers' confidence in parenting (Donithen & Schoppe-Sullivan, 2022). However, structural and systemic barriers, in the form of work or social stereotypes and lack of institutional support, often limit fathers from fully engaging in parenting roles (Volling & Palkovitz, 2021). Fathers often struggle with balancing work and family responsibilities while also seeking help. Many fathers are more likely to seek support when resources are convenient, online, or easily accessible (Olsavsky et al., 2020).

The findings indicate that work stress, rigid social expectations, and limited support can make it more difficult for fathers to manage anxiety and stay emotionally connected with their children. Understanding how these pressures may affect paternal emotional regulation is an important component of understanding how fathers' anxiety may contribute to anxiety in their children (Diniz et al., 2023; Fisher & Glangeaud-Freudenthal, 2023; Griffith et al., 2023). However, research that specifically examines fathers' emotional regulation processes within broader contextual stressors remains limited. This gap makes it more difficult to understand how fathers' emotional functioning may influence parenting behaviors and children's emotional outcomes (Shenaar-Golan et al., 2021). The following section looks at how school stress, friendships, and academic pressure connect to family life and children's emotional well-being.

Environmental and Academic Stressors

Insecure attachment and poor parental relationships significantly increase the risks of anxiety, depression, and suicidal ideation. While secure social connections with peers and teachers can serve as protective factors, dependency on parents can exacerbate behavioral and emotional difficulties, highlighting the importance of attachment security and social development (Iwanski et al., 2022; Seteanu & Giosan, 2021; Waraan et al., 2021).

Avoidant attachment to fathers and anxious attachment to mothers have been strongly linked with suicidal ideation in adolescents, often driven by emotional distance and fears of rejection (Waraan et al., 2021). Poor parent-child relationships are associated with increased anxiety, depression, and SI. Adolescents with emotionally unavailable or critical parents often report higher levels of distress (Waraan et al., 2021).

Children of fathers with high ACEs have increased emotional problems, such as higher rates of anxiety, depression, and difficulty with emotional regulation. These children are also more likely to exhibit increased behavioral issues, such as conduct problems that include aggression and oppositional behavior, which further contribute to poor peer relationships and difficulty in social interaction (Seteanu & Giosan, 2021).

Peer relationships play an important role in adolescent mental health. Poor peer connections are strongly linked to anxiety and depression, while bullying is linked to a higher risk for SI. In contrast, positive peer interactions and emotionally supportive teachers help buffer against anxiety and depression, even in high-stress family environments (Al-Yateem et al., 2020; Zheng et al., 2023). Strong teacher relationships can act as a buffer, helping to lower symptoms of anxiety and depression (Zheng et al., 2023). However, overdependence on parents also increases the risk of emotional and behavioral problems. Overdependence on mothers often leads

to heightened anxiety and clinginess, while overdependence on fathers tends to reduce autonomy and increase oppositional behaviors (Iwanski et al., 2022).

Academic pressure, parental math anxiety, and peer relationships significantly affect child outcomes. However, parental involvement and support can help buffer against these stressors (Al-Yateem et al., 2020; Bellon et al., 2022). Academic pressure is one of the strongest predictors of anxiety, especially in cultures where high educational success is emphasized. In the UAE, adolescents reported significant anxiety related to academic success (Al-Yateem et al., 2020). Poor peer relationships and bullying were also a major cause of social anxiety, especially among girls. However, adolescents who reported high parental warmth and involvement showed lower levels of anxiety, highlighting the protective role of supportive parenting (Al-Yateem et al., 2020). Another important factor is parental math anxiety. When parents feel anxious about math, they often avoid doing math-related activities with their children, which can lower the child's confidence and performance in the subject (Bellon et al., 2022). While the studies are informative, most rely on parent or self-report and do not always capture how fathers' anxiety directly shapes academic or peer-related stress (Baartmans et al., 2024; Bellon et al., 2022).

When fathers struggle with anxiety or emotional regulation, it can make it harder for them to support their children through academic and social stress. Understanding how paternal anxiety impacts parenting behaviors helps explain how these pressures can lead to higher anxiety in children (Al-Yateem et al., 2020; Bellon et al., 2022). Finally, the next section focuses on what helps, highlighting the protective factors and interventions that can support both fathers and children in managing anxiety. When fathers have trouble staying emotionally connected, it may make it harder for their children to feel safe and secure. Over time, this can lead to higher anxiety, emotional struggles, and problems with relationships. Examining how fathers' anxiety

impacts their connection with their children helps explain why emotional regulation is important to breaking cycles of anxiety in families (Baartmans et al., 2024; Seteanu & Giosan, 2021; Shenaar-Golan et al., 2021).

Children's anxiety often exists as a network of interconnected symptoms, with worry and social fears being at the center. These are closely tied to parental anxiety and the overall family environment, highlighting how anxiety can be passed down through generations (Baartmans et al., 2024). Additionally, younger children and those with severe symptoms often require higher levels of accommodation and support, suggesting that early intervention is important (Shimshoni et al., 2019). Few studies explore how fathers, in particular, support children through those school and peer challenges, especially when managing their own anxiety and emotional regulation (Baartmans et al., 2024; Shenaar-Golan et al., 2021).

Protective Factors and Interventions

Several factors may help buffer the impact of parental anxiety on children. Research has identified family support systems, therapeutic interventions, and parenting practices that can reduce anxiety and improve emotional functioning in families.

Support Systems

Social support networks and external resources are vital protective factors that buffer against parental and child mental health challenges (Aktürk et al., 2024; Chhabra et al., 2020; Stock et al., 2019). Having strong support from family, friends, or support groups plays an important role in reducing parental distress and promoting emotional well-being. Parents who use positive ways to cope, like asking questions, solving problems, or focusing on the good in their child's situation, tend to be more resilient (Stock et al., 2019). Compassionate and clear communication from healthcare providers also helps families reduce stress during the treatment

process. Families with strong emotional bonds and effective communication skills are generally better at managing stress more successfully and maintaining a sense of stability (Stock et al., 2019). The type of social support that is received influences mental health outcomes differently.

Family support was more effective in reducing maternal anxiety, while social support was important in lowering paternal anxiety (Aktürk et al., 2024). Fathers who had access to mental health resources, high-quality partner relationships, and active caregiving roles also report lower depression rates (Chhabra et al., 2020). Family-based interventions that focus on unity and reduced conflict have shown promise in moderating the impact of parental mental health struggles on maltreatment. Additionally, financial counseling and social support programs have been found to lower stress levels and reduce abuse in economically strained families (Ben David, 2021).

Fathers who have access to strong support systems are often better prepared to handle stress and stay emotionally connected with their children, which can help protect children from developing anxiety. In contrast, fathers who lack access to support or mental health resources often report more emotional withdrawal, inconsistent parenting, and difficulty responding to their children's emotional needs (Ben David, 2021; Seteanu & Giosan, 2021). Focusing on how to help fathers manage their own emotions is vital in understanding how paternal anxiety and emotional regulation impact children's mental health (Aktürk et al., 2024; Chhabra et al., 2020; Stock et al., 2019).

The Impact of Coping Strategies and Skill Development

Positive coping strategies, parental self-efficacy, and active participation in parenting programs enhance resilience and reduce maladaptive behaviors (Stock et al., 2019; Van Der Giessen et al., 2019). Parental support, emotional warmth, and open communication are strong

protective factors that help reduce the risk of suicidal ideation in children and adolescents. In contrast, harsh discipline, emotional neglect, and inconsistent parenting have been linked to higher rates of SI (Sultan & Javed, 2020). Participation in parenting programs has been shown to improve emotional availability, reduce harsh parenting behaviors, and promote healthier family dynamics (Seteanu & Giosan, 2021). In addition, higher parental self-efficacy and the use of positive coping strategies, such as information-seeking and problem-solving, are associated with reduced parental distress and improved family resilience (Stock et al., 2019).

Parent training programs have been shown to strongly improve parent-child relationships by reducing parental rejection and psychological control (Van Der Giessen et al., 2019). Families who engage in parent training programs show the highest reduction in negative parenting behaviors. These programs emphasized warmth, validation, and autonomy-supportive behaviors, which are important in maintaining improvements in parent-child dynamics (Van Der Giessen et al., 2019). However, most evaluations of parenting programs focus on mothers or mixed-parent samples, making it harder to assess how effective the interventions are specifically for fathers (Seteanu & Giosan, 2021; Van Der Giessen et al., 2019).

Helping fathers strengthen skills like warmth, emotional validation, and support can make a difference in how they connect with their children. Programs that help build these skills can help fathers better manage anxiety and emotional stress, creating healthier relationships and lowering the risk of anxiety in children (Seteanu & Giosan, 2021; Stock et al., 2019; Van Der Giessen et al., 2019). Although parenting programs and emotional support have shown promise, few interventions are tailored specifically to fathers with anxiety. This highlights a critical gap that the current study aims to address (Aktürk et al., 2024; Van Der Giessen et al., 2019). When fathers develop strong coping skills and confidence in their parenting, they can better manage

stress and be emotionally available to their children. This emotional stability plays an important role in protecting children from developing anxiety, making paternal emotional regulation a key part of family health (Aktürk et al., 2024; Stock et al., 2019; Van Der Giessen et al., 2019).

Summary

A review of current research on parental mental health, anxious parenting behaviors, and child anxiety, with a focus on how these dynamics differ between mothers and fathers, shows that both parents influence child outcomes in distinct but interconnected ways. While maternal anxiety has been studied extensively, paternal anxiety, particularly in relation to emotional regulation and parenting style, has received far less attention (Fjermestad et al., 2020; Trepia et al., 2023). Several studies suggest that fathers' mental health plays a critical role in child outcomes, but many still combine maternal and paternal data or rely on maternal reports, making it difficult to isolate the father's unique influence (Shenaar-Golan et al., 2021; Trepia et al., 2023).

There is also limited research on how cultural, structural, and environmental stressors, like single parenting or financial strain, affect how fathers experience and manage anxiety (Azuine & Singh, 2019; Flouri et al., 2019; Wade et al., 2022). Parenting behaviors such as overprotection and emotional unavailability have been linked to child anxiety, but how these behaviors appear in anxious fathers is still unclear (Zhou & Li, 2022). Additionally, while indirect links between paternal anxiety and child outcomes have been proposed, few studies use designs that test these pathways clearly (Shenaar-Golan et al., 2021). The purpose of this study is to fill these gaps by using a regression design to directly examine how paternal anxiety and emotional regulation relate to perceived child anxiety while controlling for paternal age. The

methodology used to explore these relationships, including the study design, participants, procedures, measures, and analysis plan, is outlined in the next chapter.

Chapter 3: Research Method

This quantitative study examined how paternal anxiety related to emotional regulation challenges in fathers and anxiety symptoms in their children, using standardized self-report measures. The goal was to better understand how a father's anxiety impacted his ability to manage emotions and how that influenced his child's mental health.

A cross-sectional, correlational design was utilized, which means data were collected once without manipulating any variables. This design helped identify whether paternal anxiety was linked to the outcomes. Multiple regression analysis was used to test these relationships, and paternal age was included as a control variable to account for potential age-related differences. This approach was consistent with established guidelines for conducting ethical and rigorous research on mental health and family systems (Creswell & Creswell, 2018; Field, 2018; Jackson, 2016).

Research Methodology and Design

A non-experimental, cross-sectional correlational design was used to examine the relationship between paternal anxiety and the two dependent variables: emotional regulation challenges and child anxiety. This type of design is often used in mental health and family research when it is not possible or ethical to manipulate variables (Creswell & Creswell, 2018; Jackson, 2016).

The main focus of this study was to determine whether paternal anxiety predicted difficulties with emotional regulation and symptoms of anxiety in children. To test this, the study used multiple regression analysis. This statistical method helped identify how much one variable, paternal anxiety, contributed to the prediction of another variable, such as emotional regulation or child anxiety. Paternal age was included as a control variable to help ensure that the results

were not simply due to age differences between fathers. Information about family structure, such as whether the father was single or partnered, and whether he provided full-time or part-time care, was also collected to describe the sample and provide context for the findings. This approach allowed for a clearer understanding of how the main study variables were related (Field, 2018).

Rationale for Using a Quantitative Approach

This approach was suitable because it used numbers and statistical tools to explore the relationship between variables. It allowed for testing specific hypotheses about whether paternal anxiety was linked to difficulties with emotional regulation and to anxiety symptoms in children (Creswell & Creswell, 2018; Jackson, 2016).

The main variables in the study, paternal anxiety, emotional regulation, and child anxiety, were all measured using established, reliable questionnaires. These tools provided consistent data that were analyzed and used to make general conclusions about similar groups of people (Jackson, 2016). Using multiple regression also allowed the study to examine how these variables were related while controlling for paternal age, which might influence the results (Field, 2018).

Rationale for Correlational Design

A correlational design is a good fit for this study because it allows the researcher to explore how different variables are related without changing or manipulating anything. This type of design is commonly used in psychological research, especially when studying traits like anxiety or parenting behaviors, which cannot be ethically assigned or controlled (Field, 2018; Jackson, 2016).

To examine the relationships, two multiple regression models were used to analyze whether paternal anxiety predicted emotional regulation challenges and child anxiety. This type of analysis helped show whether paternal anxiety predicted each of the two outcomes while taking into account paternal age (Field, 2018).

The two models were:

1. Whether paternal anxiety predicted emotional regulation challenges.
2. Whether paternal anxiety predicted child anxiety.

Paternal age was included as the covariate in both models because prior research has linked paternal age to psychiatric outcomes in offspring (Wang et al., 2022).

This design followed well-established research practices and helped identify patterns that could be useful for therapy and future research (Creswell & Creswell, 2018; Leedy & Ormrod, 2010).

Cross-Sectional Design Justification

This design was a practical way to examine how paternal anxiety, emotional regulation challenges, and child anxiety were related without needing to follow participants over a long period (Creswell & Creswell, 2018).

Cross-sectional designs worked well with surveys and community-based recruitment, making them both cost-effective and efficient for collecting data from a wide group of people (Leedy & Ormrod, 2010). Although this approach could not show how things change over time, it was useful for spotting patterns and helping researchers form ideas for future studies (Jackson, 2016).

Since this study was focused on exploring relationships rather than proving cause and effect, a cross-sectional design was a logical and manageable choice. It allowed for the collection

of data at one point in time without needing to manipulate any variables. This made it a good fit for studying real-world experiences (Creswell & Creswell, 2018).

Study Variables

This study included one independent variable and two dependent variables. All three were measured using well-established self-report questionnaires that have been shown to be reliable and valid. In addition to the main study variables, some basic background information was collected to understand the people in the study better. For fathers, this included their age, education level, family structure, where they live, and if they were currently involved in parenting. For children, information included their age and gender. Among these, paternal age will be the covariate in the analysis. The other demographic variables were reported for descriptive purposes. This helped explain the results and give a clear picture of the participants. Paternal age was used as a control variable to help rule out other possible explanations for the findings. Age may influence how fathers manage emotions and how they perceive their child's anxiety (Slaughter & Nagoshi, 2020; Trepia et al., 2023). Including these variables helped strengthen the study's accuracy and interpretation.

Independent Variable

Paternal anxiety referred to the level of anxiety symptoms experienced by the father. It was measured using the Beck Anxiety Inventory (BAI; Beck et al., 1988).

Dependent Variables

1. Emotional regulation challenges were measured using the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004).
2. Child anxiety was measured using the Spence Children's Anxiety Scale—Parent Report (SCAS-P; Spence, 1997).

Control Variable

Paternal age was included as a control variable in the regression analyses. Fathers reported their age in years in the demographic questionnaire.

These instruments were chosen because they are widely used and supported by research. They offer accurate and reliable ways to measure anxiety and emotional regulation in different types of people (Jackson, 2016; Leedy & Ormrod, 2010). More details about these tools are provided in the Instrumentation section.

Population and Sample

The target population for this study was fathers who had at least one child between the ages of 6 and 18. This age range was chosen because anxiety disorders often begin during middle childhood and the teenage years, which are key times for spotting emotional and behavioral challenges (CDC, 2023; Merikangas et al., 2010). Fathers were eligible to take part in the study if they were 18 years or older, lived in the United States, and believed their child currently showed signs of anxiety. They were also required to be currently involved in parenting and able to read and complete the survey in English. These criteria aligned with the study's goal of exploring how paternal anxiety and emotional regulation related to child anxiety.

To include different types of families, fathers from both two-parent and single-father households were invited to participate. Among single fathers, the study noted whether they had full or partial custody of their child, as well as whether they were parenting alone or with help from a partner or family member. This information was collected for descriptive purposes only to provide context about the sample. Fathers were not included if they were unable to complete the survey in English. This was determined through the informed consent and the survey process, as they were both written in English. If participants were unable to understand or complete the

survey independently, they did not meet the language requirement, and their participation did not proceed.

The study used purposive sampling to find fathers who met these criteria. This is a common approach in behavioral research when the goal is to study a specific group (Creswell & Creswell, 2018; Leedy & Ormrod, 2010). Participants were recruited through CloudResearch. The eligibility criteria were entered into the platform, and CloudResearch matched and invited fathers who met those criteria. Those who qualified were sent to a Qualtrics survey link, where they read the consent form and completed the questionnaires. No other recruitment methods were used.

To determine how many participants were needed, a power analysis was conducted using G*Power software. The results showed that at least 43 participants were needed to find a medium effect size ($f^2 = 0.15$) with a significance level of .05 and a power of .80 (Faul et al., 2009). To allow for dropouts or incomplete surveys, the goal was to recruit 52 participants. This accounted for about a 20% attrition rate, which is a common recommendation when planning for survey-based research (Kline, 2005; MacKinnon et al., 2023). This same group was used in both analyses, one testing the link between paternal anxiety and emotional regulation, and the other testing the link between paternal anxiety and child anxiety.

Sampling Procedures

Participants were chosen based on specific characteristics that matched the study's goals (Creswell & Creswell, 2018). Eligible participants were fathers who were at least 18 years old, lived in the United States, were currently involved in parenting, and had at least one child between the ages of 6 and 18 who they believed was showing signs of anxiety. Participants were also required to be able to read and complete the survey in English. This type of targeted

sampling is useful for studying specific groups rather than trying to represent the general population (Leedy & Ormrod, 2010).

Fathers were recruited using purposive sampling through CloudResearch. The eligibility criteria were entered into the platform, and participants who met those criteria were invited to participate. Although the approved recruitment plan included additional outreach methods such as social media and professional networks, recruitment was ultimately conducted exclusively through CloudResearch to ensure an adequate and timely sample size. Participants were then redirected to a Qualtrics survey to review informed consent and complete the study measures.

Participation was voluntary and anonymous. Fathers who qualified completed an online consent form and survey. To thank them for their time, each participant received a \$15 electronic gift card after completing the survey. Additional steps within Qualtrics were used to make sure that responses were valid and not automated, helping to protect the accuracy of the data.

Study Procedures

Fathers who met the study's criteria were recruited through CloudResearch. Although community outreach and digital platforms were approved as part of the broader recruitment plan, participants were ultimately directed to the online survey through CloudResearch. The recruitment materials included a brief description of the study and a secure link to the online survey (Creswell & Creswell, 2018; Leedy & Ormrod, 2010).

Interested fathers were directed to a secure online site where they read and signed an informed consent form. This form explained the purpose of the study, how long it would take, how privacy will be protected, and that participation is voluntary. It also stated that participants could skip any question or stop the survey at any time without penalty (Jackson, 2016).

After giving consent, participants answered a short set of demographic questions and then completed three self-report surveys. These surveys measured paternal anxiety, emotional regulation, and child anxiety as perceived by the father. The full survey was expected to take about 25–30 minutes.

Data were collected using the secure platform Qualtrics, which protects privacy through encryption and other safety features (Creswell & Creswell, 2018). No identifying details, including IP addresses, were collected. If participants wanted the \$15 gift card, they entered their email on a separate form that was not connected to their survey responses to protect their anonymity (Leedy & Ormrod, 2010).

All data were stored on a password-protected server approved by the IRB. Only the main researcher and authorized team members had access. Before analyzing the data, responses were checked to make sure they were complete and met eligibility requirements. Using an anonymous online format was expected to help participants feel more comfortable when answering sensitive questions about anxiety and parenting (Creswell & Creswell, 2018; Jackson, 2016).

To further protect the quality of the data, steps were taken to prevent automated or duplicate responses. A CAPTCHA was added to confirm that respondents were human, and the "Prevent Ballot Box Stuffing" option was enabled to block multiple entries from the same browser. A few attention-check questions were included to make sure participants were reading carefully, and responses were reviewed before gift cards were sent. These steps helped ensure that the data came from genuine participants and remained accurate.

Materials or Instrumentation

This study used three standardized self-report questionnaires to measure the main variables: paternal anxiety, emotional regulation challenges, and child anxiety as reported by the

father. In addition to these tools, a short demographic survey was included to collect background information such as paternal education level, family structure, and geographical location, child age, and child gender. Paternal age was also collected and was used as a covariate in the analysis. These tools were chosen because they are reliable, widely used, and relevant for both clinical and research settings.

The Beck Anxiety Inventory (BAI) is a 21-item survey used to measure how much anxiety an adult is experiencing (Beck et al., 1988). Each question is rated from 0 ("not at all") to 3 ("severely"), and total scores range from 0 to 63. The BAI has been shown to be very reliable, with high internal consistency ($\alpha = .92-.94$) and good test-retest reliability ($r = .67-.75$) in different groups of people (Fydrich et al., 1992).

Difficulties in Emotion Regulation Scale (DERS) is a 36-item questionnaire designed to assess how people typically manage their emotions (Gratz & Roemer, 2004). The DERS covers six areas, including difficulty accepting emotions, problems staying focused on goals, poor impulse control, lack of awareness or clarity about emotions, and limited access to emotion regulation strategies. Items are rated from 1 ("almost never") to 5 ("almost always"). The DERS is highly reliable ($\alpha = .93$) and is strongly linked to anxiety, depression, and emotional difficulties (Fowler et al., 2014; Gratz & Roemer, 2004).

Spence Children's Anxiety Scale – Parent Version (SCAS-P) is a 38-item questionnaire where parents quantify their child's anxiety symptoms (Spence, 1997). It explores several types of anxiety, such as separation anxiety, social fears, general worries, obsessive behaviors, panic symptoms, and fears of getting hurt. Parents rate each item from 0 ("never") to 3 ("always"). Higher scores show more anxiety symptoms. The SCAS-P has strong internal consistency ($\alpha =$

.84–.92) and matches well with other ways of measuring child anxiety, including ratings from doctors and the children themselves (Nauta et al., 2004; Whiteside & Brown, 2008).

Operational Definitions of Variables

Each of the main variables in this study was defined based on how it was measured using the validated tools described earlier in this chapter. These definitions help make sure that the terms used in the study were clear and consistent during data collection and analysis.

Paternal Anxiety

Paternal anxiety referred to how much anxiety a father experiences. This includes feelings like nervousness, fear, restlessness, and trouble managing worry. It was measured using the Beck Anxiety Inventory (BAI), which is a 21-item survey that gives a total score between 0 and 63. Higher scores mean more severe anxiety symptoms (Beck et al., 1988; Fydrich et al., 1992).

Emotional Regulation Challenges

Emotional regulation challenges described how much a person struggles with understanding, accepting, and managing their emotions. This was measured using the Difficulties in Emotion Regulation Scale (DERS), which focuses on several aspects of emotional difficulty. Total scores range from 36 to 180, with a higher score indicating more problems with managing emotions (Fowler et al., 2014; Gratz & Roemer, 2004).

Child Anxiety

Child anxiety, as seen by the father, included signs like frequent worrying, fear, and avoidant behavior. It was measured using the Spence Children's Anxiety Scale – Parent Version (SCAS-P), a 38-item questionnaire that the father completed. Scores from each item were added

to create a total score. The total score reflected how often and how serious the child's anxiety symptoms appeared to be based on the father's observations (Nauta et al., 2004; Spence, 1997).

Data Analysis

All data were analyzed using IBM SPSS Statistics software. First, basic descriptive statistics were run for the main study variables: paternal anxiety, emotional regulation challenges, and child anxiety. Descriptive statistics were also calculated for participant background information, including paternal education level, family structure, and geographical location, child age, and child gender. Paternal age was included separately as the covariate in the analysis. These details helped describe the sample and provided useful context for interpreting results (Creswell & Creswell, 2018).

To answer the main research questions, two separate multiple hierarchical regression analyses were conducted. The two models were:

Model 1: Predicting Paternal Emotional Regulation

Paternal emotional regulation (measured by the DERS; Gratz & Roemer, 2004) was the dependent variable. Paternal anxiety (measured by the BAI; Beck et al., 1988) was the independent variable. Paternal age was included as the covariate (Creswell & Creswell, 2018; Jackson, 2016). Including paternal age as a covariate helped ensure the results showed the unique effect of paternal anxiety and not differences that were explained by age (Creswell & Creswell, 2018).

Model 2: Predicting Child Anxiety

Child anxiety (measured by the SCAS-P; Spence, 1997) was the dependent variable. Paternal anxiety (measured by the BAI; Beck et al., 1988) was the independent variable. As in

Model 1, paternal age was included as a covariate (Creswell & Creswell, 2018; Leedy & Ormrod, 2010).

Assumptions

Like all studies that use regression analysis, this research depended on several key statistical assumptions. These assumptions were checked before interpreting the results to make sure the findings were accurate and trustworthy (Field, 2018; Jackson, 2016).

Linearity

The relationship between paternal anxiety (the independent variable) and each outcome (emotional regulation and child anxiety) was expected to be in a straight-line pattern. This was checked by assessing scatterplots in SPSS (Field, 2018).

Normality of Residuals

The leftover differences between predicted and actual scores (residuals) were expected to be normally distributed. This was reviewed using histograms, normal probability plots (P-P plots), and other descriptive statistics (Field, 2018; Jackson, 2016).

Homoscedasticity

The spread of residuals was expected to be consistent across different levels of paternal anxiety. This was also checked through scatterplots of standardized residuals (Field, 2018).

Independence of Observations

Each participant's response was expected to be independent of others. Since the data were collected anonymously and individually through a secure online survey, this assumption was considered to be met (Creswell & Creswell, 2018).

Multicollinearity

Even though each model included just one predictor (paternal anxiety) and one control variable (paternal age), multicollinearity was still tested. Variance Inflation Factor (VIF) and tolerance scores were reviewed to make sure the variables were not too closely related (Field, 2018). If the assumptions were not met, other options, such as adjusting the data or running extra checks, were used to make sure the results were accurate and trustworthy (Field, 2018).

Limitations

There were several limitations in this study that should have been considered when interpreting the results. These issues may have affected how the findings were understood or applied to other groups.

First, the study used a cross-sectional design, which means all data were collected at one time. While regression analysis can show whether variables are related, it cannot prove that one causes the other. To find out whether paternal anxiety actually leads to emotional regulation problems or child anxiety, a study that followed participants over time would have been needed (Creswell & Creswell, 2018; Leedy & Ormrod, 2010).

Second, the study relied only on self-report questionnaires. Even though the surveys used are well-tested, answers may have been affected by how people want to be seen, how aware they are of their own feelings, or how comfortable they are answering sensitive questions. Fathers may have either underreported or overreported symptoms in themselves or their children, which could have affected the accuracy of the results (Jackson, 2016).

Third, the sampling method limited how well the results could be applied to the general population. Because participants were recruited through CloudResearch, they may have been more comfortable with online platforms or survey participation than the average father. This

made it harder to know if the results applied to fathers who were less connected or faced more barriers to getting help (Jackson, 2016).

Another limitation was that the study used only one source of information, fathers, for reports of child anxiety. There was no input from children, other caregivers, or teachers, which limited how fully the study captured what the child was experiencing.

Even with these limitations, the study provided important insights into how paternal anxiety was linked to emotional regulation and child anxiety. The results can help guide future research and support the development of clinical interventions that focus on fathers' mental health in the context of family well-being.

Delimitations

Delimitations are the specific choices made by the researcher to narrow the focus of the study and keep it manageable (Creswell & Creswell, 2018). This study includes several key delimitations.

First, the study focused only on fathers and does not include mothers or other caregivers. This choice was made on purpose to address a gap in the research since most past studies have focused mainly on mothers. Focusing specifically on fathers' mental health helps explore an area that needs more attention (Trepiaik et al., 2023). Second, the study used a quantitative, cross-sectional design. This design was chosen because it allows for quick and efficient data collection at one point in time. While it does not show how things change over time, it is a good fit for a first step in exploring these relationships in everyday settings (Field, 2018; Jackson, 2016). Third, the study included fathers in the United States. This focus helped keep the study manageable and aligns with the researcher's access to U.S.-based contacts and resources.

However, it may limit how well the results apply to fathers in other areas or cultural backgrounds.

Finally, data was collected using online surveys in English. This makes participation easier for many people, but it may leave out fathers who do not speak English or who do not have regular internet access. These limits were necessary to keep the study practical and manageable within the available time and resources. These choices were made carefully to keep the study focused, relevant, and feasible.

Ethical Assurances

This study followed all ethical guidelines for conducting research with human participants. Before any data were collected, the full research plan was submitted to the university's Institutional Review Board (IRB) for approval. Recruitment and data collection did not begin until the IRB gave official approval.

Participation was completely voluntary. All participants reviewed an informed consent form that explained the study's purpose, how long it would take, the kinds of questions being asked, and their rights. The form clearly stated that they could skip any question or stop the survey at any time without any penalty (Creswell & Creswell, 2018; Jackson, 2016).

To protect privacy, no identifying information was collected. If participants wanted to receive the \$15 electronic gift card, they provided their email address using a separate form that was not linked to their survey responses. This kept their answers anonymous while still allowing them to receive the incentive (Leedy & Ormrod, 2010).

All data was collected through a secure and encrypted online platform. Responses were stored on a password-protected server that was approved by the university. Only the primary researcher and authorized team members had access to the data. No names, email addresses, or

other personal information were included in the dataset. Because the survey included questions about anxiety and emotional well-being, participants were reminded that they could stop at any time if they felt uncomfortable. The consent form also included contact information for local and national mental health resources in case any participant experienced distress during the survey. All study procedures followed the ethical standards of the American Psychological Association (APA, 2017), especially those related to respect, fairness, and protection from harm. The study was designed to keep risks low while supporting each participant's rights, privacy, and well-being.

Summary

This chapter included the methods for a quantitative, cross-sectional study that explored the relationship between paternal anxiety, emotional regulation challenges, and child anxiety as reported by fathers. A correlational design was chosen to study these relationships using well-known and validated self-report surveys completed by fathers of children aged 6 to 18 (Creswell & Creswell, 2018).

The study used purposive sampling to recruit fathers across the United States through CloudResearch. Data were collected using a secure, anonymous online survey (Leedy & Ormrod, 2010). Two hierarchical multiple regression analyses were used to test whether paternal anxiety predicted emotional regulation problems and child anxiety while controlling for the father's age. Before interpreting results, key assumptions for regression were tested to make sure the analysis is valid (Field, 2018; Jackson, 2016).

The chapter also reviewed several limitations, such as relying on self-reports, using only one informant, and focusing on a limited population. Delimitations, such as focusing only on fathers using English-language online surveys, were also discussed. Ethical steps, such as getting

IRB approval, ensuring informed consent, protecting data, and maintaining anonymity, followed the APA (2017) ethical guidelines. Together, the methods in this chapter provided a solid and ethical foundation for studying how paternal anxiety affected emotional regulation and child mental health in families.

In this chapter, the research design, participant recruitment, data collection procedures, and analytic strategy were outlined. After following these procedures and analyzing the data, the results were obtained. Chapter 4 presents the findings of the study and explains how the statistical analyses addressed the research questions.

Chapter 4: Findings

The problem addressed in this study was how paternal anxiety may contribute to fathers' own emotional regulation difficulties and anxiety in their children, when controlling for paternal age.

The purpose of this quantitative study was to explore whether paternal anxiety (independent variable) predicted two outcomes: emotional regulation challenges in fathers and anxiety in their children (dependent variables), while controlling for paternal age.

This quantitative cross-sectional correlational design was used to examine the extent to which paternal anxiety was related to emotional regulation challenges and perceived child anxiety. Paternal anxiety was the independent variable, and emotional regulation and child anxiety were the dependent variables. Paternal age was included as the control variable. Two separate hierarchical multiple regression analyses were performed to determine the strength and significance of these relationships.

This chapter presents an evaluation of the reliability of the instruments used in this study, a description of the assessment of statistical assumptions, an overview of the demographic characteristics of the participants, and the results of the regression analyses organized by research question. Results are reported objectively, followed by an evaluation of the findings in relation to existing research and theory.

Evaluation of the Data

The data used in this study was collected using validated instruments with established psychometric properties. The Beck Anxiety Inventory (BAI) is a 21-item self-report scale that has demonstrated high reliability, with internal consistency coefficients typically above .90 (Beck et al., 1988; Fydrich et al., 1992). The Difficulties in Emotion Regulation Scale (DERS) is a 36-

item measure with reported internal consistency of approximately .93 and has been validated in both clinical and non-clinical populations (Fowler et al., 2014; Gratz & Roemer, 2004). The Spence Children's Anxiety Scale – Parent Version (SCAS-P) is a 38-item parent-report instrument with internal consistency ranging from .84 to .92 across subscales (Nauta et al., 2004; Spence, 1997).

In the present sample, internal consistency reliability coefficients were as follows: BAI, $\alpha = .950$; DERS, $\alpha = .944$; and SCAS-P, $\alpha = .962$, indicating excellent reliability for all three measures.

Several statistical assumptions were evaluated prior to interpreting the regression results.

1. Linearity: Scatterplots were created to check whether the relationships between the main variables (paternal anxiety and each outcome variable) formed a straight-line pattern. Visual inspection revealed that the relationships between paternal anxiety and emotional regulation and between paternal anxiety and child anxiety were primarily linear.
2. Normality of residuals: A normal probability plot (P-P plot) and histograms of the residuals (differences between actual and predicted values) were reviewed. The points were close to the diagonal line, showing that the residuals were normally distributed. The residuals were approximately normally distributed around the regression line, suggesting that the assumption of normality was met.
3. Homoscedasticity: The scatterplots of standardized residuals were examined for each model. The residuals appeared to be evenly distributed across the range of values, meaning the variance in errors was consistent across levels of the predictor variables, indicating no clear evidence of heteroscedasticity.

4. Multicollinearity: Multicollinearity was assessed using tolerance and variance inflation factor (VIF) values in the regression output. For both models, tolerance values were approximately .998 and VIF values were approximately 1.002, indicating no concern for multicollinearity between paternal age and paternal anxiety.
5. Independence of residuals: The Durbin–Watson statistics were 2.16 for Model 1 and 2.05 for Model 2, both within the generally acceptable range of 1.5 to 2.5, suggesting that the residuals were independent.

Based on these checks, all assumptions for the regression models were met, allowing the results to be interpreted reliably and with confidence.

Results

The following section presents the statistical findings of the study based on the analyses described in Chapter 3. Descriptive statistics are presented first, followed by the regression analyses used to address the research questions. Although the a priori power analysis was conducted using a one-tailed test due to the directional hypotheses, SPSS reports two-tailed significance values by default. Therefore, two-tailed p-values were used in the regression analyses, providing a more conservative test of the hypotheses.

Sample Characteristics

A total of 52 fathers completed the survey. During data screening, two cases were removed because the reported child ages (4 and 5 years) did not meet the inclusion criterion of 6–18 years. This resulted in a final analytic sample of 50 fathers, which exceeded the minimum sample size of 43 identified through the a priori power analysis. The fathers in the study ranged in age from 23 to 54 years ($M = 39.90$, $SD = 6.39$, Median = 40). Each father reported on one

child, whose ages ranged from 6 to 17 years ($M = 11.44$, $SD = 3.25$, Median = 11). Based on the parent reports, 62% of the children were male, and 38% were female.

The fathers in this study had varying levels of education, and the groups were distributed relatively evenly across these levels. Most fathers had at least some college. Family structure also varied across the sample. Most fathers lived in two-parent households, while the rest were split between shared-custody and single-father homes. Table 1 shows a summary of these characteristics.

Table 1

Demographic Characteristics of Fathers and Children (N = 50)

Variable	n	%
Paternal Age		
23–29 years	4	8.0
30–39 years	14	28.0
40–49 years	23	46.0
50–54 years	9	18.0
Child Age		
6–8 years	12	24.0
9–11 years	15	30.0
12–14 years	12	24.0
15–17 years	11	22.0
Child Gender		
Male	31	62.0
Female	19	38.0
Family Structure		
Two-parent household	31	62.0
Single father, full custody	10	20.0
Single father, shared/partial custody	9	18.0
Paternal Education		
High school diploma or GED	10	20.0
Some college or associate degree	14	28.0
Bachelor's degree	13	26.0
Master's degree	13	26.0

Descriptive Statistics for Study Variables

Descriptive statistics for the main study variables are shown in Table 2. Fathers' scores on the Beck Anxiety Inventory (BAI_Total) ranged from 0 to 55 ($M = 23.90$, $SD = 14.00$), indicating a wide range of anxiety levels within the sample. Scores on the Difficulties in Emotion Regulation Scale (DERS_Total) ranged from 68 to 167 ($M = 106.78$, $SD = 26.54$). This indicated that fathers differed in how much trouble they had managing emotions. Scores on the Spence Children's Anxiety Scale – Parent Version (SCAS_Total) ranged from 8 to 99 ($M = 45.88$, $SD = 22.95$), indicating a wide range of anxiety symptoms reported for their children. Fathers in the study were between 23 and 54 years old ($M = 39.90$, $SD = 6.39$).

Table 2

Descriptive Statistics for Main Study Variables (N = 50)

Variable	N	Minimum	Maximum	M	SD
BAI_Total	50	0.00	55.00	23.90	14.00
SCAS_Total	50	8.00	99.00	45.88	22.95
DERS_Total	50	68.00	167.00	106.78	26.54
Paternal Age	50	23	54	39.90	6.39

Bivariate correlations among the main variables showed that paternal anxiety was positively related to both paternal emotion regulation difficulties ($r = .728$, $p < .001$) and father-reported child anxiety ($r = .738$, $p < .001$). Paternal age was not significantly related to either emotional regulation difficulty or father-reported child anxiety.

Table 3

Correlations Among Main Study Variables (N = 50)

	1	2	3	4
DERS_Total	1.000	-.079	.728**	.738**
Paternal Age	-.079	1.000	.043	.102
BAI_Total	.728**	.043	1.000	.738**
SCAS_Total	.738**	.102	.738**	1.000

Note. N = 50. ** $p < .001$.

Research Question 1

RQ1: Does paternal anxiety significantly predict emotional regulation challenges when controlling for paternal age?

H0: Paternal anxiety does not significantly predict emotional regulation challenges when controlling for paternal age.

H1: Paternal anxiety significantly predicts emotional regulation challenges when controlling for paternal age.

A hierarchical multiple regression was conducted with emotional regulation difficulties as the dependent variable. Paternal age was entered in Step 1, followed by paternal anxiety in Step 2. Table 4 presents the model summary, and Table 5 presents the ANOVA results. The regression coefficients are presented in Table 6.

In Step 1, paternal age did not significantly predict emotional regulation difficulties, $R^2 = .006$, $F(1, 48) = 0.298$, $p = .587$. When paternal anxiety was added in Step 2, the overall model became significant, $R^2 = .542$, $F(2, 47) = 27.79$, $p < .001$, accounting for 54.2% of the variance in paternal emotion regulation difficulties. The change in explained variance from step 1 to step 2 was significant, with a change in R^2 of .536, $F(1, 47) = 54.94$, $p < .001$.

Therefore, the null hypothesis for Research Question 1 was rejected.

Table 4

Model Summary for Hierarchical Regression Predicting Emotional Regulation Difficulty

Model	R	R ²	Adjusted R ²	SE of the estimate	R ² change	F change	df1	df2	p for R ² change
1	.079	.006	-.015	26.73	.006	.298	1	48	.587
2	.736	.542	.522	18.34	.536	54.94	1	47	<.001

Table 5

ANOVA for Hierarchical Regression Predicting Emotional Regulation Difficulty

Model	Source	Sum of squares	df	Mean square	F	p
1	Regression	213.22	1	213.22	.298	.587
	Residual	34297.36	48	714.53		
	Total	34510.58	49			
2	Regression	18697.31	2	9348.66	27.79	<.001
	Residual	15813.27	47	336.45		
	Total	34510.58	49			

Table 6*Coefficients for hierarchical regression predicting emotional regulation difficulty*

Model	Predictor	B	SD	β	t	p
1	Constant	119.81	24.14	—	4.96	<.001
	Paternal Age	-0.33	0.60	-.079	-0.55	.587
2	Constant	91.88	16.99	—	5.41	<.001
	Paternal Age	-0.46	0.41	-.110	-1.12	.270
	BAI_Total	1.39	0.19	.733	7.41	<.001

These results indicate that paternal anxiety was a statistically significant predictor of emotional regulation difficulties after controlling for paternal age.

Research Question 2

RQ2: Does paternal anxiety significantly predict child anxiety when controlling for paternal age?

H0: Paternal anxiety does not significantly predict child anxiety when controlling for paternal age.

H1: Paternal anxiety significantly predicts child anxiety when controlling for paternal age.

A hierarchical multiple regression was conducted with father-reported child anxiety as the dependent variable.

In Step 1, paternal age alone did not significantly predict father-reported child anxiety, $R^2 = .010$, $F(1, 48) = 0.508$, $p = .479$. When paternal anxiety was added in Step 2, the overall model became significant, $R^2 = .550$, $F(2, 47) = 28.73$, $p < .001$, explaining 55.0% of the variance in father-reported child anxiety. The change in explained variance from Step 1 to Step 2 was significant, with a change in $R^2 = .540$, $F(1, 47) = 56.37$, $p < .001$.

In the final model, paternal anxiety was a strong, significant predictor of father-reported child anxiety ($B = 1.205$, $\beta = .735$, $t = 7.51$, $p < .001$). Paternal age again remained non-significant ($B = 0.235$, $t = 0.72$, $p = .475$). Paternal anxiety was positively associated with father-reported child anxiety after controlling for paternal age.

Therefore, the null hypothesis for Research Question 2 was rejected.

Table 7

Model Summary for Hierarchical Regression Predicting Father-reported Child Anxiety

Model	R	R ²	Adjusted R ²	SE of the Estimate	R ² change	F change	df1	df2	p for R ² change
1	.102	.010	-.010	23.07	.010	.508	1	48	.479
2	.742	.550	.531	15.72	.540	56.37	1	47	<.001

Table 8

ANOVA for Hierarchical Regression Predicting Father-reported Child Anxiety

Model	Source	Sum of squares	df	Mean square	F	p
1	Regression	270.34	1	270.34	.508	.479
	Residual	25540.94	48	532.10		
	Total	25811.28	49			
2	Regression	14198.28	2	7099.14	28.73	<.001
	Residual	11613.00	47	247.09		
	Total	25811.28	49			

Table 9*Coefficients for Hierarchical Regression Predicting Father-reported Child Anxiety*

Model	Predictor	B	SD	β	t	p
1	Constant	31.21	20.84	—	1.50	.141
	Paternal Age	.37	.52	.102	.71	.479
2	Constant	6.97	14.56	—	.48	.634
	Paternal Age	.25	.35	.071	.72	.475
	BAI_Total	1.21	.16	.735	7.51	<.001

These results indicate that paternal anxiety was a statistically significant predictor of father-reported child anxiety after controlling for paternal age.

Evaluation of the Findings

For Research Question 1, the results showed a strong positive relationship between paternal anxiety and emotional regulation difficulties. After controlling for paternal age, paternal anxiety remained a statistically significant predictor of fathers' difficulties managing their emotions. Fathers who reported higher anxiety scores also reported greater difficulty understanding, accepting, and regulating their emotional responses.

This finding is consistent with previous research showing that individuals with higher anxiety often experience more emotional reactivity and greater challenges with emotion regulation (Gratz & Roemer, 2004; Shenaar-Golan et al., 2021). Studies have suggested that anxiety can make it harder for individuals to remain emotionally steady, especially during stressful situations. The results of the present study align with this pattern.

From the perspective of Bowen Family Systems Theory, anxiety is considered a central force that influences emotional functioning within individuals and families (Bowen, 1978; Kerr & Bowen, 1988). Bowen proposed that higher levels of chronic anxiety are associated with lower

differentiation of self and increased emotional reactivity. The current findings are consistent with this theoretical view, as fathers with higher anxiety scores also reported more difficulty regulating their emotions.

For Research Question 2, paternal anxiety was also a statistically significant predictor of father-reported child anxiety after controlling for paternal age. Fathers who reported higher anxiety levels tended to report higher levels of anxiety symptoms in their children.

This result is consistent with existing research linking parental anxiety to higher levels of anxiety in children (Fjermestad et al., 2020; Trepik et al., 2023; Zhou & Li, 2022). Prior studies have found similar associations across both maternal and paternal samples, suggesting that parental anxiety is related to child anxiety symptoms. The findings of this study reflect that same pattern within this sample.

Bowen Family Systems Theory suggests that anxiety operates within the family system rather than remaining isolated within one individual (Bowen, 1978). One concept within this theory, the family projection process, describes how emotional patterns within parents are associated with emotional functioning in children. Although the cross-sectional design of this study does not allow for causal conclusions, the positive association found between paternal anxiety and father-reported child anxiety is consistent with Bowen's theoretical framework.

In both regression models, paternal age was not a statistically significant predictor. This indicates that within this sample, paternal anxiety explained variance in emotional regulation difficulties and father-reported child anxiety beyond what could be attributed to age. This finding is consistent with research suggesting that emotional functioning may be more closely related to parenting and child outcomes than demographic characteristics such as age (Shenaar-Golan et al., 2021).

Overall, the findings of this study were consistent with both existing research and Bowen Family Systems Theory. Across both research questions, paternal anxiety emerged as a significant predictor of fathers' emotional regulation difficulties and their reports of child anxiety, whereas paternal age did not show a significant relationship with either outcome.

Summary

This chapter included the results of this study, which examined how paternal anxiety was related to fathers' emotion regulation difficulties and their children's anxiety. After reviewing the data and making sure the assumptions for hierarchical multiple regression were met, two regression models were run.

In Model 1, paternal anxiety was a significant predictor of fathers' emotion regulation difficulties, even after age was controlled. It explained about 54% of the variance in emotional regulation difficulty scores. In Model 2, paternal anxiety also significantly predicted fathers' reported child anxiety after accounting for age, explaining 55% of the variance in father-reported child anxiety scores. Across both models, paternal age was not a significant predictor.

Overall, paternal anxiety was strongly associated with fathers' emotion regulation difficulties and father-reported child anxiety. Chapter 5 will examine the implications of these findings for theory, clinical practice, and future research.

Chapter 5: Implications, Recommendations, and Conclusions

The problem addressed in this study was how paternal anxiety may contribute to fathers' own emotional regulation difficulties and anxiety in their children, when controlling for paternal age. The purpose of this quantitative study was to explore whether paternal anxiety (independent variable) predicted two outcomes: emotional regulation challenges in fathers and anxiety in their children (dependent variables), while controlling for paternal age.

To address this purpose, the study used a non-experimental, cross-sectional correlational design with two multiple regression analyses. The participants were fathers of children ages 6 to 18 who reported that their child struggled with anxiety. Fathers filled out questionnaires about their own anxiety, how well they managed their emotions, and how anxious they felt their child was. Results indicated that paternal anxiety was a strong and statistically significant predictor of both fathers' emotional regulation difficulties and child anxiety. Paternal age was not a significant predictor in either model. Paternal anxiety accounted for more than half of the variance in both outcome variables. These findings directly addressed the study purpose and clarified the role of fathers' anxiety within family emotional processes. Limitations of the study included the use of self-report data, a cross-sectional design, and reliance on fathers' reports of child anxiety. Because all the measures were collected from fathers at the same time point, this may have affected how strong the relationships appeared.

This chapter presents the implications of these findings for family systems theory and clinical practice, followed by recommendations for practice and future research, and concludes with a summary of the study's key findings and contributions.

Implications

The implications of the findings in relation to the research questions and existing literature are presented in this section. The implications are organized according to each research question examined in the study.

Implications Related to Research Question 1

Research Question 1 looked at whether fathers' anxiety was related to difficulties with emotional regulation, while also considering fathers' age. The results showed that fathers with higher anxiety had more trouble understanding and managing their emotions. Fathers' age did not have a meaningful impact. This suggests that anxiety, rather than age or life experience, plays a key role in how fathers manage their emotions.

One implication of this study is that fathers with higher anxiety also reported more difficulty regulating their emotions. This supports earlier research showing that anxiety is related to emotional reactivity and difficulty regulating emotions (Gratz & Roemer, 2004; Shenaar-Golan et al., 2021). Importantly, paternal anxiety accounted for over half of the variance in emotional regulation difficulties, suggesting that anxiety may be a central component of fathers' emotional functioning rather than a minor contributing factor. When fathers struggle to manage their emotions, they may react more intensely or inconsistently, particularly during stressful parenting situations. Over time, this may affect the emotional environment of the family.

Bowen Family Systems Theory explains that anxiety can make emotional reactions stronger and harder to manage (Bowen, 1978; Kerr & Bowen, 1988). From a family systems view, higher anxiety is linked to stronger emotional reactions and less emotional separation within the family. These findings were consistent with Bowen's idea of differentiation of self by showing that fathers with higher anxiety also reported more difficulty managing their emotions

in close relationships. In this way, the study offered quantitative support for Bowen's idea that anxiety can disrupt emotional regulation within close relationships. Fathers with higher anxiety may have more difficulty staying calm when stress increases and separating their own feelings from what their children need at the moment. Because of this, staying calm and responding consistently can be more challenging during emotional situations. This shows that a father's anxiety affects not just him, but also how emotions are expressed and handled in the family. Difficulties with emotional regulation may be one way a father's anxiety impacts family relationships.

Some previous research has examined paternal age as a demographic factor associated with child psychiatric outcomes (Wang et al., 2022). In the present study, paternal age was not a significant predictor of emotional regulation difficulties. These findings suggest that chronological age alone may not serve as a protective factor when anxiety is present, highlighting the greater clinical relevance of emotional functioning compared to demographic characteristics such as age. This shifts the focus away from age and toward emotional processes, and it highlights the need to directly assess anxiety rather than assume maturity alone is protective.

In everyday life, fathers with higher anxiety may have stronger emotional reactions, struggle to calm down after disagreements, or respond less consistently to a child's emotional needs (Shenaar-Golan et al., 2021). Earlier research has shown that anxiety can make it harder to understand emotions, control reactions, and stay calm when under stress (Fowler et al., 2014; Gratz & Roemer, 2004). For fathers, these problems may be more noticeable during parenting situations that require patience and emotional presence, such as helping a child calm down,

setting limits, or managing both work and family responsibilities (Gratz & Roemer, 2004; Shenaar-Golan et al., 2021).

From a Bowen Family Systems perspective, these results can be further explained using several key concepts. The family projection process helps explain how a father's anxiety may shape how he responds to his child and how he understands the child's emotions (Bowen, 1978). When anxiety is higher, fathers may have more difficulty maintaining differentiation of self, which can make it harder to separate their own emotional reactions from their child's needs. This can change the emotional balance in the immediate family and may lead to more anxiety in children. Over time, these patterns can repeat across generations, as described by Bowen's multigenerational transmission process (Bowen, 1978; Kerr & Bowen, 1988). Taken together, the findings suggest that emotional regulation difficulties may be one mechanism through which paternal anxiety operates within the family system.

Implications Related to Research Question 2

Research Question 2 looked at whether fathers' anxiety was related to how much anxiety they reported in their children, while also taking fathers' age into account. The results showed that fathers with higher anxiety tended to report higher anxiety in their children, even after considering age. These findings suggest that fathers' anxiety may influence both their children's emotional experiences and how fathers notice and interpret those emotions.

Through this study, the researcher found a connection between fathers' anxiety and the amount of anxiety they reported in their children. Fathers with higher levels of anxiety reported higher levels of anxiety symptoms in their children, even after considering fathers' age. Paternal anxiety accounted for approximately 55% of the variance in child anxiety, indicating a strong association that warrants careful theoretical and clinical consideration. Previous research has

shown similar patterns, with parents who experience higher anxiety often reporting more anxiety in their children and showing more anxious parenting behaviors (Fjermestad et al., 2020; Trepia et al., 2023; Zhou & Li, 2022). Fathers who struggle with anxiety may worry more, be more protective, or respond in inconsistent ways. This type of parenting response may increase anxiety in children (Trepia et al., 2023; Zhou & Li, 2022).

These findings also suggest that fathers' anxiety may influence how they understand their children's behavior. Fathers who feel more anxious may focus more on possible problems and may see their child's behavior as more concerning (Zhou & Li, 2022). From this perspective, paternal anxiety may influence both how family members interact and how they interpret one another's behavior.

However, because all the data came from fathers at one point in time, this may have made the relationship look stronger than it is. Fathers who were more anxious may have been more likely to see and report anxiety in their children, making it difficult to tell how much reflects perception versus the child's actual anxiety. This does not mean the findings are invalid, but it does suggest that the results may reflect both children's actual anxiety and fathers' perceptions influenced by their own anxiety. This pattern may also reflect shared method variance, as all measures were completed by fathers at a single time point.

This difference is important to think about. The findings may show both how anxiety moves through family relationships and how a father's own anxiety might shape the way he sees his child's emotions. Future research that follows families over time and includes more than one reporter could help sort this out. It would clarify whether fathers' anxiety truly predicts changes in child anxiety, or if it mainly shapes how fathers see and interpret their children's emotions.

This pattern fits with Bowen Family Systems Theory, which explains anxiety as something that moves through family relationships rather than staying within one individual (Bowen, 1978). Through the family projection process, parents may pass anxiety to their children through repeated emotional reactions and patterns of interaction (Kerr & Bowen, 1988). However, because fathers reported child anxiety, these findings may also indicate how fathers' own anxiety influences their perceptions of their children's emotional experiences. These behaviors may be associated with higher anxiety in children, especially when parents have difficulty regulating their own emotions. The findings of this study show a strong link between paternal anxiety and fathers' reports of child anxiety. This suggests that fathers' emotional functioning may shape the emotional climate of the family and influence how anxiety is experienced within the parent–child relationship.

A few factors could have influenced how these results were interpreted. All the data collected were based on the fathers' self-reports. Fathers who experience high anxiety may be more prone to signs of distress in their children and see them as more concerning. Also, the study examined experiences at a single point in time, which may limit understanding of how anxiety and emotional regulation may shift over time. Another important factor is the cultural expectations of fatherhood and emotional regulation, which, in turn, could have influenced how fathers understood and reported their experiences.

Overall, the findings suggest that paternal anxiety affects how fathers manage their emotions and how they view their children's emotional well-being. Anxiety appears to affect the family system rather than only one person. These results support the importance of including fathers in research, assessment, and clinical work related to child anxiety and family mental

health. Paying attention to fathers' emotional experiences may help improve understanding of how anxiety develops and is maintained within families.

Taken together, these findings directly addressed the stated purpose of this study, which was to examine whether paternal anxiety predicted emotional regulation difficulties and father-reported child anxiety beyond paternal age. The results demonstrate that it was fathers' anxiety, not their age, that explained meaningful differences in both emotional regulation and perceptions of child anxiety.

Broader Clinical Implications

By examining paternal anxiety in relation to both emotional regulation and child anxiety, this study addressed the gap identified in Chapter 1 regarding the limited attention to fathers' mental health in research and clinical practice (Trepik et al., 2023). As fathers have become more involved in their children's emotional lives, it is increasingly important to better understand how their anxiety may influence family functioning and child well-being (Pleck, 2010; Volling & Palkovitz, 2021).

When thinking about these results more broadly, they also have implications for public mental health and prevention. If fathers' anxiety was closely tied to both their own emotional regulation and how they perceive their child's anxiety, then it may make sense to screen fathers in settings like pediatric offices, schools, or primary care. Fathers have historically been underrepresented in child mental health research and programming. From these findings, it is suggested that including fathers more intentionally in assessment, psychoeducation, and treatment planning could provide a more complete picture of family emotional functioning.

It is also worth considering what may happen when paternal anxiety is not addressed. Children may continue to struggle with anxiety over time, which could affect school

performance and peer relationships (Fjermestad et al., 2020; Rasing et al., 2019). From a systems perspective, supporting fathers in managing their anxiety early may positively influence the overall emotional climate of the family and potentially reduce the risk of anxiety patterns continuing across generations.

On a broader level, these findings may help improve training for professionals and shape prevention programs that have mostly focused on mothers in the past. Including fathers more intentionally in healthcare and school settings may support better long-term emotional and academic outcomes for children (Volling & Palkovitz, 2021).

Paternal Age as a Non-Significant Predictor

It is interesting that paternal age, which has been linked to child psychiatric outcomes in some large studies (Wang et al., 2022), was not a significant predictor in either regression model in this study. Many developmental perspectives suggest that greater age and life experience may lead to better emotional regulation or stronger parenting skills. However, that pattern did not appear here. The findings suggest that emotional functioning does not necessarily improve just because a father is older, especially when anxiety is present. Instead, difficulties with emotional regulation were more closely connected to anxiety levels than to age alone.

This also adds something important to the literature. It suggests that demographic factors like age may be less clinically meaningful than emotional processes when trying to understand paternal influence within families. Rather than focusing only on age, future research could look more closely at factors such as parenting experience, level of father involvement, work stress, or overall stress load to better understand what actually shapes fathers' emotional functioning.

Recommendations for Practice

The findings of this study point to several implications for clinical practice and family-based mental health services. Because paternal anxiety accounted for more than half of the variance in both fathers' emotional regulation difficulties (54.2%) and child anxiety (55.0%), these results suggest that fathers' emotional experiences may play a substantial role in family emotional functioning. Rather than focusing exclusively on children or mothers, it may be important that fathers be more intentionally included in assessment, treatment, and prevention efforts. Because of these strong associations, fathers' anxiety may deserve more direct attention in settings such as family therapy, pediatric behavioral health, school-based mental health services, and primary care, especially when children present with anxiety concerns.

One implication is the importance of paying closer attention to paternal anxiety when children present with anxiety concerns. Given the strength of the associations found in this study, assessing paternal anxiety may provide clinically relevant information beyond focusing only on child symptoms. Fathers may be less likely to talk openly about anxiety because of stigma or expectations about masculinity and parenting (Volling & Palkovitz, 2021). In the context of this study's findings, fathers with higher anxiety also reported greater difficulty regulating emotions and higher levels of child anxiety. This suggests that unaddressed paternal anxiety may still be clinically relevant even when fathers are less verbally expressive. Since fathers have historically been underrepresented in child anxiety research (Trepiaik et al., 2023), this study adds to the literature by showing that paternal anxiety was strongly related to both emotion regulation difficulties and child anxiety in the same analysis. Giving fathers room to talk about stress and anxiety may help increase their involvement in treatment, which fits with previous research suggesting that including fathers can lead to a more complete understanding of the family

assessment (Trepiaik et al., 2023). Looking at fathers' anxiety can also help clinicians understand how emotions move through the family instead of focusing only on the child.

Another implication is the need to focus on emotional regulation skills when working with fathers. Because higher anxiety was linked to more difficulty managing emotions, interventions that focus on emotional awareness, grounding, and coping skills may be helpful, particularly in family therapy, parent coaching, and behavioral health settings (Gratz & Roemer, 2004). Although treatment outcomes were not examined in this study, these recommendations fit with the finding that emotional regulation difficulties were strongly linked to paternal anxiety. This suggests that helping fathers strengthen these skills may indirectly support healthier emotional interactions within families.

In practice, this could mean using approaches such as mindfulness-based emotion regulation strategies, parent coaching, family systems therapy, and psychoeducational programs that directly address fathers' stress and emotional awareness. Making a more intentional effort to include fathers in existing child anxiety treatment protocols may help align clinical work more closely with systemic views of family functioning.

From a Bowen Family Systems perspective, the strong link between paternal anxiety and emotional regulation difficulties in this study provides quantitative support for Bowen's concept of differentiation of self. Specifically, the findings suggest that higher paternal anxiety may reflect lower differentiation, as evidenced by reported difficulties managing emotional reactivity in close relationships. The strength of this association was consistent with Bowen's idea that anxiety works through patterns of emotional reactivity in close relationships, rather than existing only within one person (Bowen, 1978; Kerr & Bowen, 1988).

The results also suggest that including fathers in family therapy may be helpful when addressing child anxiety. Fathers' emotional reactions and parenting behaviors are related to children's emotional outcomes (Shenaar-Golan et al., 2021). Using a Bowen family systems framework, this finding was consistent with the family projection process, in which parental anxiety may influence how parents understand and respond to children's emotional experiences (Bowen, 1978; Kerr & Bowen, 1988). Helping fathers understand how their anxiety shows up in family interactions may help them become more aware and respond more thoughtfully, which fits with family systems approaches to treatment (Bowen, 1978; Shenaar-Golan et al., 2021).

Parenting and psychoeducational programs may also benefit from including material designed specifically for fathers. Many programs tend to focus mostly on mothers, which may make it harder for fathers to feel involved (Volling & Palkovitz, 2021). Because fathers' anxiety was a strong predictor in both models, programs that focus on fathers' stress, emotions, and parenting roles may better reflect what is happening emotionally within families. When programs address fathers' stress, emotional experiences, and parenting roles, fathers may feel more supported and more likely to participate (Volling & Palkovitz, 2021). Greater father involvement may be theoretically linked to broader family functioning within a systems framework (Bowen, 1978), although co-parenting quality and overall family functioning were not directly measured in this study.

Providers in healthcare, school, and community mental health settings may find it helpful to include fathers in discussions about child anxiety. Because this study relied on fathers' reports of their child's anxiety, the findings suggest that fathers' own emotional experiences may shape how they see and respond to their children. Focusing more on fathers' emotional experiences may help support a more family-centered approach to children's mental health.

This study contributes to existing literature by examining paternal anxiety within the same statistical models predicting both emotional regulation and child anxiety, an area historically dominated by maternal-focused research. While prior studies have identified associations between parental anxiety and child outcomes, the strength of the relationships observed here underscores the importance of including fathers more intentionally in both research and practice. Additionally, the finding that paternal age was not a significant predictor suggests that emotional functioning, rather than demographic stage, may be more clinically meaningful when working with families.

Overall, these practice recommendations are based on the main finding of this study, which was that paternal anxiety was strongly related to both difficulties with emotional regulation and higher child anxiety, while paternal age was not significant. This further suggests that emotional functioning may matter more than life stage or demographic factors when determining clinical focus. By intentionally including fathers and paying attention to their anxiety and emotion regulation, clinicians may be better able to approach anxiety as something that happens within the family, rather than viewing it only as an individual symptom.

In summary, the most important clinical implication of this study is that paternal anxiety appears to be strongly associated with both fathers' emotional regulation difficulties and their perceptions of child anxiety, above and beyond paternal age. While causal conclusions cannot be drawn, the magnitude of these associations suggests that fathers' emotional functioning deserves direct attention in assessment, prevention, and intervention efforts. Framing these implications cautiously and within a systems perspective aligns the findings with both empirical literature and Bowen Family Systems Theory, while avoiding overextension beyond the study's design.

Recommendations for Future Research

While this study adds to what is known about paternal anxiety, particularly given that paternal anxiety accounted for more than half of the variance in both emotional regulation difficulties and child anxiety, several targeted next steps logically follow from these findings. Since paternal anxiety explained more than half of the variance in both outcomes, it is important to better understand the direction of these relationships and the processes that may be driving them. Given the magnitude of these associations (54–55% variance explained), further investigation of directionality is especially warranted. Additionally, future studies should use larger and more diverse samples to determine whether the strength of these relationships remains consistent across populations and levels of symptom severity.

Based on the strength of the associations observed in this study, the next logical step in this line of research would be a longitudinal, multi-informant study examining whether paternal anxiety and emotional regulation difficulties predict changes in child anxiety over time. Because this study relied on cross-sectional data and father-reported measures, a longitudinal design would allow researchers to clarify directionality and distinguish between perception effects and actual developmental changes in child anxiety, directly addressing the limitations of cross-sectional and single-informant self-report data in the present study.

The study included a small group of fathers recruited through online methods, which may limit how much the findings can be generalized to other populations. Fathers from different cultural, socioeconomic, and family backgrounds may experience anxiety and parenting in different ways, which could affect how emotions are managed within the family. Since paternal anxiety was significant in both models, future research should look at whether these same patterns appear in clinical settings, community mental health, and pediatric behavioral health

contexts. Including both community and clinical samples would improve upon the present study by clarifying whether the magnitude of these associations varies by severity level. Future research could explore whether the strong links found in this study between paternal anxiety, emotional regulation difficulties, and child anxiety are similar across different racial, ethnic, socioeconomic, and family-structure groups.

Second, longitudinal studies would help better understand whether the strong relationships found here between paternal anxiety and child anxiety influence each other over time. Following families across multiple time points could help determine whether paternal anxiety predicts increases in child anxiety, whether child anxiety increases paternal anxiety, or whether both processes occur together. Longitudinal research would be especially helpful for exploring Bowen's idea of anxiety being passed across generations.

Future research could include information from more than one source, such as mothers, teachers, or the children themselves. Because paternal anxiety was strongly associated with child anxiety in this study, incorporating multi-informant data would help address potential shared method variance and distinguish between actual child anxiety symptoms and perceptual bias influenced by paternal anxiety. While fathers' reports are important, using multiple perspectives may help better understand differences between how children experience anxiety and how parents view it (Nauta et al., 2004). Adding observational assessments of parent–child interaction or physiological indicators of anxiety would further improve measurement beyond single-time-point self-report.

Fourth, future research should include the exploration of whether emotional regulation acts as a mediator between paternal anxiety and child anxiety. In this study, paternal anxiety was strongly linked to both emotional regulation difficulties and child anxiety. Applying mediation or

moderation models could help researchers better understand the specific processes described in Bowen Family Systems Theory, particularly differentiation of self and emotional reactivity within close relationships (Bowen, 1978; Kerr & Bowen, 1988), thereby improving upon the present correlational design by directly testing proposed mechanisms. Looking at these areas in future studies could help inform more targeted interventions.

Qualitative studies may help better understand fathers' experiences with anxiety and parenting. Hearing directly from fathers may also help improve clinical work and increase engagement. An important next step would be to carry out a qualitative study that would look at fathers' lived experiences with anxiety, emotional regulation, and parenting. Interviews or open-ended questions could help provide insight into fathers' understanding of their anxiety, how it may impact their parenting, and how they view their relationship with their children. This approach may also help explain why some fathers engage less in treatment and help develop interventions that better support fathers. Since Bowen theory emphasizes internal emotional processes and relationship dynamics (Bowen, 1978; Kerr & Bowen, 1988), qualitative or mixed-methods studies may provide a deeper understanding of differentiation, emotional reactivity, and family projection in daily family interactions, processes that quantitative measures may not fully capture.

Finally, the finding that paternal age was not a significant predictor in either model points to additional directions for future research. Instead of focusing only on age, future research should look at parenting experience, level of father involvement, work stress, and overall stress levels to see whether emotional functioning, rather than demographic stage, is a more meaningful predictor of family emotional outcomes, given that paternal age did not significantly contribute in the present models.

Conclusions

In this study, the relationship between paternal anxiety, fathers' emotional regulation, and fathers' reports of anxiety in their children was examined. The results showed that fathers' anxiety was strongly related to both difficulty managing their own emotions and higher levels of reported child anxiety, even when fathers' age was considered.

In both regression models, paternal anxiety explained more than half of the variance in emotional regulation difficulties (54.2%) and child anxiety (55.0%). Fathers' age did not meaningfully contribute to either outcome, suggesting that anxiety was a more important factor than age in this sample and that emotional functioning may be more clinically relevant than demographic stage when understanding family emotional processes.

Bowen Family Systems Theory explains anxiety as something that affects the whole family, not just one individual (Bowen, 1978; Kerr & Bowen, 1988). The results were consistent with Bowen's ideas about how anxiety can be passed from parents to children and continue across generations, although the cross-sectional design does not allow for causal or intergenerational conclusions. Together, these concepts suggest that fathers' emotional functioning can shape how anxiety is experienced within the family.

These results suggest that fathers should be more included in research, assessment, and treatment when working with child anxiety. Given that paternal anxiety accounted for a substantial proportion of variance in both models, attention to fathers' emotional functioning may be warranted in clinical and prevention settings, although intervention effects were not directly tested in this study. Helping fathers manage their anxiety and emotions may contribute to healthier emotional patterns within families and may potentially reduce patterns of anxiety across

generations, consistent with Bowen Family Systems Theory, although this study did not directly examine longitudinal or intergenerational outcomes.

In summary, even though this study cannot make causal claims, the strong associations found here highlight the importance of paternal anxiety in understanding family emotional processes. The magnitude of the relationships observed (54–55% variance explained) underscores the need for longitudinal, multi-informant research to clarify directionality and mechanisms. When clinicians pay attention to paternal anxiety and emotional regulation within the family context, their work may better reflect a systemic view of how anxiety develops and is maintained within families.

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Appendix A: Confidentiality Agreement

Non-Disclosure/Confidentiality Agreement

I, Aida Gusic, will help Alma Gusic with the research study titled:
 “The Role of Paternal Anxiety in Emotional Regulation and Child Anxiety: A Quantitative Study”

My role will be to assist with data entry and review of self-report survey responses submitted by participants (fathers) through a secure online platform.

In this role:

1. I will not disclose the names of any participants in the study.

I will not disclose personal information collected from any participants in the study.

2. I will not disclose any participant responses.
3. I will not disclose any data.
4. I will not discuss the research with anyone other than the researcher(s).
5. I will keep all paper information secure while it is in my possession.
6. I will keep all electronic information secure while it is in my possession.
7. I will return all information to the researcher when I am finished with my work.
8. I will destroy any extra copies that were made during my work.
9. Other: I will not attempt to re-identify participants based on survey data.

Signature Date

Researcher Signature Date

Full contact information of research assistant

Name: Aida Gusic, MFT

Phone: 203-522-2663

Email: aidagusic322@gmail.com

Appendix B: Online Anonymous Survey/Questionnaire Consent

Online Anonymous Survey/Questionnaire Consent

Hello,

My name is Alma Gusic, and I am a doctoral student at National University. I am conducting an online survey to explore how anxiety in fathers may be related to emotional regulation challenges and anxiety symptoms in their children.

In order to participate, you must:

- Be age 18 or older
- Identify as a father
- Live in the United States
- Have at least one child between the ages of 6 and 18
- Currently be involved in parenting
- Believe your child may be experiencing anxiety
- The following survey includes questions about:
 - Your experience with anxiety (using the Beck Anxiety Inventory)
 - Your emotional responses and regulation strategies (using the Difficulties in Emotion Regulation Scale)
 - Your perception of your child's anxiety symptoms (using the Spence Children's Anxiety Scale – Parent Version)
- Basic demographic information such as your age, family structure, and education level

The survey will take approximately **25–30 minutes** to complete. Your participation in this study is voluntary. If you decide to participate, your responses will be anonymous they will not be linked to your name, email, IP address, or any other identifying information. Please complete the survey in a private place where others cannot see your responses. It is recommended that you finish the survey in one sitting. When you are done, please close your browser window and clear your browser history or cache to help protect your privacy.

As a token of appreciation for your time, you will receive a \$15 electronic gift card after completing the survey. The gift card will be sent electronically to the email address you provide at the end of the survey. This incentive is intended to thank you for your participation and does not obligate you to participate in the study.

If you have any questions regarding this survey, please contact me at a.gusic5828@o365.ncu.edu or 203-522-8512.

If you have any questions regarding your rights as a participant in this research study, or to report a research-related concern, you may email the National University IRB at irb@nu.edu.

By clicking the next button and completing the survey you indicate that you have consented to participate in this research. If you do not want to participate, please close the browser.

Appendix C: Research Protocol

Study Title: *The Role of Paternal Anxiety in Emotional Regulation and Child Anxiety*

Principal Investigator: Alma Gusic, LMFT

Institution: National University

Estimated Time to Complete Survey: 25–30 minutes

Introduction to Participants

This anonymous online survey includes questions about your personal experiences with anxiety, how you manage your emotions, and your observations of your child’s emotional behavior.

The survey will take approximately **25–30 minutes** to complete. Please read each item carefully and answer as honestly as possible. All responses will be kept confidential. You may skip any question you do not wish to answer. Participation is voluntary, and you may exit the survey at any time without penalty.

Informed Consent Confirmation

Before beginning, please confirm that you:

- Are 18 years of age or older
- Are a father of a child between the ages of 6 and 18
- Understand the purpose and procedures of this study
- Understand that your participation is voluntary and anonymous
- Agree to proceed with the survey

Do you consent to participate in this study?

- Yes
- No

Survey Instructions

This study uses three brief self-report instruments to gather information:

1. **Beck Anxiety Inventory (BAI):** Measures your current anxiety symptoms. You will rate how much you’ve been bothered by 21 symptoms over the past week using a scale from 0 (Not at all) to 3 (Severely).
2. **Difficulties in Emotion Regulation Scale – 18 items (DERS-18):** Assesses how you typically manage and respond to your emotions. You will rate statements about your emotional experiences on a 5-point scale ranging from 1 (Almost Never) to 5 (Almost Always).
3. **Screen for Child Anxiety Related Emotional Disorders – Parent Version (SCARED-P):** Captures your perception of your child’s anxiety symptoms. You will rate each item on a scale from 0 (Not True or Hardly Ever True) to 2 (Very True or Often True).

Sample Questions

Here are examples of the types of items you will respond to:

BAI Sample:

“Fear of the worst happening”

- 0 = Not at all
- 1 = Mildly
- 2 = Moderately
- 3 = Severely

DERS-18 Sample:

“I have difficulty making sense out of my feelings.”

- 1 = Almost Never
- 2 = Sometimes
- 3 = About Half the Time
- 4 = Most of the Time
- 5 = Almost Always

SCARED-P Sample:

“My child worries about things working out for the best.”

- 0 = Not True or Hardly Ever True
- 1 = Somewhat True or Sometimes True
- 2 = Very True or Often True

Conclusion

Thank you for completing this survey. Your participation contributes to a better understanding of how anxiety in fathers affects parenting and child well-being.

If you provided your email in a separate form to receive the **\$15 electronic gift card**, please note that this contact information is collected through an unlinked form and cannot be connected to your survey responses, ensuring your anonymity.

If you have any questions or would like to withdraw your data, please contact:

Alma Gusic, LMFT

Email: a.gusic5828@o365.ncu.edu

Appendix D: Recruitment Email/Letter

Subject: Voluntary Research Study for Fathers – Earn a \$15 Gift Card

Dear Potential Participant,

My name is Alma Gusic, and I am a doctoral student at National University. I am conducting a research study to explore how anxiety in fathers may relate to how they manage their emotions and how their children experience anxiety.

I am recruiting individuals who meet all of the following criteria:

- You are a **biological, adoptive, or legal father**
- You are **18 years of age or older**
- You have at least one child between the ages of **6 and 18 years old**
- You currently reside in the **United States**

If you decide to participate in this study, you will be asked to do the following activity:

- Complete an **anonymous online survey**, which takes approximately **25–30**

minutes to complete, from any device with internet access.

During the survey, you will be asked questions about:

- Your personal experiences with anxiety
- How you typically manage emotions
- Your observations of your child's emotional and behavioral responses

Basic demographic information such as your age, relationship to your child, and location

Participants in this study will receive a \$15 electronic gift card via email after completing the survey. You will be directed to a separate, unlinked form at the end of the survey to securely enter your email for this purpose. Your contact information will not be connected to your survey responses.

If you are interested in participating in this study, please click the following link:

[Survey Link to Be Inserted Here]

If you have any questions, feel free to contact me at: Email: a.gusic5828@o365.ncu.edu

Thank you for considering participation in this voluntary research!

Sincerely,

Alma Gusic, LMFT

Appendix E: Social Media Post for an Online Survey/Questionnaire (Draft)

Social Media Post for an Online Survey/Questionnaire

Hello friends! My name is **Alma Gusic**, and I am a doctoral student at **National University**. I am conducting an online survey to learn more about how anxiety in fathers relates to their emotional regulation and their children's emotional well-being.

To participate, you must:

- Be **18 years of age or older**
- Be a **biological, adoptive, or legal father**
- Have a **child between the ages of 6 and 18**
- Live in the **United States**

The survey is anonymous and takes about **25–30 minutes** to complete. Participants will be asked about their experiences with anxiety, how they manage their emotions, and how their child behaves emotionally.

Participants will receive a \$15 gift card via email after completing the survey.

Follow this link if you wish to participate in this voluntary research: [Survey Link to Be Inserted Here]

Feel free to share this post with others who may qualify!

Appendix F: Email Recruitment for an Online Survey/Questionnaire

Subject: Fathers Needed for Anonymous Survey – \$15 Gift Card

Hello,

My name is **Alma Gusic**, and I am a doctoral student at **National University**. I am conducting an online survey to explore how paternal anxiety relates to emotion regulation and children's anxiety symptoms.

To participate, you must:

- Be **18 years of age or older**
- Be a **biological, adoptive, or legal father**
- Have a **child between the ages of 6 and 18**
- Live in the **United States**

The survey is anonymous, contains three brief questionnaires, and takes approximately **25–30 minutes** to complete. You will be asked questions about:

- Your recent anxiety symptoms
- How you typically manage your emotions
- Your child's emotional and behavioral patterns
- Basic demographic information

As a thank-you, participants will receive a **\$15 electronic gift card** after survey completion. Your contact information for the gift card will be collected separately and cannot be linked to your survey responses.

To participate in this voluntary research, please follow this link: [Survey Link to Be Inserted Here]

Thank you for your time,

Alma Gusic, LMFT, Doctoral Student

National University

Appendix G: Recruitment Social Media Post

Are You a Father? We Want to Hear From You!

Hi, my name is **Alma Gusic**, and I am a doctoral student at **National University**. I am conducting a research study to explore how anxiety in fathers may relate to how they manage their emotions and how their children experience anxiety.

I'm looking for participants who meet all of the following criteria:

- Are **18 years of age or older**
- Are a **biological, adoptive, or legal father**
- Have at least one child between **6 and 18 years old**
- Currently reside in the **United States**

If you decide to participate in this study, you will be asked to:

- Complete an anonymous online survey (takes about **25–30 minutes**) from your phone, tablet, or computer whenever it's convenient for you.

During this survey, you will be asked about:

- Your own anxiety symptoms
- How you typically manage your emotions
- Your child's emotional and behavioral experiences
- Basic demographic questions

Participants will receive a \$15 electronic gift card after completing the survey.

Your email will be collected separately from your survey to ensure your responses remain anonymous.

If you're interested, please click this link to get started: [Survey Link to Be Inserted Here]
Questions? Contact me at: [a.gusic5828@o365.ncu.edu]

Thank you for considering participation in this voluntary research!

Alma Gusic, LMFT

Appendix H: Site Permission

Date: [Date to Be Inserted]

Hello NU IRB,

My name is [Name of Permission Granter], and I am [Professional Title] at [Place of Employment]. I have reviewed **Alma Gusic**'s study titled *The Role of Paternal Anxiety in Emotional Regulation and Child Anxiety*, and I understand that they are recruiting participants who meet all of the following criteria:

- Are 18 years of age or older
- Are a biological, adoptive, or legal father
- Have at least one child between the ages of 6 and 18
- Currently reside in the United States

I grant permission to **Alma Gusic** to do the following:

- Distribute an anonymous online survey recruitment flyer or email to members of our network who may meet the eligibility criteria
- Use our organization's communication channels (e.g., email list, newsletter, social media page, or community board) to share information about the study
- Provide a survey link for eligible individuals to participate voluntarily and confidentially at their own discretion

If you have questions and would like to reach me, please do so at [Insert Email and/or Phone Number].

Thank you for your time,

[Full Signature Block of Permission Granter]

[Name]

[Title]

[Organization]

[Email]

[Phone Number]

Appendix I: Instruments (BAI, DERS, SCAS-P, Demographic Questionnaire)



Beck Anxiety Inventory (BAI)

About: This scale is a self-report measure of anxiety

Items: 21

Reliability:

Internal consistency for the BAI = (Cronbach's $\alpha=0.92$)

Test-retest reliability (1 week) for the BAI = 0.75 (Beck, Epstein, Brown, & Steer, 1988)

Validity:

The BAI was moderately correlated with the revised Hamilton Anxiety Rating Scale (.51), and mildly correlated with the Hamilton Depression Rating Scale (.25) (Beck et al., 1988).

Scoring:

	Not at all	Mildly, but it didn't bother me much	Moderately – it wasn't pleasant at times	Severely – it bothered me a lot
All questions	0	1	2	3

The total score is calculated by finding the sum of the 21 items.

Score of 0-21 = low anxiety

Score of 22-35 = moderate anxiety

Score of 36 and above = potentially concerning levels of anxiety

References: Beck, A.T., Epstein, N., Brown, G., & Steer, R.A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 893-897.



NovoPsych

Difficulties in Emotion Regulation Scale (DERS)

Instructions:

Please press the response that is most true for you.

		Almost Never	Sometimes	About half the time	Most of the time	Almost always
1	I am clear about my feeling	5	4	3	2	1
2	I pay attention to how I feel	5	4	3	2	1
3	I experience my emotions as overwhelming and out of control	1	2	3	4	5
4	I have no idea how I am feeling	1	2	3	4	5
5	I have difficulty making sense out of my feelings	1	2	3	4	5
6	I am attentive to my feelings	5	4	3	2	1
7	I know exactly how I am feeling	5	4	3	2	1
8	I care about what I am feeling	5	4	3	2	1
9	I am confused about how I feel	1	2	3	4	5
10	When I'm upset, I acknowledge my emotions	5	4	3	2	1
11	When I'm upset, I become angry with myself for feeling that way	1	2	3	4	5
12	When I'm upset, I become embarrassed for feeling that way	1	2	3	4	5
13	When I'm upset, I have difficulty getting work done	1	2	3	4	5
14	When I'm upset, I become out of control	1	2	3	4	5
15	When I'm upset, I believe that I will remain that way for a long time	1	2	3	4	5
16	When I'm upset, I believe that I'll end up feeling very depressed	1	2	3	4	5
17	When I'm upset, I believe that my feelings are valid and important	5	4	3	2	1



Spence Children's Anxiety Scale - Parent (SCAS-Parent)

Instructions:

Below is a list of items that describe children. For each item please tap the response that best describes your child. Please answer all the items.

		Never	Sometime	Often	Always
1	My child worries about things	0	1	2	3
2	My child is scared of the dark	0	1	2	3
3	When my child has a problem, s(he) complains of having a funny feeling in his / her stomach	0	1	2	3
4	My child complains of feeling afraid	0	1	2	3
5	My child would feel afraid of being on his/her own at home	0	1	2	3
6	My child is scared when s(he) has to take a test	0	1	2	3
7	My child is afraid when (s)he has to use public toilets or bathrooms	0	1	2	3
8	My child worries about being away from us / me	0	1	2	3
9	My child feels afraid that (s)he will make a fool of him/herself in front of people	0	1	2	3
10	My child worries that (s)he will do badly at school	0	1	2	3
11	My child worries that something awful will happen to someone in our family	0	1	2	3
12	My child complains of suddenly feeling as if (s)he can't breathe when there is no reason for this	0	1	2	3
13	My child has to keep checking that (s)he has done things right (like the switch is off, or the door is locked)	0	1	2	3
14	My child is scared if (s)he has to sleep on his/her own	0	1	2	3
15	My child has trouble going to school in the mornings because (s)he feels nervous or afraid	0	1	2	3
16	My child is scared of dogs	0	1	2	3

Demographic Questionnaire

Please answer the following questions about yourself and your child.

1. **What is your age?**
_____ years old
2. **What is the highest level of education you have completed?**
 - Less than high school
 - High school diploma or GED
 - Some college or associate degree
 - Bachelor's degree
 - Master's degree
 - Doctoral or professional degree
3. **Which best describes your family household structure?**
 - Two-parent household (living with spouse/partner)
 - Single father, full custody
 - Single father, shared or partial custody
 - Other (please specify): _____
4. **What state do you currently live in?**

5. **What is the age of your child you are reporting about in this survey?**
_____ years old
6. **What is the gender of your child you are reporting about in this survey?**
 - Male
 - Female
 - Non-binary / Another identity
 - Prefer not to say

Appendix J: Recruitment Flyer

Are You a Father of a Child Aged 6-18?



Your Voice Matters. Help Us Understand Fathers' Anxiety,
Emotional regulation and Child Anxiety.

We are looking for fathers to take part in a research study about how anxiety in fathers may influence emotional regulation and relate to children's well-being.



You can participate if you:

Are 18 or older
Are actively parenting at least one child between the ages of 6 and 18



What is the study about?

The study explores the connection between paternal anxiety, emotional regulation, and child anxiety. The goal is to help clinicians and researchers better understand and support fathers and their families.



What is involved?

A one-time, anonymous online survey
Takes about 20-25 minutes to complete
Questions about your mental health, emotional regulation and child anxiety



You will receive a \$15 electronic gift card for participating.

All responses are anonymous and confidential.

Appendix K: Institutional Review Board Approval Letter



9388 Lightwave Ave.
San Diego, CA 92123
irb@nu.edu

Notice of Exemption

November 13, 2025

To: Alma Gusic

Project Title: The Role of Paternal Anxiety in Emotional Regulation and Child Anxiety

NU IRB Number: IRB-FY25-26-351

Determination: Exempt from further review 45 CFR 46.101 Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

Status: Active - Research activities may begin as of November 13, 2025

Dear Alma Gusic:

The study referenced above has been reviewed by the National University IRB. The IRB has determined your research is exempt from further review under 45 CFR 46.104, which means you will not need to renew your study and may begin your study effective immediately. However, if you find the need to change your study in any way, you will need to submit a modification to the IRB prior to implementing the changes. This will allow the IRB to determine whether or not the study still meets exemption criteria.

Please review your Post Approval Responsibilities here: [Approved Documents Guidelines](#)

For any questions regarding your protocol, please reach out to the IRB at irb@nu.edu.

Sincerely,