Interparental Conflict in Early Childhood As a Predictor of Depression and Anxiety Symptoms At Age 15

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Abstract

Research has continually demonstrated a number of adverse externalizing outcomes for children from conflictual families, though the impact of interparental conflict on adolescents’ internalizing problems is less well understood. This study utilized longitudinal data from the Fragile Families and Child-Wellbeing Study, which is a stratified, multistage sample following 4,898 children from low-income families from birth to age 15. Self-report data from both the mothers and focal-teens was utilized to examine the impact of interparental conflict, at age 3, on both anxiety and depressive symptoms, at age 15. Findings indicated that there is a significant relationship between higher frequency of interparental conflict in early childhood and higher levels of anxiety and depressive symptoms in adolescence. A gender moderation analysis was conducted to examine if the effects of interparental conflict were stronger for girls or boys. Aligning with existing research, no significant gender differences were determined. These findings demonstrate that being exposed to interparental conflict, especially from a young age, can threaten one’s sense of emotional security and trust as a child, which may result in a higher likelihood of developing anxiety and depression in late adolescence.

Keywords: interparental conflict, anxiety, depression, early childhood, adolescence, gender effects, internalizing behaviors
INTERPARENTAL CONFLICT IN EARLY CHILDHOOD AS A PREDICTOR OF DEPRESSION AND ANXIETY SYMPTOMS AT AGE 15

by

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Introduction

Within the last few decades, the structure and stability of families has dramatically transitioned as a result of increasing divorce rates (Stevenson et al., 2007), and a decreasing frequency of marriages worldwide (Brown, 2003). Nevertheless, the parent-child relationship has remained one of the most significant influences on child development as it serves as a schema for all other aspects of life. In a similar regard, the parent-parent relationship plays an integral role in shaping a child’s social and emotional development, which can deeply influence a variety of developmental outcomes. A considerable body of research has shown that children from conflictual families present higher rates of behavioral problems when compared to children from non-conflictual families (Fomby & Cherlin, 2007; McLanahan, Tach, & Schneider, 2013). The explanation for why parental conflict can have damaging effects has yet to be attributed to one major reason. Nevertheless, there are a number of probable mediating factors in existing studies.

Primarily, the presence of chronic stress as a result of watching parents fight has been linked to poor child adjustment and low self-esteem (Turner & Kopiec, 2006), which may lead to future mental health concerns. There is also a high likelihood that children will model similar behaviors in their own relationships, thus resulting in conflictual relationships throughout life (Turner & Kopiec, 2006). Lastly, there are a number of studies which argue that interparental conflict may damage a parent’s ability to effectively parent due to distractions, frustration, and frequent anger (Buehler & Gerard, 2002). Thus, even though the existing literature provides varied explanations, it is clear that exposure to frequent interparental can have long-lasting adverse effects on child development. Furthermore, although extensive literature has reiterated that marital discord is linked with poorer child well-being; how interparental conflict in early childhood predicts mental health outcomes in adolescence is less well understood.
Much of the existing research places a heavy emphasis on externalizing behavioral outcomes, rather than internalizing outcomes, particularly those related to anxiety and depressive symptoms. This is often attributed to the fact that internalizing problems are more difficult to notice, and are less outwardly disruptive than externalizing problems. There is also an abundance of research which only takes into account parental relationship status (e.g. divorce) rather than looking at interparental conflict. Additionally, the available literature which does take into account mental health outcomes often places focus on parent-child relationship conflict, rather than parent-parent relationship conflict. Furthermore, there is a lack of longitudinal data available on this topic. Many studies collect data from one point in time, rather than analyzing the topic across years, as both the parents and children change. Finally, the literature does not provide consistent findings into the gendered effects on children in regards to marital conflict.

To address these existing limitations, the current study examined if interparental relationship conflict, around age 3, impacts levels of anxiety and depression later on at age 15. A moderation analysis was conducted to examine if gender moderated the relationship between interparental conflict and depression/anxiety symptoms of teenagers. More specifically, data from the Fragile Families and Child-Well-Being study was used to examine the impact of interparental relationship conflict at age 3 on levels of anxiety and depressive symptoms at age 15.

Review of Literature

Theoretical Framework

Research in child development has continually examined how family dynamics impact child well-being, often demonstrating that a less conflictual, two-parent household is associated with positive child development (Fomby & Cherlin, 2007; McLanahan, Tach, & Schneider,
One of the most commonly supported explanations for this finding is linked back to the
tenets of social learning theory. Most notably, the literature attributes social modeling of
conflictual parental behavior to be a major contributing factor to the development of poorer
psychological well-being. According to social learning theory, children learn how to think,
behave, and act in the world as a result of modeling and observing their parents’ behaviors
(Bandura, 1978, Sears et al., 2015). Therefore, it is suggested that a child’s parents’ relationship
can be influential, and can impact child well-being in a number of ways. Children often model
the behaviors and interactions of their caregivers, which can at times result in problematic child
outcomes depending upon the amount of interparental relationship conflict that the child is
observing. If a child is raised in a high-stress, high-conflict environment, they may be more
likely to demonstrate similar behavioral styles in their own future relationships (Parade et al.,
2012). For example, if a child observes poor parental communication skills and frequent conflict
between parents, they may introduce similar tendencies into their own future relationships (Sears
et al., 2015).

Interparental conflict, including the level of conflictual interactions, also serves as a
model for understanding a child’s future development. Children often learn patterns of behaviors,
interpersonal skills, and family processes via exposure to their parents' relationship (Bandura,
1978; Xia et al., 2018; Shulman and Connolly, 2013). Findings have demonstrated long term
effects on development, such that adults who have been raised in a more positive family climate
report more effective problem-solving skills throughout adulthood (Xia et al., 2018; Roisman et
al., 2004). Therefore, the parental relationship that children observe not only impacts their
childhood, but it can have long lasting implications on their adult life, as it impacts many other
characteristics such as interpersonal skills. Thus, the foundations of social learning theory,
specifically social modeling of parental behaviors, provide a probable explanation for why research often links interparental conflict and adverse child outcomes.

Another theoretical approach which emphasizes the importance of the parent-parent relationship is family systems theory (Kerr and Bowen, 1988). This theory focuses on the significance of an individual’s place within their family system, which can often be influenced by changes within the system as a whole (Kerig, 2019). Bowen (1988) argued that a state of chronic anxiety can form if family members are unable to properly think through their emotional reactions, something which often occurs during frequent marital conflict. Ultimately, this assertion draws a direct link between chronic anxiety and emotional decisions that are not properly thought out, which often occurs in conflict. Most importantly, Bowden (1988) noted that a person’s ability to think through their emotional responses can be transmitted from one generation to the next.

A similar aspect of Bowden’s theory which directly aligns with interparental conflict is the presence of triangulation. Triangling is believed to occur when anxiety, conflict, stress, etc. forms between two individuals, and is then passed onto a third person within the family system. At times, this third person can even be used as a way to shift the conflict away from the two who are fighting, and onto the third person (Bowden, 1988). Bowden referred to the effects of triangulation as the family projection process. According to the family projection process, parents transfer their anxiety to children, and the child responds to this by mistaking themselves as the problem, thus resulting in poor mental health outcomes (Bowden, 1988). This approach also asserts that the patterns within a family system will create, maintain, or even worsen both positive or negative behaviors (Watson, 2012). In the case of interparental conflict, if this becomes a pattern within a child’s family system, it may foster problematic behaviors within a
child. In some cases, these problematic behaviors can present themselves in the form of anxiety or depression due to a family system centered around stress, anger, poor communication, and conflict. These negative effects can be the result of a self-reinforcing feedback loop (Watson, 2012) which consistently facilitates feelings of stress, anxiety, depression, or sadness due to repeated exposure to parental conflict. Oftentimes things such as emotional demands, work, financial stress, and family conflicts can create resistance within the system since it prefers homeostasis (Kerig, 2011). Therefore, families who are unable to maintain stability within their system due to marital conflict, are more likely to experience family discord (Kerig, 2019), which as research shows, hinders positive child development.

**Interparental Conflict and Child Outcomes**

Many studies have examined the influence of interparental conflict on a number of child outcomes, though most often this is examined through instances of divorce/separation. Overall, it has been observed that children from parents who are in conflictual relationships, show a higher number of mental health problems compared to children of happily married families (Cooper et al., 2009; Hayatbakhsh et al., 2011). Conflictual parental relationships have also been proven to lead to a higher likelihood of externalizing problems in children (Hannighofer et al., 2017). These externalizing behaviors often include things like physical aggression, disobedience, cheating, stealing, and may even develop into crime-related problems if not resolved before adulthood. Other studies (Lansford et al., 2006; Van der Valk, Spruijt, De Goede, Maas, & Meeus, 2005) have found that children from conflictual families are more prone to adjustment problems, have poorer social skills, lower academic performance, and lower self-esteem when compared to children from intact families.
Fewer studies have looked solely at the mental health outcomes of children from conflictual families, but relevant research has found that poor marital quality is associated with a higher number of mental health problems in children (Hayatbakhsh et al., 2011; Kim & McKenry, 2002). This highlights that a poor relationship between parents, which often involves interparental conflict, can lead to mental health concerns in children. In one of the few longitudinal studies on this topic, it was concluded in a 21-year follow-up that mothers in conflictual relationships, as well as their young adult children, showed significantly more depressive symptoms than mothers and children from non-conflictual relationships (Hannighofer et al., 2017). Thus, the existing research on this topic tends to show a similar trend that interparental conflict is directly associated with a number of poor outcomes, most often including: externalizing problems, low school engagement, poor parent-child communication, and parental aggravation (Moore et al., 2011).

Other harmful outcomes related to interparental conflict include anger, fear, anxiety, sadness, insomnia, and lack of academic success (Martin et al., 2018). This observation of conflict can also often lead to externalization of distress which presents itself in the form of aggression, hostility, antisocial behaviors, delinquency, and vandalism (Sutherland, 2014). High-conflict homes can also hinder a child's personal and professional life as a result of weakened social competence, interpersonal skills, and problem solving skills (Sutherland, 2014). In addition to the overwhelming amount of potential risk factors which accompany high-conflict home environments, children are also more likely to view the world more negatively. They often struggle in romantic relationships, perceive friendships in a negative light, and have negative internal representations of family (Sutherland, 2014; Mell, 2021), which demonstrates how this conflict can even trickle down and impact future generations within a family.
Nevertheless, there is still a need for further research pertaining to internalizing problems, such as mental health outcomes, throughout the child’s life. It is also important to note that the majority of studies on this topic tend to include divorced families. Therefore, the stigma surrounding divorce, in addition to many other external factors, may make findings from divorce-focus studies less generalizable to children of conflictual parents who stayed together. Consequently, there is a continued need for research which focuses on children who live with interparental conflict rather than children from divorced families.

**Importance of Early Childhood Years**

One major reason why it is important to study interparental conflict, specifically beginning in early childhood, is due to the fact that this period is a major developmental milestone for children. This time period is more notably significant for young children given that they are learning to develop independence, social skills, cognitive skills, language skills, reading skills, and are even testing the limits of what is allowed and what is not allowed (Goldberg & Carlson, 2014). Research has documented the differences in school-readiness amongst children as a result of varying at-home learning environments, and adult-interaction prior to their first school experience (Sénéchal et al., 2002; Pinto et al., 2015). Therefore, young children from conflictual homes are missing out on valuable learning experiences when their parents are engaging in conflict. Research by Rodriguez and Tamis-LeMonda (2011) even noted that children from more positive home environments, measured by quality and quantity of stimulation within the first few years of life, showed greater school and social success than children from more negative homes. Consequently, it becomes clear that those early childhood interactions greatly shape adolescence, both socially and academically (Goldberg & Carlson, 2014).
Interparental Conflict in Early Childhood

Research (Cummings and Davies, 2010) has shown that all forms of low-quality relationships can have adverse effects, though the ones which include frequent parental conflict, especially from a young age, are notably damaging to a child’s overall well-being. Cummings and Davies (2010) developed an emotional security model which asserts that higher parental conflict in the home results in more frequent behavioral problems in children as a result of threatened security and stability in the home. They argue that exposure to conflicts from a young age not only can have an impact on the parent-child relationships, but they also threaten a child’s ability to trust, and resolve conflict themselves (Cummings & Davies, 2010). If development is hindered in these early, formative years, it can have long lasting impacts into adulthood since these years ultimately shape how children view the world. Other research (Sutherland, 2014) has demonstrated that even infants can recognize and demonstrate distress when their parents fight as early as six months old, which can have lasting effects into adulthood. Therefore, it is essential to avoid exposing children to conflict, even as early as infancy, given that they are aware of conflict well before parents may think they are, and many of the adverse impacts, like poor trust, can be long lasting.

Additionally, if consistently exposed to conflict from a young age, this may shape how a child views the world since it is their only representation of how the world works (Weaver et al., 2015). If raised with an unhealthy representation of the world, a child may develop trust issues, ineffective communication skills, and even heightened stress levels, all of which may lead to poor mental health outcomes, like anxiety and depression (Mell et al., 2021). Similarly, when a person experiences trust-related adversity in early childhood, they are more likely to experience broken social trust in adulthood (Mell et al., 2021). Thus, if interparental conflict leaves a child
with a feeling of mistrust in their parents, or in their emotional security, they are at risk for carrying these trust concerns into adulthood.

**Emotional Insecurity**

One of the most damaging impacts of a conflictual parental relationship is the development of emotional insecurity in children. This insecurity tends to be a precursor to a number of negative outcomes including managing behavior and emotions, maintaining good mental health, making friends, doing well in school, etc. (Martin et al., 2018). Young children are notably vulnerable to this emotional insecurity due to their heavy reliance on parents for all of their basic needs. When children observe their parents fighting, they subconsciously feel insecure about their parents’ ability to provide them with their essential needs, including love and support (Martin et al., 2018). Furthermore, children's sense of emotional security surrounding their family, including interparental conflict, is related to their sense of protection, safety, and security, which can have a major impact on their socioemotional regulation (Cummings et al., 2012).

At times, children may even begin to fear that they are the cause of conflict between their parents, which may lead to a fear of rejection or resentment from their parents, and can carry over into other relationships throughout life (Martin et al., 2018). Emotional insecurity is an extremely important factor to take into consideration when discussing the impact of family conflict on a child’s mental health because it is responsible for shaping emotional and behavioral responses (Cummings et al., 2012). Therefore, how a child reacts and behaves in the world is a direct result of their emotional security, and if they have emotionally insecure feelings since early childhood, this will show in the way they behave throughout life (Cummings et al., 2012).

**Interparental Conflict and Parenting Abilities**

Interparental conflict can impact child well-being in a number of ways. One of the most
common explanations for this in current literature is the negative impact that interparental conflict can have on the parent-child relationship. If consistently being distracted by conflict, or filled with feelings of frustration, anger, and stress, a parent may grow to be a less effective parent to their child. If a parent is unsatisfied with their romantic relationship they may feel more stress, anger, or unhappiness than a parent who is content with their romantic relationship. This in turn can crossover into their parent-child relationship given their overall unhappiness, or even level of anger from fighting with their partner.

Several studies that focus on marital satisfaction found that happily married mothers had less mental health problems than unhappily married mothers with conflictual relationships (Meadows et al., 2008; Hannighofer et al., 2017). Additionally, it has been found that 45% of single mothers who have a poor relationship to their child’s father experience yearly depression or anxiety symptoms compared to 23.6% of happily married mothers (Hannighofer et al., 2017). Other research examined mothers who are unsatisfied with their relationships, and found a direct link between higher marital discord and depressive symptoms (Meadows et al., 2008). Thus, it has been found that marital conflict is a predictor of poorer mental well-being in parents, which can impact their parenting abilities. These findings similarly relate to fathers such that people in argumentative relationships showed higher values in depressive symptoms and anxiety symptoms compared to people in non-conflictual relationships (Cairney et al., 2003).

Furthermore, research has noted that people who live with marital conflict report higher than average stress levels (Reichman et al., 2001). It is important to note that in most cases, it is better for the parents and the children to leave unhappy relationships due to the fact that depressive levels often decrease when a conflictual relationship ends (Hannighofer et al., 2017).

This all relates to the central focus of this study by demonstrating how interparental
conflict can impact the family unit in a number of ways. Not only can it create an unhappy living environment for the child, but it can also negatively impact a parents’ ability to parent. An adult who spends their day in a high-stress, high-conflict living environment may not be as emotionally available as a parent living in a happy and fulfilling home environment.

**Spillover Effect**

Studies frequently list the adverse consequences of conflict on children, though do not always explain how and why these effects happen. Aside from the unhealthy living environment accompanied by frequent argumentation, many of the poor outcomes can be linked back to the behaviors that the parents are modeling. Parents in high-conflict relationships tend to engage in more criticism, aggression, threat making, shouting, and even hitting (Martin et al., 2018). As a result, children observe these problematic reactions as normal, and may adopt similar behavioral styles in their own relationships (Xia et al., 2018; Shulman and Connolly, 2013). It has also been noted that high-conflict parenting tends to be less effective parenting because not as much attention is being paid to the child. There may be more than average attention being paid to resolving conflict or instigating conflict, which may hinder a child’s ability to form secure attachments to their parents (Sutherland, 2014) and may even take away from more beneficial parent-child interactions.

There is also potential for the transmission of moods and behaviors from one family sub-system to another, referred to as the spillover hypothesis (Engfer, 1988). In this case, the spillover tends to be negative as a result of the transmission of things like anger and stress from the parents to the child. Therefore, if the parents are mid-conflict, the child may not only sense their negative feelings, but may also begin to embody similar emotions themselves both inside and outside the home (Engfer, 1988). Naturally, this can have a detrimental impact on a child’s
ability to form positive relationships with teachers, students, friends, etc., which can in turn lead
to poor mental health outcomes. Thus, it is clear that spillover does not only include temporary
emotions like stress, it also can have a long lasting impact on the child’s ability to resolve
conflict, maintain relationships, and even regulate emotions (Sears et al., 2015).

**Gendered Effects of Interparental Conflict**

Although the majority of existing research pertaining to child gender differences is from
the lense of divorce, there is a smaller subset of literature which looks more broadly at parental
conflict. In general, the findings of these studies are rather mixed. For example, some studies
have found the relation between parental conflict and later child anxiety (Gordis et al., 1997) as
well as behavioral concerns (Amato and Keith, 1991) to be stronger for boys than for girls. This
belief is frequently tied to the assumption that boys are more likely to listen to their father’s
reprimanding than they are their mother’s. Thus, when a boy sees his father arguing with his
mother, he becomes even less likely to listen to his mother’s requests, and the son gets into more
trouble by disobeying his mother (Fischer, 2007).

Other studies assert that internalizing problems have been found to be more significant in
girls of conflictual families (El-Sheikh et al., 2013; Kalmijn, 1994; Brocka and Kochanskaa,
2016). There is also additional evidence which suggests that boys tend to respond to interparental
conflict by developing behavioral adjustment problems, in the form of externalizing behavior,
whereas girls tend to respond with internalizing behavior, which leads to mental health concerns
(Brocka and Kochanskaa, 2016). Research has attributed these findings to the threatened feeling
of emotional security for girls when they observe parental conflict (Brocka and Kochanskaa,
2016). Furthermore, many studies note that girls tend to be more sensitive to interparental
distress than boys (Crawford, Cohen, Midlarsky, & Brook, 2001). Though most importantly, girls
have repeatedly been found to be at higher risk for anxiety and depression starting in adolescence than boys (Albano et al., 2003; El-Sheikh, Keiley, Erath, & Dyer, 2013; Keenan et al., 2010; Keenan & Shaw, 1997; Rudolph & Hammen, 1999).

Nevertheless, as a whole, there are still mixed findings in regards to the gender effects of children from conflictual parents. Many studies did not find any significant differences across genders, (Krein and Beller, 1988; Morrison and Cherlin, 1995), whereas some found stronger effects for boys (Gordis et al., 1997; Amato and Keith, 1991; Fischer, 2007), and others found stronger effects for girls (Kalijn, 1994; Albano, Chorpita, & Barlow, 2003; El-Sheikh, Keiley, Erath, & Dyer, 2013; Keenan et al., 2010; Keenan & Shaw, 1997; Rudolph & Hammen, 1999), all of which highlights a major gap in the existing literature. Ultimately, there is a clear need for the continuation of research which examines the gender differences in children from families with marital conflict.

**Gaps in Existing Literature**

Marital conflict has consistently been shown to result in a higher frequency of behavioral problems in children which often lead to a number of negative outcomes later in life including lower odds of completing high school and attending college (McLeod & Kaiser, 2004), and greater risk of unemployment (Fergusson & Horwood, 2005). Additionally, research has provided evidence that behavioral and emotional problems in childhood are a precursor to an overwhelming amount of adverse outcomes later in life including crime, substance abuse (Flory, Milich, Lynam, Leukefeld, & Clayton, 2003), teenage pregnancy, and suicidal behaviors (Fergusson, Horwood, & Ridder, 2005). However, little research has examined how frequency of interparental conflict is linked to adolescent mental health outcomes like anxiety and depression. Additionally, the majority of studies which do place focus on mental health concerns (Fergusson,
Horwood, & Ridder, 2005; Kim-Cohen et al., 2002; Kratzer & Hodgins, 1997) were conducted over a decade ago, hence the need for continuing research on the topic. Similarly, research tends to focus on family structure/dynamics rather than looking more closely at the presence of parental conflict. Studies tend to focus on overall relationship status (e.g. married, divorced, single, etc.), rather than the presence of frequent conflict. They compare the differences between two-parent families and single-parents without taking into account the occurrence of conflict. Therefore, it is essential that researchers continue to observe the extent to which interparental conflict is linked to long term child outcomes in an effort to illuminate how exposure to parental discord contributes to children’s long-term success behaviorally, emotionally, and mentally.

**Current Study**

In an effort to address these current gaps and limitations, this study directly focused on the frequency of interparental conflict, between biological parents, rather than the more commonly used topics of relationship status/divorce. It also took into account child mental health outcomes which are frequently overlooked in the existing research, paying specific attention to anxiety and depressive symptoms. This study provided insight into whether there are child gender differences in the association between interparental conflict and mental health outcomes, something which is often up for debate in the existing research. Additionally, this research examined the long-term impacts on children by using interparental conflict data at age 3, and analyzed its impacts on later mental health outcomes at age 15. Data from age 3 was utilized due to the significant impact of the early childhood home environment on shaping later adolescence and adulthood. Data from age 15 was used because it is currently the oldest age available from children within this longitudinal study, and it includes a self-report mental health questionnaire, rather than reliance on a parent-report questionnaire.
Purpose

The primary purpose of this study was to achieve a more specific understanding of how interparental conflict in early childhood can predict mental health concerns later on in adolescence. Specifically, this study focused on self-reported anxiety and depressive symptoms of teenagers from conflictual families at age 3. This study also examined if child gender acts as a moderator between interparental conflict and teen depression and anxiety symptoms.

Research Questions

The following research questions were utilized to guide the current investigation: 1) Does higher reported interparental conflict at age 3 lead to higher levels of anxiety in teens at age 15? 2) Does higher reported interparental conflict at age 3 lead to higher levels of depression in teens at age 15? 3) Does child gender act as a moderator between interparental conflict and teen depression and anxiety?

Hypotheses

It was hypothesized that: 1) Higher reported interparental conflict at age 3 will lead to higher levels of anxiety in teens at age 15. 2) Higher reported interparental conflict at age 3 will lead to higher levels of depression in teens at age 15. 3) The effects of interparental conflict will be stronger for female participants than for male participants.

Methods

Fragile Families Overview

Secondary data was collected from the Fragile Families and Child Well-Being study conducted by Princeton University. This longitudinal study is a stratified, multistage sample of 4,989 children from low-income families. It currently has conducted six waves of data collection between 1998 and 2017, and includes data from interviews, home visits, and observations. Each
wave includes follow up information which is collected from either the mother or father of the focal child. Information from each child has been collected since age 1, and the most recent wave yields the results from their age 15 follow up, which was used for the outcome variables in this study. The predictor variable, interparental conflict, used data from the maternal caregiver questionnaire which was completed when the child was around age 3. The outcome variables, adolescent levels of anxiety and depression were collected from adolescent self-report responses around age 15.

The baseline sample from this dataset included 4,898 infants born between 1998 and 2000. Their parents were sampled from 20 major U.S. cities with populations of 200,000 or more. Researchers sought out mothers from hospitals which reported the highest number of non-marital births, with unmarried parents being oversampled. Mothers gave their first interview within 48 hours after they gave birth to the child, and fathers were encouraged to complete it whenever possible. Three years after the child’s birth, researchers conducted follow up interviews, the majority of which were conducted over the phone at the 3-year follow-up. Participants were compensated with $20 at the end of their separate interviews.

Participants

This dataset included data from young adult mothers and fathers who had recently had a baby, and resided in any of the 20 of the largest major U.S. cities. The mean age of the mothers was 21.0 years (Range=14 to 25 years old; SD=2.38), and 30% were under the age of 19. The majority (53.3%) of the mothers were Black/African American, 21.1% were Hispanic/Latina, and 16.1% were White. The average age of the fathers was 24.1 (Range=15–61 years old; SD=4.96), with 69.3% under the age of 25 years. 42% of the fathers were Black/African American, 17.6% were Hispanic/Latino (22.3%), and 10.8% were Caucasian. The majority
(52.9%) of the fathers reported an annual household income of less than $25,000. About 27.4% of the fathers had some high school education, 28.3% had a H.S. diploma/GED, and 15.5% completed some college. 34% of mothers reported some high school education, 32.6% had a H.S. diploma/ GED, and 21.1% had completed some college/2-year degree. At baseline, 84.1% of the mothers reported that they were romantically involved with their babies’ other parent and 11% of the mothers reported being married to him/her. This number dropped significantly by year 3 with only 42.1% of the mothers still reporting to be romantically involved with the baby's other parent.

**Analytic Sample**

After data cleaning, and application of inclusion criteria, the mothers age range changed to 20-25 years old (previously 14-25 years old), with 3,069 mothers meeting inclusion criteria (original study size was 4,898). Additionally, the teen age range was still 15 years old, given that only data from their age 15 wave was utilized, with 3,607 teens meeting inclusion criteria (original study size was 4,989). The analytic sample consisted of a similar demographic breakdown to the original dataset with the majority of participants (56%) identifying as black, and 62% of participants reported an annual household income below $25,000/ year.

**Variables and Measures**

This study utilized secondary data from the Fragile Families Dataset, and will only include participant responses from wave 3 (year 3) and wave 6 (year 15). The predictor variable, interparental conflict, is a self-reported measure asking the mother how often they argue with the baby’s father, with answers ranging from “always” to “never”. The outcome variables, adolescent levels of anxiety and depressive symptoms, were measured via teen responses at age 15 to the Brief Symptom Inventory 18 (BSI 18) Anxiety Scale, and CES-Depression Scale (See
Appendix A). For the moderation analyses, the gender of the child was reported at birth which simply asks the parents to report the sex, either female or male, of the focal baby at birth.

A bivariate linear regression was conducted in SPSS to analyze the relationship between the predictor variable (interparental conflict) and the outcome variables (adolescent levels of anxiety, and depression). Interparental conflict was determined by a self-reported measure asking the mother “how often do you and the child's father argue”, with answers ranging from “always” to “never”. The scales utilized to determine anxiety and depressive symptoms are as follows:

**CES-Depression Scale**

Adolescent depressive symptoms were determined by the child’s responses to an adapted depression scale drawn from the Center for Epidemiologic Studies Depression Scale (CES-D) (See Appendix A). Prior research has reported a strong internal reliability for this scale with an average rating above .9, and a test-retest reliability range between .91-.92 (Cuijpers et al., 2008; Leykin et al., 2011). The internal consistency reliability for the CES-D scale utilized on the adolescent participants was excellent, with a Cronbach's Alpha value of .996. The CES-D is a self-report scale including items which describe the participant’s feelings in the past week (e.g. “I feel I cannot shake off the blues”) and includes values on a four-point scale ranging from (1=strongly agree, to 4-strongly disagree).

**BSI Anxiety Scale**

Adolescent anxiety symptoms were similarly determined by the child’s responses to an adapted Brief Symptom Inventory 18 (BSI 18) (See Appendix A) which is used to measure psychological distress and disorders. The BSI instrument is commonly used, and is known to show acceptable internal reliability with an average rating above .7, and test-retest reliability
range of .68 to .91. (Croog, 1986; Arion & Patsdaughter, 1989; Derogatis, 1993). The internal consistency reliability for the BSI scale utilized on adolescent participants was also high, with a Cronbach's Alpha value of .997. This scale was modified and shortened for the Year 15 Teen survey and asked teens “Thinking about the past four weeks, do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with this?” including things like “nervousness or shakiness inside”, “fearful”, “tense”, etc.

**Gender as a Moderator**

Finally, an exploratory moderation analysis will be conducted to test if there are gender differences in the teen anxiety/depression values as a result of interparental conflict. The gender of the child was included in the baseline checklist responses to the year 1 (wave 1) survey, and was coded as a dichotomous variable with boys being scored as 0 and girls being scored as 1.

**Inclusion Criteria**

In order to avoid spurious associations between variables, age of mother and biological parental relationship status were utilized as inclusion criteria to guide the current study. Specifically, to avoid instances in which the father of the child was never actually part of the baby’s life, only maternal-responses were included from respondents who noted that they were either married to the baby’s father, or were romantically living with the baby’s father at wave 3 (age 3). This allows for a more focused definition of interparental conflict within the home that the child is being exposed to, rather than mixing results with conflict from a non-biological parent, or single parents.

Similarly, in an attempt to ensure that the mother of the baby was in fact one of the primary caregivers of the baby, only mothers above the age of 20 at the time of the child’s birth were included. This was done in an attempt to avoid instances in which a teenage mother was
still living in her childhood home, with grandparents present. Data from the National
Longitudinal Survey of Youth indicated that age 20 is the most common age for young adults to
move into their own household, thus age 20 was selected as a cutoff age for participants. This
inclusion criteria was established to aid in creating a sample of mothers who likely had already
moved out of their childhood home, so that children were more likely to have been raised in a
two parent household with only its mother and father as primary caregivers.

Data Analysis

A bivariate linear regression was conducted to examine the relationship between
interparental conflict and adolescent levels of anxiety and depressive symptoms. Adolescent
responses to the Brief Symptom Inventory 18 Anxiety Scale (BSI 18) were summed by
computing the mean of each of the 6 scale items in SPSS, and the sum score was used to
represent each teen’s level of anxiety. Mean substitution was utilized to account for missing data
on items that are missing no more than 1 or 2 items. Teen responses to the CES-Depression Scale
(CES-D) were also used in the analysis by generating a mean score of each of the 5-items in the
scale. The one variable that is positively worded (k6d2s) was recoded differently to conform with
the other items such that (4=3, 3=2, 2=1, and 1=0). Lastly, a moderation analysis was conducted
to determine whether the relationship between interparental conflict and adolescent depression/
adolescent anxiety levels was moderated by gender.

Results

A bivariate linear regression was conducted to examine if interparental conflict at age 3
predicted teen depressive and anxiety symptoms at age 15. An alpha level of .05 was used for all
statistical tests in the current study. The analysis showed a significant effect of interparental
conflict on both depressive symptoms ($t=341.548$, $\beta=.038$, $p<.05$), and anxiety symptoms
(t=261.052, β=.040, p<.05) at age 15 (See Tables 1 and 2). This finding supports hypothesis 1 (Higher reported interparental conflict at age 3 will lead to higher levels of anxiety in teens at age 15) and hypothesis 2 (Higher reported interparental conflict at age 3 will lead to higher levels of depression in teens at age 15), demonstrating that participants with parents who reported a higher prevalence of interparental conflict reported more depressive symptoms, in addition to more anxiety symptoms. A 1-unit increase in conflict was associated with an .094 unit increase in depressive symptoms. Similarly, a 1-unit increase in conflict was associated with an .239 unit increase in anxiety symptoms. Interparental conflict explained about 1% of variance in teen depressive symptoms ($R^2=.01$; F(1,2995)=4.413, p<.001), and 2% of variance in teen anxiety symptoms ($R^2=.02$, F(1,2995)=4.859, p<.001).

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear regression analysis of the association between interparental conflict and teen depression at age 15.</td>
</tr>
<tr>
<td>Moderation analyses of the effect of gender on the relationship between interparental conflict and depression.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 1($R^2=.001$)</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$β$</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>14.830</td>
<td>.043</td>
<td>341.548</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>IPC</td>
<td>.094</td>
<td>.045</td>
<td>.038</td>
<td>2.101</td>
<td>.036</td>
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</table>

<table>
<thead>
<tr>
<th>Step 2($R^2=.081$)</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$β$</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>14.995</td>
<td>.060</td>
<td>250.285</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>IPC</td>
<td>.082</td>
<td>.062</td>
<td>.033</td>
<td>1.313</td>
<td>.189</td>
</tr>
<tr>
<td>Gender</td>
<td>-.334</td>
<td>.085</td>
<td>-.071</td>
<td>-3.908</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>IPC x Gender</td>
<td>.022</td>
<td>.089</td>
<td>-.006</td>
<td>.247</td>
<td>.805</td>
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</tbody>
</table>

*Note. IPC=Interparental Conflict
*Significant at the $p<.05$ level
Table 2
Linear regression analyses of the association between interparental conflict and teen anxiety at age 15. Moderation analyses of the effect of gender on the relationship between interparental conflict and anxiety.

<table>
<thead>
<tr>
<th>Step 1 ($R^2 = .002$)</th>
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<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$</th>
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<tbody>
<tr>
<td>(Constant)</td>
<td>15.752</td>
<td>.060</td>
<td>.040</td>
<td>261.052</td>
<td>.000</td>
</tr>
<tr>
<td>IPC</td>
<td>.239</td>
<td>.063</td>
<td>.040</td>
<td>2.204</td>
<td>.028</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2 ($R^2 = .052$)</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>15.859</td>
<td>.085</td>
<td>.045</td>
<td>187.361</td>
<td>.000</td>
</tr>
<tr>
<td>IPC</td>
<td>.155</td>
<td>.088</td>
<td>.045</td>
<td>1.767</td>
<td>.077</td>
</tr>
<tr>
<td>Gender</td>
<td>-.217</td>
<td>.121</td>
<td>-.033</td>
<td>-1.801</td>
<td>.072</td>
</tr>
<tr>
<td>IPC x Gender</td>
<td>-.036</td>
<td>.126</td>
<td>-.007</td>
<td>-.284</td>
<td>.077</td>
</tr>
</tbody>
</table>

Note. IPC=Interparental Conflict
Significant at the $p<.05$ level

These findings reject hypothesis 3 (The effects of interparental conflict will be stronger for female participants than for male participants), suggest that there is not a significant difference in the depression scores of female and male teens from families with interparental conflict ($t=-.284, \beta=.045, p=.77$). This notes that the effect of interparental conflict on depression scores is not notably stronger for females or males, rather scores are similar between genders. Though, gender did act as a marginally significant moderator when looking at the relationship between interparental conflict and teen anxiety symptoms ($\beta=1.55, SE=0.88, p=0.077$). This finding indicates that there is nearly a significant difference in anxiety scores of female and male teens from families with interparental conflict, though this difference is not notably significant. Therefore, the effect of interparental conflict on anxiety scores is stronger for females than males, though the effect cannot be deemed statistically significant. Furthermore, after adding gender to the interaction term, interparental conflict explained about 7% of variance in teen depressive symptoms ($R^2=0.07, F(1,2995)=6.589, p<.001$), and 3% of variance in teen anxiety symptoms ($R^2=0.03, F(1,2995)=2.729, p<.001$).
Discussion

The current study examines the impacts of interparental conflict in early childhood as a predictor of both depression and anxiety symptoms during teenage years within a diverse sample. The findings contribute to the existing literature by emphasizing the likelihood of developing adverse mental health outcomes if exposed to interparental conflict from a young age. The majority of existing studies tend to focus on the behavioral outcomes of children who are raised with either parental divorce, or with parental conflict. Not as many studies address the emotional outcomes such as the child’s mental health, especially over time. Additionally, this study looks directly at interparental conflict as a predictor rather than the more frequently used predictor of marital status/divorce. This study also provides unique insight by utilizing a self-report scale for the mental health outcomes of the children, instead of gaining data from a parent’s or doctor’s perspective of the teen’s mental health. Finally, there is an on-going debate in existing research in regards to the gender differences between boys and girls of families with marital discord. In an effort to contribute to these findings, the current study determined that gender acted as a marginally significant moderator between interparental conflict and teen anxiety symptoms.

Importance of Findings

To reiterate, it was hypothesized that higher reported parental conflict at age 3 will lead to higher levels of self-reported anxiety and depression at age 15. In alignment with prior studies (Fomby & Cherlin, 2007; McLanahan, Tach, & Schneider, 2013), as well as with the basis of Social Learning Theory, this finding once again confirmed that parental relationships, involving high conflict, results in adverse outcomes for children throughout life. Results of the analysis suggested that children who were exposed to households containing interparental conflict, since age 3, demonstrate high levels of depression and anxiety symptoms at age 15. This finding is
most often linked back to the main premise of Social Learning Theory which asserts that children learn how to act in their world as a result of observing their parents’ behaviors. Thus, as children from conflictual families continually observe problematic behaviors such as poor communication, and frequent argumentation, they are more likely to demonstrate similar behaviors in their future relationships, which are often precursors to mental health concerns. Although many studies place the emphasis on parental divorce rather than parental conflict, this finding does align with the majority of existing research which has demonstrated that children from families of marital conflict, or divorce, report higher anxiety/depression and antisocial behaviors (Strohschein, 2005).

One of the most prominent explanations for this finding is the idea that there are less psychosocial resources (including things like marital satisfaction, parental happiness, and healthy family functioning) for children from conflictual families than there are for children from happy families (Sarigiani, Heath, & Camarena, 2003). Lacking these essential resources in these young formative years can result in lower levels of trust, support, emotional security, and positivity (Fishman & Meyers, 2000), which over time can develop into symptoms of both anxiety and depression. In addition to the lack of psychosocial resources, there is also an over presence of stress inside the home environment for these children from a young age. Chronic stress can not only weaken children’s self-esteem, but it can also contribute to feelings of unworthiness, low personal control, and poorer overall well-being (Sarigiani, Heath, & Camarena, 2003).

Another major contributing factor at play is the potential for marital conflict to affect the quality of parent–child interactions (Erel & Burman, 1995; Kerig, 2010), which can in turn impact positive child development. As reinforced in Family Systems Theory, this may occur as a result of spillover such that tensions from the couples’ relationship can spread into the
parent-child relationship, resulting in anger/stress/frustration being taken out on the child (Chung, Flook, & Fuligni, 2009). More specifically, if tension and conflict are high between the parents, then they may bring these problems into the parent-child relationship and in turn negatively impact the child. Naturally, this can heighten the risk for development of anxiety and depression in children as a result of increased stress, tension, and anger inside the home.

Additionally, it was hypothesized that gender would act as a moderator between parental conflict and teen anxiety and depression symptoms. Yet, reiterating the majority of findings in the current literature (Krein and Beller, 1988; Morrison and Cherlin, 1995), the gender of the child was not found to be a significant moderator between interparental conflict and depressive outcomes of teens. However, female gender did act as a marginally significant moderator between interparental conflict and teen anxiety symptoms. Even though the results on this topic tend to be split between child gender outcomes, there are some studies which align with the current finding that effects may be stronger for girls (Albano, Chorpita, & Barlow, 2003; El-Sheikh, et al., 2013). These findings are attributed to the idea that girls have traditionally shown a higher likelihood of blaming themselves for parental conflict, which may develop into later internalizing problems in adolescence (Keedie, 2021). Other studies note that girls are more likely to report being fearful of marital conflict, and typically exhibit more facial distress when exposed to adult anger (Hosokawa et al., 2019). There is also evidence that girls are typically more threatened by loss of emotional security, often resulting in internalizing behaviors (Hosokawa et al., 2019). Additionally, many studies report that when boys are impacted by interparental conflict, it tends to show itself in the form of externalizing behavioral problems (Keenan et al., 2010; Rudolph & Hammen, 1999), which does not align with the internalizing behavioral focus of this study, though is worth noting in regards to the gender findings.
Limitations

Although the current study expands knowledge on the topic of parenting by examining the link between parental conflict and child mental health outcomes, it does include a number of limitations. Primarily, due to a large amount of missing data on fathers’ self-reported frequency of conflict, the parental conflict variable was measured only via maternal-reports. This may yield inaccurate representations of partner relations if mother reports do not directly align with the father’s perspective of their relationship. Additionally, many of the mothers in this study were young, which may have led to participant bias due to a fear of truly exposing the amount of conflict in their relationship. It is also possible that if the participant is often the aggressor in their relationship, that they may undermine the amount of conflict with their partner. Ideally, future research could take an aggregated score of both the maternal and paternal responses in regards to their frequency of relationship conflict.

Furthermore, similar concerns may be present in the teen self-report scales of their mental health outcomes. Young participants may falsely report their feelings surrounding their own mental health for a number of reasons. Primarily, they may ignore their feelings of anxiety/depression as a result of the stigma surrounding mental health, which was even worse at the time of this study. It is also possible that teen responses may be an inaccurate representation of their long term mental health because their mood/level of maturity at the time of the study may have impacted results. Future studies may lessen the likelihood of this limitation by using age 22 data once it becomes available to allow for more maturity in participants. Lastly, due to the nature of the data available, this study was also unable to define the type, quality, and intensity of marital conflict being reported, once again encouraging further research on the topic at hand.
Future Directions

As society continues to report both higher occurrences of parental conflict and higher prevalence of mental health concerns in children, it is essential that researchers continually develop their understanding of the relationship between parental conflict and child mental health. There are a number of ways to build upon the current study to ensure that research on this topic remains both up to date, accurate, and generalizable. Primarily, there is an ongoing need for research pertaining to the gender differences of children exposed to marital discord. The current study, along with the majority of existing research, fails to find consistent findings in reference to the gender differences of children from both divorce and parental conflict. Thus there remains a need for future research to repeatedly address the topic of gender when studying marital discord, divorce, parental separation, parental conflict, etc.

Future studies may also take into account more specific characteristics of the parental conflict including intensity and ability to resolve the argument. Conflict may look different for every single couple, thus researchers can continue to build upon this topic by providing a deeper understanding of the topic of marital conflict itself, and how it differs by couple. Next steps in research may also take into account both the maternal and parental perceptions of conflict within the home to gain a potentially more accurate representation of their conflictual relationship. There is also a need for future studies to develop their own interparental conflict scale to truly gain the most accurate, and detailed understanding of interparental conflict. Future studies may also benefit from analyzing the teen mental health outcomes over a variety of different ages, including those older than 15, to allow for a more comprehensive understanding of participant mental health overall.
Additionally, there is an overwhelming amount of research which addresses child outcomes after divorce, but few studies look specifically at families who could have gotten a divorce due to frequent marital conflict, though they chose to remain together. This topic certainly needs attention in future studies to ensure that conflictual families who stay together are accurately represented in the existing literature. Accordingly, future studies should continue to incorporate the internalizing behaviors of children from marital discord, to account for the rapid rise in mental health concerns in both children and adults.

Implications

Research pertaining to child development, family dynamics, and teen mental health presents a number of universally relevant implications. Primarily, this study may be beneficial to schools/educators given that the results illustrate how conflictual parenting can inhibit proper child development. Educators should continue to take into account the home lives of children, and understand the potential negative outcomes (e.g. heightened anger, frustration, behavioral problems, poor communication, anxiety, depression) that may be associated with children who have been raised with frequent interparental conflict. In a similar regard, the mental health services within schools should be aware of the apparent association between interparental conflict and adverse mental health outcomes. Children from these families may be experiencing chronic stress, threatened emotional security, lower levels of trust, and weakened self-esteem, all of which are commonly linked to poor mental health. Therefore, exposure to interparental conflict should potentially be screened for in children to ensure they are receiving adequate mental health counseling to avoid the development of depression, or anxiety. Additionally, this study reiterated a heightened potential for negative long term effects; therefore, a study like this may be beneficial to future romantic partners, friends, etc. Finally, this study provided insight for
underrepresented populations in family research. The participants came from predominantly young, black, low-income families, who are most often not the majority of participants in family research. This not only provides generalizable results to non-white participants, but also encourages future studies to utilize participants who are traditionally underrepresented in research.

**Conclusion**

The current study sought to better understand the impact of interparental conflict, in early childhood, on teen mental health outcomes, including anxiety and depression. A number of gaps in the existing literature aided in shaping the current study including: the need for longitudinal data on children from conflictual childhoods, the over presence of divorce studies rather than studies which focus on exposure to interparental conflict, the need for diverse samples in studying family dynamics, and a lack of research focusing on internalizing behaviors rather than externalizing behaviors.

Through the use of secondary data from the Fragile Families Child Well-Being study, it was determined that higher occurrence of interparental conflict, at age 3, was associated with higher reported depression and anxiety symptoms at age 15. Findings also suggested that female gender acted as a marginally significant moderator between interparental conflict and anxiety symptoms, reinforcing the idea that females are socially constructed to be more “in-tact” with their emotions, while males are encouraged to repress their emotions. Studying this topic not only contributes to the field of child development, but it also includes larger implications for both parenting practices, and teenage mental health. It is likely that the ever worsening mental health crisis may have a drastic impact on family dynamics; therefore, researchers should continue to examine the mental health concerns of families to provide the most accurate understanding of a modern day family.
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## Appendix A

<table>
<thead>
<tr>
<th>Add Health CES-D Survey Item</th>
<th>Y15 Teen survey Item</th>
<th>Variable</th>
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</thead>
<tbody>
<tr>
<td>4-point scale (0-3)</td>
<td>4-point scale (1-4)</td>
<td></td>
</tr>
<tr>
<td>You felt that you could not shake off the blues, even with help from your family and your friends.</td>
<td>I feel I cannot shake off the blues, even with help from my family and my friends.</td>
<td>k6d2c</td>
</tr>
<tr>
<td>You felt sad.</td>
<td>I feel sad.</td>
<td>k6d2n</td>
</tr>
<tr>
<td>You were happy.</td>
<td>I feel happy.</td>
<td>k6d2s</td>
</tr>
<tr>
<td>You felt life was not worth living.</td>
<td>I feel life is not worth living.</td>
<td>k6d2x</td>
</tr>
<tr>
<td>You felt depressed.</td>
<td>I feel depressed.</td>
<td>k6d2ac</td>
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Table 3. CES-D Item Modifications for the Wave 6 (Age 15) teen depression scale questions.

<table>
<thead>
<tr>
<th>BSI 18 Anxiety Subscale Item</th>
<th>Y15 Teen survey Item</th>
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<tbody>
<tr>
<td>5-point scale (0-4)</td>
<td>4-point scale (1-4)</td>
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</tr>
<tr>
<td>Spells of terror or panic</td>
<td>I have spells of terror or panic.</td>
<td>k6d2d</td>
</tr>
<tr>
<td>Feeling tense or keyed up</td>
<td>I feel tense or keyed up.</td>
<td>k6d2j</td>
</tr>
<tr>
<td>Suddenly scared for no reason</td>
<td>I get suddenly scared for no reason.</td>
<td>k6d2t</td>
</tr>
<tr>
<td>Nervousness or shakiness inside</td>
<td>I feel nervous or shaky inside.</td>
<td>k6d2ag</td>
</tr>
<tr>
<td>Feeling fearful</td>
<td>I feel fearful.</td>
<td>k6d2ai</td>
</tr>
<tr>
<td>Feeling so restless you couldn’t sit still</td>
<td>I feel so restless I can’t sit still.</td>
<td>k6d2ak</td>
</tr>
</tbody>
</table>

Table 4. BSI 18 Item Modifications for the Wave 6 (Age 15) teen anxiety scale questions.
Abigail Rein Picinich
Master of Science Candidate in Human Development and Family Science
Syracuse University

Abigail is originally from Oneonta, New York. Her research interests include: how early childhood familial experiences shape mental health and later romantic relationships, as well as the impacts of interparental conflict and parental infidelity on later child well-being.

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