The Intergenerational Transmission of Depressive and Anxiety Problems: Bidirectional Associations, Racial/Ethnic Differences, and the Mediating Role of Family Processes

by

Belal Jamil

A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Arts

Approved February 2024 by the
Graduate Supervisory Committee:

Jinni Su, Chair
Leah Doane
Kevin Grimm

ARIZONA STATE UNIVERSITY

May 2024

ABSTRACT

Depression and anxiety are among the most prevalent psychiatric disorders for adults and adolescents and can be intergenerationally transmitted from parents to their children. Moreover, depressive and anxiety disorders often develop during adolescence. Additionally, family environment and the parent-child relationship are significant predictors of mental health among adolescents. Yet, few studies have considered how adolescent depression and anxiety problems may influence the family environment and mental health of parents. Moreover, even fewer studies have examined how depressive and anxious intergenerational pathways may vary by racial/ethnic status. As such, bidirectional effects of parent and adolescent depressive and anxiety problems were investigated using data from the Adolescent Brain and Cognitive Development (ABCD) study at Time 1 (T1)(Mage = 9.92, n=11,861), Time 2 (T2), and Time 3 (T3). Each follow-up was approximately one-year apart. Multiple path analysis models were used to examined bidirectional associations between parent and adolescent A) depressive problems B) anxiety problems and C) depressive and anxiety problems from T1 to T3 and how family conflict and adolescent-reported parental acceptance at T2 mediated these associations. Measurement invariance testing and multigroup analyses were conducted across non-Hispanic White, Hispanic, and non-Hispanic Black participants to examine if depressive and anxious pathways or measurement differed by racial-ethnic status. Findings revealed that both adolescent and parent depression problems at T1 predicted increases in depression at T3. Greater adolescent or parent anxiety problems at T1 predicted increases in adolescent and parent anxiety problems at T3. Greater family conflict and lower perceived parental acceptance at T2 predicted increases in adolescent

depressive problems but did not predict adolescent anxiety problems over time. Parental depressive and anxiety problems at T1 did not predict adolescent-reported parental acceptance at T2 but did predict greater family conflict. Measurement noninvariance was found for family conflict and adolescent depressive problems. Multigroup analyses revealed that the association between both depressive and anxiety problems from T1 to T3 was weaker among Black adolescents compared to White and Hispanic adolescents. In summary, this research contributes valuable insights into the measurement of and relationship between parent and adolescent mental health, family dynamics, and adolescent perceived parental acceptance.

DEDICATION

This thesis is dedicated to the mentor, friends, and family who have supported me throughout my training.

TABLE OF CONTENTS

Page

LIST OF TABLES

TABLE Page

LIST OF FIGURES

FIGURE Page

Introduction

Depression and anxiety are among the most prevalent psychiatric disorders for adults and adolescents (Garcia & O'Neil, 2021; McLaughlin & King, 2015). These internalizing disorders can lead to significant impairments to daily functioning and overall welfare. Depressive symptoms are characterized by persistent and chronic feelings of sadness, hopelessness, and lack of interest in activities (Wang et al., 2017). Anxiety symptoms refer to disproportionate and chronic feelings of nervousness, restlessness, and impending danger (Vallance & Fernandez, 2016). Depression is one of the leading causes for disability in the United States and has a yearly economic burden of $326 billion in the United States (Ferrari et al., 2013; Greenberg et al., 2021; The US Burden of Disease Collaborators, 2018). Similarly, anxiety disorders are the most prevalent mental disorder among adolescent populations, as 1 in every 3 adolescents is predicted to develop an anxiety disorder (Kessler et al., 2005). The median age of onset for anxiety and depressive disorders is during adolescence (Lijster et al., 2017).

Indeed, adolescence is a developmental period in which the prevalence of these depressive and anxious problems increases significantly, with the majority of psychiatric disorders onset by age 24 (Humensky et al., 2010). Depressive and anxiety problems in adolescence are associated with a variety of long-term negative consequences such as worse quality of life, physical health problems, job loss, lower life expectancy, lower academic achievement, psychiatric comorbidity, and suicidal behaviors (Fletcher, 2008; Hetrick et al., 2012; Jamnik & DiLalla, 2019; Jenkins et al., 2021). The prevalence of depressive and anxiety symptoms has been steadily rising over the past few years, with the rates of adolescents with anxiety and depressive disorders increasing by 20%

(Ghandour et al., 2019). Given the demonstrated importance of clinical and subclinical levels of depression and anxiety in predicting quality of life, it is critical to understand the mechanisms that may underlie the development of these symptoms among adolescents (Benson et al., 2011; Besteher et al., 2020), to inform prevention and intervention efforts.

Intergenerational Transmission of Depressive and Anxiety Problems

One of the most predictive risk factors for youth depressive and anxiety disorders is having a family history of internalizing disorders. Indeed, the risk for developing depressive and anxiety disorders is doubled for offspring of parents with anxiety and depressive disorders (Ayano et al., 2021; Loechner et al., 2020). Goodman and Gotlib (1999) highlighted four mechanisms that underlie the intergenerational transmission of psychopathology from depressed mothers to their offspring, which include genetic vulnerability for the disorder, innate neuroregulatory dysfunction, greater family stress, and exposure to negative parental affects, cognitions, and behaviors (Goodman & Gotlib, 1999). This theory has demonstrated utility in explaining developmental pathways for the intergenerational transmission of depression and anxiety problems from mothers and fathers (Aktar & Bögels, 2017). Prior family and twin studies have shown that depression and anxiety are moderately heritable (49-67%) (Guffanti et al., 2016). Furthermore, molecular genetic studies such as genome-wide association studies have identified many genetic variants associated with depressive and anxious outcomes (Cai et al., 2020; Gottschalk & Domschke, 2017). Depression and anxiety have also been linked to neural dysfunctions in the limbic system and prefrontal cortex which can lead to heightened stress reactivity, inhibited recovery from exposure to stressors, and greater emotion dysregulation (Sylvester et al., 2012; van Tol et al., 2010). Parents may transmit this

neuroregulatory dysfunction to their children through genetics and parenting (Butterfield et al., 2021; Martin et al., 2009). Children may also model the maladaptive behaviors and cognitive strategies of their parent, which may impact their ability to respond adaptively to stressful events.

Parenting and Family Environment as Important Mechanisms for the Intergenerational Transmission of Depression and Anxiety

In addition to biological risk, parents with depression and anxiety may also increase their child's vulnerability through frequent negative interactions with the child, conflict within the home, and a lack of meeting the emotional and physical needs of the child (Creswell & Waite, 2015; Goodman, 2020). Parental depression has been demonstrated to affect parenting behaviors and interactions with children. One important aspect of parenting is adolescent-perceived parental acceptance. Parental acceptance refers to the degree to which parents engage in positive, accepting, and uplifting behaviors with their children (Miranda et al., 2016). The parental acceptance—rejection theory posits that parental acceptance is a significant predictor of positive psychosocial development and can have lifelong impacts through its effects on personality, coping abilities, and self-esteem (Rohner & Britner, 2002). Parental acceptance has been associated with a myriad of positive outcomes. Children who grow up with supportive and affectionate parents are more likely to display lower depressive and anxious problems, greater self-esteem, emotional stability, and psychological wellbeing (Khaleque, 2013; Li & Meier, 2017). Additionally, longitudinal studies demonstrate that children from highly supportive families report greater academic achievement, and flourishing later in life (Chen et al., 2019; Gurdal et al., 2016), and lower rates of

substance use in adolescence and emerging adulthood (Donaldson et al., 2016). Parents with elevated depressive problems are more likely to display greater rejecting (i.e., lower accepting), punitive and controlling parenting behaviors, inconsistent parenting strategies, and emotional dysregulation in their interactions with their children (Epkins & Harper, 2016; Lovejoy et al., 2000; McCabe, 2014). Higher levels of depressive problems in parents are associated with lower parental acceptance and more criticism towards their adolescents (Galbally & Lewis, 2017; Johnco et al., 2021; Kim, 2011).

Prior work examining the effects of parental anxiety on subsequent parenting behaviors is not as extensive nor conclusive as for parental depression. Some research demonstrates that parents with anxiety disorders demonstrate greater criticism and less warmth and positive affect than parents without anxiety (Crosby Budinger et al., 2013; Hajal & Paley, 2020; Pereira et al., 2014). Parents high in anxiety often experience greater negative affect like fear, worry, and restlessness, which may spill over into their relationships with adolescents and result in criticizing, overinvolved, or restrictive parenting (Friedman et al., 2023; Möller et al., 2015; Russell et al., 2020; van Eldik et al., 2020). Lower parental acceptance was found to partially mediate the relationship between maternal and child anxiety (Ma et al., 2016). Yet, parent-child observational studies revealed parents with anxiety demonstrated lower levels of parental control or nonsignificant effects on parenting behaviors (Turner et al., 2003; van der Bruggen et al., 2010).

In addition to affecting parenting behaviors, parents who report greater numbers of depressive and anxiety problems may create family environments that increase risk for maladjustment for adolescents. For example, parental depression is associated with

greater marital and family conflict (Galbally & Lewis, 2017; Nath et al., 2015). Although peer influence increases during adolescence, family environment still maintains an important and distinct role in adolescents' psychological and behavioral development (Bell et al., 1982; Moreira et al., 2018; Repetti et al., 2002; Schacter & Margolin, 2019). Having a positive family environment characterized by supportive behaviors, openness, and low conflict has been associated with healthy psychosocial development and fewer behavioral and emotional problems for adolescents (Rodriguez et al., 2014). Depressive and anxiety problems can be characterized by heightened emotional reactivity and dysregulation, which increases risk for interpersonal conflicts (Nazir & Mohsin, 2013). Parental depressive and anxiety problems have been associated with greater conflict within the home (Tissot et al., 2017). Longitudinal studies reveal that in families with frequent conflict, or negative and aggressive interactions, adolescents are at greater risk for developing depressive and anxiety problems (Cohen et al., 2015; Fosco & Lydon-Staley, 2020; Rogers et al., 2020). Daily experiences of family conflict are associated with subsequent increases in depressive and anxious problems for adolescents (Fosco & Lydon-Staley, 2020). Taken together, these findings suggest that parental acceptance and family conflict may serve as important mechanisms through which depressive and anxious problems are transmitted from parents to adolescents.

Bidirectional Influences between Parents and Adolescents Depressive and Anxiety Problems

Intergenerational research has primarily focused on the impact of parental influences on children's behavioral and mental health outcomes. Yet, children may also influence the parenting behaviors and mental health of their caregivers. Family systems

theory posits that, within the family, there are dyadic subsystems in which people interact and influence one another's behavior (Bowen, 1993; Calatrava et al., 2022), suggesting that both parents and their adolescents may influence each other's mental health outcomes through interactions within the family. Adolescents with depressive or anxiety problems may be more likely to evoke negative parenting responses and emotions during their interactions with parents (Johnco et al., 2021; Pérez-Edgar et al., 2021). In fact, longitudinal studies have demonstrated that children's behaviors from early childhood through adolescence can significantly influence the parenting and mental health of their caregivers (Hannigan et al., 2016; Mäntymaa et al., 2004; Paschall & Mastergeorge, 2016). Greater internalizing behaviors in early adolescence has been associated with subsequent lower parental warmth and greater parental control (Rothenberg et al., 2020). Internalizing problems during toddlerhood has predicted greater hostile parenting and subsequent increases in the child's internalizing problems during early childhood (Hentges et al., 2021). Delineating parent-driven and child-driven effects in the intergenerational transmission of depressive and anxiety problems is critical to determine which pathways of risk may exacerbate internalizing symptoms. Identifying paths that affect risk can inform intervention efforts to alter the maintenance and proliferation of internalizing problems within families.

Examining Racial-Ethnic Differences in Pathways of Transmission

Parenting behaviors and family processes have been well established as mechanisms through which depressive and anxiety problems can be developed and maintained within families. Yet, it is important to note that there has been a disproportionate overrepresentation of White/European Americans within psychological

research, whereas the developmental and psychological experiences of racial/ethnic minority groups are often understudied (Roberts & Mortenson, 2023). Instead, findings from White/European samples are often assumed to generalize to other racial/ethnic populations and be indicative of all groups (Cheon et al., 2020). Developmental research demonstrates that family processes, parenting, and mental health outcomes can vary for adults and adolescents due to cultural and racial/ethnic group differences (Rodriguez et al., 2023; Williams, 2018). For example, Hispanic/Latinx and Black youth are more likely to experience depressive and anxiety problems yet are the least likely to have access to mental health services or health insurance (Alegria et al., 2010).

Some aspects of parenting, such as parental warmth have been found to have a universal positive effect on children's development (Rothenberg et al., 2020). Prior research suggests that, in addition to socioeconomic factors, cultural and racial/ethnic differences may engender variations in parenting (Bhargava & Witherspoon, 2015; Kado-Walton et al., 2023; Khoury-Kassabri & Straus, 2011; le et al., 2008; Roubinov & Boyce, 2017). For example, Black, Asian, and Hispanic/Latinx parents tend to place greater focus on academic success than White parents and are more likely to express greater strictness and control when parenting (Julian et al., 1994). Asian-American parents are less likely than Black parents to be emotionally expressive in interactions with their children (Wu & Qi, 2005). Mexican-origin parents are more likely to report higher parental warmth and support, which may have a more pronounced effect on Mexican-origin adolescents mental health (Kho et al., 2023). Prior meta-analytic studies reveal that familism, or Hispanic/Latinx familial values, have been associated with lower levels of depressive problems and internalizing behaviors (Cahill et al., 2021; Valdivieso-Mora et

al., 2016). Parental influence on adolescent's mental health outcomes may vary by cultural upbringing and racial/ethnic background. A longitudinal study across 12 cultural groups revealed that children's internalizing problems, changes in their internalizing problems from ages 8-14, and effects of parental warmth and control on internalizing problems show significant variations across cultural and racial/ethnic groups (Rothenberg et al., 2020). Furthermore, racial/ethnic status was found to moderate the associations between parental warmth and intrusiveness to youth internalizing problems among White, Hispanic/Latinx, and Black families, such that parental warmth was significantly negatively associated with youth internalizing problems among Black families but was not associated with internalizing problems among Hispanic/Latinx youth (Kado, 2020). Moreover, intrusive parenting was associated with worse outcomes among Latinx and Black adolescents compared to non-Hispanic white adolescents. Further research is necessary to understand if and how the intergenerational transmission of depressive and anxiety problems vary by racial/ethnic background.

The Present Study

Taken together, prior findings demonstrate that depressive and anxiety problems can be transmitted intergenerationally, and this can occur through a variety of parenting and family mechanisms. Moreover, parenting and the family environment play a significant role in the mental health of adolescents. Additionally, adolescents may also influence their parents' behaviors, mental health, and the family environment. Further research is necessary to understand how racial/ethnic background may lead to variations in these pathways. The current study aimed to investigate 1) Are there bidirectional associations, or parent-driven and adolescent-driven effects, between parental and

adolescent depressive and anxiety problems? 2) Does parental acceptance and family conflict mediate the associations between parental and adolescent depressive and anxiety problems? 3) Do pathways for the intergenerational transmission of depressive and anxious problems vary for White, Black/African American, and Hispanic/Latino parents and adolescents? Based on prior literature and family systems theory, it was hypothesized that depressive and anxiety problems would be transmitted through parent-driven and adolescent-driven effects. Family conflict and parental acceptance would partially mediate these transmissions. We hypothesized that parents' and adolescents' depressive and anxiety problems at T1 would lead to increases in parent and adolescent depression and anxiety problems at T3 through greater family conflict. We hypothesized that greater adolescent and parent depressive and anxiety problems at T1 would predict greater adolescent depressive and anxiety problems at T3 and these associations would be partially mediated through lower levels of parental acceptance at T2. Given that there is limited research on racial/ethnic differences in the intergenerational transmission of depressive and anxiety problems, this research aim was largely exploratory and there were no present hypotheses of how these pathways may vary by racial/ethnic background of the families.

Method

Participants and Procedures

Data for the current study was drawn from the Adolescent Brain Cognitive Development (ABCD) Study. This longitudinal study included 11,875 adolescents and their primary caregivers who were recruited from 21 sites across the United States. The ABCD study collects a variety of psychological, behavioral, sociocultural, familial, and

biological measures to delineate developmental trajectories. A multistage sampling strategy was conducted consisting of 21 nationally distributed study sites, probability sampling of schools within each site, and recruitment of eligible children from schools in reference to demographic information from the American Community Survey (ACS) and annual 3rd and 4th grade school enrollment data from the Nation Center for Education Statistics (Garavan et al., 2018).The ACS is an annual survey conducted by the U.S. Census Bureau. These steps allowed the ABCD study to recruit a sample that is similar to the current racial/ethnic composition of the United States. Authorization for the ABCD study was provided by the institutional review board of the University of California, San Diego and each study site also obtained approval to conduct data collection through their local institutional review boards. Written informed consent was provided by all primary caregivers and verbal assent was obtained from all children in the study.

The ABCD Study is a longitudinal study that collects data annually. For the present study, data was used from the baseline (T1), 1-year follow up (T2), the 2-year follow up (T3) assessments. 11,877 adolescents (T1; M_{age} = 9.92 years, Female=47.4%, n = 11,877; White=52.4%, Black=13.4%, Latino/Hispanic=24.0%, Asian 4.7%, Mixed=4.2%, Other=1.3%) and their primary caregivers (baseline n=11,317, M_{age} = 39.96 years, Female= 89.6%) were recruited across 21 sites. A total of 11,861 adolescents and their primary caregiver were included in our analyses. There were 6,182 non-Hispanic White adolescents, 1,648 non-Hispanic Black adolescents, and 2,322 Hispanic/Latino adolescents. Follow-up data was collected approximately one and two years later (T2 and T3) when adolescents were between 10-11 and 11-12 years of age, respectively. Children and their primary caregivers (9609 biological mother [85.7%],

1123 biological father [9.8%], 466 custodial, adoptive, or other caregiver [4.5%]) provided information on parental and adolescent depressive and anxious problems, family conflict, and parental acceptance.

Measures

Adolescent Depressive and Anxious Problems. The Child Behavior Checklist (CBCL) is a 113-item parent-report questionnaire to examine the emotional and behavioral problems in children over the past 6 months (T. Achenbach et al., 2001). DSM-oriented scales were developed with CBCL items in line with the DSM-5 criteria for depressive and anxiety disorders (T. M. Achenbach, 2013)(Achenbach, 2013). Parents reported the degree to which various behaviors are present in their children through use of a 3-point Likert scale (0= not true; 1= somewhat or sometimes true; 2= very true or often true). Depressive and anxiety scores were calculated by summing across 14 DSM-5 oriented items for depressive problems and 9 items for anxiety problems, such that higher scores represented more depressive and anxiety problems at Time 1 and Time 3. Example items for depressive problems include crying a lot, self-harm, feelings of worthlessness, and excessive tiredness. Example items for anxiety problems include being too fearful/anxious, nervousness, self-consciousness, and excessive worry. Cronbach's alphas for adolescent depressive problems were .71 and .75 at T1 and T3, respectively and for adolescents' anxiety problems were .77 and .77 at T1 and T3.

Parental Depressive and Anxiety Problems. At T1 and T3, the Adult Self Report, Depressive and Anxious Questionnaire (T. M. Achenbach & Rescorla, 2003) was used to assess parental depressive and anxiety problems. Parents were asked to rate the degree to which they experience various problems on items assessing adaptive

functioning and problems on a 3-point scale: 0 = Not True, 1 = Somewhat or Sometimes True, 2 = Very True or Often True. Depressive and anxiety scores were calculated by summing across 6 anxiety and 14 depressive DSM-5 oriented items for each disorder, such that higher scores represented more depressive and anxiety problems (Achenbach, 2013). Example items for depressive problems include depressed mood, lack of interest, suicidal thoughts or behaviors, excessive guilt, and sleeping difficulties. Example items for anxiety problems include excessive nervousness, nightmares, fearfulness, and worry. Cronbach's alphas or parental depressive problems were .77 and .81 at T1 and T3, respectively and for parental anxiety problems were .77 and .77 at T1 and T3.

Parental Acceptance. At T2, adolescents reported on parental acceptance using the Child's Report Parenting Behavior Inventory (CRPBI), which asked them to rate the degree to which 5 statements described their parents on a 3-point scale (1=Not like, 2 = Somewhat like, 3 = A lot like). Example items include "My parent is a person who makes me feel better after talking over my worries with them", "my parent often praises me", and "My parent is a person who smiles at me very often." Items were summed to calculate total parental acceptance scores, with higher scores indicating higher levels of parental acceptance. The internal consistency was found to be acceptable (Cronbach's alpha=.72).

Family Conflict. At T2, using the Family Environment Scale-Conflict Subscale (Lanz & Maino, 2014; Moos & Moos, 1994), parents answered 9 items as true or false which evaluated whether family members expressed anger and whether conflict occurred frequently in the family. Example items include "We fight a lot in our family" and "We often criticize each other". Items were summed such that higher values represented

greater amounts of family conflict. The internal consistency was found to be questionable (Cronbach's alpha=.66).

Covariates. Participant demographic characteristics (e.g., SES, gender, pubertal development) may underlie variations in trajectories for depressive and anxiety problems and the influence of family processes. Demographic variables were included in our analyses as covariates and included participants' age, sex, race/ethnicity, adolescent pubertal development, and highest parent education (0=Never Attended, 7=7th Grade, 14= GED or equivalent Diploma, 21=Doctoral Degree). Adolescent-reported pubertal development was assessed using the Pubertal Development Scale at T1 and T3. Pubertal Development items were assessed separately for males (e.g., voice-deepening, facial hair) and females (e.g., menstruation, breast development) and pubertal development scores were calculated by summing across 5 items for males and females.

Data Analysis

Preliminary analyses were conducted using SPSS 27.0. Participants with missing data or attrition were compared to those with complete data to determine if there was significant attrition bias. Descriptive statistics and bivariate correlations were calculated for all study variables to determine any potential violations to assumptions of normality, homoscedasticity, and multicollinearity. Measurement invariance was assessed across racial/ethnic groups. One-way ANOVAs were conducted to test mean differences in key study variables by race/ethnicity for White, Hispanic/Latino, and Black parents and adolescents. For significant models, Games-Howell post-hoc tests was conducted, as opposed to Tukey's post hoc tests, to examine multiple contrasts, as Games-Howell does not assume homogeneity of variance or equal sample sizes.

Multiple path analysis models were conducted in Mplus 8.1 (Muthén & Muthén, 2017) to identify significant direct effects and indirect effects using full maximum likelihood estimation and maximum likelihood robust standard errors. In all path analyses, clustering within family and study site was accounted for using the CLUSTER and STRATIFICATION commands in Mplus, and models were re-sampled using the BOOTSTRAP command (1,000 iterations). Relevant adolescent and parental demographic characteristics (i.e., parent and adolescent age, sex, race/ethnicity, pubertal development, and family income) were included as covariates. In all models, the indirect effects were interpreted through use of bootstrapping at 95% confidence intervals to determine statistical significance (Shrout & Bolger, 2002). The first path model assessed how parental and adolescent depressive problems are transmitted within families from T1 to T3 through parental acceptance and family conflict at T2 (Figure 1). The indirect effects of parental and adolescent depressive problems at T1 on depressive problems at T3 through parental acceptance and family conflict at T2 was assessed. The second path model assessed how parental and adolescent anxiety problems are transmitted within families from T1 to T3 through parental acceptance and family conflict at T2 (Figure 2). Indirect effects were tested to examine if parents and adolescents significantly influence one another's anxiety from T1 to T3 through parental acceptance and family conflict. Finally, multigroup path analysis were conducted using structural equation modeling (SEM) to test whether racial/ethnic status of the three largest racial/ethnic groups in the sample (Non-Hispanic White, Hispanic/Latino, and Non-Hispanic Black/African American) significantly moderates the direct and indirect pathways for each of the four prior path models.

Supplemental Analyses

The comorbidity depressive and anxiety problems among adolescents and adults is well-documented and there is evidence for greater risk for depressive and anxiety problems among children of parents with depressive or anxiety disorders (Micco et al., 2009). Thus, a supplemental path model was conducted where the depressive and anxiety symptoms were examined simultaneously. Parental and adolescent depressive and anxiety problems at T1 and T3 in addition to family conflict and parental acceptance at T2 were included in the model to examine cross-disorder effects (e.g., parental depressive problems at T1 to adolescent anxiety problems at T3, adolescent anxiety problems at T1 to adolescent depressive problems at T3).

Results

Descriptive Statistics

Descriptive statistics and correlations between key study variables are presented in Table 1. Parental depressive and anxiety problems and adolescent depressive and anxiety problems were positively correlated with one another within and across time points. Parental acceptance was negatively correlated with adolescent and parental depressive and anxiety problems at T1 and T3. Family conflict was positively correlated with adolescent and parental depressive and anxiety problems at T1 and T3. Attrition analyses revealed that families with missing data at T2 were more likely to have younger parents, lower parental education, greater adolescent anxiety and depression problems at T1 and T3, and to be Black/African American or Hispanic/Latino. Families with missing data at only T3 or at T2 and T3 were more likely to have younger parents, lower parental education, and to be Black/African American.

ANOVA analyses revealed significant differences across racial/ethnic groups for a variety of the key study variables (Table 2). Games-Howell tests were conducted to determine significant between-group differences in mean-levels for key study variables. Black parents were more likely to be younger than Hispanic/Latino and White parents, whereas White parents were more likely to be the oldest at T1. Black adolescents were reported as having fewer anxious problems than White and Hispanic/Latino adolescents at T1 and T3 and fewer depressive problems than Hispanic/Latino adolescents at T1. Latino adolescents had significantly higher anxiety problems than White adolescents at T1. White parents reported significantly higher depressive problems than Black parents at T1 and then both Black and Hispanic/Latino parents at T3. Black parents reported significantly lower anxiety problems than White and Hispanic/Latino parents at T3. Hispanic/Latino parents reported greater depressive problems at T3 than Black parents and greater anxiety problems at T3 than Black and White parents. White and Hispanic/Latino parents reported similar levels of family conflict, which was lower than the average family conflict levels for Black parents. White adolescents reported significantly higher parental acceptance than Hispanic/Latino and Black adolescents, and Hispanic/Latino adolescents reported significantly higher levels of parental acceptance than Black adolescents.

Measurement Invariance

The measurement invariance of adolescent depressive and anxiety problems, family conflict, and parental acceptance was tested across the White, Black/African American, and Hispanic/Latino subsamples. Model fit statistics for the configural, metric (weak), scalar (strong), and strict invariance models are provided in Table 3. Due to the

large sample size, all chi-square tests yielded p values below .001, which prompted interpretation based on other model fit statistics. Model fit was evaluated based on comparative fit index (CFI) (CFI>.95 good fit, CFI>.90 adequate fit, CFI<.90 poor fit), Tucker-Lewis index (TLI) (TFI>.95 good fit, TFI>.90 adequate fit, TFI<.90 poor fit), standardized root mean square residual SRMR (SRMR<.08 good fit) and root mean square error approximation (RMSEA) (RMSEA<.06 good fit, RMSEA<.08 acceptable fit, RMSEA>.08 poor fit) values (Hu & Bentler, 1999). Changes in goodness-of-fit for model comparisons was assessed by observing changes in CFI and RMSEA values (ΔCFI >.010, ΔRMSEA>.015 for significant differences in model fit as indicated by Chen (2007)). Configural invariance models for parental acceptance and adolescent T1 anxiety problems showed good fit (parental acceptance: $\chi2(25)= 252.291$, CFI=.977, RMSEA= .064; adolescent anxiety problems: $\chi2(135)= 928.12$, CFI=.959, RMSEA= .056). Configural invariance models for adolescent depressive problems and family conflict showed poor fit (adolescent depressive problems $\chi2(385)= 5051.95$, CFI=.764, RMSEA= .074; family conflict: $\chi2(135)= 2802.55$, CFI=.780, RMSEA= .094).

When constraining factor loadings of items to be equal across White, Black/African American, and Hispanic/Latino groups in the metric (weak) model, the metric model did not fit the data significantly worse than the configural model for parental acceptance and the metric model fit worse than the configural model for adolescent anxiety problems in terms of CFI (parental acceptance: ΔCFI =-.004, ΔRMSEA =-.010, adolescent anxiety problems: : ΔCFI =-.014, ΔRMSEA= -.003). Metric models for parental acceptance and adolescent anxiety problems still demonstrated good fit overall (parental acceptance: $\Delta\chi2$ (16)=55.4, p<.001, CFI=.973, RMSEA= .054;

adolescent anxiety problems: $\Delta\chi 2$ (32)=307.84, p<.001, CFI=.945, RMSEA= .053). The metric (weak) model had worse fit for adolescent depressive problems and family conflict than the configural model in terms of change in CFI but minimal differences in RMSEA values (adolescent depressive problems: ΔCFI =-.030, ΔRMSEA =-.001, family conflict: ΔCFI =-.032, ΔRMSEA = -.004) (adolescent depressive problems: $\Delta\chi 2$(52)= 638.9, p<.001, CFI=.734, RMSEA= .073; family conflict: $\Delta\chi 2$ (32)= 422.45, p<.001, CFI=.748, RMSEA= .090). In the scalar (strong) model, item intercepts were constrained to be equal across White, Black/African American, and Hispanic/Latino groups. The scalar (strong) models demonstrated worse fit than the metric (weak models) across adolescents' depressive and anxiety problems, parental acceptance, and family conflict (adolescent depressive problems: ΔCFI =-.025, ΔRMSEA =-.001, family conflict: ΔCFI =-.062, ΔRMSEA = .001; adolescent anxiety problems: ΔCFI =-.037 ΔRMSEA =.010; parental acceptance: ΔCFI =-.012, ΔRMSEA = .000). Scalar models for adolescent anxiety problems demonstrated acceptable fit and for parental acceptance demonstrated good fit (parental acceptance: $\Delta\chi 2$ (20)= 147.0, p<.001, CFI=.961, RMSEA= .054; adolescent anxiety problems: $\Delta\chi 2$ (36)= 754.7, p<.001, CFI=.908, RMSEA= .063). Lastly, the strict invariance model was fit and across all constructs the strict model fit significantly worse than the scalar models (adolescent depressive problems: ΔCFI =-.183, ΔRMSEA =.013, family conflict: ΔCFI =-.041, ΔRMSEA = .001; adolescent anxiety problems: ΔCFI =-.052 ΔRMSEA =.009; parental acceptance: ΔCFI =-.047, ΔRMSEA = .015), which suggests that the unique factor variances were likely different across racial/ethnic groups. The strict model for parental acceptance demonstrated adequate model fit ($\Delta\chi 2$ (20)= 493.3, p<.001, CFI=.914, RMSEA= .069).

Path Model for Depressive Problems

Results from the path model for depressive problems are presented in Table 4. Greater parental depressive problems at T1 were associated with more adolescent depressive problems at T1 and T3 (Table 4; Figure 3). Additionally, greater adolescent depressive problems at T1 predicted greater parental depressive problems at T1 and T3. Both parent and adolescent depressive problems at T1 predicted higher family conflict at T2. Adolescent depressive problems at T1 predicted lower parental acceptance at T2. Parent depressive problems at T1 did not predict parental acceptance, and parental acceptance did not parent depressive problems at T3. Higher parental acceptance was associated with fewer adolescent depressive problems at T3.

Indirect effects revealed that family conflict partially mediated the association between adolescent depressive problems at T1 to parental depressive problems and adolescent depressive problems at T3. Greater adolescent depressive problems at T1 were associated with increases in parental and adolescent depressive problems at T3 partially through greater family conflict at T2. (Table 4). Family conflict also partially mediated the association between parent depressive problems at T1 to parent and adolescent depressive problems at T3 such that higher parent depressive problems at T1 was associated with greater family conflict, which in term predicted greater parent and adolescent depressive symptoms at T3. Parental acceptance was found to partially mediate associations between adolescent depressive pathology from T1 to T3, such that higher adolescent depressive problems at T1 was associated with lower parental acceptance, which in term predicted more adolescent depressive symptoms at T3.

Path Model for Anxiety Problems

Results from the path model for anxiety problems are presented in Table 5. Higher parental anxiety problems at T1 were associated with more adolescent anxiety problems at T1 and T3. (Table 5; Figure 4). Greater adolescent anxiety problems at T1 were associated with greater parental anxiety at T1 and T3. Similarly, as for depressive problems, greater parent and adolescent anxiety problems at T1 were associated with greater family conflict at T2. Adolescent, but not parent, anxiety problems at T1 predicted lower parental acceptance at T2. Neither family conflict nor parental acceptance significantly predicted adolescent or parent anxiety problems at T3. No significant indirect effects were detected through family conflict nor parental acceptance for parental and adolescent anxiety problems.

Racial-Ethnic Differences

Results from the multigroup analyses to test racial/ethnic differences are presented in Tables 6 and 7. In the path model for depressive problems, only one path differed significantly across racial/ethnic groups. The association between adolescent depressive problems at T1 and T3 varied significantly by racial/ethnic identity (χ^2=10.802, df = 2, p=.005); the association was weaker among Black adolescents (β=.42 (.044), p<.001) compared to White (β=.51 (.044), p<.001; χ^2=9.504, df = 1, p=.002) and Latino (β=.52 (.027), p<.001; χ^2=8.539, df = 1, p=.004) adolescents, but the association did not significantly differ between White and Latino adolescents (χ^2=.177, df = 1, p=.674). In the path model for anxiety problems one significant difference was found for adolescent anxiety from T1 to T3 (χ^2= 8.318, p=.016); similarly, the association was lower among Black adolescents (β=.51 (.037), p<.001) compared to White (β=.56 (.014),

p<.001; χ^2=8.095, p=.004) and Latino (β=.52 (.027), p<.001; χ^2=6.199, p=.013) adolescents, but the association did not differ significantly between White and Latino adolescents (χ^2=.030, p=.863). For both models, most paths did not differ significantly by adolescent race/ethnicity.

Supplemental Analysis: Path Model for Depressive and Anxiety Problems

A third path model was conducted to assess with both parent and adolescent depressive and anxiety problems included in one model to further understand how depressive and anxiety problems may influence one another and to further delineate the distinct role of depressive and anxiety problems on family conflict and perceived parental acceptance within the home. Results from the path model for both depressive and anxiety problems are presented in Table 8. Greater parental depressive problems at T1 were associated with more parent and adolescent depressive and anxiety problems at T1 and T3. Parent and adolescent depressive and anxiety problems were all positively associated with one another at T1 and at T3. Additionally, greater adolescent depressive problems at T1 predicted greater parental depressive problems at T3 and greater adolescent anxiety problems at T3. Greater parent anxiety problems at T1 predicted increases in parent anxiety and depressive problems at T3 and predicted greater adolescent anxiety, but not depressive, problems at T3. Adolescent anxiety problems at T1 predicted increases in parental depressive problems and anxiety problems at T3. Both parent and adolescent depressive problems at T1 predicted higher family conflict at T2. Greater adolescent anxiety problems at T1 predicted lower family conflict at T2, whereas parent anxiety problems at T1 did not predict family conflict. Greater family conflict at T2 predicted greater parent and adolescent depressive problems at T3, but family conflict at T2 did not

predict parent or adolescent anxiety problems at T3. Adolescent depressive problems, but not adolescent anxiety problems, at T1 predicted lower parental acceptance at T2. Parent depressive and anxiety problems at T1 did not predict parental acceptance, and parental acceptance did not predict parent depressive nor anxiety problems at T3. Higher parental acceptance was associated with fewer adolescent depressive problems at T3 but was not associated with adolescent anxiety problems at T3.

Indirect effects revealed that family conflict partially mediated the association between parent depressive problems at T1 to parental depressive problems and adolescent depressive problems at T3. Greater parent depressive problems at T1 were associated with increases in parental and adolescent depressive problems at T3 partially through greater family conflict at T2. (Table 4). Family conflict also partially mediated the association between adolescent depressive problems at T1 to parent and adolescent depressive problems at T3 such that higher adolescent depressive problems at T1 was associated with greater family conflict, which in term predicted greater parent and adolescent depressive symptoms at T3. Parental acceptance was found to partially mediate associations between adolescent depressive pathology from T1 to T3, such that higher adolescent depressive problems at T1 was associated with lower parental acceptance, which in term predicted more adolescent depressive symptoms at T3. No significant indirect effects for cross-disorder pathways for family conflict nor parental acceptance emerged between parent or adolescent depression and anxiety problems from T1 to T3.

Discussion

This study utilized the longitudinal and large sample from the ABCD study to examine the nature of associations between parental and adolescent depressive and anxiety problems, family conflict, and parental acceptance across two years. Using a sample of adolescents and their parents, we found evidence for adolescent-driven and parent-driven bidirectional effects for both depressive and anxiety problems over time. Moreover, greater family conflict and lower perceived parental acceptance predicted increases in adolescent depressive problems but did not predict changes in adolescent anxiety problems over time. Parental depressive and anxiety problems did not predict adolescent-reported parental acceptance but did predict greater family conflict. Notable racial/ethnic group differences emerged in measurement invariance of family conflict and adolescent depressive problems between White, Hispanic/Latino, and Black adolescents. Multigroup analyses revealed that the association between both depressive and anxiety problems from T1 to T3 was weaker among Black adolescents compared to White and Hispanic/Latino adolescents.

Bidirectional Effects Between Parent and Adolescent Depressive Problems

Our results indicate that adolescent depressive problems at age 10 (T1) predicts increases in parent depressive problems 2 years later, and vice-versa for parental depressive problems at T1. These findings of bidirectional effects for parent and adolescent depressive problems are consistent with our hypothesis and the family systems theory (Bowen, 1993; Calatrava et al., 2022). These relationships can be understood through various connected mechanisms within the family system. Adolescents and

parents experiencing depressive problems characterized by sadness, irritability, and withdrawal, may promote similar behaviors within the family (Goodman, 2020). Parents, witnessing their adolescent's struggles, may experience heightened caregiver stress, which is associated with greater depressive problems (Mausbach et al., 2012). Furthermore, shifts in family dynamics due to the depressive symptoms, such as increased tension and conflicts, can also contribute to parental and adolescent depressive symptoms.

The Role of Parental Acceptance and Family Conflict in the Transmission of Parent and Adolescent Depression Problems

Consistent with our hypothesis, findings demonstrate that adolescent and parent depressive problems at T1 predicted greater family conflict at T2 and greater family conflict at T2 predicted increases in parent and adolescent depressive problems at T3. Interpersonal conflicts, stemming from misunderstandings and communication breakdowns within the family, can negatively affect the emotional well-being of both adolescents and parents. Our analyses revealed significant, albeit small, indirect effects for family conflict and depressive problems such that parents and adolescents influenced increases in one another’s depressive problems through greater family conflict. Family conflict is a known risk factor for depressive problems, as it can indicate a distressing family environment. The increased family conflict at T2 may contribute to heightened emotional reactivity, greater negative affect, and interpersonal difficulties among family members, potentially leading to the development or exacerbation of depressive problems. In conclusion, these results highlight the intricate interplay of depressive symptoms within the family context. Intervention work may benefit from understanding the cyclical

role that family conflict can play in the development and maintenance of depressive problems for both parents and adolescents.

Contrary to our hypothesis, parental depressive problems at T1 did not predict adolescent-reported parental acceptance which is inconsistent with prior literature (Kim, 2011; Lovejoy et al., 2000; National Research Council (US) and Institute of Medicine (US) Committee on Depression et al., 2009). Depressive problems in parents have been associated with greater hostile, negative, and disengaged parenting (Loveyjoy et al., 2000), yet it may be that this is a more prominent predictor of family conflict within the home rather than lower perceived parental acceptance. Depression is a complex and heterogeneous condition (Lynall & McIntosh, 2023), thus some parents may experience depressive problems that have a minimal impact on their parenting behaviors and their children's perceptions of acceptance, while for others, these problems might lead to more significant disruptions in the parent-child relationship. Therefore, the variability in how parents experience and express their depressive symptoms could contribute to the lack of a uniform association between parental depression and adolescent-reported parental acceptance. Finally, adolescents' perceptions of parental acceptance can be influenced by a multitude of factors beyond their parents' mental health. These perceptions are shaped by the overall family environment, the quality of communication within the family, the broader social and cultural context in which the family exists, and their own mental health (Bornstein, 2013; Hannigan et al., 2016; Lansford et al., 2023). Indeed, our findings reveal adolescent depressive problems at T1 are a significant predictor of adolescent-reported parental acceptance at T2 and that lower parental acceptance partially mediated increases in adolescent depressive problems from T1 to T3. Adolescents

experiencing depressive problems can often grapple with heightened emotional distress, negative cognitive patterns, and interpersonal difficulties, which may negatively bias their perceptions of the parent-child relationship (Belleau, 2018; Mennen et al., 2019). Adolescents may struggle to express their emotions and needs, leading to misunderstandings and miscommunications with their parents. These reactions can influence adolescents' perceptions of acceptance as they navigate their depressive problems.

Bidirectional Effects Between Parent and Adolescent Anxiety Problems

A similar bidirectional relationship was observed in the anxiety problems path model, such that adolescent anxiety problems at T1 predicted increases in parent anxiety problems at T3 and vice-versa. Our findings are consistent with prior literature on the intergenerational transmission of anxiety disorders from parents to children (Creswell & Waite, 2015). Adolescents may model their emotional responses based on parental behaviors, potentially heightening parental awareness of their own anxiety. Moreover, our finding of significant adolescent-driven effects for parent anxiety problems was not observed in a previous study on the intergenerational transmission of anxiety problems (Johnco et al., 2021). The stress and concern associated with caring for an anxious adolescent may contribute to parental anxiety. Shared genetic risk factors for anxiety problems, environmental stressors, and changes in communication patterns within the family can further exacerbate anxiety symptoms in both adolescents and parents (Gottschalk & Domschke, 2017).

The Role of Parental Acceptance and Family Conflict in the Transmission of Parent and Adolescent Anxiety Problems

Greater adolescent and parent anxiety problems at T1 predicted greater family conflict at T2. Consistent with family systems theory, the family environment may be impacted by the mental health of both parent and adolescents (Bowen, 1993; Calatrava et al., 2022). Anxiety disorders have been associated with greater interpersonal difficulties, yet to our knowledge, this is the first study to demonstrate that parent and adolescent anxiety problems both contribute to greater family conflict (Barrera & Norton, 2009; Bögels & Brechman-Toussaint, 2006; Janovsky et al., 2020; Strand et al., 2023). These results emphasize the importance of considering the interdependence of family members' mental health and the need for comprehensive family-oriented interventions to address anxiety-related distress and reduce family conflict within the home.

Parental anxiety problems at T1 did not predict adolescent-reported parental acceptance. This is consistent with prior literature which found nonsignificant results between parental anxiety and parenting practices (Ayano et al., 2021). Parental anxiety, while potentially distressing for parents, may not necessarily lead to diminished parental acceptance. The influence of parental anxiety on parenting behaviors or the parent-child relationship may also be heterogenous. Anxiety is a multifaceted disorder and may vary in how it influences interpersonal relationships (Uhmann et al., 2010). Indeed, prior observational work has demonstrated that parents with anxiety disorder may report greater apprehension but did not differ significantly in parent-child interactions than parents without anxiety disorders (Turner et al., 2003). Similar as for adolescent depressive problems, it seems that adolescents' own anxiety problems are predictive of their perceptions of parental acceptance at T2. Greater adolescent anxiety problems at T1

predicted lower perceived parental acceptance and multiple mechanisms may underlie these findings. Adolescents with anxiety problems may be more likely to interpret neutral information as negative (e.g., fear-inducing, hostile); thus, adolescents who report greater anxiety problems may be more likely to perceive parental acceptance as lower (Carlisi & Robinson, 2018; Shin & Newman, 2019). Moreover, adolescents with anxiety problems may face greater interpersonal difficulties and dysfunctional communication with their parents, further hindering perceptions of the parent-child relationship (Barrera & Norton, 2009; Janovsky et al., 2020; Strand et al., 2023).

Contrary to our hypotheses, parental acceptance and family conflict did not predict changes in adolescent or parent anxiety problems at T3. Multiple factors may explain these nonsignificant findings. Although prior research demonstrates that conflict within the family and stressful family environments are a significant predictor of children's anxiety outcomes (Al-Biltagi & Sarhan, 2016), prior longitudinal research suggests family conflict may influence anxiety outcomes later in adolescence, and that marital conflict within the home may be a more salient predictor of increases in adolescent anxiety problems (Rueter et al., 1999; Spence et al., 2002). Moreover, our findings revealed lack of measurement invariance for family conflict across racial/ethnic groups, which highlights the need for a more robust and multifaceted measure of family conflict and stress. In terms of parental acceptance, a prior systematic review revealed that various parenting factors did not predict children's anxiety outcomes (Yap & Jorm, 2015). Parenting behaviors, such as overcontrol and overinvolvement, seem to be predictive of anxiety behaviors in early childhood but not in adolescence (Johnco et al., 2021; Möller et al., 2015). Younger children may be more sensitive than adolescents to

developing fear-learning processes based on interactions with their parents, as adolescents likely have more expansive environments to influence their fear learning processes and behaviors than younger children. Moreover, anxiety symptoms tend to tend to decrease during early adolescence and increase again during later adolescence, thus parental acceptance may continue to predict anxiety problems in later adolescents (McLaughlin & King, 2015). Other research has found significant risk factors for anxiety problems in adolescence include parent psychopathology, low-self esteem, childhood adversity, and childhood maltreatment (Blanco et al., 2014; Gardner et al., 2019; Narmandakh et al., 2021). Moreover, parental acceptance, as perceived by adolescents, may represent one facet of the parent-child relationship, and its associations with parental well-being may be outweighed by other stressors and personal factors affecting the parent's behavior and mental health. Additionally, parental acceptance is a subjective measure that captures the adolescent's interpretation of their parents' behaviors, which may not always align with the parents' actual emotional experiences.

Bidirectional Influences of Parent and Adolescent Depressive and Anxiety Problems

A third model was tested during supplemental analysis to understand the distinct impacts of parent and adolescent depressive and anxiety problems on subsequent family-level and depressive and anxious outcomes for parents and adolescents. A few notable differences emerged in analyses. Our findings revealed parental and adolescent depressive and anxiety problems all were positively associated with one another at T1 and T3, suggesting significant comorbidity in depressive and anxiety problems for parents and their adolescents. These findings are consistent with prior research that shows both parent depressive and anxiety problems contribute to increases in adolescent

depressive and anxiety problems (Powell et al., 2023). Moreover, significant cross-disorder effects were found, such that greater adolescent depressive or anxiety problems at T1 predicted increase in adolescent depressive and anxiety problems at T3, a similar relationship was observed for parental depressive and anxiety problems. These findings are consistent with prior research on the comorbidity of depressive and anxiety, which demonstrate that the onset of depressive or anxiety problems may cause or exacerbate problems in the other internalizing domain (Jacobson & Newman, 2017; Melton et al., 2016).

Significant trans-generational cross-disorder effects were also revealed for parent depressive problems and adolescent anxiety problems. Such that greater parent depressive problems at T1 predicted increases in adolescent anxiety problems at T3. These findings are consistent with prior research, which demonstrates that parental depressive problems can negatively impact adolescents psychosocial functioning and mental wellbeing (Colletti et al., 2009; National Research Council (US) and Institute of Medicine (US) Committee on Depression et al., 2009). Prior research also demonstrates that parents with depressive problems may inflate their ratings of their adolescents anxiety problems (Fjermestad et al., 2017). Moreover, greater adolescent anxiety problems at T1 predicted increases in parent depressive problems at T3. Parents who observe their adolescents struggling with excessive worry or fear may experience greater caregiver stress which can contribute to greater parental depressive problems.

Measurement Invariance of Family Conflict, Parental Acceptance, and Adolescent Depressive and Anxiety Problems

Measurement invariance was found for parental acceptance and adolescent depressive anxiety, suggesting that these measures assessed similar constructs across Black, White, and Hispanic participants. Measurement noninvariance was found for family conflict and adolescent depressive problems. Measurement noninvariance can be a critical issue when examining constructs like family conflict and parent-reported adolescent depressive problems across different racial and ethnic groups. For instance, when looking at parent-reported adolescent depressive problems, findings suggest that parents from different racial groups may differ in their perceptions of what constitutes depressive problems in their adolescents. This could be attributed to various factors, including cultural differences and social norms. Parents may have distinct expectations and understanding of what is considered normal emotional and psychological development in their children. As a result, they might report different levels of depressive problems even when the underlying emotional experiences of the adolescents are similar. This finding underscores the importance of considering cultural and contextual factors when interpreting parent-reported measures of adolescent mental health. Researchers and practitioners should be cautious about making direct comparisons across racial groups without accounting for these variations in adolescent depressive problems, as it could lead to misinterpretations of the data and potentially contribute to existing racial/ethnic disparities in research and interventions.

Similarly, measurement noninvariance was observed among Black, White, and Hispanic adolescents for family conflict. The way family conflict is experienced and conceptualized may differ based on cultural and socio-economic factors, leading to

variations in how this construct is measured. For example, the nature of family dynamics, interpersonal communication, and the cultural norms around conflict resolution may vary between these groups (Prevoo & Tamis-LeMonda, 2017). This measurement noninvariance highlights the complexity of assessing and comparing family dynamics across diverse racial and ethnic groups. Understanding these differences is crucial for researchers and practitioners working to address family-related issues and provide effective support to adolescents and their families(Smith et al., 2017; van Mourik et al., 2017). Further research is necessary to understand how and why these constructs of family conflict and parent-reported adolescent depressive problems may differ between and within different racial/ethnic groups. Doing so is essential for promoting a more nuanced understanding of the family and internalizing processes of adolescents from different racial backgrounds and to improve future research and interventions within racially and ethnically diverse populations.

Racial/Ethnic Differences in Pathways of Risk for Adolescent and Parent Depressive and Anxiety Problems

Multigroup analyses revealed that most pathways were invariant across White, Black, and Hispanic/Latino adolescents for both the depressive and anxiety path models. Our findings suggest that the bidirectional associations between parent and adolescent depressive and anxiety problems, and the mediating roles of parental acceptance and family conflict, do not differ significantly between White, Black, and Hispanic/Latinx adolescents and their parents. One exception was that the association between adolescent depressive and anxiety problems from T1 to T3 was significantly weaker for Black adolescents compared to White and Hispanic/Latino adolescents, suggesting that there is

greater variability and instability in the development of depressive and anxiety problems over time for Black youth in early adolescence. It should be noted that the construct of adolescent depressive problems failed to meet configural invariance, indicating that the variable of adolescent depressive may be measuring varying constructs across racial/ethnic groups. Thus, our revealed racial/ethnic differences may be attributed to differences in measurement across racial/ethnic groups. Moreover, caregiver perceptions of adolescent depressive problems, and what types of behaviors are considered problematic may vary by racial/ethnic status. Black families are disproportionately more likely to be in economically disadvantaged communities, meaning that Black parents are more likely to face greater economic stress than other racial/ethnic groups, in addition to experiencing racial discrimination (Smith et al., 2022). The presence of these chronic stressors may diminish the ability of parents to detect depressive or anxiety problems in their adolescents (Kaiser et al., 2017). Furthermore, prior research suggests that greater ethnic identity and fewer experiences of discrimination among Black adolescents is associated with lower depressive and anxiety problems, thus heterogeneity in depressive and anxiety trajectories may be partially attributed to differences in ethnic identity and coping mechanisms for experiences of discrimination among Black youth (Gaylord-Harden & Cunningham, 2009; Williams et al., 2012).

Strengths and Limitations

In our longitudinal study, we identified several strengths in the design and methodology, which enhanced the validity and comprehensiveness of our findings. First and foremost, the study's longitudinal nature allowed us to investigate the temporal relationships between variables, offering a deeper understanding of the dynamics of

depression and anxiety in adolescents and their parents. Another notable strength of our study was its examination of parent-driven and child-driven bidirectional effects for depression and anxiety. Moreover, our sample consisted of youth in early adolescence, which is an important developmental period to study depressive and anxiety problems, as rates of depressive and anxiety problems increase and the parent-child relationship can shift or become more tumultuous during early to mid-adolescence (Beirão et al., 2020; de la Torre-Luque et al., 2020; Lewinsohn et al., 1993; Lippold et al., 2018). Furthermore, our study included the assessment of family conflict and adolescent-perceived parental acceptance, which are critical components of the family environment that can have a significant impact on both parental and adolescent mental health. By examining these factors in conjunction with depression and anxiety, we were able to explore the multifaceted nature of family dynamics and their implications for parent and adolescent well-beings. Additionally, our study conducted supplemental ethnic/racial specific analyses, including measurement invariance and multigroup analyses. This approach allowed us to account for and explore potential variations in the measurement of relationships between the variables across different racial and ethnic groups. By recognizing and analyzing potential ethnic/racial differences, our study contributes to a more nuanced understanding of how these dynamics operate within diverse populations. This strengthens the generalizability of our findings and highlights the importance of tailoring research and support to specific racial/ethnic or cultural contexts. Supplemental analyses were also conducted to explore the comorbidity and cross-disorder transmission of depression and anxiety problems for parents and adolescents from T1 to T3. In conclusion, the longitudinal design, consideration of bidirectional effects, comorbidity

across depression and anxiety problems, examination of family conflict and parental acceptance, and the inclusion of ethnic/racial specific analyses collectively contribute to the robustness and relevance of our study. These strengths enhance the applicability of our findings to a wide range of real-world scenarios and underscore the importance of considering the complex interplay of parent and adolescent mental health, perceived parenting, and family factors in the study of adolescent and parental wellbeing.

Findings need to be interpreted in consideration of several limitations. First, the study relied heavily on caregiver reports for family conflict and parental and adolescent depressive and anxiety problems. The only adolescent-reported measure used in the study was parental acceptance. Prior research suggest that parental reports may not be the optimal way to assess children's internalizing problems, as there is often high discordance in child and parent reports of internalizing problems (Bajeux et al., 2018)). Moreover, the use of parent-report could introduce biases in questionnaire responses, particularly about mental health problems and family conflict in the home. Thus, future research would benefit from utilizing multi-informant reports for a more robust measure of mental health, parenting, and family construct. Second, DSM-oriented items for depressive and anxiety disorders from the CBCL were used to calculate scores for adolescent depressive and anxiety problems, as highlighted by Achenbach (2013). Other measures of adolescent depressive and anxiety problems exist, and future research is warranted to understand if these patterns are replicated. Third, multigroup and measurement invariance analyses were conducted in the largest three racial/ethnic groups of the sample (White, Black, and Hispanic/Latino); thus, future research is necessary to understand how these measurements and paths may vary for other racial/ethnic minority

groups (e.g., East Asian, South Asian, Native American). Fourth, measurement invariance analyses demonstrated noninvariance for family conflict and adolescent depressive problems, precipitating the need for a better understanding of why these constructs may not be conceptualized similarly across racial/ethnic groups. Furthermore, prior research suggests sex differences in the development and trajectories of adolescent depressive and anxiety problems (Hankin, 2009). The intergenerational transmission for depressive and anxiety problems may also vary by same-sex and opposite-sex parent-child dyads (Altemus et al., 2014; Fang et al., 2019; Pavlova et al., 2022). Thus, further research should test for sex-specific analyses and sex-specific transmissions of depressive and anxiety problems. Finally, parent and adolescent depressive problems were only analyzed at two timepoints and parenting/family measures were analyzed at only one time point. Using more time points and other longitudinal statistical models (e.g., cross-lagged panel models, growth mixture models) will allow further insight into the development and trajectories of depressive and anxiety problems and its underlying processes.

Conclusion

In conclusion, this study harnessed the longitudinal and extensive sample size of the ABCD study to delve into the relationships between parental and adolescent depressive and anxiety problems, family conflict, and parental acceptance across a two-year period. The findings shed light on several key aspects of these complex dynamics including bidirectional effects for parent and adolescent depressive and anxiety problems, significant indirect effects for depressive problems through family conflict and parental acceptance, and racial/ethnic differences in measurement invariance and multigroup

analysis. In summary, this research contributes valuable insights into the measurement of and relationship between parental and adolescent mental health, family dynamics, and adolescent perceptions of parenting behaviors. Furthermore, our findings underscore the necessity of accurate measurement across racial/ethnic groups. Ultimately, this study demonstrates the importance of considering how the mental health of younger adolescents may influence the mental health of their parents, and how both parent and adolescent depressive and anxiety problems can influence the overall family environment and parent-child relationship.

Table 1. Descriptive Statistics and Correlation Matrix for Study Variables

	Ado. Anx T1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1.Adolesc Dep T1	**.64*****	-	-	-	-	-	-	-	-	-	-	-	-	-
2.Parent Dep T1	**.40*****	**.42*****	-	-	-	-	-	-	-	-	-	-	-	-
3.Parent Anx T1	**.41*****	**.35*****	**.64*****	-	-	-	-	-	-	-	-	-	-	-
4.Adolesc Anx T3	**.60*****	**.45*****	**.30*****	**.31*****	-	-	-	-	-	-	-	-	-	-
5.Adolesc Dep T3	**.43*****	**.56*****	**.33*****	**.27*****	**.63*****	-	-	-	-	-	-	-	-	-
6.Parent Dep T3	**.31*****	**.33*****	**.66*****	**.47*****	**.39*****	**.42*****	-	-	-	-	-	-	-	-
7.Parent Anx T3	**.34*****	**.28*****	**.47*****	**.65*****	**.41*****	**.35*****	**.66*****	-	-	-	-	-	-	-
8.Family Conflict	**.06*****	**.12*****	**.10*****	**.07*****	**.05*****	**.12*****	**.10*****	**.06*****	-	-	-	-	-	-
9.Parental Accept	**-.05*****	**-.09*****	**-.05*****	**-.03*****	**-.04*****	**-.11*****	**-.05*****	**-.02***	**-.35*****	-	-	-	-	-
10.Parent Age	**-.06*****	**-.05*****	**-.10*****	**-.12*****	-.01	-.02	**-.07*****	**-.07*****	**-.10*****	**.05*****	-	-	-	-

11.Parent Edu	-**.03*****	-**.05*****	-**.08*****	-**.11*****	.02	-.02	-**.04*****	-**.07*****	-**.12*****	**.09*****	**.37*****	-	-	-	
12.Adolesc Age	-.01	.02	-.02	-.02	-.01	**.04*****	-.00	-.01	**-.02***	.01	**.10*****	.02	-	-	
13.Parent Sex	**.05*****	**.41*****	**.04*****	**.10*****	**.04*****	**.04*****	**.04*****	**.09*****	**.02***	**.05*****	-**.18*****	-**.07*****	.00	-	
14.Adolesc Sex	-.01	-**.07*****	-.01	-.02	**.03****	-.01	-.01	-.01	-**.07*****	**.05*****	-.01	-.01	-.02	**.04*****	
Mean/% (SD)	2.06 (2.43)	1.28 (2.03)	4.05 (3.73)	3.76 (2.56)	1.81 (2.32)	1.51 (2.30)	4.07 (3.74)	3.64 (2.53)	1.91 (1.88)	2.81 (0.29)	39.53 (6.35)	16.4 (2.7)	89.6% F	47.4 % F	9.92 (7.5)

*Notes. *=p<.05, **=p<.01, ***=p<.001. Ado= Adolescent, Dep= Depressive Problems, Anx= Anxiety Problems, T1= Time 1, T3= Time3, Fam Con= Family Conflict, Par Acc= Parental Acceptance, Edu= Education level, F=Female.*

Table 2. Comparisons of Key Study Variables Between White, Black, and Latino Participants

	Full Sample				White				Black				Latino			
	N	α	M	SD	N	α	M	SD	N	α	M	SD	N	α	M	SD
Adolescent Depression T1	11,861	.71	1.28	2.03	5,989	.71	1.27[a]	1.98	1,593	.73	1.18[a,b]	2.00	2,220	.72	1.36[a]	2.10
Adolescent Depression T3	10,356	.75	1.51	2.30	5,770	.75	2.06[a]	2.40	1,420	.72	1.12[b]	1.95	2,001	.77	1.54[a]	2.36
Adolescent Anxiety T1	11,861	.77	2.06	2.43	5,989	.77	2.06[a]	0.76	1,593	.77	1.18[b]	2.35	2,220	.78	2.24[c]	2.53
Adolescent Anxiety T3	10,356	.77	1.81	2.32	5,770	.77	1.90[a]	2.32	1,420	.76	1.28[b]	1.97	2,001	.77	1.86[a]	2.35
Parent Depression T1	11,861	.81	4.05	3.73	5,988	.80	4.27[a]	3.71	1,596	.84	3.82[b]	4.04	2,221	.81	3.90[a,b]	3.72
Parent Depression T3	10,357	.82	4.07	3.74	5,514	.80	4.28[a]	3.64	1,352	.84	3.28[b]	3.78	2,002	.81	3.76[c]	3.61
Parent Anxiety T1	11,861	.77	3.76	2.56	5,988	.79	3.65[a]	2.54	1,596	.75	3.70[a]	2.60	2,221	.75	4.10[b]	2.55
Parent Anxiety T3	10,357	.77	3.64	2.53	5,514	.79	3.63[a]	2.49	1,352	.77	3.23[b]	2.53	2,002	.75	3.87[c]	2.51
Family Conflict	10,701	.66	1.91	1.88	5,982	.67	1.80[a]	1.87	1,639	.66	2.31[b]	1.92	2,217	.63	1.88[a]	1.79
Parental Acceptance	10,696	.72	2.81	0.29	5,980	.71	2.83[a]	0.26	1,591	.72	2.75[b]	0.32	2,221	.71	2.80[c]	0.29

Family Education	11,851	--	16.41	2.68	6,179	--	17.42[a]	1.86	1,645	--	14.88[b]	2.29	2,320	--	14.58[c]	3.36
Parent Age	11,774	--	39.53	6.35	6,165	--	40.96[a]	5.64	1,643	--	35.84[b]	6.34	2,319	--	38.12[c]	6.59

*Note. Means with the same superscript were not statistically significantly different in mean values. *=p<.05, **=p<.01, ***=p<.001. Games Howell test used to test pairwise significant differences between groups. Cronbach's alpha reliability estimates presented.*

Table 3. Testing for Measurement Invariance across White, Black, and Hispanic Adolescents.

Model									
Adolescent Depressive Problems	**χ2**	**df**	**Δχ2 (Δ df)**	**CFI**	**TLI**	**RMSEA**	**SRMR**	**ΔRMSEA**	**ΔCFI**
Configural	5051.95	385	---	.764	.721	.074	.052		
Metric (weak)	5690.644***	437	638.9 (52)	.734	.723	.073	.061	-.001	-.030
Scalar (strong)	6239.59***	493	548.9 (56)	.709	.732	.072	.064	-.001	-.025
Strict	9411.329***	549	3171.7 (56)	.551	.628	.085	.103	.013	-.183
Adolescent Anxiety Problems	**χ2**	**df**	**Δχ2 (Δ df)**	**CFI**	**TLI**	**RMSEA**	**SRMR**	**ΔRMSEA**	**ΔCFI**
Configural	928.115	135	--	.959	.945	.056	.028		
Metric (weak)	1235.959***	167	307.8 (32)	.945	.941	.053	.042	-.003	-.014
Scalar (strong)	1990.63***	203	754.7 (36)	.908	.918	.063	.053	.010	-.037
Strict	3025.121***	239	1034.5 (36)	.856	.892	.072	.076	.009	-.052
Family Conflict	**χ2**	**df**	**Δχ2 (Δ df)**	**CFI**	**TLI**	**RMSEA**	**SRMR**	**ΔRMSEA**	**ΔCFI**
Configural	2802.55	135	---	.780	.707	.094	.059	---	---

Metric (weak)	3225.963***	167	422.45 (32)	.748	.728	.090	.066	-.004	-.032
Scalar (strong)	4012.264***	203	786.301 (36)	.686	.721	.091	.074	.001	-.062
Strict	4535.191***	226	522.93 (23)	.645	.717	.092	.082	.001	-.041
Parental Acceptance	**χ2**	**df**	**Δχ2 (Δ df)**	**CFI**	**TLI**	**RMSEA**	**SRMR**	**ΔRMSEA**	**ΔCFI**
Configural	252.591	25	--	.977	.955	.064	.023		
Metric (weak)	308.021***	41	55.4 (16)	.973	.968	.054	.058	-.010	-.004
Scalar (strong)	455.013***	61	147.0 (20)	.961	.968	.054	.079	.000	-.012
Strict	948.284***	81	493.3 (20)	.914	.947	.069	.263	.015	-.047

Note. *** indicates significant change in model fit, ***=p=<.001.

Table 4. Coefficients from the Path Model Predicting Depressive Problems

Direct Effects	β	B	Standard Error	P Value
Parent DepT1←→Adolescent DepT1	**.420**	**3.18**	.113	**p<.001**
Parent DepT1→Family Conflict	**.057**	**0.03**	.006	**p<.001**
Parent DepT1→Parental Acceptance	-.010	-0.00	.001	.378
Parent DepT1→Parent DepT3	**.629**	**0.63**	.014	**p<.001**
Adolescent DepT1→ Parental Acceptance	**-.070**	**-0.01**	.002	**p<.001**
Adolescent DepT1→Family Conflict	**.079**	**0.07**	.011	**p<.001**
Adolescent DepT1→ Adolescent DepT3	**.500**	**0.5**[7]	.017	**p<.001**
Family Conflict←→ Parental Acceptance	**-.337**	**-0.18**	.007	**p<.001**
Adolescent DepT1→ Parent DepT3	**.069**	**0.13**	.024	**p<.001**
Parent DepT1→ Adolescent DepT3	**.128**	**0.08**	.008	**p<.001**
Family Conflict→ Parent DepT3	**.029**	**0.06**	.014	**.001**
Parental Acceptance→ Parent DepT3	-.010	-0.18	.130	.167
Family Conflict→ Adolescent DepT3	**.033**	**0.04**	.012	**.001**
Parental Acceptance→ Adolescent Dep3	**-.050**	**-0.50**	.093	**p<.001**
Parent DepT3 ←→ Adolescent DepT3	**.282**	**1.50**	.084	**p<.001**
Indirect Effects	**β**	**B**	**95% CI**	**P Value**
Parent DepT1→Parental Acc→Parent DepT3	.000	.000	[.000, .001]	.551
Parent DepT1→Family Conflict -→Parent DepT3	**.002**	**.002**	[.001, .003]	**.003**
Parent DepT1→Parent DepT3 Total Indirect Effect	**.002**	**.002**	[.001, .003]	**.003**
Adolescent DepT1→Parental Acc→Adolescent DepT3	**.004**	**.005**	[.003, .007]	**p<.001**
Adolescent DepT1→Family Conflict →Adolescent DepT3	**.003**	**.003**	[.001, .005]	**.005**

Adolescent DepT1→Adolescent DepT3 Total Indirect Effect	**.007**	**.008**	[.005, .010]	**p<.001**
Parent DepT1→Parental Acc→Adolescent DepT3	.001	.000	[-.001,.002]	.403
Parent DepT1→Family Conflict →Adolescent DepT3	**.002**	**.001**	[.001, .003]	**.006**
Parent DepT1→Adolescent DepT3 Total Indirect Effect	**.002**	**.001**	[.001, .005]	**.018**
Adolescent DepT1→Parental Acc→Parent DepT3	.001	.001	[-.001, .002]	.294
Adolescent DepT1→Family Conflict→Parent DepT3	**.002**	**.004**	[.001 .004]	**.002**
Adolescent DepT1 →Parent DepT3 Total Indirect Effect	**.003**	**.006**	[.001, .005]	**.001**

*Note. Unstandardized and Standardized path coefficients are presented in the table. *=p<.05, **=p<.01, ***=p<.001, Parent and child age, gender, adolescent pubertal development status at T1 and T3, parental education, and racial/ethnic status were controlled for. Model clustered by Family and Site location. Dep= Depressive Problems, Parental Acc= Parental Acceptance. Each time interval (T1, T2, T3) was approximately 1 year apart.*

Table 5. Coefficients from the Path Model Predicting Anxiety Problems

Direct Effects	β	B	S.E.	P Value
Parent AnxT1←→Adolescent AnxT1	**.415**	**2.58**	.076	**p<.001**
Parent AnxT1→Family Conflict	**.040**	**0.03**	.008	**p<.001**
Parent AnxT1→Parental Acc	-.001	0.00	.001	.956
Parent AnxT1→Parent AnxT3	**.609**	**0.06**	.009	**p<.001**
Adolescent AnxT1→Parental Acc	**-.049**	**-0.01**	.001	**p<.001**
Adolescent AnxT1→Family Conflict	**.037**	**0.03**	.008	**.001**
Adolescent AnxT1→Adolescent AnxT3	**.568**	**0.54**	.012	**p<.001**
Family Con←→Parental Acc	**-.340**	**-0.18**	.007	**p<.001**
Adolescent AnxT1→Parent AnxT3	**.089**	**0.09**	.010	**p<.001**
Parent AnxT1→Adolescent AnxT3	**.090**	**0.08**	.008	**p<.001**
Family Conflict→Parent AnxT3	.016	0.02	.011	.050
Parental Acc→Parent AnxT3	.005	0.04	.075	.571
Family Conflict →Adolescent AnxT3	.007	0.01	.011	.421
Parental Acc→Adolescent AnxT3	-.013	-0.11	.079	.177
Parent DepT3 ←→ Adolescent AnxT3	**.275**	**0.97**	.046	**p<.001**
Indirect Effects	**β**	**B**	**95% CI**	**P Value**
Parent AnxT1 →Parental Acc →Parent AnxT3	.000	.000	[.000, .000]	.978
Parent AnxT1 →Family Conflict→Parent AnxT3	.001	.001	[.000, .002]	.084
Parent AnxT1→Parent AnxT3 Total Indirect Effect	.001	.001	[.000, .002]	.086
Adolescent AnxT1 → Parental Acc → Adolescent AnxT3	.001	.001	[.000, .002]	.210

Adolescent AnxT1 → Family Conflict → Adolescent AnxT3	.000	.000	[.000 .001]	.461
Adolescent AnxT1→ Adolescent AnxT3 Total Indirect Effect	.001	.001	[.000, .002]	.081
Parent AnxT1→ Parental Acc → Adolescent AnxT3	.000	.000	[.000, .000]	.966
Parent AnxT1 → Family Conflict →Adolescent AnxT3	.000	.000	[.000, .001]	.434
Parent AnxT1→ Adolescent AnxT3 Total Indirect Effect	.000	.000	[.000, .001]	.477
Adolescent AnxT1→Parental Acc →Parent AnxT3	.000	.000	[-.001, .001]	.590
Adolescent AnxT1 → Family Conflict →Parent AnxT3	.001	.001	[.000, .002]	.100
Adolescent AnxT1 → Parent AnxT3 Total Indirect Effect	.000	.001	[.000, .002]	.430

*Note. Unstandardized and Standardized path coefficients are presented in the table. *=p<.05, **=p<.01, ***=p<.001, Parent and child age, gender, parental education, adolescent pubertal development status at T1 and T3, and racial/ethnic status were controlled for. Model clustered by Family and Site location. Anx= Anxiety Problems, Parental Acc= Parental Acceptance. Each time interval (T1, T2, T3) was approximately 1 year apart.*

Table 6. Multigroup Analysis of Path Model for Depressive Problems

Paths	White		Black		Latino		Wald Test	
	β (S.E.)	P Value	β (S.E)	P Value	β (S.E.)	P Value	Wald χ^2	P value
Parent DepT1←→Adolescent DepT1	**.41 (.02)**	**.000**	**.45 (.03)**	**.000**	**.41 (.02)**	**.000**	1.875	.392
Parent DepT1→Family Conflict	**.05 (.02)**	**.006**	**.09 (.04)**	**.008**	.03 (.02)	.244	2.108	.349
Adolescent DepT1→Family Conflict	**.11 (.02)**	**.000**	.03 (.03)	.316	**.07 (.03)**	**.007**	4.24	.120
Parent DepT1→Parental Acc	-.02 (.02)	.267	-.03 (.04)	.406	**.05 (.02)**	**.026**	**6.966**	**.031**
Adolescent DepT1→Parental Acc	**-.09 (.02)**	**.000**	-.05 (.04)	.178	**-.09 (.03)**	**.001**	.303	.860
Family Conflict←→Parental Acc	**-.35 (.02)**	**.000**	**-.32 (.03)**	**.000**	**-.35 (.02)**	**.000**	1.475	.478
Parent DepT1→Parent DepT3	**.64 (.01)**	**.000**	**.63 (.03)**	**.000**	**.58 (.03)**	**.000**	5.010	.082
Adolescent DepT1→Parent DepT3	**.06 (.01)**	**.000**	.05 (.04)	.139	**.11 (.03)**	**.000**	2.272	.321
Adolescent DepT1→Adolescent DepT3	**.51 (.02)**	**.000**	**.42 (.04)**	**.000**	**.52 (.03)**	**.000**	**10.802**	**.005**
Parent DepT1→Adolescent DepT3	**.11 (.02)**	**.000**	**.17 (.04)**	**.000**	**.12 (.02)**	**.000**	.316	.854

Family Conflict→Parent DepT3	.02 (.01)	.060	.03 (.03)	.213	**.04 (.02)**	**.018**	1.085	.581
Parental Acc→Parent DepT3	.00 (.01)	.942	.01 (.03)	.860	-.04 (.02)	.051	3.125	.210
Family Conflict→Adolescent DepT3	**.04 (.01)**	**.001**	.01 (.03)	.810	.02 (.02)	.479	2.337	.311
Parental Acc→Adolescent DepT3	**-.07 (.02)**	**.000**	-.04 (.03)	.183	**-.07 (.02)**	**.002**	.2512	.285
Parent AnxT3←→Adolescent AnxT3	**.26 (.02)**	**.000**	**.28 (.04)**	**.000**	**.32 (.03)**	**.000**	3.274	.195

*Note. Unstandardized and Standardized path coefficients are presented in the table. *=p<.05, **=p<.01, ***=p<.001, Parent and child age, gender, parental education, site location, adolescent puberty status at T1 and T3, and racial/ethnic status were controlled for. Model clustered by Family and Site location, Dep= Depressive Problems, Parental Acc= Parental Acceptance. Each time interval (T1, T2, T3) was approximately 1 year apart.*

Table 7. Multigroup Analysis of Path Model for Anxiety Problems

Paths	White		Black		Latino		Wald Test	
	β (S.E.)	P Value	β (S.E)	P Value	β (S.E.)	P Value	Wald χ^2	P value
Parent AnxT1←→Adolescent AnxT1	**.40 (.01)**	**.000**	**.44 (.03)**	**.000**	**.40 (.02)**	**.000**	0.559	.756
Parent AnxT1→Family Conflict	**.04 (.02)**	**.007**	**.05 (.03)**	**.135**	.02 (.03)	.544	1.115	.573
Adolescent AnxT1→Family Conflict	**.05 (.02)**	**.001**	.05 (.03)	.134	**.02 (.02)**	**.398**	1.812	.404
Parent AnxT1→Parental Acc	-.02 (.02)	.323	.01 (.03)	.855	**.01 (.02)**	**.659**	0.940	.625
Adolescent AnxT1→Parental Acc	**-.07 (.02)**	**.000**	-.05 (.03)	.169	**-.03 (.03)**	**.228**	1.519	.468
Family Conflict←→Parental Acc	**-.35 (.02)**	**.000**	**-.32 (.03)**	**.000**	**-.35 (.02)**	**.000**	1.383	.501
Parent AnxT1→Parent AnxT3	**.63 (.01)**	**.000**	**.57 (.03)**	**.000**	**.59 (.02)**	**.000**	4.703	.095
Adolescent AnxT1→Parent AnxT3	**.07 (.01)**	**.000**	.10 (.03)	.001	**.10 (.02)**	**.000**	2.543	.280
Adolescent AnxT1→Adolescent AnxT3	**.56 (.01)**	**.000**	**.51 (.04)**	**.000**	**.58 (.02)**	**.000**	**8.318**	**.016**
Parent AnxT1→Adolescent AnxT3	**.10 (.01)**	**.000**	**.08 (.03)**	**.008**	**.05 (.02)**	**.016**	5.083	.079

Family Conflict→Parent AnxT3	.032 (.01)	.074	-.04 (.03)	.138	**.03 (.02)**	**.131**	5.149	.076
Parental Acc→Parent AnxT3	.00 (.01)	.879	.01 (.03)	.826	/02 (.02)	.345	0.465	.793
Family Conflict→Adolescent AnxT3	**.03 (.01)**	**.034**	.00 (.03)	.904	-.03 (.02)	.170	5.617	.060
Parental Acc→Adolescent Anx3	**-.02 (.01)**	**.399**	.00 (.03)	.904	**-.04 (.02)**	**.051**	1.531	.465
Parent AnxT3←→Adolescent AnxT3	**.26 (.02)**	**.000**	.28 (.03)	.000	.29 (.02)	.000	1.204	.548

*Note. Unstandardized and Standardized path coefficients are presented in the table. *=p<.05, **=p<.01, ***=p<.001, Parent and child age, gender, parental education, adolescent pubertal status at T1 and T3, and racial/ethnic status were controlled for. Model clustered by Family and Site location. Anx= Anxiety Problems, Parental Acc= Parental Acceptance. Each time interval (T1, T2, T3) was approximately 1 year apart.*

Figure 1. Depressive Problems Path Model

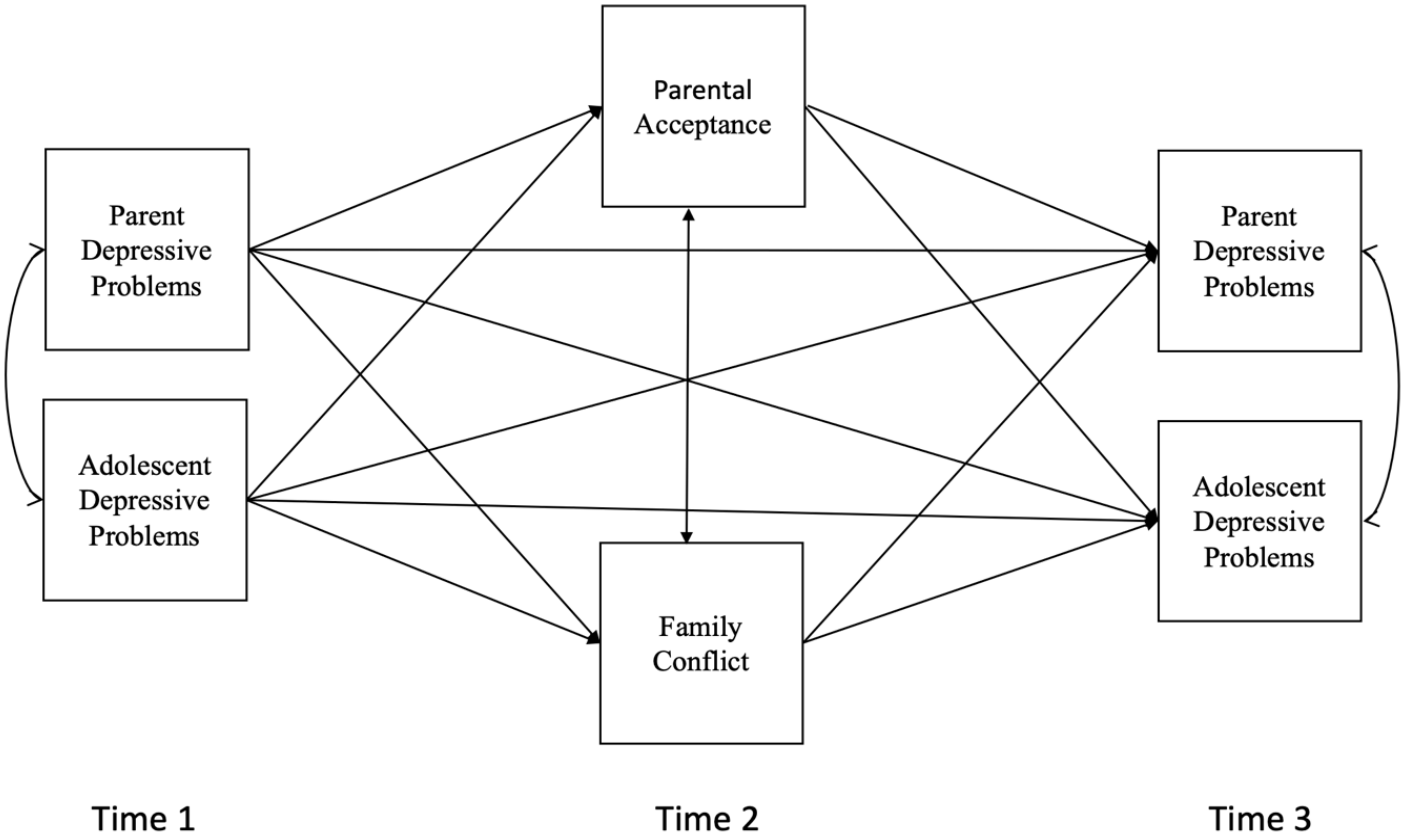


Figure 2. Anxiety Problems Path Model

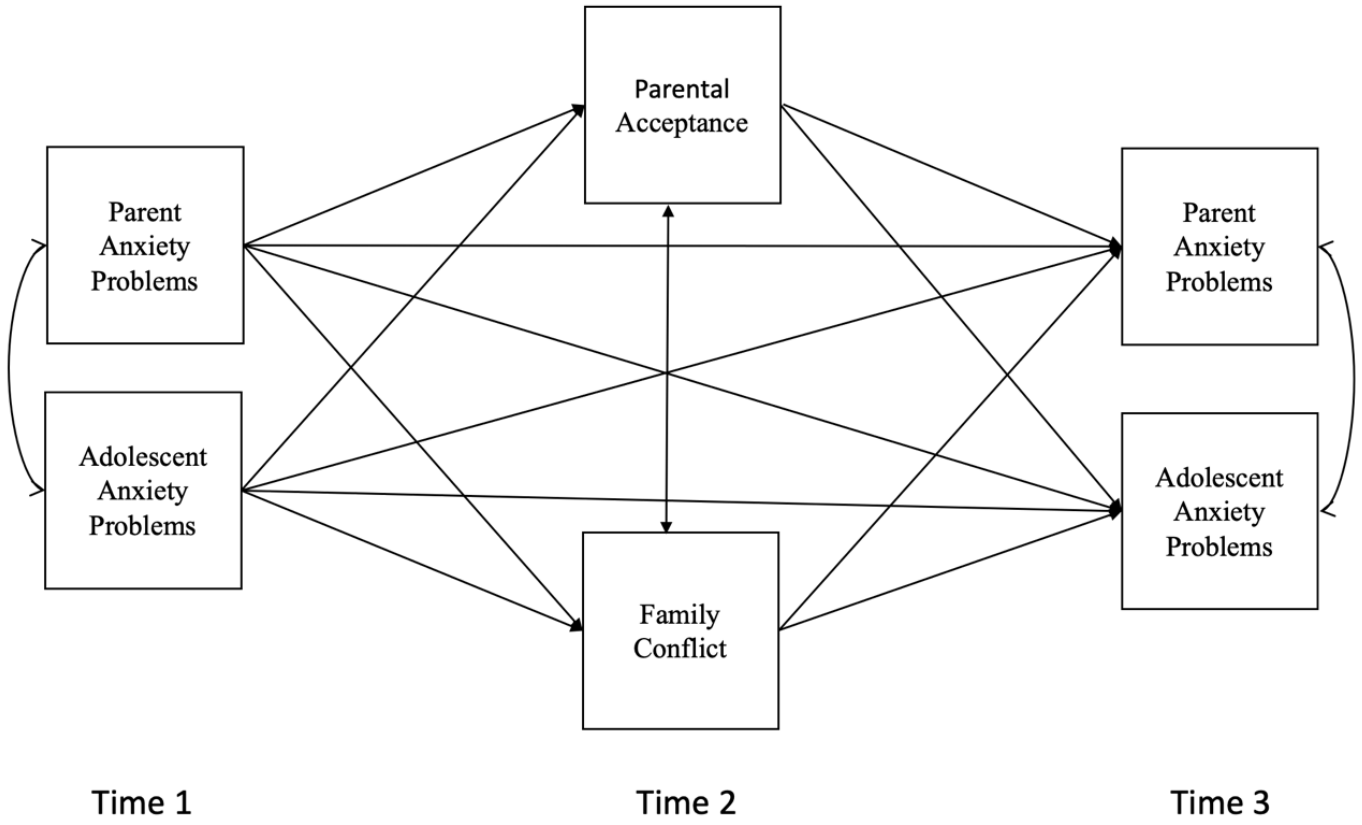
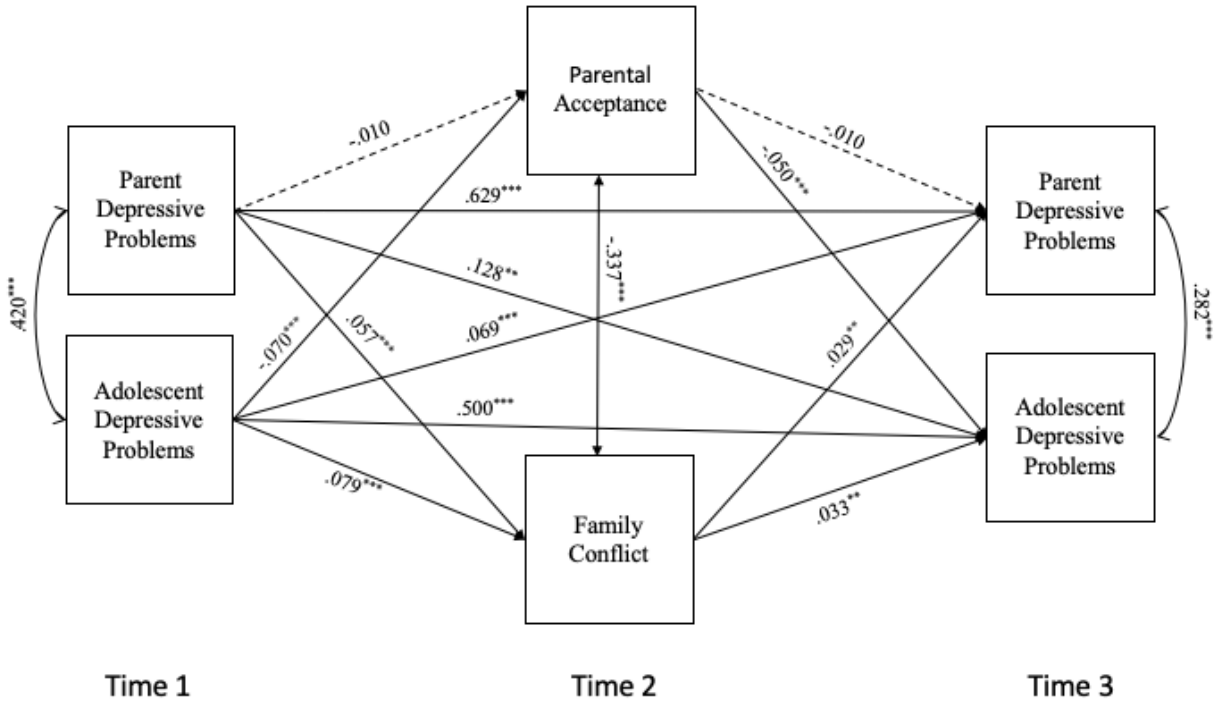
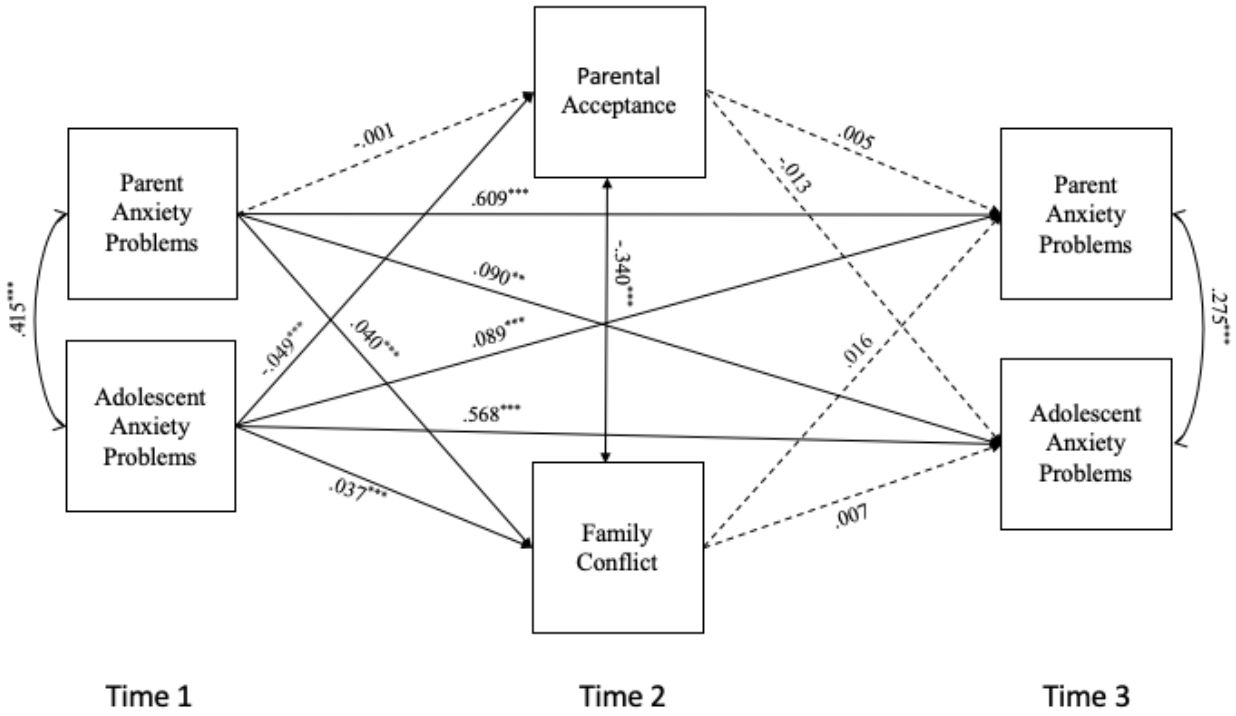


Figure 3. Depressive Problems Path Analysis



Note. *Standardized path coefficients are presented in the figure. *=p<.05, **=p<.01, ***=p<.001, Parent and child age, gender, parental education, adolescent pubertal status at T1 and T3, and racial/ethnic status were controlled for. Model clustered by Family and Site location. Each time interval was approximately 1 year apart.* Dotted lines represent insignificant paths.

Figure 4. Anxiety Problems Path Analysis



Note. *Standardized path coefficients are presented in the figure. *=p<.05, **=p<.01, ***=p<.001, Parent and child age, gender, parental education, adolescent pubertal status at T1 and T3, and racial/ethnic status were controlled for. Model clustered by Family and Site location. Each time interval was approximately 1 year apart.* Dotted lines represent insignificant paths.

Table 8. Coefficients from the Path Model Predicting Anxiety and Depressive Problems

Direct Effects	β	B	Standard Error	P Value
Parent DepT1←→Adolescent DepT1	**.420**	**3.18**	**.111**	**p<.001**
Parent AnxT1←→Adolescent DepT1	**.349**	**1.81**	**.064**	**p<.001**
Parent DepT1←→Adolescent AnxT1	**.402**	**3.66**	**.119**	**p<.001**
Parent AnxT1←→Adolescent AnxT1	**.415**	**2.59**	**.076**	**p<.001**
Adolescent AnxT1←→Adolescent DepT1	**.635**	**3.13**	**.098**	**p<.001**
Parent AnxT1←→Parent DepT1	**.645**	**6.18**	**.131**	**p<.001**
Parent AnxT1→Family Conflict	-.007	-0.01	.009	.552
Parent AnxT1→Parental Acc	.020	0.00	.001	.123
Parent DepT1→Family Conflict	**.066**	**0.03**	**.007**	**p<.001**
Parent DepT1→Parental Acc	-.022	-0.02	.001	.104
Parent DepT1→Parent DepT3	**.580**	**0.58**	**.015**	**p<.001**
Parent AnxT1→Parent DepT3	**.076**	**0.11**	**.016**	**p<.001**
Parent DepT1→Parent AnxT3	**.081**	**0.06**	**.009**	**p<.001**
Parent AnxT1→Parent AnxT3	**.562**	**0.56**	**.011**	**p<.001**
Adolescent DepT1→Parental Acc	**-.079**	**-0.01**	**.002**	**p<.001**
Adolescent DepT1→Family Conflict	**.097**	**0.09**	**.014**	**p<.001**
Adolescent AnxT1→Parental Acc	.001	0.00	.002	.937
Adolescent AnxT1→Family Conflict	**-.031**	**-0.02**	**.011**	**.025**
Adolescent DepT1→Adolescent DepT3	**.438**	**0.50**	**.020**	**p<.001**
Adolescent DepT1→Adolescent AnxT3	**.100**	**0.12**	**.017**	**p<.001**
Adolescent AnxT1→Adolescent DepT3	**.107**	**0.10**	**.013**	**p<.001**
Adolescent AnxT1→Adolescent AnxT3	**.504**	**0.48**	**.014**	**p<.001**

Family Conflict←→Parental Acc	**-.337**	**-0.18**	**.007**	**p<.001**
Adolescent DepT1→Parent DepT3	**.048**	**0.13**	**.024**	**p<.001**
Parent DepT1→Adolescent DepT3	**.099**	**0.06**	**.008**	**p<.001**
Adolescent AnxT1→Parent DepT3	**.024**	**0.04**	**.018**	**.040**
Parent DepT1→Adolescent AnxT3	**.032**	**0.02**	**.008**	**.016**
Adolescent DepT1→Parent AnxT3	.010	0.01	.016	.151
Adolescent AnxT1→Parent AnxT3	**.070**	**0.07**	**.012**	**p<.001**
Parent AnxT1→Adolescent DepT3	.018	0.02	.011	.129
Parent AnxT1→Adolescent AnxT3	**.062**	**0.06**	**.011**	**p<.001**
Family Conflict→Parent DepT3	**.030**	**0.06**	**.017**	**p<.001**
Parental Acc→Parent DepT3	-.010	-0.14	.123	.263
Family Conflict→Parent AnxT3	.012	0.02	.011	.151
Parental Acc→Parent AnxT3	.005	0.04	.075	.586
Family Conflict→Adolescent DepT3	**.034**	**0.04**	**.012**	**.001**
Parental Acc→Adolescent DepT3	**-.056**	**-0.45**	**.086**	**p<.001**
Family Conflict→Adolescent AnxT3	.001	0.00	.011	.940
Parental Acc→Adolescent AnxT3	-.011	-0.09	.079	.253
Parent DepT3←→Adolescent DepT3	**.282**	**1.47**	**.081**	**p<.001**
Parent AnxT3←→Adolescent DepT3	**.210**	**0.75**	**.047**	**p<.001**
Parent DepT3←→Adolescent AnxT3	**.256**	**1.31**	**.073**	**p<.001**
Parent AnxT3←→Adolescent AnxT3	**.273**	**0.95**	**.046**	**p<.001**
Adolescent AnxT3←→Adolescent DepT3	**.519**	**1.77**	**.068**	**p<.001**
Parent AnxT3←→Parent DepT3	**.552**	**2.96**	**.092**	**p<.001**
Indirect Effects	**β**	**B**	**95% CI**	**P Value**
Parent DepT1→Parental Acc→Parent DepT3	.000	.009	[.000, .001]	.376

Parent DepT1→Family Conflict-→Parent DepT3	**.002**	**.002**	[.001, .004]	**.003**
Parent DepT1→Parental Acc→Parent AnxT3	.001	.000	[-.001, .000]	.643
Parent DepT1→Family Conflict-→Parent AnxT3	.000	.001	[.000, .001]	.176
Adolescent DepT1→Parental Acc→Adolescent DepT3	**.004**	**.005**	[.003, .008]	**p<.001**
Adolescent DepT1→Family Conflict→Adolescent DepT3	**.003**	**.004**	[.002, .007]	**.003**
Adolescent DepT1→Parental Acc→Adolescent AnxT3	.001	.001	[-.001, .003]	.271
Adolescent DepT1→Family Conflict→Adolescent AnxT3	.000	.000	[-.002, .002]	.941
Parent AnxT1→Parental Acc→Parent AnxT3	.000	.000	[.000, .001]	.654
Parent AnxT1→Family Conflict-→Parent AnxT3	.000	.000	[-.001, .000]	.654
Parent AnxT1→Parental Acc→Parent DepT3	.000	.000	[-.001, .000]	.411
Parent AnxT1→Family Conflict-→Parent DepT3	.000	.000	[-.002, .001]	.572
Adolescent AnxT1→Parental Acc→Adolescent AnxT3	.000	.000	[-.001, .000]	.953
Adolescent AnxT1→Family Conflict→Adolescent AnxT3	.000	.000	[-.001, .001]	.943
Adolescent AnxT1→Parental Acc→Adolescent DepT3	.000	.000	[-.002, .001]	.938

Adolescent AnxT1→Family Conflict→Adolescent DepT3	-.001	-.001	[-.002, .000]	.065
Parent DepT1→Parental Acc→Adolescent DepT3	.001	.001	[.000, .002]	.131
Parent DepT1→Family Conflict→Adolescent DepT3	**.002**	**.001**	**[.001, .002]**	**.004**
Parent DepT1→Parental Acc→Adolescent AnxT3	.000	.001	[.000, .001]	.131
Parent DepT1→Family Conflict-→Adolescent AnxT3	.000	.000	[-.001, .001]	.941
Parent AnxT1→Parental Acc→Adolescent DepT3	.000	.000	[-.001, .000]	.568
Parent AnxT1→Family Conflict-→Adolescent DepT3	-.001	-.001	[-.002, .000]	.139
Parent AnxT1→Parental Acc→Adolescent AnxT3	.000	.000	[-.001, .000]	.426
Parent AnxT1→Family Conflict-→Adolescent AnxT3	.000	.000	[-.000, .000]	.971
Adolescent DepT1→Parental Acc→Parent DepT3	.001	.002	[-.001, .005]	.284
Adolescent DepT1→Family Conflict-→Parent DepT3	**.003**	**.005**	**[.003, .009]**	**.002**
Adolescent DepT1→Parental Acc→Parent AnxT3	.000	.000	[-.002, .001]	.593
Adolescent DepT1→Family Conflict-→Parent AnxT3	.001	.001	[.000, .004]	.164
Adolescent AnxT1→Parental Acc→Parent DepT3	.000	.000	[-.001, .001]	.951

Adolescent AnxT1→Family Conflict-→Parent DepT3	-.001	-.001	[-.003, .000]	.060
Adolescent AnxT1→Parental Acc→Parent AnxT3	.000	.000	[.000, .000]	.969
Adolescent AnxT1→Family Conflict-→Parent AnxT3	.000	.000	[-.002, .000]	.259

*Note. Unstandardized and Standardized path coefficients are presented in the table. *=p<.05, **=p<.01, ***=p<.001, Parent and child age, gender, parental education, adolescent pubertal development status at T1 and T3, and racial/ethnic status were controlled for. Model clustered by Family and Site location. Dep= Depressive Problems, Parental Acc= Parental Acceptance. Each time interval (T1, T2, T3) was approximately 1 year apart.*

REFERENCES

Achenbach, T., Dumenci, L., & Rescorla, L. (2001). *Manual for the ASEBA School-Age Forms & Profiles*.

Achenbach, T. M. (2013). *DSM-oriented guide for the Achenbach System of Empirically Based Assessment (ASEBA)*. ASEBA.

Achenbach, T. M., & Rescorla, L. (2003). *Manual for the ASEBA Adult Forms & Profiles: For Ages 18-59 : Adult Self-report and Adult Behavior Checklist*. ASEBA.

Aktar, E., & Bögels, S. M. (2017). Exposure to Parents' Negative Emotions as a Developmental Pathway to the Family Aggregation of Depression and Anxiety in the First Year of Life. *Clinical Child and Family Psychology Review*, *20*(4), 369–390. https://doi.org/10.1007/s10567-017-0240-7

Al-Biltagi, M., & Sarhan, E. (2016). Anxiety Disorder in Children: Review. *Journal of Paediatric Care Insight*, *1*, 18–28. https://doi.org/10.24218/jpci.2016.05

Alegria, M., Vallas, M., & Pumariega, A. (2010). Racial and Ethnic Disparities in Pediatric Mental Health. *Child and Adolescent Psychiatric Clinics of North America*, *19*(4), 759–774. https://doi.org/10.1016/j.chc.2010.07.001

Altemus, M., Sarvaiya, N., & Neill Epperson, C. (2014). Sex differences in anxiety and depression clinical perspectives. *Frontiers in Neuroendocrinology*, *35*(3), 320–330. https://doi.org/10.1016/j.yfrne.2014.05.004

Ayano, G., Betts, K., Maravilla, J. C., & Alati, R. (2021). The risk of anxiety disorders in children of parents with severe psychiatric disorders: A systematic review and meta-analysis. *Journal of Affective Disorders*, *282*, 472–487. https://doi.org/10.1016/j.jad.2020.12.134

Bajeux, E., Klemanski, D. H., Husky, M., Leray, E., Chan Chee, C., Shojaei, T., Fermanian, C., & Kovess-Masfety, V. (2018). Factors Associated with Parent–Child Discrepancies in Reports of Mental Health Disorders in Young Children. *Child Psychiatry & Human Development*, *49*(6), 1003–1010. https://doi.org/10.1007/s10578-018-0815-7

Barrera, T. L., & Norton, P. J. (2009). Quality of life impairment in generalized anxiety disorder, social phobia, and panic disorder. *Journal of Anxiety Disorders*, *23*(8), 1086–1090. https://doi.org/10.1016/j.janxdis.2009.07.011

Beirão, D., Monte, H., Amaral, M., Longras, A., Matos, C., & Villas-Boas, F. (2020). Depression in adolescence: A review. *Middle East Current Psychiatry*, *27*(1), 50. https://doi.org/10.1186/s43045-020-00050-z

Bell, R. A., LeRoy, J. B., & Stephenson, J. J. (1982). Evaluating the mediating effects of social support upon life events and depressive symptoms. *Journal of Community Psychology, 10*, 325–340. https://doi.org/10.1002/1520-6629(198210)10:4<325::AID-JCOP2290100405>3.0.CO;2-C

Belleau, A. D. M., Lauren M. Sippel, Emily L. (2018). Negatively Biased Emotion Perception in Depression as a Contributing Factor to Psychological Aggression Perpetration: A Preliminary Study. In *Emotions and their influence on our personal, interpersonal and social experiences*. Routledge.

Benson, S., Arck, P. C., Blois, S., Schedlowski, M., & Elsenbruch, S. (2011). Subclinical depressive symptoms affect responses to acute psychosocial stress in healthy premenopausal women. *Stress*, *14*(1), 88–92. https://doi.org/10.3109/10253890.2010.497884

Besteher, B., Gaser, C., & Nenadić, I. (2020). Brain Structure and Subclinical Symptoms: A Dimensional Perspective of Psychopathology in the Depression and Anxiety Spectrum. *Neuropsychobiology*, *79*(4), 270–283. https://doi.org/10.1159/000501024

Bhargava, S., & Witherspoon, D. P. (2015). Parental Involvement Across Middle and High School: Exploring Contributions of Individual and Neighborhood Characteristics. *Journal of Youth and Adolescence*, *44*(9), 1702–1719. https://doi.org/10.1007/s10964-015-0334-9

Blanco, C., Rubio, J., Wall, M., Wang, S., Jiu, C. J., & Kendler, K. S. (2014). Risk Factors for Anxiety Disorders: Common and Specific Effects in a National Sample. *Depression and Anxiety*, *31*(9), 756–764. https://doi.org/10.1002/da.22247

Bögels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review*, *26*(7), 834–856. https://doi.org/10.1016/j.cpr.2005.08.001

Bornstein, M. H. (2013). Parenting and child mental health: A cross-cultural perspective. *World Psychiatry*, *12*(3), 258–265. https://doi.org/10.1002/wps.20071

Bowen, M. (1993). *Family therapy in clinical practice*. Jason Aronson.

Butterfield, R. D., Silk, J. S., Lee, K. H., Siegle, G. S., Dahl, R. E., Forbes, E. E., Ryan, N. D., Hooley, J. M., & Ladouceur, C. D. (2021). Parents still matter! Parental warmth predicts adolescent brain function and anxiety and depressive symptoms 2 years later. *Development and Psychopathology*, *33*(1), 226–239. https://doi.org/10.1017/S0954579419001718

Cahill, K. M., Updegraff, K. A., Causadias, J. M., & Korous, K. M. (2021). Familism values and adjustment among Hispanic/Latino individuals: A systematic review and meta-analysis. *Psychological Bulletin*, *147*(9), 947–985. https://doi.org/10.1037/bul0000336

Cai, N., Choi, K. W., & Fried, E. I. (2020). Reviewing the genetics of heterogeneity in depression: Operationalizations, manifestations and etiologies. *Human Molecular Genetics*, *29*(R1), R10–R18. https://doi.org/10.1093/hmg/ddaa115

Calatrava, M., Martins, M. V., Schweer-Collins, M., Duch-Ceballos, C., & Rodríguez-González, M. (2022). Differentiation of self: A scoping review of Bowen Family Systems Theory's core construct. *Clinical Psychology Review*, *91*, 102101. https://doi.org/10.1016/j.cpr.2021.102101

Carlisi, C. O., & Robinson, O. J. (2018). The role of prefrontal–subcortical circuitry in negative bias in anxiety: Translational, developmental and treatment perspectives. *Brain and Neuroscience Advances*, *2*, 2398212818774223. https://doi.org/10.1177/2398212818774223

Chen, Y., Kubzansky, L. D., & VanderWeele, T. J. (2019). Parental warmth and flourishing in mid-life. *Social Science & Medicine*, *220*, 65–72. https://doi.org/10.1016/j.socscimed.2018.10.026

Cheon, B. K., Melani, I., & Hong, Y. (2020). How USA-Centric Is Psychology? An Archival Study of Implicit Assumptions of Generalizability of Findings to Human Nature Based on Origins of Study Samples. *Social Psychological and Personality Science*, *11*(7), 928–937. https://doi.org/10.1177/1948550620927269

Cohen, J. R., Spiro, C. N., Young, J. F., Gibb, B. E., Hankin, B. L., & Abela, J. R. Z. (2015). Interpersonal Risk Profiles for Youth Depression: A Person-Centered, Multi-Wave, Longitudinal Study. *Journal of Abnormal Child Psychology*, *43*(8), 1415–1426. https://doi.org/10.1007/s10802-015-0023-x

Colletti, C. J. M., Forehand, R., Garai, E., Rakow, A., McKee, L., Fear, J. M., & Compas, B. E. (2009). Parent Depression and Child Anxiety: An Overview of the Literature with Clinical Implications. *Child & Youth Care Forum*, *38*(3), 151–160. https://doi.org/10.1007/s10566-009-9074-x

Creswell, C., & Waite, P. (2015). The Dynamic Influence of Genes and Environment in the Intergenerational Transmission of Anxiety. *American Journal of Psychiatry, 172*(7), 597–598. https://doi.org/10.1176/appi.ajp.2015.15040509

Crosby Budinger, M., Drazdowski, T. K., & Ginsburg, G. S. (2013). Anxiety-Promoting Parenting Behaviors: A Comparison of Anxious Parents with and without Social Anxiety Disorder. *Child Psychiatry & Human Development*, *44*(3), 412–418. https://doi.org/10.1007/s10578-012-0335-9

de la Torre-Luque, A., Fiol-Veny, A., Balle, M., Nelemans, S. A., & Bornas, X. (2020). Anxiety in Early Adolescence: Heterogeneous Developmental Trajectories, Associations with Risk Factors and Depressive Symptoms. *Child Psychiatry & Human Development*, *51*(4), 527–541. https://doi.org/10.1007/s10578-019-00936-y

Donaldson, C. D., Handren, L. M., & Crano, W. D. (2016). The Enduring Impact of Parents' Monitoring, Warmth, Expectancies, and Alcohol Use on Their Children's Future Binge Drinking and Arrests: A Longitudinal Analysis. *Prevention Science*, *17*(5), 606–614. https://doi.org/10.1007/s11121-016-0656-1

Epkins, C. C., & Harper, S. L. (2016). Mothers' and Fathers' Parental Warmth, Hostility/Rejection/Neglect, and Behavioral Control: Specific and Unique Relations with Parents' Depression Versus Anxiety Symptoms. *Parenting*, *16*(2), 125–145. https://doi.org/10.1080/15295192.2016.1134991

Fang, G., Yu, H., Zhi, S., Xi, M., Peng, Z., Cai, M., Wu, W., & Wang, Y. (2019). Sex Differences in Intergenerational Transfer Risk of Major Depressive Disorder. *Medical Science Monitor : International Medical Journal of Experimental and Clinical Research*, *25*, 9887–9892. https://doi.org/10.12659/MSM.917888

Ferrari, A. J., Charlson, F. J., Norman, R. E., Patten, S. B., Freedman, G., Murray, C. J. L., Vos, T., & Whiteford, H. A. (2013). Burden of depressive disorders by country, sex, age, and year: Findings from the global burden of disease study 2010. *PLoS Medicine*, *10*(11), e1001547. https://doi.org/10.1371/journal.pmed.1001547

Fjermestad, K. W., Nilsen, W., Johannessen, T. D., & Karevold, E. B. (2017). Mothers' and fathers' internalizing symptoms influence parental ratings of adolescent anxiety symptoms. *Journal of Family Psychology*, *31*(7), 939–944. https://doi.org/10.1037/fam0000322

Fletcher, J. M. (2008). Adolescent depression: Diagnosis, treatment, and educational attainment. *Health Economics*, *17*(11), 1215–1235. https://doi.org/10.1002/hec.1319

Fosco, G. M., & Lydon-Staley, D. M. (2020). Implications of Family Cohesion and Conflict for Adolescent Mood and Well-Being: Examining Within- and Between-Family Processes on a Daily Timescale. *Family Process*, *59*(4), 1672–1689. https://doi.org/10.1111/famp.12515

Friedman, H. P., Bilsky, S. A., & Luber, M. J. (2023). Parent Anxiety, Child Anxiety, Parental Beliefs about Anxiety, and Parenting Behaviors: Examining Direct and Indirect Associations. *Journal of Child and Family Studies*, *32*(11), 3419–3429. https://doi.org/10.1007/s10826-023-02665-2

Galbally, M., & Lewis, A. J. (2017). Depression and parenting: The need for improved intervention models. *Current Opinion in Psychology*, *15*, 61–65. https://doi.org/10.1016/j.copsyc.2017.02.008

Garavan, H., Bartsch, H., Conway, K., Decastro, A., Goldstein, R. Z., Heeringa, S., Jernigan, T., Potter, A., Thompson, W., & Zahs, D. (2018). Recruiting the ABCD sample: Design considerations and procedures. *Developmental Cognitive Neuroscience*, *32*, 16–22. https://doi.org/10.1016/j.dcn.2018.04.004

Garcia, I., & O'Neil, J. (2021). Anxiety in Adolescents. *The Journal for Nurse Practitioners*, *17*(1), 49–53. https://doi.org/10.1016/j.nurpra.2020.08.021

Gardner, M. J., Thomas, H. J., & Erskine, H. E. (2019). The association between five forms of child maltreatment and depressive and anxiety disorders: A systematic review and meta-analysis. *Child Abuse & Neglect*, *96*, 104082. https://doi.org/10.1016/j.chiabu.2019.104082

Gaylord-Harden, N. K., & Cunningham, J. A. (2009). The Impact of Racial Discrimination and Coping Strategies on Internalizing Symptoms in African American Youth. *Journal of Youth and Adolescence*, *38*(4), 532–543. https://doi.org/10.1007/s10964-008-9377-5

Ghandour, R. M., Sherman, L. J., Vladutiu, C. J., Ali, M. M., Lynch, S. E., Bitsko, R. H., & Blumberg, S. J. (2019). Prevalence and Treatment of Depression, Anxiety, and Conduct Problems in US Children. *The Journal of Pediatrics*, *206*, 256-267.e3. https://doi.org/10.1016/j.jpeds.2018.09.021

Goodman, S. H. (2020). Intergenerational Transmission of Depression. *Annual Review of Clinical Psychology*, *16*(1), 213–238. https://doi.org/10.1146/annurev-clinpsy-071519-113915

Goodman, S. H., & Gotlib, I. H. (1999). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of

transmission. *Psychological Review*, *106*, 458–490. https://doi.org/10.1037/0033-295X.106.3.458

Gottschalk, M. G., & Domschke, K. (2017). Genetics of generalized anxiety disorder and related traits. *Dialogues in Clinical Neuroscience*, *19*(2), 159–168. https://doi.org/10.31887/DCNS.2017.19.2/kdomschke

Greenberg, P. E., Fournier, A.-A., Sisitsky, T., Simes, M., Berman, R., Koenigsberg, S. H., & Kessler, R. C. (2021). The Economic Burden of Adults with Major Depressive Disorder in the United States (2010 and 2018). *PharmacoEconomics*, *39*(6), 653–665. https://doi.org/10.1007/s40273-021-01019-4

Guffanti, G., Gameroff, M. J., Warner, V., Talati, A., Glatt, C. E., Wickramaratne, P., & Weissman, M. M. (2016). Heritability of major depressive and comorbid anxiety disorders in multi-generational families at high risk for depression. *American Journal of Medical Genetics. Part B, Neuropsychiatric Genetics: The Official Publication of the International Society of Psychiatric Genetics*, *171*(8), 1072–1079. https://doi.org/10.1002/ajmg.b.32477

Gurdal, S., Lansford, J. E., & Sorbring, E. (2016). Parental perceptions of children's agency: Parental warmth, school achievement and adjustment. *Early Child Development and Care*, *186*(8), 1203–1211. https://doi.org/10.1080/03004430.2015.1083559

Hajal, N. J., & Paley, B. (2020). Parental emotion and emotion regulation: A critical target of study for research and intervention to promote child emotion socialization. *Developmental Psychology*, *56*, 403–417. https://doi.org/10.1037/dev0000864

Hankin, B. L. (2009). Development of Sex Differences in Depressive and Co-Occurring Anxious Symptoms During Adolescence: Descriptive Trajectories and Potential Explanations in a Multiwave Prospective Study. *Journal of Clinical Child & Adolescent Psychology*, *38*(4), 460–472. https://doi.org/10.1080/15374410902976288

Hannigan, L. J., McAdams, T. A., Plomin, R., & Eley, T. C. (2016). Etiological Influences on Perceptions of Parenting: A Longitudinal, Multi-Informant Twin Study. *Journal of Youth and Adolescence*, *45*(12), 2387–2405. https://doi.org/10.1007/s10964-016-0419-0

Hentges, R. F., Graham, S. A., Plamondon, A., Tough, S., & Madigan, S. (2021). Bidirectional associations between maternal depression, hostile parenting, and early child emotional problems: Findings from the all our families cohort. *Journal of Affective Disorders*, *287*, 397–404. https://doi.org/10.1016/j.jad.2021.03.056

Hetrick, S. E., Parker, A. G., Robinson, J., Hall, N., & Vance, A. (2012). Predicting Suicidal Risk in a Cohort of Depressed Children and Adolescents. *Crisis*, *33*(1), 13–20. https://doi.org/10.1027/0227-5910/a000095

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55.

Humensky, J., Kuwabara, S. A., Fogel, J., Wells, C., Goodwin, B., & Van Voorhees, B. W. (2010). Adolescents with depressive symptoms and their challenges with learning in school. *The Journal of School Nursing: The Official Publication of the National Association of School Nurses*, *26*(5), 377–392. https://doi.org/10.1177/1059840510376515

Jacobson, N., & Newman, M. (2017). Anxiety and Depression as Bidirectional Risk Factors for One Another: A Meta-Analysis of Longitudinal Studies. *Psychological Bulletin*, *143*, 1155–1200. https://doi.org/10.1037/bul0000111

Jamnik, M. R., & DiLalla, L. F. (2019). Health Outcomes Associated With Internalizing Problems in Early Childhood and Adolescence. *Frontiers in Psychology*, *10*. https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00060

Janovsky, T., Rock, A. J., Thorsteinsson, E. B., Clark, G. I., & Murray, C. V. (2020). The relationship between early maladaptive schemas and interpersonal problems: A meta-analytic review. *Clinical Psychology & Psychotherapy*, *27*(3), 408–447. https://doi.org/10.1002/cpp.2439

Jenkins, P. E., Ducker, I., Gooding, R., James, M., & Rutter-Eley, E. (2021). Anxiety and depression in a sample of UK college students: A study of prevalence, comorbidity, and quality of life. *Journal of American College Health*, *69*(8), 813–819. https://doi.org/10.1080/07448481.2019.1709474

Johnco, C. J., Magson, N. R., Fardouly, J., Oar, E. L., Forbes, M. K., Richardson, C., & Rapee, R. M. (2021). The role of parenting behaviors in the bidirectional and intergenerational transmission of depression and anxiety between parents and early adolescent youth. *Depression and Anxiety*, *38*(12), 1256–1266. https://doi.org/10.1002/da.23197

Julian, T. W., McKenry, P. C., & McKelvey, M. W. (1994). Cultural Variations in Parenting: Perceptions of Caucasian, African-American, Hispanic, and Asian-American Parents. *Family Relations*, *43*(1), 30–37. https://doi.org/10.2307/585139

Kado, M. N. (2020). *Parenting Behaviors and Youth Internalizing Symptoms: Racial/Ethnic Differences Among Youth Offspring of Depressed Parents* [M.A.Psy., San Diego State University]. https://www.proquest.com/docview/2468727839/abstract/F9513BF26CBB40EBPQ/1

Kado-Walton, M., Vreeland, A., Henry, L., Gruhn, M., Compas, B., Garber, J., & Weersing, V. R. (2023). Racial/ethnic differences in parenting behaviors among depressed parents. *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, *37*(6), 763–773. https://doi.org/10.1037/fam0001125

Kaiser, T., Li, J., Pollmann-Schult, M., & Song, A. Y. (2017). Poverty and Child Behavioral Problems: The Mediating Role of Parenting and Parental Well-Being. *International Journal of Environmental Research and Public Health*, *14*(9), 981. https://doi.org/10.3390/ijerph14090981

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 593–602. https://doi.org/10.1001/archpsyc.62.6.593

Khaleque, A. (2013). Perceived Parental Warmth, and Children's Psychological Adjustment, and Personality Dispositions: A Meta-analysis. *Journal of Child and Family Studies*, *22*(2), 297–306. https://doi.org/10.1007/s10826-012-9579-z

Kho, C., White, R. M. B., Knight, G. P., Zhao, C., & Roche, K. M. (2023). Parental Warmth and Developmental Change in Familism Values: Latinx Adolescents in an Emerging Immigrant Community. *Journal of Research on Adolescence*, *33*(1), 202–215. https://doi.org/10.1111/jora.12798

Khoury-Kassabri, M., & Straus, M. A. (2011). Discipline Methods Used by Mothers: The Contribution of Ethnicity, Socioeconomic Status, and Child's Characteristics. *Child Indicators Research*, *4*(1), 45–57. https://doi.org/10.1007/s12187-010-9077-z

Kim, E. (2011). Korean American Parental Depressive Symptoms and Parental Acceptance–Rejection and Control. *Issues in Mental Health Nursing*, *32*(2), 114–120. https://doi.org/10.3109/01612840.2010.529239

Lansford, J. E., Alampay, L. P., & Oburu, P. (2023). An international perspective on parenting and family influences on adolescents and young adults. In *APA handbook of adolescent and young adult development* (pp. 209–224). American Psychological Association. https://doi.org/10.1037/0000298-013

Lanz, M., & Maino, E. (2014). Family Environment Scale. In A. C. Michalos (Ed.), *Encyclopedia of Quality of Life and Well-Being Research* (pp. 2170–2173). Springer Netherlands. https://doi.org/10.1007/978-94-007-0753-5_999

le, H.-N., Ceballo, R., Chao, R., Hill, N. E., Murry, V. M., & Pinderhughes, E. E. (2008). Excavating Culture: Disentangling Ethnic Differences from Contextual Influences in Parenting. *Applied Developmental Science*, *12*(4), 163–175. https://doi.org/10.1080/10888690802387880

Lewinsohn, P. M., Hops, H., Roberts, R. E., Seeley, J. R., & Andrews, J. A. (1993). Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disorders in high school students. *Journal of Abnormal Psychology*, *102*(1), 133–144. https://doi.org/10.1037//0021-843x.102.1.133

Li, X., & Meier, J. (2017). Father Love and Mother Love: Contributions of Parental Acceptance to Children's Psychological Adjustment. *Journal of Family Theory & Review*, *9*(4), 459–490. https://doi.org/10.1111/jftr.12227

Lijster, J. M. de, Dierckx, B., Utens, E. M. W. J., Verhulst, F. C., Zieldorff, C., Dieleman, G. C., & Legerstee, J. S. (2017). The Age of Onset of Anxiety Disorders. *Canadian Journal of Psychiatry. Revue Canadienne De Psychiatrie*, *62*(4), 237–246. https://doi.org/10.1177/0706743716640757

Lippold, M. A., Glatz, T., Fosco, G. M., & Feinberg, M. E. (2018). Parental Perceived Control and Social Support: Linkages to Change in Parenting Behaviors During Early Adolescence. *Family Process*, *57*(2), 432–447. https://doi.org/10.1111/famp.12283

Loechner, J., Sfärlea, A., Starman, K., Oort, F., Thomsen, L. A., Schulte-Körne, G., & Platt, B. (2020). Risk of Depression in the Offspring of Parents with Depression: The Role of Emotion Regulation, Cognitive Style, Parenting and Life Events. *Child Psychiatry and Human Development*, *51*(2), 294–309. https://doi.org/10.1007/s10578-019-00930-4

Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, *20*(5), 561–592. https://doi.org/10.1016/S0272-7358(98)00100-7

Lynall, M.-E., & McIntosh, A. M. (2023). The Heterogeneity of Depression. *American Journal of Psychiatry*, *180*(10), 703–704. https://doi.org/10.1176/appi.ajp.20230574

Ma, Y., Liu, L., Wang, X., & Wang, M. (2016). Intergenerational transmission of anxiety: The mediating role of parental rejection. *Chinese Journal of Clinical Psychology*, *24*, 23–27.

Mäntymaa, M., Puura, K., Luoma, I., Salmelin, R. K., & Tamminen, T. (2004). Early mother–infant interaction, parental mental health and symptoms of behavioral and emotional problems in toddlers. *Infant Behavior and Development*, *27*(2), 134–149. https://doi.org/10.1016/j.infbeh.2003.09.006

Martin, E. I., Ressler, K. J., Binder, E., & Nemeroff, C. B. (2009). The Neurobiology of Anxiety Disorders: Brain Imaging, Genetics, and Psychoneuroendocrinology. *Psychiatric Clinics*, *32*(3), 549–575. https://doi.org/10.1016/j.psc.2009.05.004

Mausbach, B. T., Roepke, S. K., Chattillion, E. A., Harmell, A. L., Moore, R., Romero-Moreno, R., Bowie, C. R., & Grant, I. (2012). Multiple mediators of the relations between caregiving stress and depressive symptoms. *Aging & Mental Health*, *16*(1), 27–38. https://doi.org/10.1080/13607863.2011.615738

McCabe, J. E. (2014). Maternal personality and psychopathology as determinants of parenting behavior: A quantitative integration of two parenting literatures. *Psychological Bulletin*, *140*, 722–750. https://doi.org/10.1037/a0034835

McLaughlin, K. A., & King, K. (2015). Developmental Trajectories of Anxiety and Depression in Early Adolescence. *Journal of Abnormal Child Psychology*, *43*(2), 311–323. https://doi.org/10.1007/s10802-014-9898-1

Melton, T. H., Croarkin, P. E., Strawn, J. R., & McClintock, S. M. (2016). Comorbid Anxiety and Depressive Symptoms in Children and Adolescents: A Systematic Review and Analysis. *Journal of Psychiatric Practice*, *22*(2), 84–98. https://doi.org/10.1097/PRA.0000000000000132

Mennen, A. C., Norman, K. A., & Turk-Browne, N. B. (2019). Attentional bias in depression, Understanding mechanisms to improve training and treatment. *Current Opinion in Psychology*, *29*, 266–273. https://doi.org/10.1016/j.copsyc.2019.07.036

Micco, J. A., Henin, A., Mick, E., Kim, S., Hopkins, C. A., Biederman, J., & Hirshfeld-Becker, D. R. (2009). Anxiety and depressive disorders in offspring at high risk for anxiety: A meta-analysis. *Journal of Anxiety Disorders*, *23*(8), 1158–1164. https://doi.org/10.1016/j.janxdis.2009.07.021

Miranda, M. C., Affuso, G., Esposito, C., & Bacchini, D. (2016). Parental Acceptance–Rejection and Adolescent Maladjustment: Mothers' and Fathers' Combined

Roles. *Journal of Child and Family Studies*, *25*(4), 1352–1362. https://doi.org/10.1007/s10826-015-0305-5

Möller, E. L., Majdandžić, M., & Bögels, S. M. (2015). Parental Anxiety, Parenting Behavior, and Infant Anxiety: Differential Associations for Fathers and Mothers. *Journal of Child and Family Studies*, *24*(9), 2626–2637. https://doi.org/10.1007/s10826-014-0065-7

Moos, R. H., & Moos, B. S. (1994). Family environment scale manual: Development, applications, research. *(No Title)*.

Moreira, H., Gouveia, M. J., & Canavarro, M. C. (2018). Is Mindful Parenting Associated with Adolescents' Well-being in Early and Middle/Late Adolescence? The Mediating Role of Adolescents' Attachment Representations, Self-Compassion and Mindfulness. *Journal of Youth and Adolescence*, *47*(8), 1771–1788. https://doi.org/10.1007/s10964-018-0808-7

Muthén, B., & Muthén, L. (2017). Mplus. In *Handbook of Item Response Theory*. Chapman and Hall/CRC.

Narmandakh, A., Roest, A. M., de Jonge, P., & Oldehinkel, A. J. (2021). Psychosocial and biological risk factors of anxiety disorders in adolescents: A TRAILS report. *European Child & Adolescent Psychiatry*, *30*(12), 1969–1982. https://doi.org/10.1007/s00787-020-01669-3

Nath, S., Russell, G., Ford, T., Kuyken, W., & Psychogiou, L. (2015). Postnatal paternal depressive symptoms associated with fathers' subsequent parenting: Findings from the Millennium Cohort Study. *The British Journal of Psychiatry*, *207*(6), 558–559. https://doi.org/10.1192/bjp.bp.114.148379

National Research Council (US) and Institute of Medicine (US) Committee on Depression, P. P., England, M. J., & Sim, L. J. (2009). Associations Between Depression in Parents and Parenting, Child Health, and Child Psychological Functioning. In *Depression in Parents, Parenting, and Children: Opportunities to Improve Identification, Treatment, and Prevention*. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK215128/

Nazir, A., & Mohsin, H. (2013). Coping Styles, Aggression and Interpersonal Conflicts among Depressed and Non-Depressed People. *Health Promotion Perspectives*, *3*(1), 80–89. https://doi.org/10.5681/hpp.2013.010

Paschall, K. W., & Mastergeorge, A. M. (2016). A review of 25 years of research in bidirectionality in parent–child relationships: An examination of methodological

approaches. *International Journal of Behavioral Development*, *40*(5), 442–451. https://doi.org/10.1177/0165025415607379

Pavlova, B., Bagnell, A., Cumby, J., Vallis, E. H., Abidi, S., Lovas, D., Propper, L., Alda, M., & Uher, R. (2022). Sex-Specific Transmission of Anxiety Disorders From Parents to Offspring. *JAMA Network Open*, *5*(7), e2220919. https://doi.org/10.1001/jamanetworkopen.2022.20919

Pereira, A. I., Barros, L., Mendonça, D., & Muris, P. (2014). The Relationships Among Parental Anxiety, Parenting, and Children's Anxiety: The Mediating Effects of Children's Cognitive Vulnerabilities. *Journal of Child and Family Studies*, *23*(2), 399–409. https://doi.org/10.1007/s10826-013-9767-5

Pérez-Edgar, K., LoBue, V., & Buss, K. A. (2021). From parents to children and back again: Bidirectional processes in the transmission and development of depression and anxiety. *Depression and Anxiety*, *38*(12), 1198–1200. https://doi.org/10.1002/da.23227

Powell, V., Lennon, J., Bevan Jones, R., Stephens, A., Weavers, B., Osborn, D., Allardyce, J., Potter, R., Thapar, A., Collishaw, S., Thapar, A., Heron, J., & Rice, F. (n.d.). Following the children of depressed parents from childhood to adult life: A focus on mood and anxiety disorders. *JCPP Advances*, *n/a*(n/a), e12182. https://doi.org/10.1002/jcv2.12182

Prevoo, M. J., & Tamis-LeMonda, C. S. (2017). Parenting and globalization in western countries: Explaining differences in parent–child interactions. *Current Opinion in Psychology*, *15*, 33–39. https://doi.org/10.1016/j.copsyc.2017.02.003

Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, *128*(2), 330–366.

Roberts, S. O., & Mortenson, E. (2023). Challenging the White = Neutral Framework in Psychology. *Perspectives on Psychological Science*, *18*(3), 597–606. https://doi.org/10.1177/17456916221077117

Rodriguez, E. M., Donenberg, G. R., Emerson, E., Wilson, H. W., Brown, L. K., & Houck, C. (2014). Family Environment, Coping, and Mental Health in Adolescents Attending Therapeutic Day Schools. *Journal of Adolescence*, *37*(7), 1133–1142. https://doi.org/10.1016/j.adolescence.2014.07.012

Rodriguez, V. J., Cadet, G. D. J., Sisitsky, M., Cooley, C., Acosta, J., Coles, E., Charity-Parker, B., Walters, A., Shaffer, A., & Parent, J. (2023). Assessing parenting in racially and ethnically diverse families: A lack of measurement equivalence.

Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43), *37*(6), 753–762. https://doi.org/10.1037/fam0001095

Rogers, A. A., Padilla-Walker, L. M., McLean, R. D., & Hurst, J. L. (2020). Trajectories of Perceived Parental Psychological Control across Adolescence and Implications for the Development of Depressive and Anxiety Symptoms. *Journal of Youth and Adolescence*, *49*(1), 136–149. https://doi.org/10.1007/s10964-019-01070-7

Rohner, R. P., & Britner, P. A. (2002). Worldwide Mental Health Correlates of Parental Acceptance-Rejection: Review of Cross-Cultural and Intracultural Evidence. *Cross-Cultural Research*, *36*(1), 16–47. https://doi.org/10.1177/106939710203600102

Rothenberg, W. A., Lansford, J. E., Bornstein, M. H., Chang, L., Deater-Deckard, K., Di Giunta, L., Dodge, K. A., Malone, P. S., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Steinberg, L., Tapanya, S., Uribe Tirado, L. M., Yotanyamaneewong, S., Alampay, L. P., Al-Hassan, S. M., & Bacchini, D. (2020). Effects of Parental Warmth and Behavioral Control on Adolescent Externalizing and Internalizing Trajectories Across Cultures. *Journal of Research on Adolescence*, *30*(4), 835–855. https://doi.org/10.1111/jora.12566

Roubinov, D. S., & Boyce, W. T. (2017). Parenting and SES: Relative values or enduring principles? *Current Opinion in Psychology*, *15*, 162–167. https://doi.org/10.1016/j.copsyc.2017.03.001

Rueter, M. A., Scaramella, L., Wallace, L. E., & Conger, R. D. (1999). First onset of depressive or anxiety disorders predicted by the longitudinal course of internalizing symptoms and parent-adolescent disagreements. *Archives of General Psychiatry*, *56*(8), 726–732. https://doi.org/10.1001/archpsyc.56.8.726

Russell, B. S., Hutchison, M., Tambling, R., Tomkunas, A. J., & Horton, A. L. (2020). Initial Challenges of Caregiving During COVID-19: Caregiver Burden, Mental Health, and the Parent-Child Relationship. *Child Psychiatry and Human Development*, *51*(5), 671–682. https://doi.org/10.1007/s10578-020-01037-x

Schacter, H. L., & Margolin, G. (2019). The Interplay of Friends and Parents in Adolescents' Daily Lives: Towards A Dynamic View of Social Support. *Social Development (Oxford, England)*, *28*(3), 708–724. https://doi.org/10.1111/sode.12363

Shin, K. E., & Newman, M. G. (2019). Self- and other-perceptions of interpersonal problems: Effects of generalized anxiety, social anxiety, and depression. *Journal of Anxiety Disorders*, *65*, 1–10. https://doi.org/10.1016/j.janxdis.2019.04.005

Shrout, P., & Bolger, N. (2002). Mediation in Experimental and Nonexperimental Studies: New Procedures and Recommendations. *Psychological Methods*, *7*, 422–445. https://doi.org/10.1037/1082-989X.7.4.422

Smith, A. E., Hudnut-Beumler, J., & Scholer, S. J. (2017). Can Discipline Education be Culturally Sensitive? *Maternal and Child Health Journal*, *21*(1), 177–186. https://doi.org/10.1007/s10995-016-2107-9

Smith, E. P., Yzaguirre, M. M., Dwanyen, L., & Wieling, E. (2022). Culturally Relevant Parenting Approaches Among African American and Latinx Children and Families: Toward Resilient, Strengths-Based, Trauma-Informed Practices. *Adversity and Resilience Science*, *3*(3), 209–224. https://doi.org/10.1007/s42844-022-00059-9

Spence, S. H., Najman, J. M., Bor, W., O'Callaghan, M. J., & Williams, G. M. (2002). Maternal anxiety and depression, poverty and marital relationship factors during early childhood as predictors of anxiety and depressive symptoms in adolescence. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *43*(4), 457–469. https://doi.org/10.1111/1469-7610.00037

Strand, E. R., Hjemdal, O., Anyan, F., Nordahl, H., & Nordahl, H. M. (2023). Change in interpersonal problems and metacognitive beliefs as predictors of improvement in patients with generalized anxiety disorder. *Clinical Psychology & Psychotherapy*, *30*(4), 842–851. https://doi.org/10.1002/cpp.2841

Sylvester, C. M., Corbetta, M., Raichle, M. E., Rodebaugh, T. L., Schlaggar, B. L., Sheline, Y. I., Zorumski, C. F., & Lenze, E. J. (2012). Functional network dysfunction in anxiety and anxiety disorders. *Trends in Neurosciences*, *35*(9), 527–535. https://doi.org/10.1016/j.tins.2012.04.012

The US Burden of Disease Collaborators. (2018). The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States. *JAMA*, *319*(14), 1444–1472. https://doi.org/10.1001/jama.2018.0158

Tissot, H., Favez, N., Ghisletta, P., Frascarolo, F., & Despland, J.-N. (2017). A Longitudinal Study of Parental Depressive Symptoms and Coparenting in the First 18 Months. *Family Process*, *56*(2), 445–458. https://doi.org/10.1111/famp.12213

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

Uhmann, S., Beesdo-Baum, K., Becker, E. S., & Hoyer, J. (2010). Specificity of Interpersonal Problems in Generalized Anxiety Disorder Versus Other Anxiety Disorders and Depression. *The Journal of Nervous and Mental Disease*, *198*(11), 846. https://doi.org/10.1097/NMD.0b013e3181f98063

Valdivieso-Mora, E., Peet, C. L., Garnier-Villarreal, M., Salazar-Villanea, M., & Johnson, D. K. (2016). A Systematic Review of the Relationship between Familism and Mental Health Outcomes in Latino Population. *Frontiers in Psychology*, *7*, 1632. https://doi.org/10.3389/fpsyg.2016.01632

Vallance, A. K., & Fernandez, V. (2016). Anxiety disorders in children and adolescents: Aetiology, diagnosis and treatment. *BJPsych Advances*, *22*(5), 335–344. https://doi.org/10.1192/apt.bp.114.014183

van der Bruggen, C. O., Bögels, S. M., & van Zeilst, N. (2010). What influences parental controlling behaviour? The role of parent and child trait anxiety. *Cognition and Emotion*, *24*(1), 141–149. https://doi.org/10.1080/02699930802618843

van Eldik, W. M., de Haan, A. D., Parry, L. Q., Davies, P. T., Luijk, M. P. C. M., Arends, L. R., & Prinzie, P. (2020). The interparental relationship: Meta-analytic associations with children's maladjustment and responses to interparental conflict. *Psychological Bulletin*, *146*(7), 553–594. https://doi.org/10.1037/bul0000233

van Mourik, K., Crone, M. R., de Wolff, M. S., & Reis, R. (2017). Parent Training Programs for Ethnic Minorities: A Meta-analysis of Adaptations and Effect. *Prevention Science*, *18*(1), 95–105. https://doi.org/10.1007/s11121-016-0733-5

van Tol, M.-J., van der Wee, N. J. A., van den Heuvel, O. A., Nielen, M. M. A., Demenescu, L. R., Aleman, A., Renken, R., van Buchem, M. A., Zitman, F. G., & Veltman, D. J. (2010). Regional Brain Volume in Depression and Anxiety Disorders. *Archives of General Psychiatry*, *67*(10), 1002–1011. https://doi.org/10.1001/archgenpsychiatry.2010.121

Wang, J., Wu, X., Lai, W., Long, E., Zhang, X., Li, W., Zhu, Y., Chen, C., Zhong, X., Liu, Z., Wang, D., & Lin, H. (2017). Prevalence of depression and depressive symptoms among outpatients: A systematic review and meta-analysis. *BMJ Open*, *7*(8), e017173. https://doi.org/10.1136/bmjopen-2017-017173

Williams, D. R. (2018). Stress and the Mental Health of Populations of Color: Advancing Our Understanding of Race-related Stressors. *Journal of Health and Social Behavior*, *59*(4), 466–485. https://doi.org/10.1177/0022146518814251

Williams, M. T., Chapman, L. K., Wong, J., & Turkheimer, E. (2012). The role of ethnic identity in symptoms of anxiety and depression in African Americans. *Psychiatry Research, 199*(1), 31–36. https://doi.org/10.1016/j.psychres.2012.03.049

Wu, F., & Qi, S. (2005). Parenting within Cultural Context: Comparisons between African-American and Asian-American Parents. In *Online Submission*. https://eric.ed.gov/?id=ED490490

Yap, M. B. H., & Jorm, A. F. (2015). Parental factors associated with childhood anxiety, depression, and internalizing problems: A systematic review and meta-analysis. *Journal of Affective Disorders*, *175*, 424–440. https://doi.org/10.1016/j.jad.2015.01.050