

ORIGINAL ARTICLE OPEN ACCESS

Parent-Adolescent Relationship Quality and Parenting Stress Across More Than Two Decades: The Mediating Role of Depressive Symptoms

Weiman Xu | Gilbert R. Parra | Thulitha Wickrama | Michael J. Merten

Department of Child, Youth and Family Studies, University of Nebraska-Lincoln, Lincoln, Nebraska, USA

Correspondence: Weiman Xu (wxu17@huskers.unl.edu)

Received: 26 September 2023 | Revised: 22 February 2025 | Accepted: 21 April 2025

Keywords: depressive symptoms | parent-adolescent relationship quality | parenting stress | random intercept cross-lagged model

ABSTRACT

Parenting stress is associated with negative outcomes for both parents and their children, and it may be influenced by the quality of relationships that parents had with their own parents. To enhance understanding of this intergenerational relation, the present study examined whether stability and change in depressive symptoms mediated the association between parent—adolescent relationship quality during adolescence and subsequent parenting stress almost 25 years later. Using data from all five waves of the National Longitudinal Study of Adolescent to Adult Health (Add Health) restricted dataset from the United States, the study included adolescents who were between 12 and18 years old at Wave 1 and had at least one child at Wave 5 (2016–2018; N=4890; $M_{\rm age}$ at Wave 1=15.67, ${\rm SD_{age}}$ at Wave 1=1.50). A modified version of the random intercept cross-lagged model was used to account for both within- and between-person levels of depressive symptoms. Findings indicated that high levels of parent—adolescent relationship quality (with both mothers and fathers) were related to low levels of depressive symptoms that were stable over the almost 25 years of the study (between-person individual differences). In turn, low levels of depressive symptoms that were stable over time were associated with low levels of parenting stress in parenthood. Results underscore the potential long-term value of interventions that enhance parent—adolescent relationship quality in adolescence, as these could reduce enduring depressive symptoms and parenting stress in future generations.

1 | Introduction

Parenting stress is associated with a wide range of negative outcomes for parents as well as their children (Deater-Deckard 2004). An established literature indicates that the relationship parents (G2) had with their parents (G1) during childhood and adolescence could influence parenting-related stress when rearing their own children (G3; Belsky et al. 2009). To build on this work, there is a need to better understand factors that help explain the complex relation between the parent-adolescent relationship in one generation and parenting stress in the next generation. Research indicates that parent-adolescent relationship quality contributes to depressive symptoms

(Allen et al. 2007; Beach et al. 2017; Crandall et al. 2020; Shore et al. 2018) and parents' depression is related to parenting stress (Daundasekara et al. 2021; Jaffee et al. 2021). As such, symptoms of depression may be a key mechanism underlying the connection between parent–adolescent relationship quality and parenting stress across generations (Lovejoy et al. 2000; Rothenberg et al. 2018; Whitbeck et al. 1992). Most studies examining the relation between parent–adolescent relationship quality and parenting, including the role of depressive symptoms, considered depression as a stable construct over time (Hammen et al. 2014). However, there is evidence that suggests symptoms of depression fluctuate over the life course (Kerr and Capaldi 2019). Research investigating whether depression

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2025 The Author(s). Family Process published by Wiley Periodicals LLC on behalf of Family Process Institute.

mediates the association between parent–adolescent relationship quality and parenting stress across generations thus should account for patterns of stability and change in depressive symptoms. The purpose of the present study was to examine whether stability and change in symptoms of depression over time mediated the relation between parent–adolescent relationship quality during adolescence and parenting stress almost 25 years later.

1.1 | Parent-Adolescent Relationship Quality and Parenting Stress Across Generations

Parenting stress has been conceptualized as adverse responses that occur when the roles and responsibilities of parenting are perceived to outweigh parents' resources (Deater-Deckard 2004). Individuals who exhibit elevated levels of parenting stress are at increased risk of experiencing psychosocial difficulties (Aviles et al. 2024). The emotional and behavioral adjustment of youth also has been consistently associated with parenting stress (Wang and McLeroy 2023). A recent review summarized parent, child, and situational factors that are related to parenting stress (Fang et al. 2024). The review highlighted several ways to build on prior work in this area including the need for longitudinal studies with large representative samples that include multiple caregivers. In addition, there is a need for increased attention to better understand developmental pathways that lead to parenting stress.

Previous studies indicates that parenting stress can be influenced by the relationship parents had with their parents and that gender differences may exist. For example, Belsky et al. (2005) investigated parent-child relationship quality in early childhood, middle childhood, and early adolescence, and examined the linkages to warm-sensitive-stimulating parenting in adulthood. Results showed that G2 mothers who experienced better parent-adolescent relationship quality with G1 parents in early adolescence were more likely to engage in warm-sensitivestimulating parenting. However, such transmission was not significant for G2 fathers. Savelieva et al. (2017) found intergenerational continuity of parent-adolescent relationship quality using data covering 28 years, and the continuity of emotional warmth was stronger for G2 fathers than for G2 mothers. Raby et al. (2015) also found supportive parenting in adulthood could be predicted by perceived maternal sensitivity during G2's first 3 years.

Despite the established literature demonstrating the link between parenting across generations (Belsky et al. 2005; Savelieva et al. 2017; Wang et al. 2021), relatively few studies have focused on intergenerational influences on parenting stress specifically. The quality of the relationship parents had with their parents before adulthood may have an important impact on their parenting stress. Parents' early experiences with their own caregivers can significantly shape their capacity to handle the demands of childrearing. Attachment theory suggests that an individual's social–emotional functioning is influenced by the quality of their attachment relationships with their parents in childhood (Main et al. 1985; Unternaehrer et al. 2019). For example, children who experienced more corporal punishment and psychological aggression reported higher levels of parenting-related stress (Niu et al. 2018). Moreover, parents who received less

supportive caregiving or experienced maltreatment in their early years were more likely to report elevated stress when parenting their own children (Haynes et al. 2020; Lange et al. 2019; Unternaehrer et al. 2019). These studies suggested there is an association between parent-adolescent relationship quality and parenting stress across generations. However, the measurement of parent-adolescent relationship quality in G2's early years has relied on G2's recollections of their early family experiences (Savelieva et al. 2017; Serbin and Karp 2003). This methodology has shown several limitations, particularly when assessing children's experiences with their parents retrospectively (Nivison et al. 2021). In addition, research indicates that the quality of parent-child relationships can differ between mother-child and father-child dyads. For example, Yaffe's study (2023) highlighted that mothers were often perceived as more accepting and fathers were more engaged in authoritative practices, which could influence stress outcomes. These differences may potentially lead to varying impacts on later parenting stress for mothers and fathers.

1.2 | The Mediating Role of Depressive Symptoms

Research is also needed to identify the mechanisms that help explain the relation between parent–adolescent relationship quality and parenting stress across generations. One of the potential mediators in this intergenerational transmission is an individual's depressive symptoms. Poor parent–adolescent relationship quality in childhood may increase the risk of poor mental well-being (e.g., higher levels of depressive symptoms), which in turn could lead to less psychological resources in adult-hood, for example, more parenting stress (Goodman et al. 2011; Unternaehrer et al. 2019). Specifically, a high-quality parent–adolescent relationship can serve as a protective factor, reducing the likelihood of developing depressive symptoms and parenting stress. Conversely, a poor parent–adolescent relationship can increase vulnerability to depression, which in turn elevates parenting stress in later life.

Empirical studies also supported the mediating role of an individual's depressive symptoms in the association between parent-adolescent relationship quality and parenting stress across generations. To start with, there is a well-established association between parent-adolescent relationship quality and depressive symptoms from both cross-sectional and longitudinal studies. Findings indicate that lower levels of parentadolescent relationship quality were linked to higher levels of depressive symptoms concurrently (Allen et al. 2007), 6 years later (Crandall et al. 2020), and even in adulthood (Beach et al. 2017). Parent-adolescent relationship quality also was found to predict trajectories of depressive symptoms. Notably, poorer parent-adolescent relationship quality was associated with depressive symptoms trajectories that remained high and/or increased over time (Shore et al. 2018). There also is a well-established association between parents' depressive symptoms and their parenting stress (Jaffee et al. 2021). Based on Abidin's model of parenting stress (1990), parents' psychosocial functioning is proximally associated with parenting stress. Parents with elevated depressive symptoms are more likely to perceive situations as exceeding their coping resources, resulting in challenges with parenting and

increased parenting stress. Longitudinal research has shown evidence of a positive association between parents' depression and increased parenting stress over time (Daundasekara et al. 2021). Mothers with more depressive symptoms in the perinatal and postnatal periods tended to have higher levels of parenting stress in later years (Fredriksen et al. 2019; Leigh and Milgrom 2008). Overall, the direct association between parent-adolescent relationship quality and depressive symptoms as well as between depressive symptoms and parenting stress have been well-established.

Relatively few studies have directly examined depressive symptoms as a potential mechanism that accounts for the relation between parent-child relationship quality during adolescence and parenting in adulthood. Even fewer studies have examined these linkages to parenting stress. There are notable exceptions. For example, Whitbeck et al. (1992) used both survey and observation data from 451 families to examine the intergenerational transmission of parental rejection and depression. Results indicate that G2 depression mediated the continuity of parental rejection from G1 to G2. Rothenberg et al. (2018) sampled 246 families from the Adolescent and Family Development Project (AFDP; Chassin et al. 1999). Findings indicate that depressive symptoms across ages 14, 15, and 21 mediated the longitudinal intergenerational transmission of family conflict, but in different ways for G2 mothers and fathers. Specifically, after adding depressive symptoms at ages 14 and 15 as covariates, G2 mothers who experienced more family conflicts tended to have higher levels of depressive symptoms at age 21 and in turn showed more family conflicts when they had their own children. However, such indirect effects were not statistically significant for G2 fathers. There are also some researchers who didn't find the mediating role of depression or significant associations between G2 depression and G2 parenting. For example, Coffino (2010) used longitudinal and multi-reporter data from 56 families. The study found the intergenerational transmission of parenting but failed to detect the mediating role of G2 depression in childhood, adolescence, or adulthood in this transmission after controlling for G1 depression. Pears and Capaldi (2001) found significant associations between G2 depression with G1 abusive parenting but not the direct association between G2 depression with G2 abusive parenting or the indirect effects from G1 abusive parenting to G2 abusive parenting through G2 depressive symptoms.

Previous studies suggested the potential mediating role of depressive symptoms in the relation between parent-child relationship quality in adolescence and parenting in adulthood. However, no study has examined this mechanism for parenting stress, and mixed findings on the mediation effects of depressive symptoms exist. The mixed findings may be attributed to the stability and variation of depression across different life stages from adolescence to adulthood. On the one hand, once depressive symptoms emerge, they are likely to show stability through adulthood (Hammen et al. 2014). On the other hand, due to an individual's different development from early adolescence to parenthood, changes may exist in depressive symptoms across these two decades covering different life course stages, and the mediating role of depression can also be different (Kerr and Capaldi 2019). Thus, both the stability and variation in an individual's depressive symptoms over time may serve as mediators, albeit in different ways, in the relation between parent-adolescent relationship

quality and parenting stress across generations. We propose that the mediating role of depressive symptoms in this association should be examined at both within-person and between-person levels to more accurately capture the mechanisms underlying the intergenerational influence on parenting stress.

1.3 | The Present Study

The purpose of the present study was to examine whether stability and change in an individual's depressive symptoms mediated the relation between their relationship quality with their parents during adolescence and their subsequent parenting stress almost 25 years later after they had their own child(ren). The study builds on prior research in several important ways. First, a large, nationally representative dataset that spanned over two decades was used. Perceived parent-adolescent relationship quality was measured initially among a group of adolescents between the ages of 12 and 18. Parenting stress was then assessed among those same individuals who reported being a parent almost 25 years later. Second, stable, between-person variation in depressive symptoms over almost 25 years was examined as well as within-person deviations from individuals' average scores by using a modified version of the random intercept cross-lagged model (RI-CLPM; Hamaker et al. 2015). The RI-CLPM is an analytical approach that helps to separate stable, trait-like differences between individuals (between-person effects) from the fluctuations that occur within individuals over time (withinperson effects). Traditional cross-lagged panel models can mix these two sources of variance, potentially confounding stable traits with dynamic changes. The RI-CLPM addresses this by introducing random intercepts, which capture stable, betweenperson variation, thereby allowing us to focus on how changes within an individual relate to other variables independently of broader individual differences. This approach allows for a more precise investigation into how both stability and changes in depressive symptoms contribute to the relation between parentadolescent relationship quality and parenting stress across generations. Third, given the differences between mothers and fathers in previous findings, adolescents' perceptions of their relationship quality with their mothers and fathers were both considered.

2 | Method

2.1 | Participants and Procedures

Following IRB approval from the University of Nebraska-Lincoln, data were obtained from the National Longitudinal Study of Adolescent to Adult Health (Add Health) restricted use dataset. Add Health is a longitudinal dataset with a nationally representative sample of 20,745 participants. It began in 1994–1995 (Wave 1) when participants were in grades 7–12 and currently involves five waves of data. Wave 2, 3, 4, and 5 data were collected in 1996, 2001–2002, 2008, and between 2016–2018, respectively. This study used survey data from all five waves.

According to the *Guidelines for Analyzing Add Health Data* (Chen and Harris 2020), any observations that have missing weights, missing strata information, or missing cluster

information should be deleted from the dataset, and then a sub-sample can be selected. The number of subjects with complete data on the weight variable (GSW12345), the strata variable (region of country [REGION]), and the cluster variable (primary sampling unit—school identifier [PSUSCID]) was 7105. We then selected a sample who were between 12 and 18 years old at Wave 1 (N=6915) and had at least one child at Wave 5 (N=4890). All data analyses in this study were based on this sample of 4890 participants ($M_{\rm age\ at\ Wave\ 1} = 15.67$, $SD_{age at Wave 1} = 1.50$; $M_{age at Wave 5} = 37.54$, $SD_{age at Wave 5} = 1.66$). We examined whether there were differences in adolescents' age (W1), biological sex at birth (W1), relationship quality with mother and father (W1), and depressive symptoms (W1) between our analysis sample and the excluded sample (n=7105-4890=2215). Differences were found for participants' age, biological sex at birth, and depression at Wave 1. Specifically, those who were in the analytic sample were older $(M_{\text{excluded}} = 15.79, M_{\text{analytic}} = 15.67, t = 2.66, p = 0.008)$ and had higher levels of depressive symptoms ($M_{\text{excluded}} = 0.47$, $M_{\rm analytic} = 0.50$, t = -2.03, p = 0.042). The analytic sample also had a larger proportion of females (Percentage_{excluded} = 62.7%, chi-square = 119.59, Percentage_{analytic} = 48.9%, p < 0.001). We controlled for age and biological sex at birth in all primary analyses. For the final analytic sample (N = 4890), there were 62.7% females (sex at birth), and the participants' self-reported ethnicities were as follows: 68.5% White, 18.3% Black or African American, 1.4% American Indian or Native American, 4.7% Asian or Pacific Islander, and 7.1% other.

2.2 | Measures

2.2.1 | Parent-Adolescent Relationship Quality

Adolescents reported their perception of the parent-adolescent relationship quality with six items at Wave 1 (e.g., "Most of the time your mother/father is warm and loving toward you"). Mother- and father-adolescent relationship quality were reported by adolescents separately using a 5-point Likert scale (1=strongly agree, 5=strongly disagree). In this study, items were reverse coded so that higher scores indicated better parent-adolescent relationship quality. Cronbach's α was 0.85 for mothers and 0.90 for fathers.

2.2.2 | Depressive Symptoms

The depressive symptoms of participants were measured with three items from the Center for Epidemiological Studies-Depression (CES-D) scale (Radloff 1977). Only three items were included at all five waves. Respondents reported the frequencies of their depressive symptoms (i.e., felt that could not shake off the blues, even with help from family and friends, felt depressed; and felt sad) during the last 7 days. They reported using a 4-point Likert scale ($0 = never\ or\ rarely$, $3 = most/all\ of\ the\ time$). Higher scores indicated higher levels of depressive symptoms. To ensure measurement consistency over time, we tested longitudinal measurement invariance for this measure. Results supported configural, metric, and scalar invariance across all five waves (see Tables S1 and S2). Cronbach's α s ranged from 0.80 to 0.84 for the five waves of data, and

McDonald's ω s ranged from 0.81 to 0.85, indicating good internal consistency.

2.2.3 | Parenting Stress

Add Health data included four items at Wave 5 that measured parenting stress. The four items come from a subset of the Parenting Stress Scale (PSS) developed by Berry and Jones (1995), including "I am happy in my role as a parent", "I feel close to my child(ren)", "The major source of stress in my life is my child(ren)", and "I feel overwhelmed by the responsibility of being a parent". The participants used a 5-point Likert scale ($1 = strongly \ agree$, $5 = strongly \ disagree$) at Wave 5. In this study, the last two items shown above were reverse coded so that higher scores represented higher levels of parenting stress. In the current sample, this four-item scale had acceptable reliability (Cronbach's $\alpha = 0.66$).

2.3 | Data Analysis

As shown in Table 1, there was a high level of stability in depressive symptoms across more than two decades. An analytic framework that accounted for this stability was needed. Therefore, RI-CLPM was used (Hamaker et al. 2015; Figure 1 and Figure 2). The random intercept model provided a framework to estimate the between-person stability in depressive symptoms over time and within-person deviations from average levels of depressive symptoms at each Wave. A latent variable representing between-person stability in depressive symptoms was estimated by fixing the Wave 1 through Wave 5 factor loadings for depressive symptoms to "1". As shown in Figures 1 and 2, latent variables representing within-person deviations from average levels of depressive symptoms were estimated at each wave by fixing factor loadings to "1". Autoregressive paths between adjacent time points were freely estimated. These parameters examined whether within-person deviations at one time point were associated with within-person deviations at the next time point.

Parameters were added to the random intercept model to test mediation (random intercept mediation model). Specifically, a direct path between parent-adolescent relationship quality at Wave 1 and parenting stress at Wave 5 was estimated. In addition, parent-adolescent relationship quality was estimated as a predictor of the latent variable representing between-person stability in depressive symptoms. The latent variable representing between-person stability in depressive symptoms, in turn, was estimated to be a predictor of parenting stress at Wave 5. Models were estimated separately for mother- and father-adolescent relationship quality. Analyses were conducted with *Mplus* 8.4. Full Information Maximum Likelihood Estimate (FIML) was used. Indirect effects were estimated using boot-strapping techniques.

A second random intercept mediation model was tested (separately for mother- and father-adolescent relationship quality). In addition to the mediating role of between-person stability in depressive symptoms, direct paths from parent-adolescent relationship quality at Wave 1 to each of the within-person deviations from average latent variables were also estimated. Each of the

TABLE 1 Descriptive statistics and correlations among the study variables (N=4890).

	1	2	3	4	5	6	7	8	9	10
1. Adolescent age (W1)										
2. Adolescent sex assigned at birth (W1)	0.08***									
3. Mother-adolescent relationship quality (W1)	-0.17***	0.08***								
4. Father-adolescent relationship quality (W1)	-0.20***	0.11***	0.46***							
5. Depressive symptoms (W1)	0.12***	-0.17***	-0.27***	-0.28***						
6. Depressive symptoms (W2)	0.07***	-0.17***	-0.21***	-0.23***	0.45***					
7. Depressive symptoms (W3)	-0.02	-0.13***	-0.11***	-0.13***	0.24***	0.26***				
8. Depressive symptoms (W4)	-0.04*	-0.10***	-0.09***	-0.11***	0.22***	0.24***	0.30***			
9. Depressive symptoms (W5)	-0.02	-0.08***	-0.10***	-0.12***	0.19***	0.20***	0.25***	0.34***		
10. Parenting stress (W5)	0.00	-0.04**	-0.09***	-0.08***	0.06***	0.06***	0.10***	0.13***	0.24***	
<i>M</i> ean	15.67	0.37	4.23	4.05	0.50	0.49	0.39	0.38	0.43	1.77
SD	1.50	0.48	0.80	0.31	0.61	0.60	0.56	0.53	0.58	0.61
Range	12-18	0-1	1–5	1-5	0-3	0-3	0-3	0-3	0-3	1-5

Note: W = Wave. For Adolescent sex assigned at birth, 0 = female, 1 = male.

p < 0.05, p < 0.01, p < 0.001, p < 0.001.

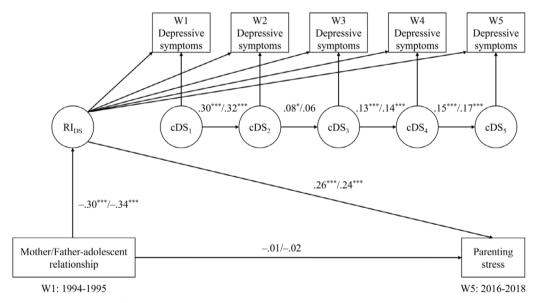


FIGURE 1 | Standardized estimates of the intergenerational relation between parent–adolescent relationship quality and parenting stress with the stable, between-person symptoms of depression as the mediator. W = Wave. DS = depressive symptoms. $RI_{DS} = the$ stable, between-person symptoms of depression over the almost 25 years of the study. Adolescent age at W1 and sex assigned at birth were entered as covariates. Numbers before the slash "/" were from the mother model. Numbers after the slash "/" were from the father model. *p < 0.05, ***p < 0.001.

within-person deviations from average latent variables, in turn, was estimated to predict parenting stress at Wave 5. The between-person mediational path was also included in this second model. This model tested whether within-person deviations from average depressive symptoms at each time point mediated the relation between parent-adolescent relationship quality at Wave 1 to parenting stress at Wave 5. Age and biological sex at birth of participants at Wave 1 were entered as covariates in all models.

3 | Results

Descriptive statistics and correlations among study variables are presented in Table 1. Findings indicated that adolescents' perceptions of mother-adolescent relationship quality at Wave 1 were negatively associated with parenting stress at Wave 5 (almost 25 years later; r=-0.09, p<0.001), which was similar for father-adolescent relationship quality at Wave 1 and parenting

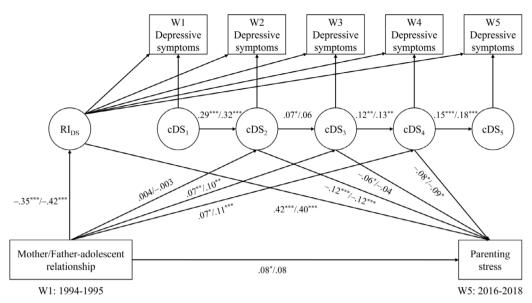


FIGURE 2 | Standardized estimates of intergenerational relation between parent–adolescent relationship quality and parenting stress with the stable, between-person symptoms of depression and the within-person deviations from average depressive symptoms at Wave 2, Wave 3, and Wave 4 as the mediators. W=Wave. DS=depressive symptoms. RI_{DS} = the stable, between-person symptoms of depression over the almost 25 years of the study. Adolescent age at W1 and sex assigned at birth were entered as covariates. Numbers before the slash "/" were from the mother model. Numbers after the slash "/" were from the father model. *p < 0.05, **p < 0.01, ***p < 0.001.

stress at Wave 5 (almost 25 years later; r=-0.08, p<0.001). Positive relations were found among measures of depressive symptoms across the five assessment periods (rs ranged from 0.19 to 0.45; ps<0.001). Mother-adolescent relationship quality and father-adolescent relationship quality were both negatively associated with symptoms of depression at each of the five assessment periods (rs ranged from -0.09 to -0.28; ps<0.001). Parenting stress at Wave 5 was positively associated with symptoms of depression at each of the five assessment periods (rs ranged from 0.06 to 0.24; ps<0.001).

Results from the random intercept mediation model that focused on mother-adolescent relationship quality at Wave 1 provided a good fit to the data $(n = 4700; \chi^2[19] = 93.26, p < 0.001,$ CFI = 0.95, TLI = 0.91, RMSEA = 0.03, SRMR = 0.03). As shown in Figure 1 (we reported standardized results throughout the manuscript), mother-adolescent relationship quality at Wave 1 was not directly associated with parenting stress at Wave 5. Importantly, as noted, a zero-order association was found between those two variables (see Table 1). Motheradolescent relationship quality was negatively related to the latent variable representing stable individual differences in depressive symptoms over almost 25 years of the study (between-person effects; $\beta = -0.30$, p < 0.001). The latent variable capturing stable, between-person symptoms of depression was, in turn, positively associated with parenting stress at Wave 5 (between-person effects; $\beta = 0.26$, p < 0.001). The indirect effect was found to be significantly different from zero (indirect effect = -0.08; 95% CI = [-0.11, -0.05]). This suggests that individuals with high levels of mother-adolescent relationship quality at Wave 1 tended to have stable, low levels of depressive symptoms. Individuals with stable low levels of depressive symptoms, in turn, tended to have low levels of parenting stress.

As noted, a second random intercept mediation model was tested for mother-adolescent relationship quality to examine whether within-person deviations from average depressive symptoms at each time point mediated the relation between parent-adolescent relationship quality at Wave 1 to parenting stress at Wave 5. Results from the model that used mother-adolescent relationship quality at Wave 1 provided a good fit to the data $(n = 4700; \chi^2[13] = 65.64, p < 0.001,$ CFI = 0.96, TLI = 0.90, RMSEA = 0.03, SRMR = 0.03). As shown in Table 2, two significant indirect effects were found. Specifically, mother-adolescent relationship quality at Wave 1 was indirectly related to parenting stress at Wave 5 through within-person deviations from average depressive symptoms at Wave 3 (indirect effect = -0.01; 95% CI = [-0.01, -0.001]) and Wave 4 (indirect effect = -0.01; 95% CI = [-0.01, -0.001]). The directions of the relations corresponding to the significant within-person indirect effects were different than expected. Specifically, there were statistically significant positive associations between mother-adolescent relationship quality and within-person deviations from average levels of depressive symptoms at Waves 3 and 4. The positive associations indicate that higher levels of mother-adolescent relationship quality were related to individuals' levels of depressive symptoms that were higher than their average levels of depressive symptoms. Moreover, connected to the significant indirect effects, there were statistically significant negative associations between within-person deviations from their average levels of depressive symptoms at Waves 3 and 4 and parenting stress. The negative associations indicate individuals' levels of depressive symptoms that were higher than their average levels at Waves 3 and 4 were associated with lower levels of parenting stress. Importantly, the indirect effect of mother-adolescent relationship quality at Wave 1 to parenting stress at Wave 5 through the stable, between-person symptoms of depression over the

TABLE 2 | Standardized estimates of the indirect effects with within-person deviations from average depressive symptoms at each time point as mediators.

	Indirect effect estimation	95% confidence interval
Mother model		
W1 MARQ—W2 Deviation—W5 PS	-0.00	[-0.01, 0.01]
W1 MARQ—W3 Deviation—W5 PS	-0.01*	[-0.01, -0.001]
W1 MARQ—W4 Deviation—W5 PS	-0.01*	[-0.01, -0.001]
W1 MARQ—RI _{DS} — W5 PS	-0.15*	[-0.21, -0.09]
Father model		
W1 FARQ—W2 Deviation—W5 PS	-0.00	[-0.01, 0.01]
W1 FARQ—W3 Deviation—W5 PS	-0.00	[-0.002, 0.02]
W1 FARQ—W4 Deviation—W5 PS	-0.01*	[-0.03, -0.001]
W1 FARQ—RI _{DS} — W5 PS	-0.17*	[-0.26, -0.10]

Note: RI_{DS} = the stable, between-person symptoms of depression over the almost 25 years of the study. Adolescent age at W1 and sex assigned at birth were entered as covariates.

Abbreviations: FARQ, father-adolescent relationship quality; MARQ, mother-adolescent relationship quality; PS, parenting stress.

almost 25 years of the study remained statistically significant (indirect effect = -0.15; 95% CI = [-0.21, -0.09]).

A similar pattern of results was found for the random intercept mediation model that focused on father-adolescent relationship quality at Wave 1 (Figure 2). The father-adolescent relationship quality model provided a good fit to the data (n=3604; $\chi^{2}[19] = 76.66$, p < 0.001, CFI = 0.95, TLI = 0.91, RMSEA = 0.03, SRMR=0.03). As shown in Figure 2, a significant relation between father-adolescent relationship quality at Wave 1 and parenting stress at Wave 5 was not found. Importantly, as noted, a zero-order association was found between those two variables (see Table 1). Father-adolescent relationship quality was negatively related to the latent variable capturing the stable, between-person symptoms of depression over almost 25 years of the study (between-person effects; $\beta = -0.34$, p < 0.001). The latent variable representing the stable, between-person symptoms of depression were, in turn, positively associated with parenting stress at Wave 5 (between-person effects; $\beta = 0.24$, p < 0.001). The indirect effect was found to be significantly different from zero (indirect effect = -0.08; 95% CI = [-0.13, -0.05]). This suggests that individuals with high levels of father-adolescent relationship quality at Wave 1 tend to have stable low levels of depressive symptoms. Individuals with stable low levels of depressive symptoms, in turn, tended to have low levels of parenting stress when they had their own child(ren).

A similar pattern of results emerged for the within-person deviations model using father-adolescent relationship quality at Wave 1. The model provided a good fit to the data $(n=3604; \chi^2[13]=44.97, p<0.001, CFI=0.97, TLI=0.92,$ RMSEA = 0.03, SRMR = 0.02). As shown in Table 2, only one significant indirect effect was found through within-person deviations from average depressive symptoms at Wave 4 (indirect effect = -0.01; 95% CI = [-0.03, -0.001]). Consistent with the mother-adolescent relationship quality model, the direction of the relation corresponding to the significant withinperson indirect effect in the father-adolescent relationship quality model was different than expected. Specifically, there was a statistically significant positive association between father-adolescent relationship quality and within-person deviations from average levels of depressive symptoms at Wave 4. The positive association indicates that higher levels of father-adolescent relationship quality were related to individuals' levels of depressive symptoms that were higher than their average levels of depressive symptoms. Moreover, connected to the significant indirect effect, there was a statistically significant negative association between within-person deviations from their average levels of depressive symptoms at Wave 4 and parenting stress. The negative association indicates individuals' levels of depressive symptoms that were higher than their average levels at Wave 4 were associated with lower levels of parenting stress. Importantly, the indirect effect of father-adolescent relationship quality at Wave 1 to parenting stress at Wave 5 through the stable, between-person symptoms of depression over the almost 25 years of the study remained statistically significant (indirect effect = -0.17; 95% CI = [-0.26, -0.10]).

4 | Discussion

Parenting stress is related to negative psychosocial outcomes for youth (Pinquart 2017). There is a large body of research that shows the quality of parents' relationship with their own parents is one factor that can influence parenting stress (Kerr and Capaldi 2019). Despite the established literature in this area, there is a need to better understand the mechanisms that explain this intergenerational association. The present study examined whether depressive symptoms mediate the association between the quality of the parent-adolescent relationship between G1 and G2 and G2's parenting stress.

This research builds on prior work in several important ways. First, the intergenerational influence of parent-child relationship quality on parenting stress was investigated across a period spanning more than two decades, from early adolescence to early middle adulthood, in a nationally representative sample. Second, perceptions of the quality of relationships with both mothers and fathers were considered. Third, stability and change in depressive symptoms over time were distinguished and were both examined. This is important because research suggests that although there are high levels of stability in depressive symptoms there are also fluctuations in symptoms of depression over time (Kerr and Capaldi 2019). As such, consideration of both between-person stability and within-person fluctuations in depressive symptoms across time can help to better understand the role that symptoms of depression play in

^{*}Significant indirect effects.

the longitudinal association between the quality of the parentadolescent relation and parenting stress.

Consistent with some previous research (Madden et al. 2015; Savelieva et al. 2017), findings indicated that the quality of the parent-adolescent relationship during early and middle adolescence was associated with parenting stress almost 25 years later. This association was found for adolescents' perceptions of their relationship quality with both their mothers and fathers. Given the long timeframe between assessment periods (more than two decades), the results provide some of the strongest evidence to support the transmission of influence in the family context between generations.

Findings from this study indicated that high levels of parent-adolescent relationship quality were related to low levels of depressive symptoms that were stable over the almost 25 years of the study (between-person individual differences). In turn, low levels of depressive symptoms that were stable over time were associated with low levels of parenting stress in early middle adulthood. Stable, between-person levels of depressive symptoms were found to mediate the relation between parent-adolescent relationship quality and parenting stress for both perceptions of mothers and fathers. It thus appears that lower levels of perceived adolescent relationship quality with mothers and fathers contribute to elevated levels of depressive symptoms that are enduring.

One strength of the study is that within-person fluctuations in individuals' symptoms of depression over time were also investigated as mediators of the intergenerational relation between parent-adolescent relationship quality and parenting stress. Findings indicated there was some evidence that within-person deviations from average levels of depression mediated the association between parent-adolescent relationship quality and parenting stress. Two of the three indirect effects were found to be statistically significant for mothers and one of the three indirect effects was evident for fathers. The nature of these indirect effects was unexpected based on prior research and theory. The findings indicated that better parentadolescent relationship quality during adolescence was related to levels of depressive symptoms that were higher than individuals' typical levels during emerging (for mothers only) and early (for both mothers and fathers) adulthood. In turn, levels of depressive symptoms that were higher than individuals' typical levels during emerging (for mothers only) and young (for both mothers and fathers) adulthood, were associated with lower levels of parenting stress. One possible explanation for these surprising results centers around the separation of within- and between-person effects in the analyses. Specifically, individuals who tend to have low levels of depressive symptoms have the possibility of experiencing larger increases compared to individuals who tend to have high levels of depressive symptoms because their typical scores are at the lower end of the distribution (i.e., their typical levels are situated at the lower end of the distribution, allowing more capacity for upward change within the measure's range). The between-person findings indicate that individuals who tend to have lower levels of depressive symptoms also tend to have high levels of parentadolescent relationship quality and low levels of parenting stress. Once the between-person factors are taken into account,

the within-person effects seem to be capturing increased levels of depressive symptoms that are most likely to occur for individuals who tend to typically have low levels of depressive symptoms as well as high levels of parent-adolescent relationship quality and low levels of parenting stress. Additional research is needed to support these interpretations. Future work in this regard could focus on identifying factors that influence within-person fluctuations in depressive symptoms over time. This could include investigation of stability and change in family factors and processes including developmentally typical and atypical shifts in the parent-adult child relationship across the life course.

The between-person mediational effects were larger and more consistent than the within-person effects (see Table 2). Depressive symptoms that are stable between adolescence and young adulthood are an important mechanism that helps explain the connection between parent-adolescent relationship quality and parenting stress. Consistent with several theoretical perspectives (e.g., attachment theory), adolescents who do not perceive they have a high-quality relationship with their mothers and fathers are at risk of experiencing elevated depressive symptoms that are stable over time (Branje et al. 2010). Highquality parent-adolescent relationships are associated with lower levels of depressive symptoms and better coping mechanisms (Laursen and Collins 2009; Steinberg and Morris 2001). Poor relationship quality with parents may be a source of stress for adolescents and likely limits their tendency to turn to their parents for help with key developmental challenges (Bannink et al. 2013).

The enduring feelings of depression play a critical role in shaping parents' experiences of stress in parenting roles. Chronic depressive symptoms may contribute to a diminished sense of personal efficacy and reduced capacity to manage stressors (Conger et al. 2002; Lovejoy et al. 2000). Over time, these stable depressive patterns could hinder effective coping mechanisms, leading to cumulative stress that becomes embedded within the parenting role, making it more challenging for parents to adapt flexibly to the demands of early middle adulthood (Dix and Meunier 2009). This finding aligns with previous findings suggesting that chronic psychological conditions, including depression, can shape a parent's interpretation of stress in their caregiving role and affect their responsiveness to children's needs. For instance, parents with prolonged depressive symptoms may experience persistent low energy or motivation, which can interfere with day-to-day parenting tasks and increase feelings of being overwhelmed or inadequacy (Repetti et al. 2002). In addition, chronic depressive states are often accompanied by cognitive distortions, such as negative self-evaluation, which may exacerbate feelings of parental stress (McLeod et al. 2007). In contrast, short-term fluctuations in depressive symptoms might reflect temporary responses to situational stressors that parents are able to adapt to over time. While acute stress or mood shifts can affect parenting temporarily, these do not have the same enduring impact on a parent's overall sense of stress in the caregiving role if the depressive symptoms do not persist. Thus, our findings suggest that it is the chronic, rather than the fluctuating, depressive symptoms that contribute to a cumulative psychological strain, which is likely to be more influential in the long-term experience of parenting stress.

4.1 | Limitations and Future Directions

Several limitations of the study should be noted, each with directions for future research. First, the measures of key constructs in this study (i.e., parent-adolescent relationship quality, depressive symptoms, and parenting stress) relied on a limited number of items taken from broader, validated scales. This may limit the depth and nuance of these conceptual structures. With fewer items, the scales might lack comprehensive coverage of each dimension, which could result in an underestimation of the complexity of these concepts. Future studies should consider using fuller versions of these scales to ensure a richer and more precise assessment of each construct, which may reveal additional dimensions of influence not observed here.

Second, reliance on self-reported data from a single informant might lead to mono-informant bias. Self-report measures can sometimes yield inflated correlations between constructs measured at the same time due to shared method bias. Future research should incorporate multi-informant perspectives and multi-methods where possible, such as behavioral observations of parent-adolescent interactions or clinical assessments of depressive symptoms, to provide a more robust understanding of these dynamics across generations.

Third, as noted earlier, future research could also consider using longitudinal assessments of parent–child relationship quality. For instance, relationship quality may fluctuate in response to developmental changes, and these fluctuations might offer valuable insights into the processes underlying intergenerational transmission. Employing models that can account for both stability and change in these constructs, such as dynamic structural equation modeling, may help to capture these processes in greater depth.

Fourth, the long-time intervals between waves in the current study may obscure short-term dynamic processes that could be better captured through more frequent assessments. This highlights the need for future research employing designs that assess relationships and mood fluctuations over shorter time frames, such as daily diary or ecological momentary assessment approaches, to capture nuanced, within-person fluctuations in depressive symptoms and their associations with early parent-adolescent relationship quality as well as parenting stress for the next generation.

5 | Conclusions and Implications

The present study found that chronic levels of depressive symptoms mediated the intergenerational association between parent-adolescent relationship quality and parenting stress across more than two decades. These results suggest that interventions targeting depressive symptoms could disrupt the transmission of parenting-related challenges from one generation to another. For clinicians, this means that addressing depressive symptoms in parents could have far-reaching benefits for family dynamics, potentially reducing the cycle of stress and emotional challenges that can be passed down. Fortunately, several evidence-based prevention and treatment models for depression exist. Family Talk, for instance,

is a family-based intervention that has shown effectiveness in reducing the impact of parental depression on families by fostering communication and resilience among family members (Beardslee 2019).

Given the association found between parent-adolescent relationship quality and chronic, stable symptoms of depression, clinicians might consider enhancing the effectiveness of such interventions by directly addressing unprocessed relational experiences from parents' own adolescence. Exploring unresolved issues with parents can provide a foundation for healthier relational patterns in their parenting, as well as reduce enduring emotional impacts from their upbringing. Finally, these findings highlight the potential benefits of engaging both mothers and fathers in depressionfocused interventions. Clinicians could work to include both parents in therapeutic approaches, recognizing that early experiences with both mothers and fathers influence parenting stress almost 25 years later, and that involving both may maximize the intervention's impact on family well-being for the next generation. By focusing on these chronic patterns, clinicians can promote intergenerational resilience, enhancing the emotional health of parents and reducing the likelihood of stress transmission across generations.

Acknowledgments

This research uses data from Add Health, funded by grant P01 HD31921 (Harris) from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), with cooperative funding from 23 other federal agencies and foundations. Add Health is currently directed by Robert A. Hummer and funded by the National Institute on Aging cooperative agreements U01 AG071448 (Hummer) and U01AG071450 (Aiello and Hummer) at the University of North Carolina at Chapel Hill. Add Health was designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill.

Conflicts of Interest

The authors declare no conflicts of interest.

References

Abidin, R. R. 1990. "Introduction to the Special Issue: The Stresses of Parenting." *Journal of Clinical Child Psychology* 19, no. 4: 298–301. https://doi.org/10.1207/s15374424jccp1904_1.

Allen, J. P., M. Porter, C. McFarland, K. B. McElhaney, and P. Marsh. 2007. "The Relation of Attachment Security to Adolescents' Paternal and Peer Relationships, Depression, and Externalizing Behavior." *Child Development* 78, no. 4: 1222–1239. https://doi.org/10.1111/j.1467-8624. 2007.01062.x.

Aviles, A. I., S. K. Betar, S. M. Cline, Z. Tian, D. B. Jacobvitz, and J. S. Nicholson. 2024. "Parenting Young Children During COVID-19: Parenting Stress Trajectories, Parental Mental Health, and Child Problem Behaviors." *Journal of Family Psychology* 38, no. 2: 296–308. https://doi.org/10.1037/fam0001181.

Bannink, R., S. Broeren, P. M. van de Looij–Jansen, and H. Raat. 2013. "Associations Between Parent-Adolescent Attachment Relationship Quality, Negative Life Events and Mental Health." *PLoS One* 8, no. 11: e80812. https://doi.org/10.1371/journal.pone.0080812.

Beach, S., M. Lei, R. Simons, et al. 2017. "When Inflammation and Depression Go Together: The Longitudinal Effects of Parent-Child

Relationships." *Development and Psychopathology* 29, no. 5: 1969–1986. https://doi.org/10.1017/S0954579417001523.

Beardslee, W. R. 2019. "Master Clinician Review: Parental Depression and Family Health and Wellness: What Clinicians Can Do and Reflections on Opportunities for the Future." *Journal of the American Academy of Child & Adolescent Psychiatry* 58, no. 8: 759–767. https://doi.org/10.1016/j.jaac.2019.02.008.

Belsky, J., R. Conger, and D. M. Capaldi. 2009. "The Intergenerational Transmission of Parenting: Introduction to the Special Section." *Developmental Psychology* 45, no. 5: 1201–1204. https://doi.org/10.1037/a0016245.

Belsky, J., S. R. Jaffee, J. Sligo, L. Woodward, and P. A. Silva. 2005. "Intergenerational Transmission of Warm-Sensitive-Stimulating Parenting: A Prospective Study of Mothers and Fathers of 3-Year-Olds." Child Development 76, no. 2: 384–396. https://doi.org/10.1111/j.1467-8624.2005.00852.x.

Berry, J. O., and W. H. Jones. 1995. "The Parental Stress Scale: Initial Psychometric Evidence." *Journal of Social and Personal Relationships* 12, no. 3: 463–472. https://doi.org/10.1177/0265407595123009.

Branje, S. J., W. W. Hale, T. Frijns, and W. H. Meeus. 2010. "Longitudinal Associations Between Perceived Parent-Child Relationship Quality and Depressive Symptoms in Adolescence." *Journal of Abnormal Child Psychology* 38: 751–763. https://doi.org/10.1007/s10802-010-9401-6.

Chassin, L., S. C. Pitts, C. DeLucia, and M. Todd. 1999. "A Longitudinal Study of Children of Alcoholics: Predicting Young Adult Substance Use Disorders, Anxiety, and Depression." *Journal of Abnormal Psychology* 108, no. 1: 106–119. https://doi.org/10.1037/0021-843X.108.1.106.

Chen, P., and K. M. Harris. 2020. *Guidelines for Analyzing Add Health Data*. Carolina Population Center at the University of North Carolina at Chapel Hill. https://addhealth.cpc.unc.edu/wp-content/uploads/docs/user_guides/GuidelinesforAnalysisofAddHealthData_202004.pdf.

Coffino, B. S. 2010. The Role of Depression and Social Relationships in the Intergenerational Transmission of Observed Parenting. University of Minnesota

Conger, R. D., L. E. Wallace, Y. Sun, R. L. Simons, V. C. McLoyd, and G. H. Brody. 2002. "Economic Pressure in African American Families: A Replication and Extension of the Family Stress Model." *Developmental Psychology* 38, no. 2: 179–193. https://doi.org/10.1037/0012-1649. 38.2.179.

Crandall, A., E. A. Powell, G. C. Bradford, et al. 2020. "Maslow's Hierarchy of Needs as a Framework for Understanding Adolescent Depressive Symptoms Over Time." *Journal of Child and Family Studies* 29: 273–281. https://doi.org/10.1007/s10826-019-01577-4.

Daundasekara, S. S., J. E. Beauchamp, and D. C. Hernandez. 2021. "Parenting Stress Mediates the Longitudinal Effect of Maternal Depression on Child Anxiety/Depressive Symptoms." *Journal of Affective Disorders* 295: 33–39. https://doi.org/10.1016/j.jad.2021.08.002.

Deater-Deckard, K. 2004. *Parenting Stress*. Yale University Press. https://doi.org/10.12987/yale/9780300103939.001.0001.

Dix, T., and L. N. Meunier. 2009. "Depressive Symptoms and Parenting Competence: An Analysis of 13 Regulatory Processes." *Developmental Review* 29, no. 1: 45–68. https://doi.org/10.1016/j.dr.2008.11.002.

Fang, Y., J. Luo, M. Boele, D. Windhorst, A. van Grieken, and H. Raat. 2024. "Parent, Child, and Situational Factors Associated With Parenting Stress: A Systematic Review." *European Child & Adolescent Psychiatry* 33, no. 6: 1687–1705. https://doi.org/10.1007/s00787-022-02027-1.

Fredriksen, E., T. von Soest, L. Smith, and V. Moe. 2019. "Parenting Stress Plays a Mediating Role in the Prediction of Early Child Development From Both Parents' Perinatal Depressive Symptoms." *Journal of Abnormal Child Psychology* 47: 149–164. https://doi.org/10.1007/s10802-018-0428-4.

Goodman, W. B., A. C. Crouter, S. T. Lanza, M. J. Cox, L. Vernon-Feagans, and Family Life Project Key Investigators. 2011. "Paternal Work Stress and Latent Profiles of Father–Infant Parenting Quality." *Journal of Marriage and Family* 73, no. 3: 588–604.

Hamaker, E. L., R. M. Kuiper, and R. P. P. P. Grasman. 2015. "A Critique of the Cross-Lagged Panel Model." *Psychological Methods* 20, no. 1:102–116. https://doi.org/10.1037/a0038889.

Hammen, C. L., K. D. Rudolph, and J. L. Abaied. 2014. "Child and Adolescent Depression." In *Child Psychopathology*, edited by E. J. Mash and R. A. Barkley, 225–263. Guilford Press.

Haynes, E., E. Crouch, J. Probst, E. Radcliff, K. Bennett, and S. Glover. 2020. "Exploring the Association Between a Parent's Exposure to Adverse Childhood Experiences (ACEs) and Outcomes of Depression and Anxiety Among Their Children." *Children and Youth Services Review* 113: 105013. https://doi.org/10.1016/j.childyouth.2020.105013.

Jaffee, S. R., J. L. Sligo, H. M. McAnally, A. E. Bolton, J. M. Baxter, and R. J. Hancox. 2021. "Early-Onset and Recurrent Depression in Parents Increases Risk of Intergenerational Transmission to Adolescent Offspring." *Journal of Child Psychology and Psychiatry* 62, no. 8: 979–988. https://doi.org/10.1111/jcpp.13356.

Kerr, D. C. R., and D. M. Capaldi. 2019. "Intergenerational Transmission of Parenting." In *Handbook of Parenting*, edited by M. H. Bornstein, 443–482. Routledge.

Lange, B. C., L. S. Callinan, and M. V. Smith. 2019. "Adverse Childhood Experiences and Their Relation to Parenting Stress and Parenting Practices." *Community Mental Health Journal* 55: 651–662. https://doi.org/10.1007/s10597-018-0331-z.

Laursen, B., and W. A. Collins. 2009. "Parent-Child Relationships During Adolescence." In *Handbook of Adolescent Psychology*, edited by R. M. Lerner and L. Steinberg. Wiley. https://doi.org/10.1002/9780470479193.adlpsy002002.

Leigh, B., and J. Milgrom. 2008. "Risk Factors for Antenatal Depression, Postnatal Depression and Parenting Stress." *BMC Psychiatry* 8: 1–11. https://doi.org/10.1186/1471-244X-8-24.

Lovejoy, M. C., P. A. Graczyk, E. O'Hare, and G. Neuman. 2000. "Maternal Depression and Parenting Behavior: A Meta-Analytic Review." *Clinical Psychology Review* 20, no. 5: 561–592. https://doi.org/10.1016/S0272-7358(98)00100-7.

Madden, V., J. Domoney, K. Aumayer, et al. 2015. "Intergenerational Transmission of Parenting: Findings From a UK Longitudinal Study." *European Journal of Public Health* 25, no. 6: 1030–1035. https://doi.org/10.1093/eurpub/ckv093.

Main, M., N. Kaplan, and J. Cassidy. 1985. "Security in Infancy, Childhood, and Adulthood: A Move to the Level of Representation." *Monographs of the Society for Research in Child Development* 50, no. 1/2: 66–104. https://doi.org/10.2307/3333827.

McLeod, B. D., J. R. Weisz, and J. J. Wood. 2007. "Examining the Association Between Parenting and Childhood Depression: A Meta-Analysis." *Clinical Psychology Review* 27, no. 8: 986–1003. https://doi.org/10.1016/j.cpr.2007.03.001.

Niu, H., L. Liu, and M. Wang. 2018. "Intergenerational Transmission of Harsh Discipline: The Moderating Role of Parenting Stress and Parent Gender." *Child Abuse & Neglect* 79: 1–10. https://doi.org/10.1016/j. chiabu.2018.01.017.

Nivison, M. D., D. L. Vandell, C. Booth-LaForce, and G. I. Roisman. 2021. "Convergent and Discriminant Validity of Retrospective Assessments of the Quality of Childhood Parenting: Prospective Evidence From Infancy to Age 26 Years." *Psychological Science* 32, no. 5: 721–734. https://doi.org/10.1177/0956797620975775.

Pears, K. C., and D. M. Capaldi. 2001. "Intergenerational Transmission of Abuse: A Two-Generational Prospective Study of an At-Risk Sample."

Child Abuse & Neglect 25, no. 11: 1439–1461. https://doi.org/10.1016/S0145-2134(01)00286-1.

Pinquart, M. 2017. "Associations of Parenting Dimensions and Styles With Externalizing Problems of Children and Adolescents: An Updated Meta-Analysis." *Developmental Psychology* 53, no. 5: 873–932. https://doi.org/10.1037/dev0000295.

Raby, K. L., J. M. Lawler, R. J. Shlafer, P. S. Hesemeyer, W. A. Collins, and L. A. Sroufe. 2015. "The Interpersonal Antecedents of Supportive Parenting: A Prospective, Longitudinal Study From Infancy to Adulthood." *Developmental Psychology* 51, no. 1: 115–123. https://doi.org/10.1037/a0038336.

Radloff, L. S. 1977. "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1, no. 3: 385–401. https://doi.org/10.1177/0146621677 00100306.

Repetti, R. L., S. E. Taylor, and T. E. Seeman. 2002. "Risky Families: Family Social Environments and the Mental and Physical Health of Offspring." *Psychological Bulletin* 128, no. 2: 330–366. https://doi.org/10.1037/0033-2909.128.2.330.

Rothenberg, W. A., A. M. Hussong, and L. Chassin. 2018. "Intergenerational Continuity in High-Conflict Family Environments: Investigating a Mediating Depressive Pathway." *Developmental Psychology* 54, no. 2: 385–396. https://doi.org/10.1037/dev0000419.

Savelieva, K., L. Pulkki-Råback, M. Jokela, et al. 2017. "Intergenerational Continuity in Qualities of the Parent–Child Relationship: Mediating and Moderating Mechanisms." *Journal of Child and Family Studies* 26, no. 8: 2191–2201. https://doi.org/10.1007/s10826-017-0729-1.

Serbin, L., and J. Karp. 2003. "Intergenerational Studies of Parenting and the Transfer of Risk From Parent to Child." *Current Directions in Psychological Science* 12, no. 4: 138–142. https://doi.org/10.1111/1467-8721.01249.

Shore, L., J. W. Toumbourou, A. J. Lewis, and P. Kremer. 2018. "Review: Longitudinal Trajectories of Child and Adolescent Depressive Symptoms and Their Predictors—A Systematic Review and Meta-Analysis." *Child and Adolescent Mental Health* 23: 107–120. https://doi.org/10.1111/camh.12220.

Steinberg, L., and A. S. Morris. 2001. "Adolescent Development." *Annual Review of Psychology* 52, no. 1: 83–110. https://doi.org/10.1146/annurev.psych.52.1.83.

Unternaehrer, E., K. T. Cost, W. Jonas, et al. 2019. "Once and Again: History of Rearing Experiences and Psychosocial Parenting Resources at Six Months in Primiparous Mothers." *Human Nature* 30, no. 4: 448–476. https://doi.org/10.1007/s12110-019-09355-3.

Wang, M., F. Wang, Y. Wang, and X. Xing. 2021. "Parental Anxiety and Depression Moderate Intergenerational Transmission of Parental Psychological Aggression in China." *Journal of Interpersonal Violence* 36, no. 17–18: 8314–8337. https://doi.org/10.1177/0886260519850535.

Wang, Y. C., and A. M. McLeroy. 2023. "Poverty, Parenting Stress, and Adolescent Mental Health: The Protective Role of School Connectedness Reexamined." *Children and Youth Services Review* 153: 107127. https://doi.org/10.1016/j.childyouth.2023.107127.

Whitbeck, L. B., D. R. Hoyt, R. L. Simons, et al. 1992. "Intergenerational Continuity of Parental Rejection and Depressed Affect." *Journal of Personality and Social Psychology* 63, no. 6: 1036. https://doi.org/10.1037/0022-3514.63.6.1036.

Yaffe, Y. 2023. "Systematic Review of the Differences Between Mothers and Fathers in Parenting Styles and Practices." *Current Psychology* 42, no. 19: 16011–16024. https://doi.org/10.1007/s12144-020-01014-6.

Supporting Information

Additional supporting information can be found online in the Supporting Information section.