



Effects of Father-Adolescent and Mother-Adolescent Relationships on Depressive Symptoms among Chinese Early Adolescents

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Abstract

Parent–adolescent relationships play an important role in protecting adolescents from depressive symptoms. However, there are no consistent conclusions about the extent to which fathers and mothers uniquely contribute to adolescents’ depressive symptoms. The present study aimed to acquire knowledge in this research area in two ways. First, this study separated the potential impacts of father–child and mother–child relationships on depressive symptoms in Chinese adolescents. Second, this study used a longitudinal design with nationally representative samples from the China Education Panel Survey. A total of 8794 middle school students in grade 7 completed measures of father–adolescent and mother–adolescent relationships, and depressive symptoms twice (T1 and T2; one-year interval). Results indicated that both positive father–adolescent and mother–adolescent relationships had negative effects on depressive symptoms in female adolescents. However, positive father–adolescent, not mother–adolescent, relationships had a negative effect on depressive symptoms in male adolescents. These findings suggest that positive parent–adolescent relationships could reduce early adolescents’ depressive symptoms, but positive father–adolescent and mother–adolescent relationships might have different protective effects on early adolescents’ depressive symptoms among male and female adolescents in China.

Keywords father-adolescent relationship · mother-adolescent relationship · depressive symptoms · early adolescents · Chinese · longitudinal study

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Introduction

Depressive symptoms are a prevalent mental health concern during adolescence (Rawana & Morgan, 2014; Tak et al., 2017). Saluja et al. (2004) found that about 16.7% of adolescents reported depressive symptoms in the United States. Liu et al. (2020) believed that the frequency of depressive symptoms in Chinese adolescents was higher than that in Western adolescents. Moreover, numerous studies have shown that depressive symptoms are associated with a series of negative outcomes among early adolescents. For example, depressive symptoms could increase the risk of academic difficulties (Aunola et al., 2000) and decrease life satisfaction (Leung & Fung, 2021; Liu et al., 2020). Furthermore, from a developmental perspective, the onset of depressive symptoms in early adolescence can have a significant impact on psychological well-being in adulthood persistently (Hankin et al., 1998; Weersing & Brent, 2006). For example, Weissman et al. (1999) found that adolescents with depressive symptoms had a higher suicide rate at 7.7%, a five-fold increased risk for first suicide attempt, and two-fold increased risk of major depressive disorder (MDD) when they transitioned to adulthood. Because of the severe and negative influences of depressive symptoms on youth development, it is very important to identify the protective factors that promote prevention and intervention efforts.

Parent–adolescent relationships are believed to play an important role in adolescents' depressive symptoms (Allen et al., 2007; Branje et al., 2010; Sheeber et al., 2007; Withers et al., 2016). However, few studies have investigated whether and to what extent fathers and mothers uniquely contribute to depressive symptoms among male and female adolescents in non-Western contexts. This study investigated the independent effects of father–adolescent and mother–adolescent relationships on early adolescents' depressive symptoms in boys and girls, using nationally representative longitudinal data from the China Education Panel Survey (CEPS), which sampled 28 county units from 31 national provinces and autonomous regions in China.

Parent–Adolescent Relationship and Adolescents' Depressive Symptoms

Attachment theory provides a comprehensive perspective on understanding the quality of the parent–adolescent relationship that could prevent adolescents from experiencing depressive symptoms (Duchesne & Ratelle, 2014). Parent–child attachment is an emotional bond originating from the interaction between children and their caregivers, in which children develop a relatively stable understanding of personal relationships, affecting later personality development (Bowlby, 1982). When children transit to adolescence, they face more challenges from social relationships, especially peer relationships. Adolescents with secure attachment develop higher social competence and self-esteem to effectively adjust

to social relationships (Ammaniti et al., 2000). Conversely, insecurely attached adolescents face more stress from social relationships, leading to a higher risk of depressive symptoms (Allen et al., 2007). Moreover, with the development of physical, psychological, and cognitive changes, adolescents strive for independence from parents and demand more autonomy (Allen et al., 2004; Allen et al., 2007). Adolescents with secure attachment to parents are more cognitively and emotionally autonomous, whereas adolescents with insecure attachment have more parental conflict and a higher risk of depressive symptoms (Cheung et al., 2016; Withers et al., 2016). Thus, a high-quality parent-adolescent relationship can protect adolescents from depressive symptoms (Branje et al., 2010; Duchesne & Ratelle, 2014).

A positive parent-adolescent relationship, characterized by support, trust, warmth, and acceptance, could decrease the levels of depressive symptoms (Allen et al., 2006; McGue et al., 2005; Nickerson & Nagle, 2004). For example, Cornwell (2003) suggested that a 25% increase in social support from parents resulted in a 2.7% decrease in depressive symptoms among adolescents. Brumariu (2015) found that adolescents usually had a low risk of depressive symptoms if they can successfully employ emotional strategies to solve the conflict with parents. In contrast, negative parent-adolescent relationships, such as over-control, rejection, coldness, and over-protectiveness, are associated with high levels of depressive symptoms (Avison & Mcalpine, 1992; Hale et al., 2005). Relative to healthy adolescents, adolescents with depressive symptoms have more negative relationships with their parents (Sheeber et al., 2007). Dysfunctional interaction with parents may lead to difficulty in gaining autonomy for adolescents, which increases the risk of depressive symptoms (Allen et al., 2006). Although there is consensus that parental relationships are related to depressive symptoms in adolescents, there are different findings depending on the gender of both parents and adolescents.

Effects of Father-Adolescent and Mother-Adolescent Relationships on Adolescents' Depressive Symptoms

According to attachment theory, mothers are children's and adolescents' main attachment figures, and the secure mother-adolescent relation should play a more important role in adolescents' psychological adjustment relative to the father-adolescent relation (Bowlby, 1982). As mothers are more involved in the daily care of adolescents, they have more influence on adolescents' emotional outcomes than fathers do (Van Lissa et al., 2019). Indeed, many empirical studies have showed that the maternal relationship is related to depressive symptoms in adolescents (Kobak et al., 1993; Malmberg & Flouri, 2011). Furthermore, Cortés-García et al. (2019) demonstrated that the maternal relationship had a stronger influence on adolescents' depressive symptoms at ages 12–14 than the paternal relationship. For adolescents, maternal relationships not only improve competence and self-esteem (Yap et al., 2010), but also relieve the effects of stress on depressive symptoms (Ge et al., 1994). Conversely, negative interaction behaviors displayed by mothers aggravate adolescents' depressive symptoms (Yap et al., 2010). Van der Giessen et al. (2015)

further demonstrated that less maternal emotional variability could predict an increase in adolescents' internalizing problems during the mother–adolescent conflict interaction.

However, culture theory suggests that in the traditional family, the father has the authority and is responsible for earning money for the family and disciplining the children (Ho, 1987; Shek, 1999b). Moreover, in recent decades, the large number of mothers entering the labor market has led to an increase in the participation of fathers in the daily care of their children (Li & Lamb, 2015). Indeed, an increasing number of studies have indicated that fathers play an important role in adolescents' development (Gallarin, & Alonso–Arbiol, I., 2012; Möller et al., 2016; Paquette et al., 2013; Shek, 1998). Paternal behavioral control has a stronger impact on adolescent delinquency than does maternal behavioral control (Shek & Zhu, 2019). In addition, paternal support is beneficial to social adjustments, and more interactions with fathers are linked with fewer internalizing behaviors (Dubeau et al., 2013). Shek (1999a) also pointed out that paternal parenting characteristics had more effects on adolescent mental health than did maternal in Hong Kong Chinese adolescents.

Previous studies investigated the different impacts of maternal relationship and paternal relationship on adolescent depressive symptoms. For example, Day and Padilla-Walker (2009) suggested that connectedness and involvement from fathers, not from mothers, could decrease adolescents' depressive symptoms. Sheeber et al. (2007) also found that paternal relationship had stronger effects on adolescent depressive symptoms than did maternal relationship. However, Rueger et al. (2014) suggested that maternal and paternal relationships have a complementary influence on adolescents' depressive symptoms. Specifically, when fathers' support is low, mothers' support can be supplemented. Indeed, few studies distinguished the effects of paternal relationship and maternal relationship on depressive symptoms in Chinese early adolescents.

Adolescent Gender Moderated the Relation Between Parent-Adolescent Relationship and Adolescent Depressive Symptoms

Previous studies showed that, relative to boys, parent–adolescent relationships are more likely to influence girls' depressive symptoms (Cyranowski et al., 2000; Liu et al., 2020; Rudolph et al., 2000). Stewart et al. (1999) suggested that the perceptions of low parental caring and high conflict with parents could obviously impact girls' depressive symptoms, but not for boys. In addition, some findings suggested that maternal relationships were linked with depressive symptoms in adolescents, especially girls (Rueger et al., 2014; Van Lissa et al., 2019; Yap et al., 2010).

Moreover, Branje et al. (2010) suggested that paternal relationship was associated with depressive symptoms in only male adolescents. Relative to female adolescents, male adolescents perceived more support from fathers, which decreased the level of depressive symptoms (Colarossi & Eccles, 2003; Cornwell, 2003). However, Keizer et al. (2019) found that the quality of paternal relationships could only predict the

changes in daughters' self-esteem, but not in sons. A longitudinal study has demonstrated that maternal parenthood qualities are related to female adolescents' well-being, but not for male adolescents, while fathers exert more effects on male adolescents, but not on female adolescents, in the Chinese context (Shek, 2005).

In addition, many studies have shown that family economic conditions (i.e., family income) could affect adolescents' depressive symptoms through health service utilization (Goodman & Huang, 2001), parenting styles (Radziszewska et al., 1996), social support (Schraedley et al., 1999), and stress (Lupien et al., 2000; Romero et al., 2007). Thus, family economic condition is a very important control variance associated with adolescents' depressive symptoms.

The Present Study

Based on the literature reviews above, this study aimed to investigate the longitudinal effects of both the father-adolescent relationship and mother-adolescent relationship on early adolescents' depressive symptoms in boys and girls in China. Specifically, we examined whether low levels of mother-adolescent relationship could predict high levels of depressive symptoms among boys and girls, and whether low levels of father-adolescent relationship could predict high levels of depressive symptoms among boys and girls. Thus, this study proposes two hypotheses: (1) For boys, positive father-adolescent relationship could predict less adolescent depressive symptoms; (2) For girls, positive mother-adolescent relationship could predict less adolescent depressive symptoms.

Method

Participants

We used the data from the CEPS which is a nationally representative survey. Participants in the baseline survey in March 2014 (T1) were 19,487 students (including 10,279 in Grade 7 and 9208 in Grade 9) from 112 schools and 438 classes. Participants in the second survey in March 2015 (T2) were 9449 students from the original Grade 7. In the present study, we selected samples that fully participated in the two rounds of surveys. After eliminating the samples with missing variables, there were 8794 students in final analysis.

Measures

Father-Adolescent and Mother-Adolescent Relationships We used one item to assess father-adolescent relationship, "How was your relationship with father?" Similarly, the mother-adolescent relationship was assessed by one item, "How was your relationship with your mother?" The two items were rated using a 3-point frequency

response scale (1 = *not close*, 2 = *general*, and 3 = *very close*). We coded this variable as a dummy variable.

Depressive Symptoms According to previous studies (Radloff, 1977; Saylor et al., 1984), we used four items to measure adolescents' depressive symptoms: "Have you had any of the following feelings in the past 7 days? Depressed, unhappy, life has no meaning, sad." All items were rated using a 5-point frequency response scale ranging from 1 meaning *almost never* to 5 meaning *almost always*. In present study, the Cronbach's alpha for the depressive symptoms was 0.82 and 0.89 for T1 and T2, respectively.

Demographic Measures We collected demographic variables of students' gender, age, and family economic conditions at T1. Family economic conditions were assessed using one item, "What is your family's financial situation at present?" which was rated using a 5-point frequency response scale ranging from 1 (*very poor*) to 5 (*very rich*).

Data Analysis Strategy

We conducted data analysis using the regression model in SPSS 21.0. First, we conducted a descriptive analysis of all variables. Second, we examined the effects of father- and mother-adolescent relationships on depressive symptoms in boys and girls, respectively. Depressive symptoms at T1 and T2 were skewed, so we log-transformed the variables. We used the bootstrapping method, which is a non-parametric approach that allows for hypothesis testing and calculation of effect sizes (Preacher & Hayes, 2008). We obtained 5000 bootstrap resamples in the current study and used them to determine the 95% confidence intervals (CIs) of the effects (Preacher & Hayes, 2008).

Table 1 Bivariate correlations of father-adolescent and mother-adolescent relationships at T1, adolescents' depressive symptoms at T1 and T2, and family economic conditions among boys and girls

Variables	1	2	3	4	5
1 Father-adolescent T1	–	.46***	–.22***	–.15***	.06***
2 Mother-adolescent T1	.53***	–	–.23***	–.16***	.09***
3 Depression T1	–.22***	–.21***	–	.44***	–.14***
4 Depression T2	–.14***	–.13***	.38***	–	–.08***
5 Family economic	.04**	.06***	–.10***	–.08***	–

[†] $p < .08$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. $N = 4547$ for boys. $N = 4247$ for girls. The correlation below the diagonal is for boys; the correlation above the diagonal is for girls

Results

Correlation of Father-Adolescent Relationship, Mother-Adolescent Relationship, and Depressive Symptoms

As Table 1 shows, the results suggested that for both boys and girls, father-adolescent and mother-adolescent relationships at T1 were negatively associated with adolescent depressive symptoms at both T1 and T2. Additionally, family economic status was positively related to father-adolescent and mother-adolescent relationships at T1, while being negatively linked with adolescent depressive symptoms at both T1 and T2 (see Table 1).

Effects of Father-Adolescent and Mother-Adolescent Relationships on Depressive Symptoms in Boys and Girls

We examined the effects of father-adolescent and mother-adolescent relationship (T1) on depressive symptoms (T2) among boys and girls, respectively, controlling for depressive symptoms (T1) and family economic conditions. For boys, results indicated that boys with very close father-adolescent relationships had fewer depressive symptoms than boys with no close father-adolescent relationship ($B = -0.082$, $SE = 0.037$, $t = -2.19$, $p = 0.028$, bootstrap 95% CI = $[-0.165, -0.000]$). Moreover, the difference in depressive symptoms between boys with general father-adolescent relationships and boys with no close father-adolescent relationship was not significant ($B = -0.042$, $SE = 0.038$, $t = -1.11$, $p = 0.266$, bootstrap 95% CI = $[-0.125, 0.040]$). On the other hand, relative to boys with no close relation to mothers, neither boys with very close relation to mothers nor boys with general relation to mothers had less depressive symptoms ($B = -0.063$, $SE = 0.043$, $t = -1.48$, $p = 0.140$, bootstrap 95% CI = $[-0.156, 0.032]$; $B = -0.045$, $SE = 0.044$, $t = -1.04$, $p = 0.298$, bootstrap 95% CI = $[-0.141, 0.050]$, respectively).

Table 2 Effects of father-adolescent and mother-adolescent relationships on depressive symptoms among boys and girls

Variables	Depression T2 (boys)				Depression T2 (girls)			
	B	SE	t	p	B	SE	t	p
Family economic	-0.037	0.010	-3.59	<0.001	-0.008	0.010	-0.82	0.414
Depression T1	0.403	0.016	25.63	<0.001	0.461	0.016	29.30	<0.001
Father-adolescent T1								
very close	-0.082	0.037	-2.19	0.028	-0.080	0.030	-2.69	0.007
general	-0.042	0.038	-1.11	0.266	-0.054	0.030	-1.82	0.069
Mother-adolescent T1								
very close	-0.063	0.043	-1.48	0.140	-0.105	0.039	-2.67	0.008
general	-0.045	0.044	-1.04	0.298	-0.071	0.040	-1.77	0.077

$N = 4547$ for boys, $N = 4247$ for girls. Father-adolescent and mother-adolescent relationships were dummy variables; reference groups were "no close relation to father or mother" at Time 1

For girls, results indicated that the effects of both paternal and maternal relationships on depressive symptoms were significant. Specifically, relative to girls with no relation to fathers, girls who were very close to their fathers showed fewer depressive symptoms ($B = -0.080$, $SE = 0.030$, $t = -2.69$, $p = 0.007$, bootstrap 95% $CI = [-0.138, -0.019]$). Moreover, girls very close to their mothers had fewer depressive symptoms than girls with no close relation to mothers ($B = -0.105$, $SE = 0.039$, $t = -2.67$, $p = 0.008$, bootstrap 95% $CI = [-0.185, -0.027]$). Table 2 presents the results of this analysis (see Table 2).

Discussion

To examine the unique effects of father–adolescent and mother–adolescent relationships on adolescents' depressive symptoms in Chinese youth, this study analyzed the data of 8794 adolescents (4547 boys; 4247 girls) from two waves of the CEPS. Results indicated that both positive paternal and maternal relationships predicted less depressive symptoms in Chinese girls. However, only positive paternal relationship predicted less depressive symptoms in Chinese boys. These findings suggested that the parental relationships could reduce Chinese adolescent depressive symptoms, but maternal and paternal relationships had different protective effects on boys' depressive symptoms.

Parent-Adolescent Relationship and Adolescent Depressive Symptoms

This study suggested that positive parental relationship predicted less adolescent depressive symptoms. This result was consistent with previous findings that high-quality parent–adolescent relationships could predict low levels of adolescents' depressive symptoms (Ranson & Urichuk, 2008; Withers et al., 2016). In comparison to children and adults, adolescents are more likely to be depressed in face of great challenges and stressors without parental support (Potochnick & Perreira, 2010). However, parents can provide adolescents with essential psychosocial resources, such as support and communication, which can increase adolescents' self-esteem and competence against depressive symptoms (Brage & Meredith, 1994; Hunter et al., 2015; Zhang et al., 2021). In contrast, the parent–adolescent relationship deterioration aggravates this problem. For example, McGue et al. (2005) found that adolescents perceived the quality of parent–adolescent relationship decline consistently by less warmth and more conflict leading to depressive symptoms, and girls reported greater changes than boys. Thus, it is necessary to improve parental relationship against adolescent depressive symptoms. Our longitudinal study replicates this finding and further confirms the association between the parent–adolescent relationship and adolescents' depressive symptoms in the Chinese context.

Effects of Paternal and Maternal Relationships on Boys' and Girls' Depressive Symptoms

We found that both positive paternal and maternal relationships predicted less depressive symptoms in Chinese girls, while positive paternal relationship, not maternal relationship, predicted less depressive symptoms in Chinese boys. This finding suggests that fathers play more important roles in decreasing male adolescents' depressive symptoms than do mothers. This result is consistent with previous studies showing that the high quality of the father-adolescent relationship can be a protective factor against depressive symptoms in adolescents. For example, one study revealed that high levels of emotional support from fathers decreased the association between relational victimization and depressive symptoms, whereas emotional support from mothers could not predict the increases in adolescents' symptoms (Desjardins & Leadbeater, 2011). Another study indicated that paternal attachment, but not maternal attachment, could buffer the negative impacts of peer victimization on male adolescents' self-esteem, which was related to internalizing problems, such as anxiety and depression (Pan et al., 2020). Our study enriches the existing literature by suggesting that fathers play an important role in adolescents' development (Paquette et al., 2013; Shek, 1999a; Shek & Zhu, 2019).

The different social resources provided by fathers and mothers may explain the significant role of paternal relationships on adolescents' depressive symptoms. Relative to mothers, fathers should afford to earn money for supporting their families. Leung and Shek (2020) revealed that paternal sacrifice exerted more impact on adolescent life satisfaction than did maternal sacrifice, as fathers strived to earn money in poor Chinese families. Moreover, emotional support from fathers, not from mothers, affects mental health via self-esteem or stress-buffering for boys (Lim et al., 2015; Rueger et al., 2016). Thus, paternal relationship may play a more influential role in protecting adolescents from depressive symptoms, especially among boys.

Besides, the gender difference is another possible explanation given the different roles between parents' and adolescents' expectations for each other in Chinese culture. Different parental roles between fathers and mothers are culturally assigned by gender expectations. Fathers need to earn money to support their families, make decisions, and educate children as a disciplinary role, whereas mothers are in charge of daily care and emotional comfort for children (Ho, 1987; Shek, 1999b). The Chinese expression “*yang bu jiao, fu zhi guo*” emphasize that fathers should be responsible for children's behaviors by close supervision (*guan*) (Chen et al., 2002). Moreover, the Chinese culture of filial piety (*xiao*) requires that children respect and obey their parents (Hwang, 2001). As a result, Chinese fathers have authority over their children through conduct and moral guidance. Liang et al. (2013) found that positive paternal relationship could promote the level of effortful control for children, but mothers' encouragement and acceptance was not beneficial for the increase of effortful control. Moreover, empirical evidence indicated that over-protectiveness from mothers impeded the development of self-efficacy, leading to depressive symptoms (Allen et al., 2006; Avison & Mcalpine, 1992).

Furthermore, the traditional role of fathers has changed recently. As mothers participate in the labor force, fathers have more time to be involved in childcare to

enhance the quality of attachment in many cultural contexts (Mori et al., 2012; Raley et al., 2012). Empirical evidence suggests that fathers, contrary to their traditional authoritative role that they express implicitly and treat their children more strictly (Shang, 2007), are more cautious about emotional expression and more responsive to their children (Yan, 2006), as they have more positive emotions that are associated with social competence than mothers (Liang et al., 2012). Thus, paternal relationship becomes a stronger protective factor for adolescents' depressive symptoms than mothers.

In addition, fathers make different contributions to mental health for girls and boys. Relative to girls, boys are given more resources and preferred by parents in Chinese culture because of male superiority. Although the one-child policy enhances the importance of girls, boys are still given higher expectations by parents. Therefore, they are treated with stricter rules and higher standards by fathers (Chuang & Su, 2009), whereas girls reported less control from fathers (Chen et al., 2000). Obviously, paternal relationships can affect adolescents' well-being, especially for boys.

We found that the mother–adolescent relationship had a significant impact on girls' depressive symptoms, but had no significant impact on depressive symptoms in boys. Adolescents' gender differences in coping strategies may account for this result. Girls are more likely to seek emotional support and express their emotional needs more toward their mothers than their fathers (Geuzaine et al., 2000). Therefore, emotional comfort from mothers can relieve girls' depressive symptoms, whereas boys get less emotional comfort from mothers as they are not good at expressing their emotions.

Strengths and Limitations

These findings add to the literature and have clinical implications for the importance of the parent–adolescent relationship on adolescent depressive symptoms. First, this study examined the effects of paternal and maternal relationships on adolescent depressive symptoms in Chinese boys and girls. These findings contribute to acquiring knowledge in parent–adolescent relationships, which extend previously reported evidence that mothers, as primary figures, play a major role in adolescents' well-being and underscore the importance of fathers in adolescents' development. Second, given the focus in prior literature on community samples and the lack of large national sample surveys, this study used the nationally representative data from the CEPS, which increase the applicability of the results. Third, this study used a longitudinal design, which could control for baseline depressive symptoms.

This study has several limitations. First, we used self-reports to assess all variables. Although adolescents' reports on their feelings are reasonable, the absence of parents' reports may decrease the accuracy of the outcomes. Future research should consider parents' perceptions to eliminate responder bias. Second, we based the study on the assumption that parent–adolescent relationships could affect adolescents' depressive symptoms, without considering the reverse and reciprocal effects. Some scholars have suggested that adolescents with depressive symptoms can predict the worsened attachment relationship (Branje et al., 2010;

Cortés-García et al., 2019). Therefore, future studies should investigate whether adolescent depressive symptoms could predict parental relationship. Third, some of the effect sizes of the significant findings were on the lower side. The reason may be that the results were longitudinal effects by controlling for depressive symptoms at Time 1. Because the statistical significance and practical significance are distinguishing, caution must be exercised when applying the results to practice. Additionally, the results need to be replicated in further research.

Implications for Clinical Practice

The current findings contribute to the development of effective intervention programs and policy measures that protect early adolescents from suffering depressive symptoms. First, the findings underscore the importance of adopting a family ecological model to understand adolescent behavior. The family ecological model suggests that family, like an ecological model (including father–adolescent relationship, mother–adolescent relationship, the relationship between father and mother, etc.) together influence adolescents' behaviors (Davison et al., 2013). For example, adolescents living in non-intact families face more risks of depressive symptoms (Zhou et al., 2020). Second, as parent–adolescent relationship is an important dimension of family processes (Henry et al., 1996), practitioners should focus on family processes. We should develop family centered, but not individual centered, intervention programs to decrease adolescent depressive symptoms. Third, there is a need to focus on fathers, who have been neglected in the literature. Policymakers should understand the predictive effects of the father–adolescent relationship on adolescents' depressive symptoms and encourage fathers to participate in the growth of adolescents and provide more guidance for them to improve father–child relationship in China.

Conclusion

Our results suggest that both positive paternal and maternal relationships could protect female adolescents from depressive symptoms, while only positive paternal relationship could relieve male adolescents' depressive symptoms in China. These findings suggest that positive parent–adolescent relationships could reduce early adolescents' depressive symptoms, but positive father–adolescent and mother–adolescent relationships might have different protective effects on early adolescents' depressive symptoms among male and female adolescents in China.

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Declarations

Conflicts of Interest The authors declare that they have no conflict of interest.

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