

The Relationship Between Parent-Child Filial Piety Belief Conflict and Depression in Adolescent Offspring

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Abstract

Filial piety is a fundamental principle for maintaining family relationships and has an important influence on children's mental health. However, conflicts may exist between parents' and children's filial piety beliefs within families, and its psychological significance for children remains unknown. This study examines the relationship between parent-child filial piety belief conflict and depression in adolescent offspring, with attention to differences across various parent-child gender combinations. Based on longitudinal questionnaire survey data collected at a 2-year interval from 3,321 adolescents and their fathers and mothers, and employing polynomial regression and response surface analysis methods, the following results were obtained: (1) When no conflict exists between parents' and children's filial piety beliefs, the levels of reciprocal and authoritarian filial piety do not have a predictive effect on children's depression. (2) When conflict exists between parents' and children's filial piety beliefs, conflict with fathers regarding reciprocal and authoritarian filial piety negatively predicts depression levels in sons, while conflict with both fathers and mothers regarding reciprocal and authoritarian filial piety negatively predicts depression levels in daughters. This indicates that when no parent-child conflict exists regarding filial piety, the type and level of filial piety itself are unrelated to children's depression, but conflicts between sons and fathers and between daughters and parents regarding filial piety may induce depression in children.

Full Text

The Association Between Parent-Child Value Conflict in Filial Piety and Adolescent Depression

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Abstract

Filial piety is a fundamental principle for maintaining family relationships and exerts important influences on children's mental health. However, parents' and children's filial piety values may conflict within families, and the psychological significance of such conflicts for children remains unknown. This study examined the relationship between parent-child value conflict in filial piety and adolescent depression, with particular attention to differences across parent-child gender combinations. Based on longitudinal questionnaire data spanning two years from 3,321 adolescents and their fathers and mothers, polynomial regression and response surface methodology yielded the following results: (1) When parents' and children's filial piety values were not in conflict, the levels of reciprocal and authoritarian filial piety did not predict adolescent depression. (2) When parents' and children's filial piety values were in conflict, conflicts with fathers in both reciprocal and authoritarian filial piety negatively predicted sons' depression levels, while conflicts with both fathers and mothers in reciprocal and authoritarian filial piety negatively predicted daughters' depression levels. These findings indicate that when parent-child consensus on filial piety exists, the type and level of filial piety are unrelated to adolescent depression, but conflicts between fathers and sons and between parents and daughters in filial piety may trigger depressive symptoms in adolescents.

Keywords: filial piety, value conflict, adolescent depression, gender difference, response surface analysis

1. Introduction

Filial piety represents one of the core values of Chinese culture and serves as an important value norm for maintaining parent-child relationships and supporting family functioning, holding significant meaning for family and social harmony and stability (Yeh & Yang, 2009). Consequently, filial piety has long constituted essential content in Chinese family education. Children acquire behavioral norms and expectations for parent-child interaction patterns through intentional parental instruction or implicit learning in daily interactions with parents (Guo et al., 2021). Consensus on filial piety values between parents and children functions as a psychological schema for parent-child interaction that influences children's psychosocial adaptation (Fu et al., 2016). However, parent-child value conflicts in filial piety may also arise. From a social development perspective, the connotation of filial piety evolves with social transformation, and parents' and children's internalized filial piety values may differ due to the

distinct eras in which they were socialized (Xu, 2022). From an individual development perspective, children are not passive “copiers” of parental values during the acquisition of filial piety but rather active selectors (Cao & Yeh, 2014), which may lead to values diverging from those of their parents. Particularly during adolescence, family members’ roles and expectations toward adolescents are redefined (Sheeber et al., 2001), and as adolescents’ needs for autonomy and independence develop alongside enriched social interactions outside the family, parent-child value conflicts in filial piety become especially likely. Such conflicts may consequently affect adolescents’ psychosocial adaptation (De Los Reyes & Ohannessian, 2016).

Adolescence represents a period of high incidence for depression, with detection rates of mild and severe depression among Chinese adolescents reaching 24.6% and showing further increases compared to a decade ago (Hou & Chen, 2021). Adolescent depression not only constitutes the most important cause of suicide but also triggers adverse consequences in academic and social domains as well as behavioral problems such as substance abuse (Thapar et al., 2012). Early adolescence, in particular, serves as a transitional period from the low-prevalence childhood stage to the high-prevalence adolescent stage (Kessler et al., 2001), making it both a critical period when depressive problems begin to emerge and become apparent and an optimal period for intervention (Ahmed et al., 2015). Therefore, exploring the precipitating factors of early adolescent depression holds significant importance. In addition to changes and challenges brought by physical development and cognitive maturation, difficult-to-manage external stress represents an important precipitating factor for adolescent depression (Zhang, 2002). External values that conflict with individual values create a sense of being pulled in different directions, representing a significant stressor leading to symptoms of hopelessness, helplessness, and psychological distress (Agnew, 2006; Zhang et al., 2020). Based on this foundation, this study examines the relationship between parent-child value conflict in filial piety and adolescent depression.

1.1 Dual Filial Piety Model and Its Relationship with Depression

Filial piety is defined as a set of social attitudes and behaviors of children toward their parents, possessing a multifaceted internal structure. The dual filial piety model proposed by Yeh and Yang (2009) has been most widely applied (Bedford & Yeh, 2019; Yeh & Yang, 2009). This model posits that filial piety comprises two dimensions—reciprocal filial piety and authoritarian filial piety—that differ markedly in intrinsic nature and functional operation, reflecting two distinct psychological schemas for parent-child interaction. Reciprocal filial piety operates based on the principle that observing filial norms serves to repay parents’ nurturing kindness and satisfy naturally arising needs for emotional interaction, manifested as spontaneous care and concern for parents. Authoritarian filial piety operates based on seeking social recognition through compliance with role norms and hierarchical systems, manifested as suppressing oneself to obey par-

ents and uphold family honor. Given that reciprocal and authoritarian filial piety respectively embody equal, reciprocal relationships and hierarchical, ordered relationships in their operational mechanisms, the former is generally considered to satisfy relational needs and thus exert positive effects on individual psychosocial adaptation, whereas the latter is considered to hinder autonomy needs and thus exert negative effects (Bedford & Yeh, 2021). Empirical research examining filial piety and adolescent depression has similarly found a negative relationship between reciprocal filial piety and depression and a positive relationship between authoritarian filial piety and depression (Pan & Tang, 2021; Yeh, 2006).

1.2 Parent-Child Value Conflict in Filial Piety and Adolescent Depression

Although existing research has revealed relationships between adolescents' own filial piety values and their depression, whether parent-child value conflicts in filial piety affect adolescent depression remains unknown. In fact, research on the intergenerational transmission of filial piety indicates that correlations between parents' and children's filial piety values are only moderately positive for both reciprocal and authoritarian filial piety, with significant differences also evident at the group mean level (Li, 2020). This suggests that within a family, parent-child filial piety values may exist in either "conflict" or "no-conflict" states. Combining the levels of parents' and children's filial piety values, four scenarios can be distinguished for either reciprocal or authoritarian filial piety (Figure 1 [Figure 1: see original paper]). Scenarios and represent "no-conflict" states, while scenarios and represent "conflict" states.

Figure 1 Conflict scenarios for reciprocal or authoritarian filial piety between parents and children

Based on this classification, the relationship between parent-child value conflict in filial piety and adolescent depression can be specified as three research questions for both reciprocal and authoritarian filial piety: (1) the effect of whether parent-child value conflict exists (scenarios , vs. ,) on adolescent depression; (2) the effect of conflict direction when conflict exists (scenario vs.) on adolescent depression; and (3) the effect of filial piety value levels when no conflict exists (scenario vs.) on adolescent depression.

Acculturative family distancing theory and person-environment fit theory provide theoretical frameworks for examining these research questions. Originating from research on cultural adaptation issues in immigrant families, acculturative family distancing theory posits that because parents and children in immigrant families adapt to the local culture to different degrees, their values easily conflict. Such parent-child value conflicts disrupt normal family functioning, create stress for children, and ultimately lead to depression (Hwang, 2006). For example, research has found that in Chinese families immigrating to the United States, greater differences between parents and children in American culture-oriented

values predict higher levels of adolescent depression (Kim et al., 2009). In fact, similar to value conflicts in immigrant families arising from different degrees of adaptation to a new social culture, even in non-immigrant families, parents and children raised in different social backgrounds may inevitably experience value conflicts as social culture changes and children's autonomy develops, thereby affecting children's mental health. As a value defining parent-child interaction patterns, filial piety provides a guiding framework for fulfilling normal family functions. Consequently, parent-child value conflicts in filial piety may be particularly destructive to family functioning and exert important influences on adolescent depression (Lee, 2013).

However, while these theories clarify that parent-child value conflict in filial piety represents an important precipitating factor for adolescent depression, they fail to specifically explain how different conflict scenarios affect depression. Person-environment fit theory can provide a theoretical framework for the relationship patterns between the degree and direction of parent-child value conflict in filial piety and adolescent depression, offering specific hypotheses for the three research questions. Person-environment fit theory indicates that the match between environmental demands and individual supplies relates to stress, which further induces psychosocial adaptation problems such as depression (Edwards et al., 1998). Filial piety represents norms and standards for how children should treat parents in terms of attitudes and behaviors. Parents' filial piety values reflect their internal demands regarding "how children should treat parents," while children's filial piety values determine their specific supplies regarding "how children should treat parents." Thus, whether parent-child value conflict exists in filial piety can be viewed as a match between individual supplies and environmental demands in understanding parent-child interaction patterns, thereby relating to adolescent depression.

First, according to person-environment fit theory, mismatch between an individual and environment on a particular characteristic can cause stress and consequent mental health problems, with higher degrees of mismatch producing more intense stress (Edwards et al., 1998). For example, research has found that greater differences between parents and children in familism values predict lower self-esteem in children (Toro & Nieri, 2018). Compared with conflict states, the absence of parent-child value conflict in filial piety indicates that children's supplies can meet parents' demands, thereby avoiding parent-child relationship crises and alleviating psychological stress (Yeh & Yang, 2009). Based on this, regarding the question of whether parent-child value conflict affects adolescent depression, this study hypothesizes:

The greater the degree of conflict in reciprocal filial piety between parents and children, the higher the level of adolescent depression (H1a).

The greater the degree of conflict in authoritarian filial piety between parents and children, the higher the level of adolescent depression (H1b).

Regarding mismatch states in supply-demand relationships, person-environment

fit theory further posits that when environmental demands exceed individual capabilities, individual capabilities necessarily cannot meet environmental demands, inevitably creating stress; when environmental demands fall below individual capabilities, individuals do not face stress from being unable to meet environmental demands with their supplies (Edwards et al., 1998). Therefore, compared with individual capabilities exceeding environmental demands, when individual capabilities cannot meet environmental demands, individuals exhibit higher probabilities of mental health problems. For example, research on Chinese immigrant family adolescents found that regarding obedience and respect for authority, when parents endorsed these values more strongly than children, adolescents exhibited higher depression levels than when children endorsed them more strongly than parents (Stein & Polo, 2014). Regarding “how children should treat parents,” parents are the demand-makers in the relationship, while children are the performers. Thus, parents’ filial piety values exceeding children’s values means children’s performance cannot meet parents’ demands, and the resulting stress is more likely to cause adolescent depression. Based on this, regarding the question of conflict direction when parent-child value conflict exists, this study hypothesizes:

When parents’ reciprocal filial piety level exceeds children’s, adolescents will exhibit higher depression levels compared with when parents’ level is lower than children’s (H2a).

When parents’ authoritarian filial piety level exceeds children’s, adolescents will exhibit higher depression levels compared with when parents’ level is lower than children’s (H2b).

Additionally, regarding matched supply-demand relationships, although person-environment fit theory does not explicitly propose hypotheses, it emphasizes that even when individuals and environments match on a particular characteristic, the characteristic’s attributes and levels may affect stress experienced by individuals (Edwards et al., 1998). Research on three-dimensional relationships among demands, supplies, and stress has found that when environmental demands are reasonable and positive, matching high demands with high capabilities produces less stress than matching low demands with low capabilities (Edwards, 1996; Livingstone et al., 1997). This may occur because meeting higher standards generates stronger feelings of accomplishment and pride compared with meeting lower standards. However, when environmental demands are unreasonable or developmentally hindering—for example, when companies demand absolute obedience or overtime work from employees—individuals’ meeting of environmental demands may actually produce stress. Research has found that for adolescents with high competitive orientations, although they achieve person-environment fit in school climates emphasizing competition, the excessive competition mutually endorsed by person and environment leads to adolescent depression (Liu et al., 2023). As previously noted, reciprocal filial piety emphasizes equal status and intimate emotions between parents and children, while authoritarian filial piety emphasizes parents’ absolute authority over children,

respectively exhibiting positive and negative effects on individual psychosocial adaptation. Based on this, regarding the question of filial piety value levels when no parent-child value conflict exists, this study hypothesizes:

When parents and children exhibit high consensus on reciprocal filial piety, adolescents will exhibit lower depression levels compared with when they exhibit low consensus (H3a).

When parents and children exhibit high consensus on authoritarian filial piety, adolescents will exhibit higher depression levels compared with when they exhibit low consensus (H3b).

1.3 Gender Differences

Based on social cognitive theory (Bandura, 2002), individuals tend to take same-sex parents as role models and objects of identification, with stronger motivation to learn from same-sex parents' behaviors. Gender role socialization theory also posits that parents typically feel greater responsibility for socializing same-sex children (Huston, 1983). Consequently, same-sex parents and children tend to interact and communicate more frequently (Crouter et al., 1995) and develop closer relationships (Laursen & Collins, 2009). Thus, a "same-sex effect" may exist in parent-child interaction processes, wherein mutual influence between same-sex parent-child dyads is stronger. For example, research has found that father-child relationship quality affects only male adolescents' psychological adaptation, with no effect on female adolescents (Bacikova-Sleskova et al., 2024; Branje et al., 2010). Other research has found that conflict with fathers' educational expectations has long-term effects on boys' depression, while conflict with mothers' educational expectations has long-term effects on girls' depression (Guo et al., 2021). By the same token, for filial piety values, whether conflict exists in this parent-child interaction guideline between same-sex parents and children may exert greater influence on children. Based on this, this study hypothesizes:

The relationship between father-son reciprocal filial piety conflict and sons' depression will be stronger than that between mother-son conflict and sons' depression (H4a).

The relationship between father-son authoritarian filial piety conflict and sons' depression will be stronger than that between mother-son conflict and sons' depression (H4b).

The relationship between mother-daughter reciprocal filial piety conflict and daughters' depression will be stronger than that between father-daughter conflict and daughters' depression (H5a).

The relationship between mother-daughter authoritarian filial piety conflict and daughters' depression will be stronger than that between father-daughter conflict and daughters' depression (H5b).

In summary, this study employs a parent-child dyadic longitudinal design to examine the relationship between parent-child value conflict in filial piety and adolescent depression, specifically investigating: (1) the effect of whether parent-child value conflict exists on adolescent depression, (2) the effect of conflict direction when conflict exists on adolescent depression, and (3) the effect of filial piety value levels when no conflict exists on adolescent depression, while further clarifying whether same-sex effects exist in these relationships.

2. Method

2.1 Participants

Participants came from the Child Academic and Psychological Development Study (CAPS), an ongoing longitudinal study focusing on family and school influences on children's academic and psychological development. One sub-cohort of this project began in 2016, tracking all fourth-grade students and their parents in 36 primary schools in a district/county in Hebei Province. After these students graduated from primary school in 2019, the study continued tracking all students who remained in the district/county for middle school. This study utilized questionnaire data from two time points: Time 1 (T1) in the fall semester of fifth grade (December 2017) and Time 2 (T2) in the fall semester of seventh grade (December 2019). At T1, 3,725 students and their fathers and mothers participated with valid data. Due to attrition from not attending middle school in the district/county or other reasons, 404 students and their parents were lost at T2 (attrition rate = 10.85%), leaving 3,321 students and 3,015 fathers and 3,163 mothers with valid data at T2. Attrition analysis revealed no significant differences between those lost at T2 and those retained on gender [$\chi^2(1) = 3.96, p = 0.051$], age [$t(3723) = 1.90, p = 0.058$], co-residence with father [$\chi^2(1) = 3.74, p = 0.054$], co-residence with mother [$\chi^2(1) = 0.09, p = 0.770$], or T1 father filial piety [$t_{\text{reciprocal}}(3723) = -0.35, p = 0.727$; $t_{\text{authoritarian}}(3723) = 0.05, p = 0.961$], mother filial piety [$t_{\text{reciprocal}}(3723) = -1.53, p = 0.126$; $t_{\text{authoritarian}}(3723) = -1.15, p = 0.252$], or child filial piety [$t_{\text{reciprocal}}(3723) = -0.11, p = 0.916$; $t_{\text{authoritarian}}(3723) = 0.44, p = 0.662$], indicating no systematic attrition. Therefore, this study used the 3,321 students and their parents who participated at T2 as valid participants, including 1,692 boys and 1,629 girls. Students' mean age at T1 was 10.87 years ($SD = 0.36$). At T1, 89.9% of students lived with both parents, 5.3% lived with one parent, and 4.7% lived with neither parent.

2.2 Procedure

The testing procedure was identical at T1 and T2. Student testing was administered in intact classrooms by trained psychology or education undergraduate or graduate students who served as proctors, with questionnaires completed in students' classrooms. Informed consent forms were obtained from parents before testing, and participants could withdraw at any time. Parent testing involved students taking parent questionnaire packets home, which contained

testing instructions, father questionnaires, and mother questionnaires. Fathers and mothers were asked to complete the questionnaires separately, and students returned the packets to proctors at school the following day.

2.3 Measures

2.3.1 Filial Piety Values At T1, the Dual Filial Piety Scale developed by Yeh and Bedford (2003) was used to measure fathers', mothers', and children's filial piety values. The scale includes two dimensions—reciprocal filial piety and authoritarian filial piety—each with eight items rated on a 6-point scale from “1 = not at all important” to “6 = extremely important.”

Based on the social context at data collection and preliminary interviews with students, this study revised the scale by deleting the authoritarian filial piety item “To continue the family line, children should have at least one son” and the reciprocal filial piety item “When parents pass away, children should personally attend the funeral regardless of distance.” The final version included seven items for each dimension. Dimension scores were computed as the mean of all items, with higher scores indicating stronger filial piety values. In this study, Cronbach's α coefficients for reciprocal and authoritarian filial piety were 0.89 and 0.80 in the father sample, 0.88 and 0.79 in the mother sample, and 0.89 and 0.76 in the child sample, respectively.

2.3.2 Child Depression At T2, the Chinese version of the Children's Depression Inventory (CDI) developed by Kovacs (1992) and compiled by Yu and Li (2000) was used to measure students' depression levels. The scale includes 27 items, each with three options describing varying degrees of depression, rated on a 0–2 scale. The sum of all items yields the child depression score, with higher scores indicating more severe depression. The scale has demonstrated good reliability and validity in Chinese samples (Liu et al., 2019). In this study, Cronbach's α for the child sample was 0.89.

2.3.3 Parent Depression At T2, the depression subscale of the Depression Anxiety Stress Scales (DASS) developed by Lovibond and Lovibond (1995) and compiled by Moussa et al. (2001) was used to measure fathers' and mothers' depression levels. The depression subscale includes seven items rated on a 4-point scale from “0 = does not apply to me at all” to “3 = applies to me very much.” The sum of all items multiplied by two yields the parent depression score, with higher scores indicating more severe depression. The scale has demonstrated good reliability and validity in Chinese samples (Gong et al., 2010; Lu et al., 2020). In this study, Cronbach's α coefficients for the depression subscale were 0.92 in the father sample and 0.91 in the mother sample.

2.4 Data Analysis

SPSS 22.0 was used for descriptive statistics and correlation analyses of all study variables. Mplus 7.1 was used to conduct polynomial regression and

response surface analyses (Edwards, 2002; Tang et al., 2011) to examine relationships between parent-child value conflict in filial piety and adolescent depression. Models were constructed separately for reciprocal and authoritarian filial piety and for boys and girls to test the effects of father-son/daughter reciprocal filial piety conflict, father-son/daughter authoritarian filial piety conflict, mother-son/daughter reciprocal filial piety conflict, and mother-son/daughter authoritarian filial piety conflict on adolescent depression. Robust maximum likelihood estimation (MLR) was used for model estimation, and full information maximum likelihood (FIML) was used to handle missing data.

Previous research on variable matching relationships often used difference scores, which can lead to unclear reliability and validity and confound congruence effects with variable relationships. Polynomial regression overcomes these limitations and can address questions that difference scores cannot, such as simultaneously considering linear and nonlinear relationships between predictors and outcomes and interactive effects of two predictors on outcomes. Response surface methodology transforms difficult-to-interpret polynomial regression coefficients into intuitive three-dimensional graphs, allowing observation of congruence effects across predictor levels and outcome value patterns under incongruence (Tang et al., 2011). Thus, scenarios without parent-child value conflict in filial piety can be represented by congruence effects, while scenarios with conflict can be represented by incongruence effects. This approach has been demonstrated to be more scientifically reliable in parent-child informant discrepancy research (Laird & De Los Reyes, 2013).

Specifically, for each parent-child filial piety conflict analysis, a polynomial regression equation was first established: X represents father or mother filial piety, Y represents child filial piety, and Z represents child depression. The intercept represents Z when X and Y both equal zero. The coefficients for the linear terms X and Y represent linear relationships between X and Y levels and Z. The coefficients for the quadratic terms represent nonlinear relationships between X and Y and Z. The coefficient for the interaction term $X \times Y$ represents the interactive effect of X and Y on Z. The error term represents random error. Considering mutual influences of depression among family members (Hale et al., 2020; Tichovolsky et al., 2018), father depression, mother depression, and child depression were simultaneously included as dependent variables in the equation to achieve mutual control, constructing multivariate regression equations with multiple dependent variables. To reduce multicollinearity in constructing product terms and facilitate interpretation, father, mother, and child filial piety values were centered using the scale midpoint ($= 3.5$, range = 1–6) as the reference point before entering the equation (Edwards, 2002).

Based on regression coefficients from the polynomial regression equation, three-dimensional response surfaces were constructed, and slopes and curvatures along the congruence line ($X = Y$) and incongruence line ($X = -Y$) were calculated. The slope of the response surface along the congruence line tests the relationship between filial piety value levels and depression when father/mother and

child filial piety values are not in conflict. If the slope is significantly negative, it indicates that higher congruence in reciprocal or authoritarian filial piety between parents and children predicts lower adolescent depression compared with low congruence (corresponding to H3a and H3b). The curvature further tests whether this relationship is nonlinear. The slope of the response surface along the incongruence line tests the relationship between conflict direction and depression—that is, whether depression differs when father/mother filial piety values are higher or lower than children’s values. If the slope is significantly positive, it indicates that higher parent reciprocal or authoritarian filial piety values compared with children’s values predict higher adolescent depression than when parent values are lower (corresponding to H2a and H2b). The curvature tests the relationship between conflict degree and depression—that is, how depression changes as the degree of conflict between father/mother and child filial piety values increases. If curvature is significantly positive, it indicates that greater conflict in reciprocal or authoritarian filial piety between parents and children predicts higher adolescent depression (corresponding to H1a and H1b).

3. Results

3.1 Descriptive Statistics and Correlation Analysis

Means, standard deviations, and correlation matrices for all study variables in boys and girls are presented in Table 1. In both boys and girls, fathers’ and mothers’ reciprocal filial piety showed significant positive correlations with children’s reciprocal filial piety, and fathers’ and mothers’ authoritarian filial piety showed significant positive correlations with children’s authoritarian filial piety. Fathers’ and mothers’ depression showed significant positive correlations with children’s depression. Children’s depression showed significant negative correlations with their own reciprocal filial piety.

Table 1 Correlation Matrix of Parents’ and Children’s Filial Piety Values and Depression

Variable	M (SD)	1	2	3	4	5	6	7	8	9
1. Father reciprocal filial piety T1	4.78 (0.84)	—	0.35***	0.46***	0.11***	0.13***	0.06*	0.08**	0.11***	0.21***
2. Father authoritarian filial piety T1	3.33 (0.94)	0.27***	—	0.13***	0.47***	0.17***	0.13***	0.18***	0.14***	0.13***
3. Mother reciprocal filial piety T1	4.83 (0.78)	0.52***	0.20***	—	0.14***	0.31***	0.13***	0.08**	0.13***	0.16***

Variable	M (SD)	1	2	3	4	5	6	7	8	9
4. Mother authoritarian filial piety T1	3.27 (0.88)	0.14**	0.55**	0.29***		0.23**	0.14**	0.13**	0.13**	0.13**
5. Child reciprocal filial piety T1	5.32 (0.86)	0.16**	0.05*	0.37**	0.05*	—	0.06*	—	—	—
6. Child authoritarian filial piety T1	4.37 (0.94)	—	0.14***	0.13***	0.43***		0.05*	0.06*	0.13***	
7. Father depression T2	6.38 (9.38)	—	0.18***	0.14***	0.13***	0.07**		0.53***	0.58***	
8. Mother depression T2	6.09 (9.67)	—	0.14***	0.13***	0.58***	0.53***			0.14***	
9. Child depression T2	14.28 (9.05)	—	0.13***	0.13***	0.13***	0.58**	0.14***			

Note: $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Correlations below the diagonal are for boys; correlations above the diagonal are for girls. T1 = fifth grade, T2 = seventh grade.*

3.2 Polynomial Regression and Response Surface Analysis Results

3.2.1 Father/Mother-Son Reciprocal Filial Piety Conflict and Sons' Depression Table 2 presents polynomial regression and response surface analysis results for relationships between father/mother-child reciprocal filial piety conflict and adolescent depression. When predicting sons' depression, the congruence line slopes for father-son and mother-son reciprocal filial piety were both non-significant, indicating that when father-son or mother-son reciprocal filial piety values were not in conflict, value levels were unrelated to sons' depression, failing to support H3a. Additionally, the incongruence line slope for father-son reciprocal filial piety was significant and positive with a small effect size ($a_3 = 1.84$, $p = 0.039$, Cohen's $d = 0.10$), while the incongruence line slope for mother-son reciprocal filial piety was non-significant. This indicates that when fathers' reciprocal filial piety levels exceeded sons' levels, sons exhibited higher depression levels compared with when fathers' levels were lower (see line $X = -Y$ in Figure 2 [Figure 2: see original paper]), supporting H2a and H4a. Meanwhile, the incongruence line curvatures for father-son and mother-son re-

reciprocal filial piety were both non-significant, indicating that conflict degree did not affect sons' depression, failing to support H1a.

3.2.2 Father/Mother-Daughter Reciprocal Filial Piety Conflict and Daughters' Depression As shown in Table 2, when predicting daughters' depression, the congruence line slopes for father-daughter and mother-daughter reciprocal filial piety were both non-significant, indicating that when father-daughter or mother-daughter reciprocal filial piety values were not in conflict, value levels were unrelated to daughters' depression, failing to support H3a. Additionally, the incongruence line slope for father-daughter reciprocal filial piety was significant and positive with a small effect size ($a_3 = 2.95$, $p = 0.007$, Cohen's $d = 0.13$), and the incongruence line slope for mother-daughter reciprocal filial piety was also significant and positive with a small effect size ($a_3 = 2.74$, $p = 0.033$, Cohen's $d = 0.11$). This indicates that when fathers' or mothers' reciprocal filial piety levels exceeded daughters' levels, daughters exhibited higher depression levels compared with when parents' levels were lower (see line $X = -Y$ in Figures 3 [Figure 3: see original paper] and 4 [Figure 4: see original paper]), supporting H2a but not H5a. Meanwhile, the incongruence line curvature for father-daughter reciprocal filial piety was non-significant, but the incongruence line curvature for mother-daughter reciprocal filial piety was significant and positive with a small effect size ($a_4 = 1.59$, $p = 0.012$, Cohen's $d = 0.13$), indicating that greater conflict in reciprocal filial piety between mothers and daughters predicted higher daughters' depression (see line $X = -Y$ in Figure 4 [Figure 4: see original paper]), supporting H1a and H5a.

3.2.3 Father/Mother-Son Authoritarian Filial Piety Conflict and Sons' Depression Table 3 presents polynomial regression and response surface analysis results for relationships between father/mother-child authoritarian filial piety conflict and adolescent depression. When predicting sons' depression, the congruence line slopes for father-son and mother-son authoritarian filial piety were both non-significant, indicating that when father-son or mother-son authoritarian filial piety values were not in conflict, value levels were unrelated to sons' depression, failing to support H3b. Additionally, the incongruence line slopes for father-son and mother-son authoritarian filial piety were both non-significant, failing to support H2b. Meanwhile, the incongruence line curvature for father-son authoritarian filial piety was significant and positive with a small effect size ($a_4 = 0.80$, $p = 0.024$, Cohen's $d = 0.11$), while the incongruence line curvature for mother-son authoritarian filial piety was non-significant, indicating that greater conflict in authoritarian filial piety between fathers and sons predicted higher sons' depression (see line $X = -Y$ in Figure 5 [Figure 5: see original paper]), supporting H1b and H4b.

3.2.4 Father/Mother-Daughter Authoritarian Filial Piety Conflict and Daughters' Depression As shown in Table 3, when predicting daughters' depression, the congruence line slopes for father-daughter and

mother-daughter authoritarian filial piety were both non-significant, indicating that when father-daughter or mother-daughter authoritarian filial piety values were not in conflict, value levels were unrelated to daughters' depression, failing to support H3b. Additionally, the incongruence line slope for father-daughter authoritarian filial piety was significant and positive with a small effect size ($a_3 = 2.09$, $p = 0.001$, Cohen's $d = 0.16$), and the incongruence line slope for mother-daughter authoritarian filial piety was also significant and positive with a small effect size ($a_3 = 1.98$, $p = 0.007$, Cohen's $d = 0.14$). This indicates that when fathers' or mothers' authoritarian filial piety levels exceeded daughters' levels, daughters exhibited higher depression levels compared with when parents' levels were lower (see line $X = -Y$ in Figures 6 [Figure 6: see original paper] and 7 [Figure 7: see original paper]), supporting H2b but not H5b. Meanwhile, the incongruence line curvature for father-daughter authoritarian filial piety was significant and positive with a small effect size ($a_4 = 1.46$, $p < 0.001$, Cohen's $d = 0.17$), and the incongruence line curvature for mother-daughter authoritarian filial piety was also significant and positive with a small effect size ($a_4 = 1.52$, $p = 0.004$, Cohen's $d = 0.14$), indicating that greater conflict in authoritarian filial piety between fathers and daughters or mothers and daughters predicted higher daughters' depression (see line $X = -Y$ in Figures 6 and 7), supporting H1b but not H5b.

Table 2 Polynomial Regression and Response Surface Analysis Results for Parent-Child Reciprocal Filial Piety Conflict and Depression

Reciprocal Filial Piety	Polynomial Regression		Response Surface Analysis	
	Parent (b_1)		Child (b_2)	
Father-Son	-1.54*		-1.53*	
Mother-Son	-2.12*		-1.89*	
Father-Daughter	-1.54*		-1.53*	
Mother-Daughter	-2.12*		-1.89*	

Table 3 Polynomial Regression and Response Surface Analysis Results for Parent-Child Authoritarian Filial Piety Conflict and Depression

Authoritarian Filial Piety	Polynomial Regression		Response Surface Analysis	
	Parent (b_1)		Child (b_2)	
Father-Son	-1.52**		-1.48**	
Mother-Son	-1.52**		-1.48**	
Father-Daughter	-1.52**		-1.48**	
Mother-Daughter	-1.52**		-1.48**	

Figure 2 Response Surface Plot of Father-Son Reciprocal Filial Piety and Sons' Depression

Figure 3 Response Surface Plot of Father-Daughter Reciprocal Filial Piety and Daughters' Depression

Figure 4 Response Surface Plot of Mother-Daughter Reciprocal Filial Piety and Daughters' Depression

Figure 5 Response Surface Plot of Father-Son Authoritarian Filial Piety and Sons' Depression

Figure 6 Response Surface Plot of Father-Daughter Authoritarian Filial Piety and Daughters' Depression

Figure 7 Response Surface Plot of Mother-Daughter Authoritarian Filial Piety and Daughters' Depression

4. Discussion

This study adopted a parent-child value matching perspective to propose a theoretical framework for the relationship between parent-child value conflict in filial piety and adolescent depression based on acculturative family distancing theory and person-environment fit theory. Using a parent-child dyadic longitudinal design, we examined differences and similarities in the roles of reciprocal and authoritarian filial piety and whether same-sex effects existed across different parent-child gender combinations. Polynomial regression and response surface analysis revealed that when parent-child reciprocal or authoritarian filial piety values were not in conflict, value levels did not affect adolescent depression. When parent-child value conflict existed, father-son reciprocal filial piety, father-daughter reciprocal and authoritarian filial piety, and mother-daughter reciprocal and authoritarian filial piety all showed that when parents' filial piety levels exceeded children's levels, adolescents exhibited higher depression compared with when parents' levels were lower. Additionally, father-son, father-daughter, and mother-daughter dyads all showed that greater conflict in authoritarian filial piety predicted higher adolescent depression, while mother-daughter dyads also showed that greater conflict in reciprocal filial piety predicted higher daughters' depression.

4.1 Parent-Child Value Conflict in Filial Piety and Adolescent Depression

Previous research on filial piety and children's mental health typically examined individual perspectives, revealing the positive effects of children's reciprocal filial piety on their own mental health and the potential negative effects of authoritarian filial piety (Bedford & Yeh, 2019; Fu et al., 2016). Some research from the parental perspective has also found adverse effects of parents' filial piety values on children's mental health (Lu et al., 2006). The present study extends this work by examining parent-child value conflict, revealing that what truly affects children's mental health may not be parents' or children's filial piety values per se but rather whether parent-child value conflict exists—particularly

whether parents' endorsement of reciprocal or authoritarian filial piety exceeds children's corresponding endorsement. This finding aligns with acculturative family distancing theory and person-environment fit theory.

Although societal endorsement of reciprocal filial piety has gradually increased while authoritarian filial piety has declined across generations, both forms of filial piety retain adaptive functions in contemporary families (Yuan et al., 2022). For example, in three-generation households or families with multiple children where family relationships are complex, obedience to authority represents a rapid and effective method for resolving inter-member conflicts, making authoritarian filial piety highly endorsed and transmitted in such families (Guo et al., 2021; Li, 2020). Consequently, when parent-child value conflict in filial piety is absent, the level of filial piety values jointly held by parents and children—whether reciprocal or authoritarian—has no significant effect on adolescent depression. This partly explains findings from some studies that failed to detect adverse effects of authoritarian filial piety on mental health (Leung & Shek, 2020; Wu & Chen, 2021). Conversely, when parent-child value conflict exists, greater conflict degree predicts higher adolescent depression. This result aligns with acculturative family distancing theory, which posits that parent-child value conflicts cause psychological problems in children. Moreover, because parents' filial piety values represent demands for children's filial behavior while children's filial piety values represent their understanding of filial obligations, when children's supplies cannot meet parents' demands, pressure and demands from parents necessarily affect satisfaction of children's competence needs (Lu et al., 2006). Thus, both reciprocal and authoritarian filial piety show that when parents' endorsement exceeds children's, adolescents exhibit more severe depression. Additionally, compared with reciprocal filial piety, authoritarian filial piety particularly demonstrates the importance of reaching consensus—that is, lower conflict in authoritarian filial piety better protects adolescent mental health. This may be because in both directions of authoritarian filial piety conflict, not only does children's inability to meet parents' authoritarian demands cause depression, but when children's endorsement exceeds parents', overemphasis on absolute obedience to parental will, self-suppression, and making extreme sacrifices for parents—the so-called “foolish filial piety”—creates unnecessary pressure and burden that also leads to depression. This aligns with person-environment fit theory's proposition that exceeding capabilities can create additional burden and depletion, generating stress. For example, research has found that among children with parental caregiving responsibilities, excessive filial obligation creates heavier burden and consequent depression (Khalaila & Litwin, 2011). In contrast, children's reciprocal filial piety exceeding parents' represents children's spontaneous emotional care and concern beyond what is required, which can further enhance parents' positive feelings and strengthen parent-child bonds, thus not negatively affecting children. Research has found that children's emotional support beyond parental expectations helps improve elderly parents' loneliness (Li et al., 2022), thereby enhancing parent-child relationships and children's mental health.

4.2 Same-Sex Effects

Examining differences across parent-child gender combinations revealed that sons' depression related only to conflicts with fathers in reciprocal and authoritarian filial piety, whereas daughters' depression related to conflicts with both fathers and mothers in reciprocal and authoritarian filial piety. This indicates that same-sex effects were found only in father-son dyads. This may be because during socialization, girls are typically taught to accept, obey, and attend to others' feelings (Trautner & Eckes, 2000), making them highly concerned with whether they meet both fathers' and mothers' filial expectations. Thus, both father-daughter and mother-daughter conflicts in filial piety create psychological pressure that triggers depression in girls. Boys, in contrast, primarily take fathers as models and norms, making them more concerned with meeting fathers' filial expectations, such that father-son conflicts create psychological pressure triggering depression in boys. For example, research has found that sons' life satisfaction is affected only by fathers' mental health, while daughters' life satisfaction is affected by both fathers' and mothers' mental health (Li & Wang, 2022). Another possible explanation is that fathers play a dominant role in children's acquisition of filial piety values, making daughters, like sons, attentive to fathers' demands and norms. Compared with mothers' warmth and protection, fathers more strongly encourage children's exploration of the external world and thus exert stronger influence on children's social development (Lamb & Lewis, 2010; Paquette, 2004). Particularly in moral development, research has found that father absence is closely related to children's moral development level and criminal behavior (Yang & Dong, 2005).

Additionally, for reciprocal filial piety, only mother-daughter dyads showed protective effects of lower conflict on adolescent depression. Research on gender differences in filial piety values indicates that females endorse reciprocal filial piety emphasizing intimate emotions more strongly than males (Chen & Qing, 2019). Therefore, conflict between mothers and daughters in this value—even when daughters' endorsement exceeds mothers'—creates additional pressure that triggers depression.

4.3 Theoretical Implications, Limitations, and Future Directions

The theoretical implications of this study are twofold. First, although some research has examined parents' or children's filial piety values from individual perspectives, this study adopted a parent-child value matching perspective to propose a theoretical framework for the relationship between parent-child value conflict in filial piety and adolescent depression based on acculturative family distancing theory and person-environment fit theory. On one hand, findings confirm the hypothesized relationship between parent-child value conflict in filial piety and adolescent depression, particularly the detrimental effect of parents' filial piety values exceeding children's. On the other hand, no relationship was found between filial piety value levels and adolescent depression when parent-child value conflict was absent. This demonstrates that what truly affects ado-

lescent depression is value conflict between adolescents and parents regarding filial piety, not the type and level of filial piety itself. These results complement previous research focusing only on adolescents' filial piety values and depression (Pan & Tang, 2021; Yeh, 2006). Second, this study identified same-sex effects in males, wherein sons' depression related only to conflicts with fathers' filial piety values, while daughters' depression related to conflicts with both fathers' and mothers' values. Gender composition represents an inherent attribute embedded in parent-child relationships, and filial piety as a definition of parent-child interaction patterns necessarily implies gender role similarities and differences. However, research on relationships between filial piety values and individual psychology and behavior often neglects parent-child gender roles, which may account for inconsistent findings in existing research. This study's preliminary exploration and possible explanations represent both a test of same-sex effects and provide insights and methodological implications for future research.

This study has several limitations. First, based on the dual filial piety model, this study measured and compared parents' and children's filial piety values. Although the dual filial piety model can intuitively distinguish two filial piety dimensions with different natures and functions, it cannot comprehensively reflect more detailed internal components of filial piety. For example, Ge's (2021) recent research indicates that filial piety structurally includes nine important factors such as respecting parents' well-being and obeying parents. Future research could further decompose filial piety values to more accurately reflect how parent-child value conflict in filial piety affects children's mental health. Second, although this study employed multi-time-point measurement to assess parent-child filial piety values and adolescent depression sequentially, the results cannot support causal inferences. Particularly considering that adolescent depression may change over the two-year interval and may be affected by immediate family environments, future research could simultaneously measure parent-child filial piety values and adolescent depression at multiple time points to more comprehensively examine immediate and sustained effects of parent-child value conflict on adolescent depression. Third, this study did not examine underlying mechanisms through which parent-child value conflict in filial piety affects adolescent depression. For example, parent-child value conflict may affect specific parent-child interaction patterns and relationships, thereby influencing satisfaction of children's psychological needs and consequently affecting depression (Ryan & Deci, 2017). Future research could explore and test such mechanisms. Finally, this study did not consider boundary conditions when examining relationships between parent-child value conflict in filial piety and adolescent depression. For example, research has found that family structure and children's age affect intergenerational differences in filial piety (Guo et al., 2021; Li, 2020). These factors may also moderate the relationships found in this study and could be examined in future research.

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