Effects of Parental Favoritism in Childhood on Depression among Middle-Aged and Older Adults: Evidence from China

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Abstract. Based on the life course theory, we quantitatively analyze the effects of parental favoritism in childhood on the depression of middle-aged and older adults. Using the 2014 and 2018 data from the China Health and Retirement Longitudinal Survey (CHARLS), we found that the damaging effects of parental favoritism in childhood on depression among middle-aged and elderly adults were statistically significant (P<0.05). Moreover, there is gender heterogeneity in this effect. The respondents' middle-aged and late-life depression is statistically related to same-sex caregiver favoritism only. Respondents' self-reported parental favoritism is not just a feeling but is significantly related to allocating resources such as family education and nutrition in the early years. Policymakers should take early action to guide multi-child families with fair parenting and scientific education, prevent middle-aged and elderly depression, and improve this group's whole life health based on the life course perspective.

Keywords: parental favoritism in childhood; depression; middle-aged and older adults; life course theory; CHARLS

1 Introduction

At present, depression has become a significant global public health issue in society. Back in the early 21st century, the WHO Global Burden of Disease report noted that half of the top 10 leading causes of disabling conditions were related to the mental dimension [1]. With the changing demographics and disease spectrum, the risk and burden of mental illness have only increased in recent years. It is estimated that one-quarter of the global population is experiencing mental health problems which leads to staggering economic losses. In developing countries, the loss of disability-adjusted life years (DALYs) due to depression is over 55 million [2]. While the call for "mental health" is gaining momentum, the investment and attention given to mental health in various countries are still disproportionate to the burden of mental health conditions. In

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2019, China National Mental Health Development Report (2017-2018), China's first mental health blue book, was released. According to the report, 11%-15% of people may have mild to moderate mental problems. Mental health problems of middle-aged and older adults are also worrying. A large sample study pointed out that the incidence of depression in middle-aged and older people in China has been higher than in Western countries [3]. The health status of middle-aged and older adults is not only a matter of their well-being but also affects the healthcare expenditure of the whole society.

With the gradual acceptance of the life course research perspective, more and more scholars have found that poor health outcomes in middle-aged and older individuals are likely to stem from their early life [4-6]. Among them, the early-life family environment, the closest microsystem to the individual, has a significant influence and determinant role on individual health. For example, if individuals experience poverty, abuse, family conflicts, or differential parental treatment in their childhood, it can cause health inequalities in the long term for them [7]-[9]. Furthermore, as the two-child policy opens and the three-child policy is continuously reinforced, changes in family structure also lead to a potential problem - how can multiple-child parenting be equitable? Parental favoritism, i.e., differential parental treatment, is a common phenomenon in multi-child families. For this topic, a series of studies found that parental favoritism has significant effects on individuals' later psychological development of self-esteem [10-11], risky behaviors [12], sibling relationships [13], depression [9,14-15], and even associated with higher suicide rates [16]. Moreover, some scholars have found that the recall of parental favoritism in childhood is more critical and predictive of depression in adulthood than parental favoritism in adulthood [9].

Furthermore, studies consistently show that parental favoritism harms both favored and unfavored children [17]. Therefore, studying the effects of parental favoritism in childhood is essential for the scientific growth and whole-life health promotion of children in multi-child families. However, to our knowledge, there has been little evidence of parental favoritism in China. Previous studies tend to focus only on its effects on adolescents. Few articles examine the long-term effects of parental favoritism through extensive sample data. Therefore, this study attempts to analyze the effects of childhood parental favoritism on depression among middle-aged and older adults. We aim to provide empirical evidence for scientific parenting in multi-child families, reducing individual early-life family shocks, and preventing health problems in middle and old age.

2 Data and Methods

2.1 Data sources

This paper uses the China Health and Retirement Longitudinal Survey (CHARLS) for research, a high-quality, large-sample micro-data for families and individuals of middle-aged and older adults aged 45 and above in China, covering various individual characteristics, including mental health. The national baseline survey was started in 2011, followed by follow-up visits in 2013, 2015, and 2018. Its samples have now covered

150 county-level units in 28 provinces (autonomous regions and municipalities) and about 21,000 people in 12,000 households.

More importantly, the CHARLS project team also conducted a particular "Life History Survey of Chinese Residents" in 2014, which provided a valuable research opportunity for this paper. The survey collected a large amount of retrospective data on respondents' early life conditions, including information on their parents and siblings, health history, and childhood environment.

This study uses the primary data source for the depression status, demographic information, socioeconomic, and other variables from the 2018 National Tracking Survey data. We matched it with the 2014 life history data to obtain information on respondents' parental favoritism, health status, and family economic status in childhood. Then we finally screened the samples without missing key variables to get 9961 valid samples.

2.2 Measurement

(1) Depression measurement. The core explanatory variable of this study is the respondents' mental health status. The mental health assessment in this article relies on the total score of the Epidemiological Survey Depression Scale (CES-D) in the CHARLS survey data in 2018 (value range 0-30). CES-D is one of the main scales used to measure depressive symptoms internationally. A series of studies have shown that it is highly predictive for the clinical diagnosis of depression and anxiety disorders [18-19]. The higher the CES-D score, the worse the mental health status; a score of 10 and above (out of 30 points) is a high risk of depression [20]. Therefore, this paper uses both the CES-D score and CESD score of 10 and above as mental health indicators to better estimate the risk of depression in the population. Referring to Andresen's measurement standard, this paper defines a CES-D score ≥10 as depression. In the Logit model, depression is set as 1 and 0 if otherwise.

(2) Parental favoritism in childhood. Questions in the CHARLS data that measure parental favoritism during childhood include: "Did your female guardian treat your siblings better than you when you were growing up?" "Did your female guardian prefer boys to girls?" "Did your male guardian treat your siblings better than you when you were growing up?" "Did your male guardian prefer boys to girls?" The answer options are divided into four items: "Very much" "Somewhat" "A little" and "Not at all". Combine "Very much" and "Somewhat" into "severe", "A little" and "not at all" are combined into "not severe". Preference for boys or other siblings is essentially the differential treatment of different children by parents. A study has shown that caregivers of different genders have different impacts on their children [21]. Therefore, this paper combines the two questions of preference for boys and siblings to construct a variable of childhood male/female caregiver favoritism by gender (gender of the caregiver). In the two questions, either answer If it is "severe", the value is 1, which means that the male/female caregivers favor respondents' siblings in childhood severely, and 0, which means the bias is not severe. In addition, the demographic variables of respondents, parents' educational status, and family economics in childhood are used as control variables.

2.3 Statistical methods

The stata16.0 software was applied to perform descriptive statistics and regression analysis of the data. Moreover, we used the $\chi 2$ test for a one-way analysis of depression status in middle-aged and older adults. Then we included variables with statistically significant univariate analysis results in the binary logistic regression and OLS models. Under the premise of controlling for confounding factors such as demographic variables, childhood health, and childhood family economy, we measured the effects of childhood male/female parental favoritism on depression in middle-aged and elderly. $P<0.05$ was considered statistically significant.

Table 1. The basic situation and depression of middle-aged and elderly people

	Number of people (%)	CESD-score	Normal (CESD-score<10)	Depressed (CESD-score>=10)	χ^2	P-value
Gender					207.232	<0.001
Female	5102(51.2%)	9.574	2879(56.4%)	2223(43.6%)		
Male	4859(48.8%)	7.329	3418(70.3%)	1441(29.7%)		
Age					18.590	<0.001
45-54	2616(26.3%)	7.875	1745(66.7%)	871(33.3%)		
55-64	3597(36.1%)	8.657	2226(61.9%)	1371(38.1%)		
>=65	3748(37.6%)	8.730	2326(62.1%)	1422(37.9%)		
Hukou					124.419	<0.001
Agricultural	8104(81.4%)	8.904	4914(60.6%)	3190(39.4%)		
Non-agricultural	1857(18.6%)	6.624	1383(74.5%)	474(25.5%)		
Marital status					75.842	<0.001
No spouse	1210(12.1%)	10.488	628(51.9%)	582(48.1%)		
With spouse	8751(87.9%)	8.201	5669(64.8%)	3082(35.2%)		
Education level					295.484	<0.001
Below elementary school	3934(39.5%)	10.038	2133(54.2%)	1801(45.8%)		
Elementary School	2343(23.5%)	8.246	1493(63.7%)	850(36.3%)		
Middle School	2374(23.8%)	7.440	1656(69.8%)	718(30.2%)		
High School and above	1310(13.2%)	6.097	1015(77.5%)	295(22.5%)		
Household income per capita (logged)					219.992	<0.001
Poor	3267(32.8%)	9.723	1805(55.2%)	1462(44.8%)		

Fair	3340(33.5%)	8.746	2057(61.6%)	1283(38.4%)		
Good	3354(33.7%)	7.001	2435(72.6%)	919(27.4%)		
Health status in childhood					76.528	<0.001
Good	7338(73.7%)	8.117	4816(65.6%)	2522(34.4%)		
Fair	2096(21.0%)	9.267	1209(57.7%)	887(42.3%)		
Poor	527(5.3%)	10.383	272(51.6%)	255(48.4%)		
Family economic status in childhood					115.446	<0.001
Good	992(10.0%)	7.458	703(70.9%)	289(29.1%)		
Fair	5214(52.3%)	7.937	3463(66.4%)	1751(33.6%)		
Poor	3755(37.7%)	9.501	2131(56.8%)	1624(43.2%)		
Mother's education status					25.143	<0.001
Uneducated	8503(85.4%)	8.668	5290(62.2%)	3213(37.8%)		
Educated	1458(14.6%)	7.378	1007(69.1%)	451(30.9%)		
Father's education status					42.990	<0.001
Uneducated	5415(54.4%)	8.972	3266(60.3%)	2149(39.7%)		
Educated	4546(45.6%)	7.891	3031(66.7%)	1515(33.3%)		
Number of siblings					4.527	0.210
0	187(1.9%)	8.460	117(62.6%)	70(37.4%)		
1-2	1850(18.6%)	8.281	1205(65.1%)	645(34.9%)		
3-5	6018(60.4%)	8.411	3796(63.1%)	2222(36.9%)		
>=6	1906(19.1%)	8.888	1179(61.9%)	727(38.1%)		
Childhood paternal favoritism					16.579	<0.001
Not severe	8538(85.7%)	8.370	5466(64.0%)	3072(36.0%)		
Severe	1423(14.3%)	9.132	831(58.4%)	592(41.6%)		
Childhood maternal favoritism					12.420	<0.001
Not severe	8397(84.3%)	8.381	5370(64.0%)	3027(36.0%)		
Severe	1564(15.7%)	9.006	927(59.3%)	637(40.7%)		

Note: The tables in this article are all drawn by ourselves using CHARLS data filtered by key variables.

3 Results

3.1 Basic information about the study subjects

Among the survey subjects, 4859 (48.8%) are males, and 5102 (51.2%) are females. The age range is from 45 to 95 years old, age (61.66±9.01), of which 2616 people (26.3%) are 45-54 years old; 3597 people (36.1%) are 55-64 years old; 3748 people (37.6%) are 65 years old and above. There are 8104 people in agricultural households, accounting for 81.4%, and 1857 in non-agricultural households, accounting for 18.6%. As for the education level: below the elementary school, 3934 people, accounting for 39.5%; elementary school, 2343 people, accounting for 23.5%; junior high school, 2374 people, accounting for 23.8%; high school and above, 1310 people, accounting for 13.2%. There are 8751 spouses, accounting for 87.9%, and no spouse (including unmarried, divorced, widowed, or separated) 1210 people, accounting for 12.1%.

3.2 Cardinality test of depression among middle-aged and older adults

Among the 9961 middle-aged and older adults included in the study, 3664 middle-aged and older adults have depression scores greater than or equal to 10, with a depression prevalence of 36.78%. The univariate analysis shows that the depression status of middle-aged and older adults differed by characteristics. There are statistically significant differences in depression status between groups for childhood parental favoritism, family conditions and health in early life, and demographic variables (all $P<0.05$). There is no statistically significant difference in depressive status between subgroups of the number of siblings ($P>0.05$). The prevalence of depression in middle-aged and older adults with childhood paternal and maternal favoritism is 41.6% and 40.7%, respectively.

3.3 Relationship between parental favoritism in childhood and depression among middle-aged and older adults and gender differences

3.3.1 Childhood parental favoritism and depression among middle-aged and older adults.

In this paper, we use the OLS model in regression analysis with CES-D score as the dependent variable and the parental differential treatment in childhood as an observational factor. Applying the linear regression model to the CESD scores meant that the scores were considered continuous, standard, and not influenced by extreme values. In contrast, Lei et al. found that the depression scores in the CHARLS data met these requirements [22]. Moreover, we used sociodemographic characteristics from the 2018 follow-up data and childhood health and family economic data from the 2014 life history data as controls to avoid confounding effects. The results showed that respondents with severe differential treatment of male or female dependents in childhood had higher midlife depression scores and worse mental health. The effect of severe differential

treatment of male dependents in childhood on midlife depression was slightly higher than that of female dependents.

The results of the analysis were consistent using logit regression models with "CES-D score >= 10 (high risk of depression)" as the dependent variable. After controlling for confounding factors, the effects of male-dependent and female-dependent favoritism on depression in middle and old age were statistically significant (P<0.05). The risk of depression in mid-age was 1.181 times higher in respondents with severe male-dependent differential treatment than in controls and 1.166 times higher in respondents with severe female-dependent differential treatment than in controls. In general, the more severe the differential treatment of early life dependents, the worse the mental status of the individual in middle and later life and the higher the risk of depression.

Table 2. The relationship between parental favoritism in childhood and depression in middle and late life

Variables	OLS model			Logistic model			
	β-value	p-value	95%CI	OR	β-value	p-value	95%CI
Childhood paternal favoritism							
Not severe				1.000			
Severe	0.484[b]	0.041	0.019~0.949	1.181[b]	0.167[b]	0.038	1.009~1.382
Childhood maternal favoritism							
Not severe				1.000			
Severe	0.454[b]	0.048	0.004~0.903	1.166[b]	0.154[b]	0.048	1.001~1.358
Gender							
Female				1.000			
Male	-1.753[a]	<0.001	-2.009~-1.497	0.597[a]	-0.515[a]	<0.001	0.546~0.654
Age							
45-54				1.000	0.000	.	
55-64	0.663[a]	<0.001	0.353~0.973	1.223[a]	0.201[a]	<0.001	1.094~1.368
>=65	0.116	0.496	-0.218~0.449	1.025	0.024	0.688	0.91~1.153
Hukou							
Agricultural				1.000			
Non-agricultural	-0.748[a]	<0.001	-1.092~-0.403	0.796[a]	-0.228[a]	0.001	0.698~0.909
Marital status							
No spouse				1.000			
With spouse	-1.650[a]	<0.001	-2.071~-1.229	0.671[a]	-0.400[a]	<0.001	0.589~0.764
Education level							
Below elementary school				1.000	0.000	.	
Elementary School	-0.886[a]	<0.001	-1.221~-0.551	0.858[a]	-0.153[a]	0.007	0.768~0.959
Middle School	-1.276[a]	<0.001	-1.62~-0.933	0.728[a]	-0.318[a]	<0.001	0.645~0.821
High School and above	-1.996[a]	<0.001	-2.425~-1.566	0.580[a]	-0.545[a]	<0.001	0.49~0.685
Household income per capita (logged)							

Poor				1.000	0.000	.	
Fair	-0.681[a]	<0.001	-0.994~-0.369	0.820[a]	-0.198[a]	<0.001	0.741~0.908
Good	-1.768[a]	<0.001	-2.092~-1.444	0.580[a]	-0.544[a]	<0.001	0.518~0.65
Mother's education status							
Uneducated				1.000			
Educated	0.012	0.948	-0.342~0.365	1.052	0.050	0.469	0.918~1.204
Father's education status							
Uneducated				1.000			
Educated	-0.251[c]	0.061	-0.513~0.011	0.932	-0.071	0.132	0.85~1.021
Health status in childhood							
Good				1.000	0.000	.	
Fair	0.881[a]	<0.001	0.587~1.174	1.333[a]	0.288[a]	<0.001	1.203~1.478
Poor	1.633[a]	<0.001	1.052~2.215	1.565[a]	0.448[a]	<0.001	1.301~1.883
Family economic status in childhood							
Good				1.000	0.000	.	
Fair	-0.002	0.993	-0.404~0.401	1.092	0.088	0.269	0.934~1.277
Poor	1.238[a]	<0.001	0.808~1.669	1.550[a]	0.438[a]	<0.001	1.319~1.821

Note: All the tables below use the same set of control variables as in Table 2; [a] P<0.01; [b] P<0.05; [c] P<0.1.

3.3.2 Gender differences in the influence of childhood parental favoritism on depression among middle-aged and older adults.

Some scholars have pointed out that differential parental treatment may affect girls and boys differently [23-24]. However, the current results on gender differences in parental favoritism and depression in middle and later life are inconsistent. For example, some scholars found that parental favoritism was harmful to boys' mental health (compared to girls) [25]. At the same time, Shanahan et al. reported that girls who perceived severe parental favoritism had a higher tendency to depression, while boys' depression was not significant [24]. Therefore, this paper explored the influence of childhood parental favoritism on depression in middle and later life and further analyzed the gender difference of this effect. The results showed that the high level of same-sex caregiver (i.e., caregiver of the same gender as the respondent) favoritism in childhood had a significantly negative impact on the respondents' mental health in their middle and later years. In contrast, the long-term effect of heterosexual caregiver favoritism on depression was not statistically significant. Men were most affected by early-life paternal favoritism.

Table 3. Gender differences in the influence of parental favoritism in childhood on depression in middle and late life

Depressed	Male Sample				Female Sample			
	OR	β-value	p-value	95%CI	OR	β-value	p-value	95%CI
Childhood paternal favoritism	1.403[a]	0.339[a]	0.007	1.095~1.799	1.047	0.046	0.657	0.854~1.283
Childhood maternal favoritism	1.070	0.068	0.584	0.840~1.362	1.239[b]	0.215[b]	0.033	1.017~1.51
Controls	YES	YES	YES	YES	YES	YES	YES	YES

Note: [a] P<0.01; [b] P<0.05; [c] P<0.1.

3.4 Mechanism Analysis

3.4.1 Family resource allocation.

Table 4. Parental favoritism and family resource allocation during childhood

	Interruption/termination of studies due to family reasons			Nutritional status in childhood (knee height)	
	OR	β-value	p-value	β-value	p-value
Childhood paternal favoritism	1.166[c](0.979~1.39)	0.154[c] (-0.022~0.329)	0.086	-0.054 (-0.260~0.151)	0.605
Childhood maternal favoritism	1.074(0.905~1.275)	0.071(-0.100~0.243)	0.415	-0.189[c] (-0.396~0.018)	0.073
Controls	YES	YES	YES	YES	YES

Note: [a] P<0.01; [b] P<0.05; [c] P<0.1.

The existing literature on parental favoritism focuses on two main areas: differences in siblings' parenting experiences and participants' perceptions and evaluations of these differences. Tables 2 and 3 show the relationship between respondents' perceptions of parental favoritism in childhood and depression. Is this perception of parental favoritism empty or real? How does it contribute to their long-term mental health? This paper explores the mechanisms of parental favoritism in human capital investment during childhood as a mechanism for siblings' parenting differences. When respondents interrupted or terminated their education due to family reasons (e.g., family was not able to pay the tuition, family needed more labor, family members needed to be taken care of , family members did not want them to continue school) but had one or more siblings who received a higher level of education, it is reasonable to assume that their parents have a preference for other children in the allocation of educational resources. Therefore, we set the variable "differential treatment in education investment" as "1" for those who had interrupted/terminated their education for family reasons and "0" if otherwise. We regressed this variable on respondents' perceived parental favoritism. The results showed that childhood paternal favoritism was significantly and positively correlated with differential treatment of educational resource investment. The ratio of respondents

who reported severe paternal favoritism in early life interrupted or terminated their education for family reasons was 1.166. The positive correlation between maternal favoritism in early life and unequal educational resource investment was insignificant. Such differential treatment in educational resource allocation may be a reasonable trade-off made by the whole family according to children's talents. However, it does not mean equity, but may exacerbate social comparisons between siblings and further damage the self-esteem and development of the unbiased child.

The nutritional status of children also reflected differences in household resource allocation. Childhood nutritional status is not only a key factor affecting the socioeconomic resources of individuals in later life but also an important indicator of family nutritional investment. Referring to existing literature, we used knee height as a proxy for the nutritional status of our study subjects during childhood. It is a more sensitive indicator of early childhood growth and development markers, and differences in knee height appear to be determined primarily during the first two years of life. We found that perceived maternal favoritism was significantly and negatively associated with knee height, while paternal favoritism's regression results were insignificant. Overall, the differential impact of male and female caregivers on the distribution of family resources may be due to the fact that male caregivers have more control over family educational resources. In comparison, female caregivers have more control over family nutritional resources.

3.4.2 Sibling relationship.

Table 5. Parental favoritism and sibling relationships during childhood

	Poor sibling relationships in childhood		
	OR	**β-value**	**p-value**
Childhood paternal favoritism	1.503[a] (1.126~2.006)	0.407[a] (0.118~0.696)	0.006
Childhood maternal favoritism	1.637[a] (1.234~2.170)	0.493[a] (0.21~0.775)	0.001
Controls	YES	YES	YES

Note: [a] P<0.01; [b] P<0.05; [c] P<0.1.

It has also been shown that the relationship between childhood parental favoritism to depression can be explained by sibling relationships [13, 24, 26]. In this paper, due to the lack of data on adult sibling relationships, we defined sibling relationships by the frequency of childhood sibling fights. For the variable "poor sibling relationships", when the frequency was often or sometimes, we set it to a value of 1 and 0 if the frequency was rarely or never. Results showed that parental favoritism had a significant relationship with sibling conflict. Respondents who reported that their parents favored their siblings had more frequent sibling conflicts and poorer relationships in their early years. Sibling relationships, one of the earliest and most enduring intimate relationships for most people, tend to be warmer and more conflicted than parent-child and peer relationships and are strongly related to individual well-being across the lifespan [27]. Attachment theory suggests that siblings can provide emotional support and reduce feelings of loneliness in adulthood and later live [28].

Furthermore, loneliness - a common emotion in middle-aged and older populations - is strongly associated with numerous mental illnesses and physical health problems [29]. It has been corroborated that sibling strain significantly impacts depression [28,30]. Moreover, according to family systems theory, there is a spillover effect between the parent-child and sibling subsystem [31]. Parental favoritism is associated with the quality of sibling relationships from childhood to adulthood [32]. Parental favoritism may reduce emotional support and intimate communication between siblings, which exacerbates siblings' rivalry and conflict and thus increase the risk of depression.

On the other hand, individuals evaluate themselves through social comparisons [33]. Childhood, as a critical period for self-perception development, often leads to social comparisons with others. Siblings are most likely to be used as a criterion for social comparison due to shared characteristics and closeness [34]. It has been documented that children begin to pay attention to their own and siblings' relationships with parents at an early age [35] and that the quality of siblings' relationships with their parents significantly influences their assessment of their relationships with their parents. Parental favoritism impacts individual development through differences in family investment and triggers unfavorable social comparisons between siblings. Nevertheless, unfavorable comparisons often lead to negative self-evaluations, for instance, low self-esteem, high depressive symptoms, and negative interpersonal relationships, with long-term adverse effects [33].

4 Conclusions

Previous studies have mainly found adverse effects of parental favoritism on adolescence and early adulthood, but mostly in a Western context. Based on a whole-life perspective, this study focused on our middle-aged and older adult population to observe the relationship between childhood parental favoritism and depressive symptoms later in life. After controlling for confounding factors, we found that childhood paternal favoritism statistically affected depression in middle and old age. Moreover, through mechanistic analysis, we found that respondents' perceived favoritism was not just a feeling, there was a real difference in the allocation of family resources. Specifically, paternal favoritism has a significant relationship with educational resource allocation, and maternal favoritism was significantly associated with nutritional resource allocation.

Notably, unlike previous literature that focused more on maternal favoritism and ignored the role of fathers, this paper considered the effects of both paternal and maternal favoritism and found that both were detrimental to the mental health of the respondents in their middle and late life. This result fits well with family systems theory and Chinese culture. From the perspective of family systems theory, both mothers and fathers contribute to the family environment [31]. In Chinese culture, fathers, as the dominant family members, tend to have more power than mothers [36], and their favoritism may influence mothers' behavior to some extent [37].

In addition, this study explored gender differences in the effects of severe early-life parental favoritism and depression, finding that respondents were more likely to

experience depressive symptoms due to same-gender provider favoritism in childhood. In contrast, the relationship between heterosexual provider favoritism and depressive status in respondents' middle and later life was not statistically significant. Gender and social learning theories provide a more robust explanation for this result. The classic literature on gender role development suggests that society encourages girls and women to focus on interpersonal relationships within the family, while boys and men are encouraged to pursue career achievements outside the home [38-39]. Parents also guide and push their children to conform to gender role expectations during parenting and spend more time with same-sex offspring. Social learning theory also proposes that parents are more responsible for the socialization of same-sex children, and offspring may be more inclined to seek out their same-sex parents and be more susceptible to the influence of same-sex nurturers.

In summary, this study demonstrates the relationship between parental favoritism and long-term mental health in extensive sample data. Some limitations of the study remain. The information on parental favoritism in this study was obtained from self-reports of middle-aged and older adults, which may lead to recall bias. For example, some scholars found that middle-aged and older adults are more inclined to downplay conflict and emphasize harmony in relationships [40], which may make them underreport or not report childhood parental favoritism. However, for the results of this paper, this may only result in an underestimate, i.e., the adverse effects of childhood parental favoritism on the depression of middle-aged and older adults may be more serious. According to the United Nations, in 2035, the proportion of elderly people in China will exceed 20%, and China will officially become a "deeply aged society", and the elderly population will reach 358 million in 2050, accounting for 26.3% of the total population. In contrast, the first children born in response to the multi-child policy enter the middle and older age groups in the middle and later part of this century. Timely prevention of adverse childhood experiences can help improve the health of this group in middle and old age, which further contributes to a healthier aging society. Therefore, this study attempts to alarm the long-term harms of parental eccentricity in families with multiple children based on a life course perspective. It suggests that policymakers need to take early action to improve the scientific parenting advocacy that accompanies a multi-child policy to prevent depression in middle and old age. This study aims to guide the scientific and fair parenting of multi-child families and improve the group's health throughout life.

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