Scientific Research Publishing

Open Journal of Social Sciences, 2019, 7, 15-35
http://www.scirp.org/journal/jss
ISSN Online: 2327-5960
ISSN Print: 2327-5952

Analysis of Chinese Family Education Investment and Its Demographic Variables

Xuguang Sun, Ailing Huang

Education College, Fujian Normal University, Fuzhou, China
Email: 752191721@qq.com, 576745282@qq.com

How to cite this paper: Sun, X.G. and Huang, A.L. (2019) Analysis of Chinese Family Education Investment and Its Demographic Variables. *Open Journal of Social Sciences*, **7**, 15-35.
https://doi.org/10.4236/jss.2019.76002

Received: May 8, 2019
Accepted: May 31, 2019
Published: June 3, 2019

Abstract

In order to study the situation of Chinese family's investment in children's education, and what factors will affect parents' educational investment, this study used 338 undergraduate and graduate students to conduct a survey of demographic variables using the self-compiled Family Education Input Scale. The results showed that parents of undergraduate and postgraduate students mainly focus on two types of investment in academic education and investment in internal literacy. However, in terms of household education investment, different families have large differences in demographic variables. Among them, the income of family education is higher than that of girls; the family of non-agricultural households is higher than the family of agricultural households; the family of single-child families is higher than the family of non-only children; the parents of this special education are investing in their children's education. The upper level is higher than that of the parents below the high school; the higher the family level, the higher the educational investment of the children. In view of the situation of different families in education investment, families should pay attention to family education investment, taking into account work and family education. Local governments should encourage their children to attend school on an equal footing and eliminate the gender "crowding out effect" of education from the source. The state should speed up family education legislation, regulate the family education investment behavior from the system, and clarify the content of family education. We will work together to create a good and positive environment for family education.

Keywords

Family Education Investment, Demographic Variables, Differences, Family Education Legislation

1. Introduction

During the National Conference this year, the "Proposal on Further Promoting the Development of Family Education" received much attention. Minister of Education Chen Baosheng also said that strengthening family education has promoted the study of family education legislation. Foreign family education legislation also provides some legislative practice references. For example, *the United Nations Convention on the Rights of the Child* states in the preamble that "the family should receive the necessary protection and assistance as a natural environment for the growth and well-being of all members of the family, especially children" [1]. As early as 1991, the United States issued the 2000 *Target: American Education Goals*, the goal of family education is to include: "By the year 2000, all schools will promote their partnership with parents to enable parents to participate more actively, encourage children to increase their social knowledge, cultural knowledge and emotional activities" [2]. Although the laws on family education have not yet been introduced, some provinces have introduced relevant regulations on family education. For example, the "Regulations on the Promotion of Family Education in Jiangsu Province (Draft)" stipulates that "nourishing child-rearing" is refused, and both parents may not refuse to divorce or other reasons, fulfilling the obligation of family education for minor children. The Jiangxi Province Family Education Promotion Regulations stipulates that parents should accept family education guidance and participate in family education activities such as parent committees. Through laws and regulations, the core content of family education is clarified, and the sustainable and healthy development of family education is promoted from the institutional level. However, there are many problems in the current investment in family education, such as "heavily material and light intellectual education", "cultivating infertility", patriarchal education, and even indifference in education. These problems reflect the unreasonable parenting style of parents, and have a negative impact on children's behavior and personality.

Zhao Ning, Zhang Yan and Wang Hua noted that the investment in family education refers to the investment of each family in education. The general investment in family education is part of the total investment of the family. It includes not only material input, opportunity cost, but also investment in time and energy. It is the cost of all kinds of education that the family spends on the family before the economy is independent [3]. This paper defines family education investment as a series of inputs for parents to develop their children's learning and internal quality. Specifically, the focus on academic investment refers to the various expenses and support of parents in their educational stages. The second is to pay attention to the input of personality which refers to the parents to invest in the good internal quality of their children.

Regarding the issue of family education investment, many domestic and foreign researchers have conducted some exploration and analysis in recent years. The research mainly focuses on the following aspects: First, from the perspective

of educational input behavior, the current situation and future of educational input behavior are analyzed and prediction. For example, Zhao Ning, Zhang Yan and Wang Hua took Fuxin City, Liaoning Province as the survey object. Through questionnaire survey and data compilation, it was found that money investment, time investment and study abroad are the most common educational development activities [4]; Iatagan Mariana believed that individuals who invest in education believe that education can not only benefit his family, but also benefit others. In addition, when an individual enters the labor market, the result of investing in a person's education can ultimately be tested [5]; Yang Xuan analyzed the main problems of China's family education investment, and found that the investment burden is too heavy, moral education investment Insufficient and lack of family education self-investment is the main concern at present [6]; Zhao Yu and Gao Gongjin interviewed nine poor families in Jinan, which is a province of China, through interviews and found that: on one hand, the parents of impoverished families, with a higher expectation for their children's education, are willing to invest in their children's education, to improve their children's education and comprehensive qualities; On the other hand, however, they pay more attention to the money that they invest, and the time, emotion and manpower invested by them are relatively scarce [7]. Second, from the perspective of influencing factors, the factors affecting family education investment are summarized. For example, Li Jie analyzed the influencing factors of rural family education investment in ethnic areas, and found that family education investment is related to many factors such as urban-rural dual structure, family income level, social culture, parental education level and number of children [8]; according to Zhou Hongli's research, the level and quality of family education input are affected by many factors such as family income, parental education, and number of children. It is an important part of the whole social education investment, while family, society and individual are three basics dimensions [9]; using rural households as an analysis unit, Du Tang, Ren Lili and Liu Shouyi used questionnaires and interviews to explore the impact of the number of rural children on direct input and emotional input in rural family education. As a result, families with a small number of children have more educational inputs, and families with more children have relatively less educational input. At the same time, rural households with fewer children have other more enthusiastic investment methods, such as: sending the child to the remedial class to study and visiting the teacher [10]. The third is to explore the influencing factors and mechanism of family education investment from the perspective of family education investment. For example, Jin Xuan, Liu Min and Wang Yang collected data through scale survey, constructed a binary logistic model to conduct quantitative analysis, and discussed factors affecting domestic human capital investment in education, and concluded relevant conclusions affecting human capital investment in family education [11]. Pan Yunhua and Xue Rui used CFPS2014 data to establish a multi-layer linear model, and explored the factors affecting family education investment and its mechanism of action from the family level and district and

county level [12]; Ekaterina Anikina *et al.* studied the relationship between investment in education and human development through the idea of human capital theory. A quantitative analysis of the correlation between education and unemployment shows that investment in education can bring non-monetary income, which is beneficial to human development [13]. Lunn and Kornrich (2018) analyzed the state of household education investment during the Great Depression in the United States through least squares regression (OLS). The study found that as the country's unemployment rate climbs and consumer confidence declines, the education expenditure of high-income families is relatively Increased spending on low-income families; given the importance of education enrichment for children's learning outcomes, increased inequality in household education investment during the Great Depression could lead to future education and social inequalities [14]; Meng Qikai analyzed the investment status of rural Chinese families from the perspective of cost and self-income, and found that: rural families make the choice of interests and behavior decisions through the calculation of their own benefits and costs, and gradually become the main body of rural education investment decisions [15]. The relationship between educational cost and income plays a major role in the rural family education investment. Summarizing the results of previous studies, we can find some limitations on the study of family education investment: First, there are more theoretical studies on family education investment, and less systematic empirical research; second, research and discussion on family education investment structure It is rare, not sufficient and in-depth; thirdly, due to the lack of data support in theoretical research, the concept of family education investment and the influencing factors of diversity and expansion have emerged; and with the continuous deepening of China's economic system reform As well as the continuous advancement of family education legislation, there has been a profound change in the investment in family education, but the structure of family education investment has not been conclusive.

In summary, how to scientifically explain the structure of family education investment behavior is one of the important topics in human capital investment, especially how to prepare a scientific test scale based on the existing research results on family education investment, and Applying to the actual measurement of family education investment behavior is one of the important tasks in the study of family education investment behavior. At the same time, the family education input behavior scale, which is strictly in accordance with the requirements of surveying, is also the first research on family education investment. This study hopes to establish a reasonable structure by exploring the past and present of family education investment behavior, and based on this, prepare a family education input behavior scale. Furthermore, based on the family education input behavior scale, the overall situation of family education input behavior and demographic characteristics variables are analyzed, and the variables affecting family education input behavior are obtained, and countermeasures for improving the status of family education investment are proposed.

2. Method

2.1. Development of Measurement Tools

2.1.1. Development of the Scale

In order to establish the structure of the family education investment scale, firstly, a semi-structured interview was conducted with 10 students in the first and second year of undergraduate degree in Fujian Normal University, 3rd and 4th grade undergraduate, and 10 students in the graduate school to understand the parents' investment in their children's education. What aspects are involved in the behavior, and at the same time, through interviews with students, to understand the status of family education investment. Based on the analysis of the existing research results, through the in-depth theoretical analysis, the two-dimensional structure of the family education input scale is summarized, namely: paying attention to learning and paying attention to personality. Paying attention to learning refers to the various expenses and supportive inputs of parents in the education stage of their children; paying attention to personality is the investment that parents spend on the internal quality of their children.

Part of the project was compiled based on the results of semi-structured interviews with students and parents of students and existing theories and concepts. At the same time, it draws on some of the topics of the open-ended questionnaires on the input of family education, and organizes the self-made items and reference items to form an initial scale. The initial scale consists of the above two dimensions and contains 18 items. The project is presented in a statement, using the Likert 5-level scale, without a reverse score.

In order to test the structure of the initial scale and the quality of the project, a small-scale prediction was first made. 150 students from Fujian Normal University were selected for group testing, and there were no missing values. A total of 150 valid samples were obtained. Among them, 75 boys and 75 girls; undergraduate students in the first and second grades, 50 undergraduate students in the third and fourth grades, and 50 graduate students, each accounting for 1/3 of the total sample.

2.1.2. Pretest

Before the project analysis, some interviews were conducted in some subjects, and submitted to two measurement experts and three psychology students for evaluation. The items with ambiguous, highly similar or polysemy were deleted. And revision; then project analysis and preliminary factor analysis (*i.e.* internal consistency reliability analysis) of the prediction results. Referring to Wu Minglong's project analysis standard, the total score of the scale is sorted from high to low, and the first 27% and the last 27% of the data are selected as high and low groups, and an independent sample T test is performed to analyze each. The degree of discrimination of the project significantly indicates that the project has a good degree of discrimination. According to the standard of the T test, the absolute value comparison results in a decision value greater than 3. After analysis, delete item 10. Further analysis of the total correlation of the questions, the total

correlation of the questions should be greater than 0.4 to show that the distinction is good, therefore, delete the items 1.4. Then, a preliminary factor analysis is performed to delete the items 3, 12 with a total correlation less than 0.4 after the correction. Finally, the homogeneity test is carried out, the factor load is greater than 0.45, the commonality is greater than 0.20, and the inconsistent items 13, 14, 15 are deleted [16]. Finally, 8 items were deleted, and 10 items were retained to form a family education input scale. The specific results are shown in Table 1.

2.2. Research Design and Participants

The subjects were extracted by the method of overall stratified random sampling. A total of 366 undergraduate students and first-and third-grade graduate students from Fujian Normal University and East China Normal University were selected. 366 questionnaires were collected and processed by missing values. A total of 338 valid samples were obtained, and the effective questionnaire rate was 92.3%. Among them, there are 156 male students and 182 female students,

Table 1. Summary of the Family Education Input Scale project analysis.

Item	Extreme group comparison	Total correlation		Homogeneity test			Remarks
	Decision value	The item related to the total score	Corrected item and total relevance	The alpha value after the item is deleted	Commonality	Factor load	
T1	3.307*	#0.359**	#0.246	0.808	#0.061	#0.246	delete
T2	6.267*	0.494**	0.457	0.828	0.311	0.558	retain
T3	5.113*	0.460**	#0.322	0.804	#0.118	#0.344	delete
T4	3.075*	#0.376**	#0.238	0.809	#0.052	#0.229	delete
T5	6.138*	0.493**	0.500	0.823	0.383	0.618	retain
T6	5.307*	0.494**	0.526	0.820	0.408	0.639	retain
T7	3.526*	0.423**	0.560	0.817	0.481	0.694	retain
T8	4.628*	0.403**	0.569	0.819	0.485	0.696	retain
T9	5.827*	0.490**	0.548	0.818	0.462	0.679	retain
T10	#2.734*	#0.312**	#0.174	0.814	#0.041	#0.202	delete
T11	7.667*	0.629**	0.600	0.813	0.475	0.689	retain
T12	6.716*	0.464**	#0.364	0.801	#0.143	#0.378	delete
T13	8.846*	0.551**	0.459	0.794	#0.174	#0.417	delete
T14	6.375*	0.503**	0.414	0.798	#0.114	#0.338	delete
T15	5.812*	0.493**	0.411	0.798	#0.135	#0.367	delete
T16	5.297*	0.521**	0.401	0.834	0.241	0.491	retain
T17	8.680*	0.639**	0.564	0.817	0.421	0.649	retain
T18	9.814*	0.651**	0.586	0.814	0.456	0.675	retain
Standard of judgment	≥3	≥0.4	≥0.4	≤0.835	≥0.2	≥0.45	

Note. *$p < 0.05$; **$p < 0.01$; #Unreachable indicator.

accounting for 46.15% and 53.85% of the total number respectively; 152 urban samples and 186 rural samples, accounting for 44.97% and 55.03% of the total number respectively; undergraduate one or two grades, undergraduate three four The grades and graduate students are 63, 66 and 209 respectively, accounting for 18.64%, 19.53% and 61.83% of the total number.

2.3. Data Collection Tools

In this study, "the initial questionnaire on the input behavior of family education" was developed by the author. After the previous project analysis, the preliminary questionnaire for family education input consists of 10 items, as shown in Table 2.

In order to prevent the reaction of the participants, the scale items were arranged in different dimensions and used a unified instruction for group measurement. The 338 effective scales obtained were divided into two halves for analysis. Among them, 160 data were used for exploratory factor analysis to construct a theoretical model of household education input behavior; another 178 data were used for confirmatory factor analysis to determine the formal amount. The structure of the table. Exploratory factor analysis, confirmatory factor analysis, and other data analysis were performed using SPSS 23.0 and AMOS 21.0 software.

2.4. Data Analysis

2.4.1. Preparation of Formal Questionnaires

First, an exploratory factor analysis was performed on 160 data. Based on the

Table 2. Preliminary questionnaire on family education investment.

Factor	Item	Factor load
Pay attention to academic investment	For your study, parents purchased a school district or rent a room near the school.	0.690
	For your future, parents will not hesitate to find a relationship or spend money to let you read a good school.	0.608
	In order to take care of you, one of the parents resigned from work.	0.824
	For your study, one parent gave up the opportunity to continue his studies.	0.827
	For your study, parents support you in purchasing a variety of learning materials (including books, electronics, courses, etc.)	0.768
Pay attention to the input of personality	Parents focus on developing your hobbies.	0.520
	Parents have the habit of communicating with you.	0.710
	When you go home on vacation or call your parents, your parents will know your current situation.	0.770
	Parents have the habit of taking you to visit cultural attractions, such as science museums, museums, memorials.	0.791
	Parents have to accompany you to learn new things and share the habit of communicating with you.	0.784

results of the project analysis, an exploratory factor analysis was performed on the remaining 10 projects. The results showed that the KMO value of the family education input behavior was 0.824, and the Bartlett spherical test had a chi-square value of 482.222 (df = 45, p = 0.000), indicating that the data is suitable for factor analysis. The specific indicators are shown in Table 3. According to the gravel diagram, after the third factor, the slope line becomes gentle, so it is appropriate to extract two factors, as shown in Figure 1.

Zhang Yali and Lu Guizhi believe that the principal component analysis method and the Kaiser oblique rotation method should meet the following criteria: the eigenvalue of 1 factor is greater than 1; the commonality of each item is greater than 0.2 (factor load is greater than 0.45); One factor covers at least three items; the four-actor load is unique; the five factors are easier to name [17]. According to the above five criteria, after several analyses, no items were deleted. Finally, a two-dimensional final scale with 10 items was formed. The cumulative interpretation rate was 56.123%, which explained 41.214% and 14.908% of the total variation, respectively, and the internal consistency of the total table and the two dimensions (Cronbach's α coefficient) is 0.840, 0.780, 0.799, indicating that the scale has good internal consistency, the specific results are shown in Table 4.

Based on the results of the exploratory factor analysis, combined with the concept and theoretical conception of family education input, the two factors are named as follows: and as two dimensions of the family education input scale:

Dimension 1: Pay attention to academic investment. In this dimension, parents' education investment in their children is mainly reflected in the various expenses for the children to receive good education and the opportunities for parents to give up, which reflects the parents' support for their children's studies.

Dimension 2: Pay attention to the input of personality. In this dimension, parents' education investment in their children is reflected in parents' care for their children and the cultivation of cultural qualities. These all indicate the parents' investment in internal education.

Then, a confirmatory factor analysis was performed on the remaining 178 data. Using AMOS21.0 to perform confirmatory factor analysis on the scale structure,

Table 3. KMO and Bartlett test.

KMO sampling suitability		0.824
Bartlett sphericity test	Approximate chi square	482.222
	Degree of freedom	45
	Significant	0.000

Table 4. Total table of family education input scale and internal coherence coefficient of each factor.

Total amount	Pay attention to academic investment	Pay attention to the input of personality
0.840	0.780	0.799

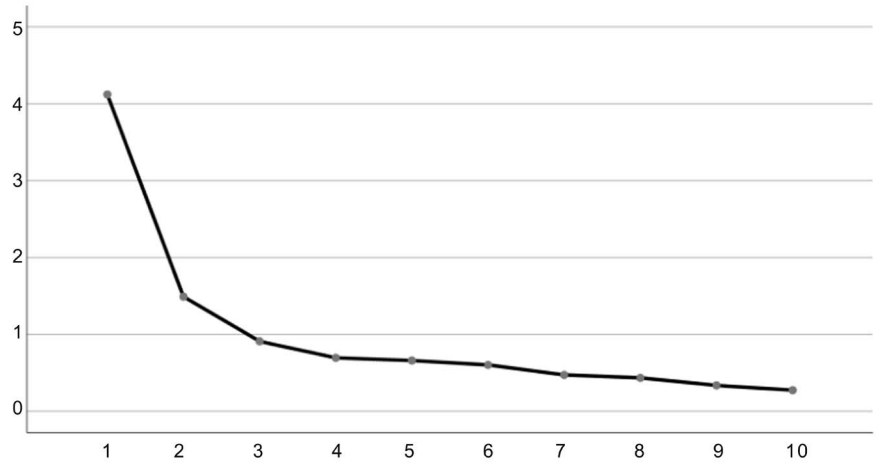

Figure 1. Family education input gravel map.

there are many different opinions on the evaluation of model fit, but the arguments of scholars Bogorzzi and Yi (1988) are more comprehensive. They think that if the hypothetical model is consistent with the actual data, the following three aspects must be considered: basic fit Indicators, overall model fit degree indicators, model internal structure fit degree indicators [18]. Specifically, it can be judged by the following criteria: chi-square degrees of freedom (x^2/df) Between 1 - 3 means that the model fits well, and the mean squared and square root (RMSEA) of the progressive residual is generally between 0.05 and 0.08, indicating that the model is good and has a reasonable fit. The general standard of good fit index (GFI) is greater than 0.90. It indicates that the model path map has a good fit with the actual data. The closer the standard fit index (NFI) and the comparative fit index (CFI) are to 1, the more the model fits. By establishing the path model map and model correction, the main fitting indices of the estimated model are $x^2 = 89.918$, df = 34, $x^2/\mathrm{df} = 2.645$, NFI = 0.920, GFI = 0.950, CFI = 0.948, RMSEA = 0.070, the specific indicators are shown in **Table 5**. It can be seen from the above indicators that the adaptation of the family education input scale is good, indicating that the scale has good structural validity.

Kline believed that the judgment of convergence validity should be consistent with the following characteristics: each observation index has a relatively high normalized factor load, the direction is consistent, and the correlation between factors is not too high [19]. The former illustrates the effectiveness of convergence, the latter It shows the discriminability of convergence. It can be seen from **Figure 2** that the normalized path coefficient of each observation index is between 0.50 and 0.83, with a medium to high degree of path coefficient; the correlation between the two factors is 0.58, which is moderately correlated, indicating that the model has good convergence efficiency. Wu Minglong pointed out that the average variance extraction of each dimension is larger than the square of the correlation coefficient of each dimension, indicating that the discriminant validity of the scale is good [20]. As can be seen from **Table 6**, the average variance extractions of the two dimensions are greater than the square of the correlation

Table 5. Overall fitness test results of the family education input scale structure.

Model	x^2	df	x^2/df	NFI	GFI	CFI	RMSEA
M_1	89.918	34	2.645	0.920	0.950	0.948	0.070

Table 6. Family education input differential validity.

	Pay attention to academic investment	Pay attention to the input of personality
Focus on learning	0.446 (AVE)	0.34
Focus on personality	0.58**	0.455 (AVE)

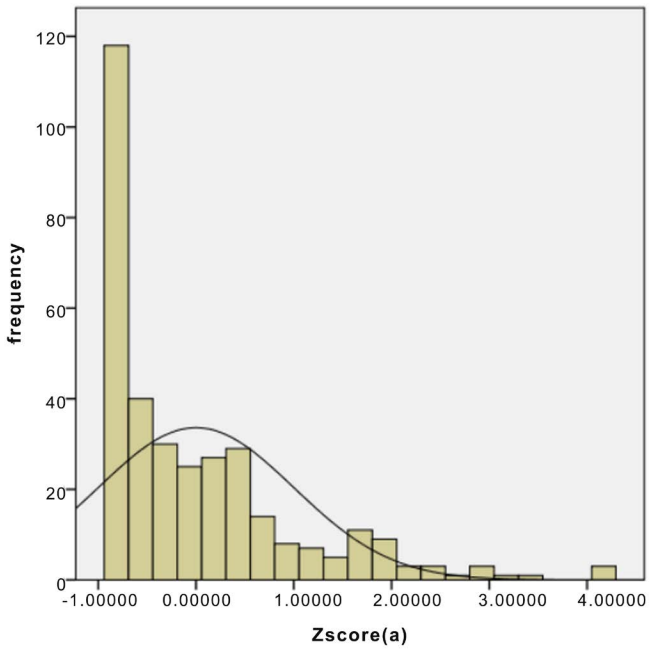

Figure 2. Pay attention to the normal distribution of the academic input dimension.

coefficients of the two dimensions. The indicators of the Family Education Input Scale all meet the standards, indicating that the scale has good polymerization validity and discriminant validity.

2.4.2. Analysis of Demographic Variables

After determining the structure of the family education input scale, it is further explored whether there are significant differences in the input of family education among the subjects with different demographic characteristics. Analysis of the differences in household education input of different demographic characteristics helps to make an in-depth analysis of household education investment to improve the status of family education investment. Therefore, the hypothesis of this study is that there are significant differences in educational input between families with different demographic characteristics.

This study uses gender, household registration type, family basics (whether it is the only one, the hometown area and the family-owned city level), and the parental education level as a demographic characteristic variable to further study

the family education investment behavior. The sample consisted of data obtained from formal measurements, and 338 valid samples. The demographic characteristics of the subjects are shown in Table 7.

3. Results

3.1. Overall Performance of Family Education Investment Behavior

It can be seen from Table 8 that, through descriptive statistical analysis, the average score of the overall input of family education is 1.94, and the average scores of the two dimensions are 8.27 and 11.1. The overall level of family education investment is low. In both dimensions, the input dimension of paying attention to academics is lower than the input dimension of paying attention to personality.

3.2. Analysis of Demographic Variables in Family Education Investment Behavior

Although the current domestic education investment is low in terms of the overall performance of family education investment, the analysis of demographic variables can give us a clearer understanding of which variables have an impact on family education investment. Independent sample T test and one-way ANOVA were performed on 338 valid data using SPSS 23.0. When the F value is significant, it indicates that there is a significant difference between the groups at least one pair, and the difference is post-tested to find out which difference exists between the two groups. The specific analysis is as follows:

Table 7. List of basic situation distribution of the participants (N = 338).

Demographic characteristic variable		Number of people	frequency
Gender	boy	156	46.15%
	girl	182	53.85%
Household registration type	Non-agricultural household	152	44.97%
	Agricultural household	186	55.03%
Number of children	Only child	134	39.64%
	Non-only child	204	60.36%
Grade	Undergraduate first and second year	63	18.64%
	Undergraduate third and fourth grade	66	19.53%
	Postgraduate	209	61.83%
Parental education	Master's degree or above	7	2.07%
	Undergraduate degree	93	27.52%
	High school and below	238	70.41%
City level	Capital city or municipality	53	15.68%
	Prefecture-level city	86	25.44%
	Cities below county level	199	58.88%
Living area	East area	200	59.17%
	Central Region	99	29.29%
	Western Region	39	11.54%

Table 8. Overall performance of household education input behavior.

	Pay attention to academic investment	Pay attention to the input of personality	overall investment
Average	8.27	11.10	1.94
Standard deviation	4.01	4.59	0.75

3.2.1. A Test of the Difference in Gender in the Input Behavior of Family Education

After examining the differences in the input of family education on the gender of the students surveyed, it is found that there is no significant difference in the input dimension of gender in the personality survey; there is a significant difference in the investment dimension and family education investment. The investment in family education for boys is significantly higher than that for girls in terms of overall investment and attention to academic input. The specific results are shown in Table 9.

3.2.2. Whether the Difference between the Only Child and the Family Education Investment Behavior

A significant difference test was made on whether the students surveyed were only children, and found that the students with only children were significantly higher than the students with non-only children in the input dimension of overall investment and personality. Only in the input dimension of academics, there is no significant difference between students with only children and students with non-only children. The specific results are shown in Table 10.

3.2.3. Difference Test of Household Registration Type in Family Education Investment Behavior

After a significant difference test on the type of household registration of the students surveyed, it was found that the students with non-agricultural hukou were significantly higher than those of the agricultural hukou in terms of the overall investment and the input dimension of the personality. However, there is no significant difference in the input dimension of academics. The specific results are shown in Table 11.

3.2.4. Difference Test of Hometown Area in Family Education Investment Behavior

After conducting a difference test on students in different regions of the hometown, it was found that the family education investment was not significantly affected by the regional input in terms of overall investment and attention to academic input and attention to personality. The specific results are shown in Table 12.

3.2.5. Difference Test of Education Investment Behavior in Families

After a difference test on the educational investment of students in different cities of the family, it is found that the overall investment in family education and the input of academic attention and the input of personality are different due to

Table 9. Differences in the input behavior of family education in student gender.

	Student gender	Average	Standard deviation	T test	Sig
Pay attention to the input of personality	Male	11.21	4.61	0.411	0.681
	Female	11.01	4.58		
Pay attention to academic investment	Male	9.04	4.66	3.251*	0.001
	Female	7.60	3.23		
Overall investment	Male	20.26	8.39	1.99*	0.048
	Female	18.61	6.52		

Table 10. Differences in family education investment behaviors of whether they are only children.

	Whether it is only	Average	Standard deviation	T test	Sig
Pay attention to the input of personality	Yes	12.81	7.77	5.803*	0.000
	No	9.98	4.10		
Pay attention to academic investment	Yes	8.82	4.60	1.952	0.052
	No	7.91	3.54		
Overall investment	Yes	21.63	8.04	4.633*	0.000
	No	17.89	6.70		

Table 11. Differences in household education input behaviors of student household registration types.

	Household registration type	Average	Standard deviation	T test	Sig
Pay attention to academic investment	Non-agricultural household registration	8.24	3.80	−0.134	0.893
	Agricultural account	8.30	4.19		
Overall investment	Non-agricultural household registration	20.78	6.95	3.168*	0.002
	Agricultural account	18.22	7.71		
Pay attention to the input of personality	Non-agricultural household registration	12.54	4.59	5.430*	0.000
	Agricultural account	9.92	4.28		

Table 12. Difference test of family education investment behavior in the hometown area.

	Hometown	Average	F test	Sig
Pay attention to the input of personality	East Region	11.23	0.200	0.819
	Central Region	10.97		
	Western Region	10.79		
Pay attention to academic investment	East Region	8.15	0.473	0.624
	Central Region	8.60		
	Western Region	8.05		
Overall investment	East Region	19.38	0.129	0.879
	Central Region	19.57		
	Western Region	18.85		

the different cities of the family. After-the-fact inspection found that, on the whole, the family education investment of students in the provincial capital or municipality directly under the jurisdiction of the family is significantly higher than that of the students whose families belong to the county or below; the family education of the families in the prefecture-level cities is significant. Students above the county level and below in the family. This is also true in the dimension of input that focuses on academic input and attention to personality. The specific results are shown in Table 13.

3.2.6. Difference Test of Parental Education Level on Family Education Investment Behavior

After the differences in the educational level of the parents of the students in the family education, it is found that the parents have different levels of education, and there are significant differences in the input of academic investment, the input dimension of personal attention and the total investment. Post-mortem examinations found that parents of this college degree are significantly higher than those of high school and below, both in terms of overall input, attention to the input dimension of personality, and the input dimension of academics. The specific results are shown in Table 14.

Based on the above analysis, we can draw the following conclusions: boys' income from family education is higher than that of girls; non-agricultural households have higher education investment than their agricultural households; single-child families are higher in education than non-only children; parents with this bachelor's degree are more likely to invest in their children's education than those below high school; the higher the family level, the higher the educational investment of the children. However, hometown location does not affect family education investment.

4. Discussion

Based on 338 valid data, this study constructs a two-dimensional structure model

Table 13. Difference test of family education input behavior in family-owned cities.

	Family city	Average	F test	Sig	Multiple comparisons
Pay attention to the input of personality	Provincial or municipality	13.09	20.500*	0.000	1 > 3; 2 > 3
	Prefecture-level city	12.79			
	County level and below	9.84			
Overall investment	Provincial or municipality	22.58	19.885*	0.000	1 > 3; 2 > 3
	Prefecture-level city	22.08			
	County level and below	17.34			
Pay attention to academic investment	Provincial or municipality	9.49	9.319*	0.000	1 > 3; 2 > 3
	Prefecture-level city	9.29			
	County level and below	7.50			

Table 14. Difference test of family education input behavior with parental education level.

	Parental education	Average	F test	Sig	Multiple comparisons
Pay attention to the input of personality	Graduate degree or above	11.43	17.989*	0.000	2 > 3
	Undergraduate degree	13.40			
	High school or below	10.19			
Pay attention to academic investment	Graduate degree or above	10.57	3.965*	0.020	2 > 3
	Undergraduate degree	9.04			
	High school or below	7.90			
Overall investment	Graduate degree or above	22.00	12.561*	0.000	2 > 3
	Undergraduate degree	22.44			
	High school or below	18.09			

of family education input and constructs a questionnaire to analyze the overall performance of family education investment and its differences in demographic variables.

4.1. The Overall Level of Family Education Investment Is Low, and There Are Differences in Each Dimension

The overall investment in family education is low, indicating that the level of family education investment in China is generally weak. This may be because, on the one hand, parents in the 1960s and 1970s paid insufficient attention to their children's education due to the conservativeness and limitations of their thoughts; Lei Wanpeng and Xiang Rong indicated that compared with the investment in education, parents pay more attention to the "revenue-generating model", especially for families in the initial construction period and growth period. They believe that the development of the family economy is the primary goal of family development. Only when they earn enough money can they share their children's high school. Going to college, therefore, the educational investment in children has been neglected [18]. The input dimension of paying attention to academics is lower than the input dimension of paying attention to personality, because based on the "revenue-first model", parents will increase household income as the sole target during the family growth stage, so the education investment in the children's primary and secondary schools is low. With the steady development of the family and the improvement of the economic level, parents will turn their attention to the family education of their children.

4.2. The Main Difference between Students' Uniqueness and Type of Household Registration Is Reflected in the Input Dimension and Overall Investment of Personality

In the input dimension of attention to personality and the overall investment in family education, the family education investment of the only child is significantly higher than that of the non-only child. Li Jie believed that family income

is certain, the more people are educated, the less the education costs of investing in each child [7]. In a multi-child family, if there are both boys and girls, the family is more inclined to invest in boys when the family income level is low, which is corroborated by the analysis of gender differences in family education inputs. Therefore, families need to increase their income to increase their educational investment. However, the problem with this family is that it ignores the education of children's education during the family growth phase.

Similarly, the different types of household registration of students have similar performances in the investment of family education. In the input dimension of personal attention and the overall investment in family education, the students of non-agricultural households are higher than the students of agricultural hukou in household education. From the perspective of the urban-rural dual structure, the income of families living in cities is higher than that of rural families, and their children receive higher education investment than rural families. Pan Yunhua and Xue Rui believed that the main reason behind this is caused by the huge difference in urban and rural income brought about by the urban-rural dual structure [11].

4.3. The Gender of Students Differs in the Input Dimension of Academics and the Overall Investment in Family Education

Boys are higher than girls in their investment dimension and overall investment. To a certain extent, this has a certain relationship with the parents' traditional ideas. Especially in rural areas and backward areas, the patriarchal thinking is particularly prominent. The gender "crowding out effect" is more obvious, which is reflected in the education input. More opportunities for educational investment. This backward thinking will cause girls to have internal attribution, and even think that "it is useless because it is a girl", which dampens the girl's enthusiasm for learning. The study also found that there are no significant differences in overall investment and dimensions in terms of the location of the hometown. Although there are differences in economic development and ideas between different regions, no matter the overall level of the concept of family education investment in the eastern region, the central region and the western region, there is no difference in the overall concept of family education investment. It is reflected from the side that the thoughts of patriarchal women are influenced by personal concepts and personal living environment.

4.4. The Main Differences between the Family-Owned City and the Parental Education Level Are Reflected in the Overall Investment and the Input of Each Dimension

Households living in provincial capitals or municipalities directly under the central government have higher education for their children than those living at or below the county level. Households living in prefecture-level cities are higher in education investment than those living at or below the county level. Different families belong to different cities, which determine the different resources that

families are exposed to, and also reflect the different degrees of openness and acceptance of ideas. This will form a chain reaction. The more developed the family's economy, the more open-minded parents, the higher the family income level, the more parents will tend to support their children's educational investment, especially the cultivation of children's inner quality, so they pay attention to personality. There will be more in the dimension.

In terms of parental education level, parents of this college degree are significantly higher than the parents of high school or lower in the overall investment in family education and in all dimensions. The higher the level of education of parents, the higher the awareness of the importance of educational input, and the higher the educational expectations of their children. Therefore, parents will be more willing to invest in high education human capital for their children. For families with lower education level, parents have "arbitrary" education on their children, that is, to what extent they are read, and there is no way to talk about personality education. The "arbitrariness" of this kind of education is the neglect of the child's right to education. Due to the neglect of parents, children in this growing environment have lower levels of self-esteem and are more likely to have absenteeism and truancy.

5. Conclusion and Recommendations

This study developed a family education input scale through exploratory analysis and confirmatory analysis. The scale consists of two dimensions: the input of care and the input of concern for internal literacy. Then, using the self-compiled Family Education Input Scale, 338 undergraduate and postgraduate students were surveyed, and their demographic variables were analyzed. It was found that there were significant differences in demographic variables among different families. Among them, the income of family education is higher than that of girls; the family of non-agricultural households is higher than the family of agricultural households; the family of single-child families is higher than the family of non-only children; the parents of this special education are investing in their children's education. The upper level is higher than that of the parents below the high school; the higher the family level, the higher the educational investment of the children.

According to the survey results of this study, the current overall level of family education investment is low, and parents are difficult to work on in their work and children's education. Through the analysis of demographic characteristics variables, it is found that gender, household registration type, whether it is only one child, parental education level and family-owned cities have significant differences in family education investment, while the hometown area has no significant impact on family education investment. Therefore, the ultimate goal of this study is to provide a basis for establishing a good family education investment structure and to provide suggestions for improving the status of family education investment. Based on the results of the structural model of family education investment and the analysis of demographic variables, we can have the following

inspirations in the input of family education:

5.1. Personal Perspective: Attach Importance to Family Education Investment, Paying Attention to Work and Family Education

By converting the input dimension of academic investment, the input dimension of personality and the total input score into the standard score analysis of the family education input scale, it is found that the family is at a low level in paying attention to academic input and paying attention to personality, as well as overall investment, as shown in Figures 2-4.

Parents are too concerned about the education of their children because of

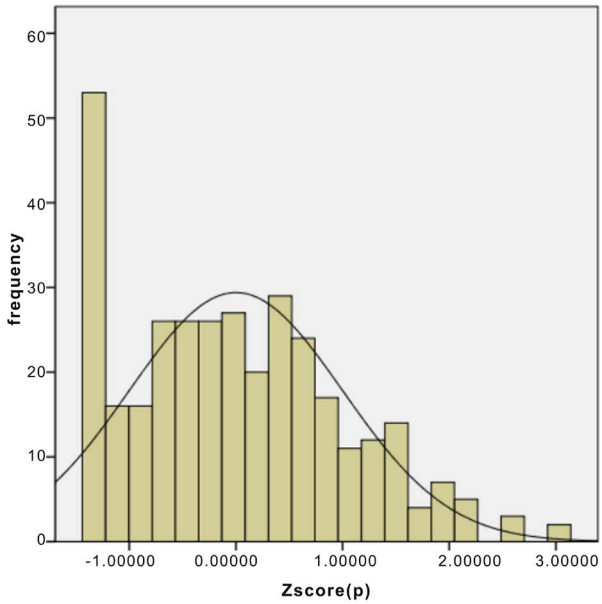

Figure 3. Pay attention to the normal distribution of personality input dimension.

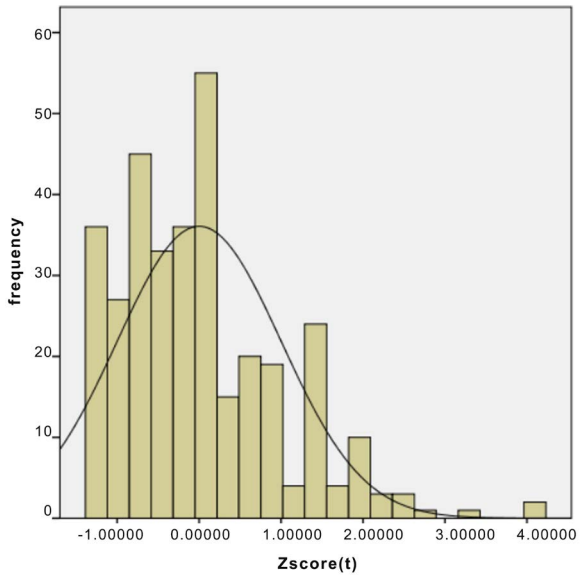

Figure 4. Normal distribution of the total score of the family education input scale.

their busy work. Sang Biao quoted that "Bauminger believes that this kind of parenting style can cause children to have poor social skills and alienation from their families [21]." Therefore, families should pay attention to the input of family education, change the concept of heavy work and light children education, and do not take the "revenue-first model" as the primary goal or even the sole goal. Lei Wanpeng and Xiang Rong found that the impact of the improvement of family economic conditions on children is mainly achieved through the supply of family learning resources. Relatively speaking, the family's continuous care and interaction have more adaptability to children's learning. positive influence. From the perspective of family education decision-making and the sustainable development of children, the mode of taking into account economic income generation and child education supervision is better than the simple income-generating model. For busy parents, it is necessary to make reasonable plans to ensure that at least one of the husband and wife can accompany their children to learn and communicate, avoiding the ending of "increased income, and the child is abolished". This is in line with the human capital theory that "family education investment is a long-term, continuous investment".

5.2. Local Government Perspective: Eliminating the Gender "Crowding out Effect" in Education

From the analysis of gender variables, male students' investment in family education is significantly higher than that of female students. On the one hand, in China, there are still backward ideas such as "women's incompetence is morality" and "reading uselessness", especially in rural backward areas. This kind of thinking is even more ingrained. On the other hand, the sharing of government education expenses is mainly concentrated. In the compulsory education stage, there is limited commitment to education costs for high schools and universities. For families with multiple children or families with limited income, the investment pressure on family education is enormous, and even the children drop out of school. Therefore, the local government should take incentives to encourage families with many children to attend school and promote the development of family education, while eliminating the "crowding out effect" of gender from the source. According to the theory of reinforcement, strengthen the family that insists on letting their children attend school (such as giving material rewards, etc.) so that the educational input behavior continues. In addition, local enterprises are encouraged to connect with schools. Through order-based training and talent transfer, social organizations and enterprises are encouraged to donate education funds, and a multi-channel financing mechanism is formed to alleviate financial constraints.

5.3. National Perspective: Accelerate Urban and Rural Development, Eliminate Urban-Rural Dual Structure, and Accelerate Family Education Legislation

From the perspective of the urban-rural dual structure and the location of the

hometown, the income of families living in cities is higher than that of rural families, and their children receive higher education investment than rural families. The main reason behind this is the huge difference in urban and rural income due to the urban-rural dual structure. It is precisely because of the imbalance of economic development and differences in ideas and concepts that the gender "crowding out effect" still exists in education, which also reflects the lack of laws and regulations on family education in China. Therefore, on the one hand, the state should adapt to local conditions and accelerate the level of rural economic development, especially for poverty alleviation. Let urban and rural residents have more disposable income, because the higher the family income level, the greater the possibility of investment education. The development of the economy will inevitably bring about the opening of ideas. It will also promote the elimination of the "crowding out effect" and bring more yuan into the concept of family education investment, thus reducing the "arbitrariness" of family investment in education. on the other hand. The state should speed up the research and introduction of family education laws, use legal means to regulate the behavior of family education, and encourage families to have a clear understanding of investment in education, avoiding "crowding out effects", "live without raising", and "cultivating without Education and other issues, so that the child's body and mind to develop healthily. In addition, advocating conditional enterprises to implement a flexible working system or a paid vacation system for dual-employee families, so that parents have more time to care about their children's family education.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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