

Research On Parents' Educational Capital And Educational Anxiety In The Home-School Cooperation Of Primary Schools In Zhejiang, China

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ABSTRACT

The purpose of this study was to explore the relationship between family educational capital, family atmosphere, home-school cooperative home-school communication and parents' educational anxiety in primary school parents in Zhejiang Province, China, and to explore the moderating effect of family educational capital, family atmosphere and parents' educational anxiety. In this study, primary school parents in Zhejiang Province of China were selected as the research objects, and questionnaires were filled out by means of convenience sampling. In this study, five research tools were used to test the subjects, namely, the Family Educational Capital Scale, the family Atmosphere Scale, the parent educational Anxiety Scale, the home-school cooperation Scale and the home-school Communication Scale. By means of questionnaire survey, 647 parents were invited to participate in this study. The results show that family educational capital and family atmosphere have a significant negative impact on parents' educational anxiety; The moderating effect of home-school cooperation on the relationship between family educational capital and parents' educational anxiety; Home-school communication plays a moderating role between family atmosphere and parents' educational anxiety; Home-school communication plays a moderating role between family educational capital and parents' educational anxiety; Home-school cooperation plays a moderating role between family atmosphere and parents' educational anxiety. The multi-channel optimization of family education capital, the multi-form promotion of education atmosphere, the diversification of home-school cooperation and the multi-channel optimization of home-school communication.

Keywords: family education capital; Family atmosphere; Home-school communication; Parent education anxiety; Home-school cooperation

1 Introduction

With the introduction of the double reduction policy by the Chinese government in 2021, the importance of family education has been highlighted. Zhejiang has supported family education by establishing a four-level community family education service system. But the dual-reduction policy has also caused parents' education anxiety, which stems from high expectations for their children's education and reflects the contradiction between supply and demand of education resources. Therefore, it is of great importance to study the causes of parents' educational anxiety and mitigation strategies for the development of family education (Deng Linyuan et al., 2024)^[1].

Parents' educational capital is crucial to children's educational development, and families with high educational capital can provide better educational resources and environment (Ming Q et al., 2023)^[2]. Educational anxiety stems from a variety of factors and is widespread and has negative effects in contemporary society. Research finds that parents' educational capital is related to educational anxiety, and parents with high educational capital are more likely to have high expectations and educational anxiety (Zhu J, 2023) [3].

In addition, factors such as social culture, educational system and family environment will also affect parents' educational capital and educational anxiety level. Many countries and regions are paying attention to and trying to solve the problems of parents' educational capital inequality and educational anxiety (Zhang Xiaofeng

et al., 2023)^[4]. Some educational policies and practices attempt to address these challenges by providing more equitable educational opportunities, strengthening educational support and guidance for parents, and reducing educational pressure on parents (Zhou Mengqiu et al., 2023)^[5].

Family educational capital is crucial to children's education and is composed of cultural, economic and social elements that influence children's educational opportunities and achievements through intergenerational transmission. A good family atmosphere cultivates children's self-confidence and positive emotions and contributes to their all-round development (Jiang Heng et al., 2023)^[6]. At the same time, family-school cooperation and communication is an important link between family and school, which is crucial to alleviate parents' educational anxiety and promote children's healthy growth (Cheng Yan et al., 2022)^[7].

Focusing on primary school parents in Zhejiang Province, this study explores the influences of family education capital, family atmosphere, home-school cooperation and home-school communication on parents' education anxiety and their interrelationships (Fu Wei, 2021)^[8]. This study aims to reveal the causes of parents' educational anxiety, provide theoretical support and practical guidance for alleviating it, and provide beneficial exploration and reference for the healthy development of family education under the dual-reduction policy (Docena V T et al., 2023)^[9]. This paper uses cultural capital theory and other analytical tools to deeply study the problem of parents' educational anxiety, which enriches the theoretical system of family education research. The research results help parents, schools and communities to better understand the status quo and causes of parents' educational anxiety, and provide empirical evidence for formulating targeted mitigation strategies (Mei S et al., 2023)^[10]. At the same time, it also provides practical guidance for the healthy development of family education under the dual-reduction policy, which has important practical significance and application value.

2 Theory and influence

2.1 Concept and influence of family educational capital

Family education capital was initially defined as the education expenses paid by parents for their children, but with the in-depth understanding of family education, the concept has been expanded to include non-monetary capital, such as nurturing concept, time, emotional contribution, etc. (Melguizo-Ibanez E et al., 2023)^[11] put forward the concept of cultural capital, emphasizing the influence of family environment on children's acquisition of knowledge. Family educational capital, including cultural and economic elements, provides cultural forms and economic support for children to help them change their lives (Salman M D et al., 2023)^[12].

2.2 The influence of family atmosphere on education

Family atmosphere refers to the relationship between family members formed after mutual interaction, including parents' care and attitude towards children's education and related activities (Hsu T C et al. 2023)^[13]. Researchers have different definitions of family atmosphere, but they all involve the relationship among family members, psychological atmosphere and individual emotional responses. As one of the tools to measure the family atmosphere scale, it is often used in psychology, sociology and pedagogy research and has good reliability and validity (Yang F, 2021)^[14].

2.3 The concept and influencing factors of parents' educational anxiety

Educational anxiety is a kind of worry when individuals face value threats, while parents' educational anxiety is derived from the uncertainty and pressure in the educational environment (Tian Y, 2022)^[15]. Research shows that parents' educational anxiety is universal and increases to varying degrees with the growth stage of their children. Anxiety is mainly related to children's academic performance, safety, Internet addiction, etc., and changes with the growth of children (Chen X, 2022)^[16]. Parents' educational anxiety is also closely related to the exam-oriented education system and social and cultural background. Future studies can further explore its nature, types and influencing factors, enrich research results and provide a basis for further research (Zheng Lihong, 2024)^[17].

2.4 The role of home-school cooperation and home-school communication in education

Home-school cooperation is an educational model in which families and schools jointly promote children's development, covering multiple subject participation of families, schools and other education-related fields (Li Jiangnan, 2024)^[18]. Through the communication between parents and teachers, it aims to promote the all-round development of students, deepen parents' understanding of children's learning needs, reduce educational anxiety, and enhance parent-child relationship (Jiang Heng, 2023)^[19].

Home-school communication is an important form of education, which has a positive impact on student development through positive interaction, not only promoting the communication between parents and teachers, but also shaping students' academic achievement, social adaptability and future development. It plays a key role in relieving parents' anxiety and promoting students' progress (Qi Jinhui, 2023)^[20]. Effective communication enables parents to better understand their children's learning and behavior performance, get professional advice, enhance education confidence, and enhance family education capital. Home-school communication helps to promote the partnership between parents and schools, to jointly set educational goals and coordinate educational activities (Zhang Jun, 2023)^[21].

3 Research methods and design

3.1 Research framework

According to the motivation and purpose of this study, the educational anxiety behavior of primary school parents in Zhejiang Province of China is taken as the main research variable, and the influence of family educational capital and family atmosphere on it is analyzed, based on cultural capital theory and cognitive dissonance theory. Convenience sampling method was used to conduct a questionnaire survey. First, the direct impact of family educational capital and family atmosphere on parents' educational anxiety was discussed. Secondly, the moderating effects of home-school cooperation on family educational capital, family atmosphere and parents' educational anxiety were discussed. Finally, the moderating effects of home-school communication on family educational capital, family atmosphere and parents' educational anxiety are discussed. The framework of this study is shown in Figure 3.1.

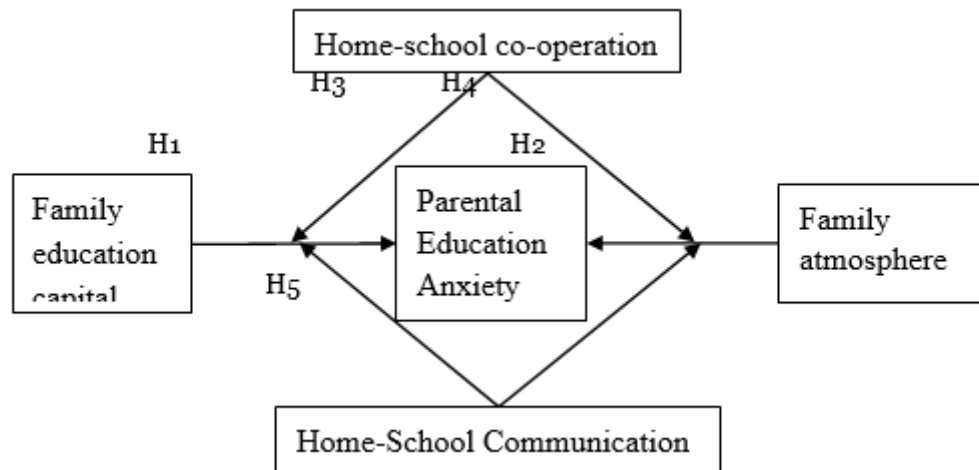


Figure 3.1 Research frame diagram 3.2 Research object and sample selection Home-School Communication

1. Research objects

This study takes primary school parents in Zhejiang Province, China as the research object. Parents' educational values, limited educational cognition and external factors of society in Jiangsu and Zhejiang regions not only worry that their children will lose at the starting line, but also fear that their families will lag behind others in educating their children, which magnifies the educational anxiety of parents in this region.

2. Sample selection

In this study, more than 100 samples were selected in Zhejiang Province of China by convenient sampling method to facilitate questionnaire survey. In order to ensure the accuracy and rigor of the questionnaire design, five research tools, including the Family educational Capital Scale, Family atmosphere scale, home-school cooperation scale, home-school Communication scale and parent educational Anxiety Scale, were used to conduct the survey. After recovering the pre-test questionnaires, data processing and exploratory factor analysis were carried out to correct and improve the contents of the questions, and based on this, a formal questionnaire was determined.

In order to improve the convenience of filling in the questionnaire and the efficiency of data recovery, online questionnaire is adopted. Compared with traditional questionnaire survey, this method has many advantages, including easy modification, reusable, convenient data recovery and low cost. Finally, a total of 700 questionnaires were collected through the questionnaire Star platform, and 53 invalid questionnaires were excluded. A total of 647 valid questionnaires were recovered, with a recovery of 92.428%. The subjects were from 9 counties and urban areas in Ningbo, Zhejiang Province. Among the 647 subjects, 299 were male and 348 were female. The sample distribution was wide.

3.3 Testing process and research tools

1. Testing process

In this research test, parents of students in Zhejiang Province were taken as test objects, and questionnaires were distributed to parents in 9 counties and urban areas of Ningbo City. The samples were sent to the parents of the students in Zhejiang Province in the form of questionnaire Star questionnaire, and sent to the parents group through the family committee, who reminded the parents to complete the questionnaire. The questionnaires were collected within one week. In the formal stage, a total of 700 questionnaires were recovered, 53 invalid questionnaires were excluded, and a total of 647 valid questionnaires were recovered, with a recovery rate of 92.428%.

2. Research tools

Questionnaire methods collect data representative of the population through sampling in order to infer population characteristics. Its advantage is that it can infer a larger group from a smaller group, which has the advantages of low cost, high reliability and validity, and fast and efficient data collection. This study mainly adopts the questionnaire survey method, using the family educational capital scale, family atmosphere scale, home-school cooperation scale, home-school communication scale, parents' educational anxiety scale and other tools to analyze the data samples.

Sample size is one of the key features of questionnaire design, affecting the detection of significant differences, relationships or interactions. According to Wu Minglong (2003), the valid sample size is proportional to the number of questionnaire items, usually between 1:5 and 1:10. Considering the possibility of invalid questionnaires, the original questionnaire consisted of 75 questions, and 500 samples were planned to be collected. Therefore, convenient sampling method was adopted to collect the data of online questionnaire.

(1) Liu Xiaoling (2017) used the family environment questionnaire to evaluate family educational resources in the International Reading Literacy Progress study of the International Association for the Evaluation of Educational Achievement (IEA). Aiming at revealing the empirical structure of family educational resources, verifying and revising relevant theories, the family educational Resources Questionnaire was created accordingly. The questionnaire adopts Likert five-point scoring method, the higher the score, the richer the family education capital.

(2) The Family Environment Scale adopts the scale prepared by Moss et al.(2013) and is a self-report used to describe family atmosphere. The scale consists of 10 items and adopts the Likert five-point scoring method. The higher the score, the better the family atmosphere.

(3) Parents' educational anxiety Scale of preschool bridging educational anxiety for parents by Guo Jingjing and Zhan Mengling (2022) was adopted. The scale adopts Likert five-point scoring method, and the higher the score, the more serious the parents' anxiety.

(4) The home-school cooperation questionnaire adopts the scale designed by Wang Miaomiao and Zhao Bin (2015), which is investigated and analyzed through three dimensions of cooperation understanding, cooperation content and cooperation mode. The scale adopts the Likert five-point scoring method, and the higher the score, the more serious the anxiety of parents.

(5) The home-school communication scale is based on the primary school communication ability questionnaire prepared by Yu Yang (2016), which extracts the part about parents and uses it. The scale adopts Likert five-point scoring method, the higher the score, the better the home-school communication.

3.3 Data analysis methods

After the questionnaires were collected, the contents filled in were reviewed, invalid questionnaires were deleted, valid questionnaires were coded and filed, and data were analyzed and processed by SPSS and AMOS. The questionnaire statistical methods included descriptive statistics, confirmatory factor analysis, data analysis methods, item analysis, exploratory factor analysis, reliability analysis and correlation analysis.

4 Presentation and analysis of results

4.1 Descriptive statistical analysis

Descriptive statistical analysis was carried out on the variables of this study, such as family education capital, parents' education anxiety, family atmosphere, home-school cooperation and home-school communication. This study adopted the method of questionnaire survey, and the research objects were students' parents. A total of 700 questionnaires were distributed, 53 invalid questionnaires were excluded, and 647 valid questionnaires were collected. The recovery rate was 92.428%. The descriptive statistical analysis of each variable is shown in the figure below. The mean value of gender is 1.540, the standard deviation is.499, and the variance is.249; the mean value of monthly income is 3.740, the standard deviation is 1.265, and the variance is 1.600.

Table 4.1 Basic Information Table of demographic variables (n=647)

	Categories	Frequency	Percentage (%)
Gender	Male	299	46.200
	female	348	53.800
Per capita household income level	4,000 yuan and below	39	6.000
	4,001-6,000 yuan	91	14.100
	\$6,001-8,000	117	18.100
	\$8,001-10,000	154	23.800
	Over 10,000 yuan	246	38.000

This study comprehensively assessed the situation of family education, using five scales of family educational capital, family atmosphere, parents' educational anxiety, home-school communication and home-school cooperation. These scales were assessed using the Likert five-point scale to provide objective data. Score of 3.201, according to the results of parents' family education capital, in the upper level; The score of family

atmosphere was 3.954, showing good performance; The scores of home-school communication and home-school cooperation were 3.331 and 3.467, respectively, showing a good state. However, parents' educational anxiety score was 2.354, slightly lower than the average, indicating a certain degree of anxiety. Overall, the family educational capital is in the upper middle level, but parents still have a certain degree of educational anxiety. The specific data are shown in Table 4.2.

Table 4.2 Descriptive Statistical analysis (n=647)

Variables	Item	Average
Home Education Capital (FEC)	11	3.201
Family Atmosphere (FA)	10	3.954
Parent Educational Anxiety (PEA)	18	2.354
Home-school Partnership (HSP)	20	3.331
Home School Communication (HSC)	16	3.467

4.2 Questionnaire reliability analysis

(1) Reliability analysis of the questionnaire data was carried out by using SPSS software. The internal consistency test method proposed by Devellis (1991) was used. Cronbach's Alpha coefficient was used to distinguish this method. The higher the alpha coefficient was, the more stable, reliable and consistent the measurement results of the scale were. Generally speaking, when Cronbach's Alpha is greater than .900, the reliability of the scale is very good. When $.800 < \text{Cronbach's Alpha} < .900$, the reliability is quite good; Good reliability when $\text{Cronbach's Alpha} < .700$; When the $\text{Cronbach's Alpha} < .700$, you need to scale modifications or eliminate part of the subject.

The reliability analysis of the Family Education Capital Scale was shown in Table 4.3. Cronbach's Alpha value of the family Education Capital Scale was .841 and greater than .700, indicating that the scale had good stability.

Table 4.3 Reliability analysis Table of the Family Education Capital Scale (n=647)

Variables	Dimensions	Number of questions	Cronbach's Alpha
Home Education Capital (FEC)	1	11	.841.

The reliability analysis results of the family atmosphere scale are shown in Table 4.4. Cronbach's Alpha value of the family atmosphere scale is .915 and greater than .700, indicating that the scale has good stability.

Table 4.4 Reliability analysis table of Family Atmosphere Scale (n=647)

Variables	Dimensions	Number of questions	Cronbach's Alpha
Family Vibe (FA)	1	10	.915.

The reliability analysis results of the Parent educational Anxiety Scale are shown in Table 4.5, and the data analysis shows that the scale has good stability.

Table 4.5 Reliability analysis table of Parent Educational Anxiety Scale (n=647)

Variables	Dimensions	Cronbach's Alpha after item deletion	Cronbach's Alpha
Educational Anxiety of Parents (PEA)	Mind-body Readiness Anxiety (1-3)	.762.	.884.
	Life Readiness Anxiety (4-8)	.827.	
	Learning Readiness Anxiety (9-15)	.805.	
	School choice anxiety (16-18)	.791.	

The reliability analysis results of the home-school cooperation scale are shown in Table 4.6. The combined analysis shows that the scale has good stability.

Table 4.6 Reliability analysis Table of Family-School Cooperation Scale 3(n=647)

Variables	Dimensions	Cronbach's Alpha after item deletion	Cronbach's Alpha
Home School Collaboration (HSP)	Understanding of Collaboration (1-7)		.937.
	What to work with (8-14)	.928.	
		.945.	
	Ways to work together (15-20)	.930.	

The reliability analysis results of the home-school Communication scale are shown in Table 4.7, and the analysis shows that the scale has good stability.

Table 4.7 4Reliability analysis Table of Home-School Communication Scale (n=647)

Variables	Dimensions	Cronbach's Alpha after item deletion	Cronbach's Alpha
Home-school Communication (HSC)	Cognition in Home-School Communication (1-5)	835.	874.
	Home-school Communication Action Ability (6-14)	896.	
	Home-school communication will ability (15)	921.	
	Home-school introspection ability (16)	934.	

4.3 Questionnaire validity analysis

Validity test is the measurement and analysis of the accuracy of the survey data. All the scales used in this study belong to the mature scales of domestic scholars, therefore, theoretically speaking, the scales have good reliability and validity. In this study, confirmatory factor analysis will be further adopted, and structural equation model will be used in AMOS. The acceptable fitting criterion was $\chi^2/df < 5.00$ and RMSEA $< .080$. RFI, NFI, CFI, TLI and IFI were all $> .900$, and the closer to 1, the better the model fit was. The AVE square root values of each variable are shown in the following table to explain the discrimination validity.

(1) Capital validity analysis of family education

The validity analysis results of the family education Capital scale were shown in Table 4.8, χ^2/df was 2.151, GFI was .929 and AGFI was .920; SRMR was .061, RMSEA was .045; NFI is .908, RFI is .912, CFI is .924 and IFI is .908; PNFI is .051, PGFI is .059; CN was 243 and greater than 200, and this study found that the fit degree of the scale model reached the fit degree, so the structural validity was good.

Table 4.8 5Fitting degree analysis of the family education Capital Scale

Overall fit	Identifying items	Fit Indicators	Evaluation value	Model fit
Absolute fit	Chi square/df	< 5.000	2.151 929.	Aptaming
	GFI	$> .900$	920.	Aptaming
	AGFI	$> .900$		Adaptation
	SRMR	$< .080$	061.	Adaptation
Value added fit	RMSEA	$< .080$	045.	Adaptation
	NFI	$> .900$	908.	Aptaming
	RFI	$> .900$	912.	Aptaming
	CFI	$> .900$	924.	Aptaming
Reduced fit	IFI	$> .900$	908.	Aptaming
	PNFI	$> .050$	051.	Aptaming
	PGFI	$> .050$	059.	fit
	CN	> 200	243	adapter

Factor load analysis was carried out on the family Education Capital Scale. The combination reliability of structural equation CR was 0.944, and the average extraction variation AVE was .604. The factor load, combination reliability and average extraction variation all reached the satisfactory level, and the questionnaire had good discriminative validity.

(2) Validity analysis of family atmosphere

The validity analysis results of the family atmosphere scale were shown in Table 4.9, χ^2/df was 3.553; GFI was .937, AGFI was .942; SRMR is .044, RMSEA is .058; NFI is .972, RFI is .965, CFI is .933 and IFI is .938; PNFI is .078, PGFI is .051; CN was 263, and this study found that the model fit of the scale reached the fit degree, so it can indicate good structural validity.

Table 4.9 Fitting degree analysis of the family atmosphere scale

Overall fit	Identifying items	Fit Indicators	Identification value	Model fit
Absolute fit	Chi square/df	< 5.000	3.553	Aptaming
	GFI	$> .900$	937.	Aptaming
	AGFI	$> .900$	942.	Adaptation
	SRMR	$< .080$	044.	Aptaming
Value added fit	RMSEA	$< .080$	058.	Aptaming
	NFI	$> .900$	972.	Adaptation
	RFI	$> .900$	965.	Aptaming
	CFI	$> .900$	933.	Adaptation
Reduced fit	IFI	$> .900$	938.	Adaptation
	PNFI	$> .050$	078.	Aptaming
	PGFI	$> .050$	051.	Aptaming
	CN	> 200	263	fit

Factor load analysis was carried out on the family atmosphere scale. The combination reliability of the structural equation CR was 0.924, and the mean extraction variation AVE was.555. The factor load, combination reliability and mean extraction variation all reached the satisfactory level, and the questionnaire had good differential validity.

(3) Validity analysis of parents' educational anxiety

The validity analysis results of the parent education anxiety scale are shown in Table 4.10, and it is found that the fit degree of the scale model reaches the appropriate degree, so the structural validity is good.

Table 4.10 Fitting degree analysis of the parent educational anxiety Scale

Overall fit	Identifying items	Fit Indicators	Identification value	Model fit
Absolute fit	χ^2 / df	< 5.000	3.863 901.	Adaptation
	GFI	>.900	902.	Aptaming
	AGFI	>.900		Aptaming
	SRMR	<.080	059.	Aptaming
	RMSEA	<.080	072.	Aptaming
Value added fit	NFI	>.900	944. 962.	Aptaming
	RFI	>.900		Adaptation
	CFI	>.900	928.	Adaptation
Reduced fit	IFI	>.900	929.	Aptaming
	PNFI	>.050	062.	Aptaming
	PGFI	>.050	057.	Aptaming
	CN	> 200	387	Aptaming

Factor load analysis was performed on the parental educational anxiety scale. The combination reliability of the structural equation (CR) was 0.853, and the mean extraction variation (AVE) was.779. The factor load, combination reliability and mean extraction variation all reached the satisfactory level, and the questionnaire had good differential validity.

(4) Validity analysis of home-school cooperation anxiety

The validity analysis results of the home-school cooperation scale are shown in Table 4.11. This study found that the model fit degree of the scale reached the fit degree, so it can indicate good structural validity.

Table 4.11 Fitting analysis of school-family cooperation scale

Overall fit	Identifying items	Fit Indicators	Identification value	Model fit
Absolute fit	χ^2 / df	< 5.000	4.621	Aptaming
	GFI	>.900	957.	Aptaming
	AGFI	>.900	932.	Aptaming
	SRMR	<.080	065.	Aptaming
	RMSEA	<.080	070.	Aptaming
Value added fit	NFI	>.900	984.	Aptaming
	RFI	>.900	956.	Aptaming
	CFI	>.900	920.	Adaptation
	IFI	>.900	925.	Adaptation
Reduced fit	PNFI	>.050	077.	fit
	PGFI	>.050	082.	Aptaming
	CN	> 200	421	Adaptation

Factor load analysis was performed on the parental educational anxiety scale. The combination reliability of the structural equation CR was 0.914, and the mean extraction variation AVE was.603. The factor load, combination reliability and mean extraction variation all reached the satisfactory level.

(5) Validity analysis of home-school communication

The validity analysis results of the home-school communication scale are shown in Table 4.12, and the analysis of the research results indicates that the structural validity is good.

Table 4.126home-school Communication scale

Overall fit	Identifying items	Fit Indicators	Evaluation value	Model fit
Absolute fit	χ^2 / df	< 5.000	1.790 958.	Aptaming
	GFI	>.900	920.	Aptaming
	AGFI	>.900		Adaptation
	SRMR	<.080	048.	Adaptation
	RMSEA	<.080	07.	Adaptation
Value added fit	NFI	>.900	930.	Aptaming
	RFI	>.900	959.	Aptaming
	CFI	>.900	984.	Aptaming

	IFI	>.900	973.	Aptaming
	PNFI	>.050	093.	Adaptation
Reduced fit	PGFI	>.050	056.	fit
	CN	>.200	306	Aptaming

Factor load analysis was performed on the parental educational anxiety scale. The combination reliability of the structural equation (CR) was.954, and the mean extraction variation (AVE) was.5523. The factor load, combination reliability and mean extraction variation all reached the satisfactory level, and the questionnaire had good differential validity.

In summary, the reliability and validity of the variables in this study, such as family educational capital, parents' educational anxiety, family atmosphere, home-school cooperation and home-school communication, all meet the standards and are suitable for data analysis.

4.4 Correlation analysis

Correlation analysis is used to determine the relationship between variables. The greater the absolute value, the stronger the correlation, indicating the existence of a strong linear relationship. It is usually used to test uncertain dependency. Before the correlation analysis is performed, the average value of each factor needs to be calculated. This study mainly explores the correlation among variables such as family educational capital, family atmosphere, parents' educational anxiety, home-school cooperation, and home-school communication. The analysis results showed that the dimensionality correlation among the variables was low to medium degree, and the overall correlation was low. See Table 4.13 for specific data.

Table 4.137 variables

Variables	Educational anxiety	Home-school communication	Family atmosphere	Home educational capital	Home-school partnership
Educational anxiety	1				
Home-school communication	- 672 * * *	1			
Family atmosphere	- 687 * * *	524 * * *	1		
Home education Capital	- 621 * * *	620 * * *	607 * * *	1	
Home-school cooperation	- 672 * * *	604 * * *	605 * * *	698 * * *	1

Note 1: *p<.001**

4.5 Direct effect test

In Model 1 and Model2, the coefficient of independent variable family atmosphere, dependent variable parental education anxiety, family education capital and family atmosphere on parental education anxiety is p<.001. Therefore, it has a negative impact on parental education anxiety. The specific data are shown in Table 4.14.

Table 4.14 8Fitting degree analysis of the overall structure model

Variables	Model 1 Parenting Anxiety			Model 2 Parenting anxiety		
	Beta.	t	VIF	Beta.	t	VIF
Gender	-.026**	-.735	1.092	000 * * *	- 005.	1.550
Household income level	-.035**	-.807	1.683	022 * * *	577.	1.486
Home Capital	Education	-.411**	18.231	1.006		
Family atmosphere				- 485 * * *	12.165 * * *	1.007
R ²	378.			471.		
AdjR ²	372.			467.		
F	67.636 * * *			99.335 * * *		

Note 1: **p<.050, *p<.001; β is the standardized regression coefficient**

Therefore, according to the results, hypothesis H1 and hypothesis H2 are verified, so it can be shown that family education capital of primary schools in Zhejiang, China has a negative and significant effect on parents' educational anxiety, and family atmosphere of primary schools in Zhejiang, China has a negative and significant effect on parents' educational anxiety.

4.6 Adjustment effect test

This part focuses on exploring the regulating role of the regulating variables, conducts multiple regression analysis on the independent variables, regulating variables and dependent variables, and adopts the stepwise regression method for testing. Before the adjustment test, in order to reduce the multicollinearity problem, the independent variables and regulating variables will be decentralized.

(1) Test the moderating effect of family-school cooperation on the relationship between family educational capital and parents' educational anxiety

The regression coefficient of family education capital on parents' education anxiety, home-school cooperation on parents' education anxiety, and the interaction between family education capital and home-school cooperation on parents' education anxiety is drawn, and the interaction diagram of home-school cooperation on family education capital and parental education anxiety is shown in Figure 4.1. When studying the effect of family education capital on parents' educational anxiety, whether home-school cooperation will have a moderating effect on the variables. If the relationship between the dependent variable of parent educational anxiety and the independent variable of family educational capital changes with the change of home-school cooperation, home-school cooperation is said to be the moderating variable.

It can be observed from Figure 4.1 that under the condition of low family education capital, low home-school cooperation corresponds to higher parental education anxiety, while high home-school cooperation corresponds to lower parental education anxiety. On the contrary, under high family education capital, high home-school cooperation corresponds to higher parent education anxiety, while low home-school cooperation corresponds to lower parent education anxiety. This indicates that when family education capital is high, home-school cooperation has a greater differential effect, emphasizing its positive moderating effect. Therefore, home-school cooperation strengthens the influence of family educational capital on parents' educational anxiety.

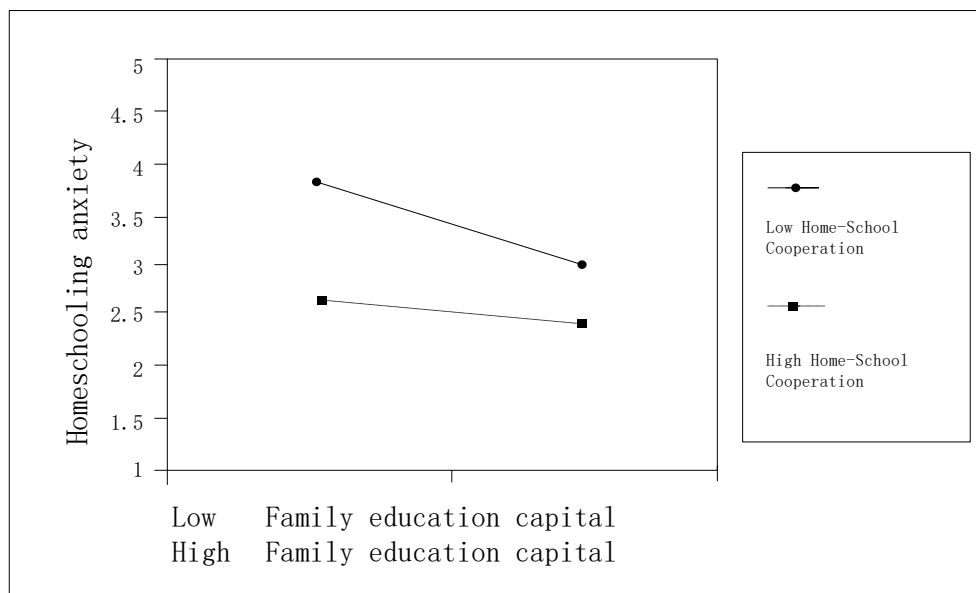


Figure 4.1 The effect of home-school cooperation on the adjustment of family education capital and parents' educational anxiety

(2) The adjustment effect of home-school cooperation on the relationship between family atmosphere and parents' educational anxiety is tested

This study explored the effects of family atmosphere, home-school cooperation and family education capital on parents' educational anxiety, and observed the moderating effect of home-school cooperation. Figure 4.2 shows the interaction between home-school cooperation and family climate and parents' educational anxiety, emphasizing the moderating role of home-school cooperation in influencing the relationship between family climate and parents' educational anxiety. The results show that under a low family climate, low home-school cooperation corresponds to a higher level of parental education anxiety, while under a high family climate, high home-school cooperation corresponds to a higher level of parental education anxiety. This indicates that home-school cooperation has a significant moderating effect on the relationship between family atmosphere and parents' educational anxiety, and enhances the influence of family atmosphere on parents' educational anxiety.

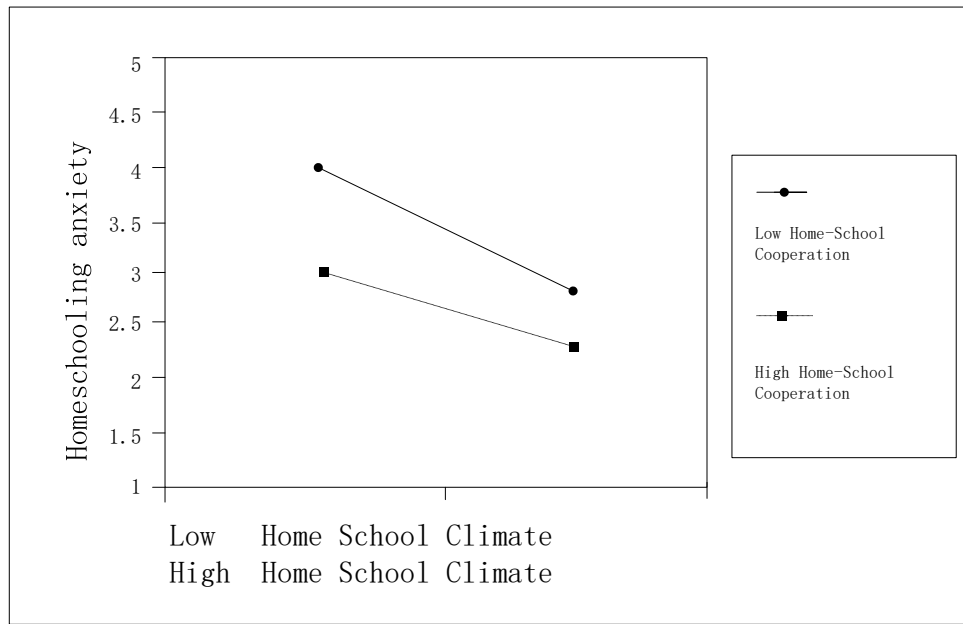


Figure 4.2 The effect of home-school cooperation on the regulation of family atmosphere and parents' educational anxiety

(3) Testing the moderating effect of home-school communication on family atmosphere and parents' educational anxiety

Home-school atmosphere, home-school communication and the interaction between school education capital and home-school communication have significant effects on parents' educational anxiety. The results in Figure 4.3 show the key role played by home-school communication between home-school climate and parents' educational anxiety. It is observed that in the case of low home-school climate, low home-school communication is associated with higher parental educational anxiety, while high home-school communication is associated with lower parental educational anxiety. Conversely, in a high-school climate, high-school communication leads to higher parental educational anxiety, while low home-school communication leads to lower parental educational anxiety. These results indicate that home-school communication plays an important role in the influence of home-school atmosphere on parents' educational anxiety, and has a positive moderating effect, thus strengthening the link between home-school atmosphere and parents' educational anxiety.

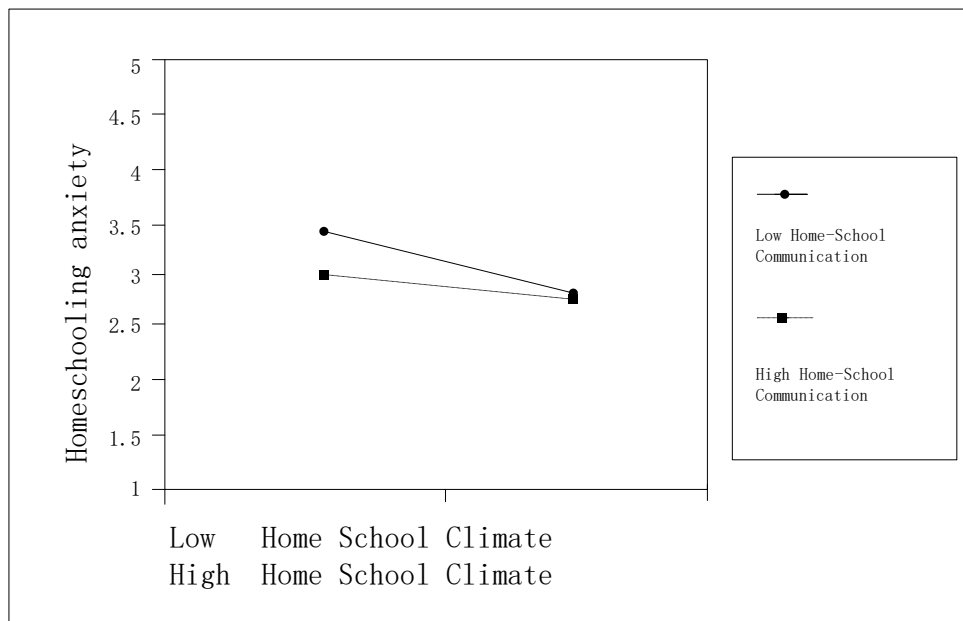


Figure 4.3 The effect of home-school communication on home-school atmosphere and parents' educational anxiety

(4) The moderating effect of home-school communication on the relationship between family educational capital and parents' educational anxiety

Family education capital, home-school communication and the interaction between family education capital and home-school communication have important effects on parents' educational anxiety. As shown in Figure 4.4, we can clearly see the interaction between home-school communication and family educational capital and parents' educational anxiety. It is observed that in the case of low family education capital, low home-school communication corresponds to higher parental education anxiety, while high home-school communication corresponds to lower parental education anxiety. On the contrary, under conditions of high family education capital, high family school communication leads to higher parent education anxiety, while low family school communication leads to lower parent education anxiety. These results indicate that home-school communication plays a key role in the influence of family education capital on parents' educational anxiety, and has a positive moderating effect, thus strengthening the link between family education capital and parents' educational anxiety.

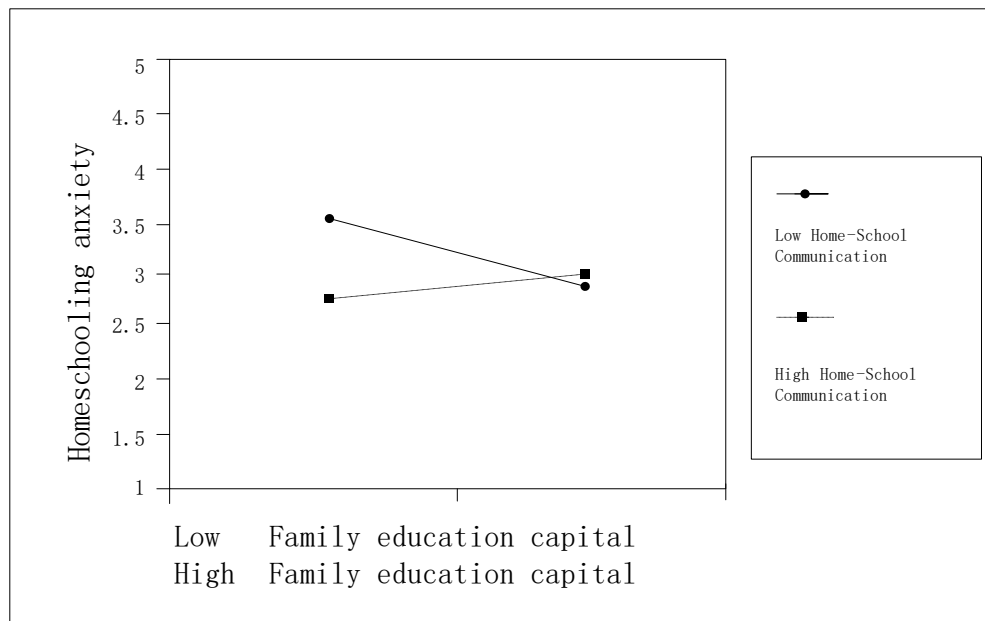


Figure 4.4 The effect of home-school communication on the adjustment of family atmosphere and parents' educational anxiety

(5) An Examination of the Moderating Effect of Home-School Communication between Family Climate and Parental Educational Anxiety

The interaction effect of home-school communication on home-school climate and parental educational anxiety is clearly presented in Figure 4.3 in the relationship between home-school climate, home-school communication and parental educational anxiety. Through the observation of moderating effects, we found that low home-school communication corresponded to higher parental educational anxiety in low home-school climate, while high home-school communication corresponded to lower parental educational anxiety. Conversely, in a high homeschool climate, high homeschool communication elicited higher levels of parenting anxiety, whereas low homeschool communication reduced parenting anxiety. This suggests that homeschool communication plays an important moderating role between homeschool climate and parental educational anxiety. In particular, the role of home-school communication was more pronounced in high home-school climate, which strengthened the effect of home-school climate on parental educational anxiety.

(6) The moderating effect of family-school communication on the relationship between family educational capital and parents' educational anxiety

When discussing the relationship among family education capital, home-school communication and parents' educational anxiety, we observed the interaction of home-school communication on family education capital and parents' educational anxiety as shown in Figure 4.4. By observing the moderating effect, we find that under low family education capital, low home-school communication is associated with a higher level of parental education anxiety, while high home-school communication is associated with a lower level of parental education anxiety. On the contrary, under the condition of high family education capital, high family school communication leads to higher level of parent education anxiety, while low family school communication reduces the level of parent education anxiety. This suggests that home-school communication plays a key moderating role between family educational capital and parental educational anxiety. Especially in the case of high family education capital, the role of home-school communication is more significant, which strengthens the influence of family education capital on parents' education anxiety.

4.6 Research hypothesis test results

According to the analysis results of Zhejiang primary school parents' family education capital, family atmosphere, parents' education anxiety, home-school cooperation and home-school communication, family

education capital has a negative impact on parents' education anxiety; The family atmosphere of Zhejiang primary school in China has a negative impact on parents' educational anxiety; The moderating effect of home-school cooperation on the relationship between family educational capital and parents' educational anxiety; The moderating effect of home-school cooperation on family atmosphere and parents' educational anxiety; The moderating effect of home-school communication on family educational capital and parents' educational anxiety; The moderating effect of home-school communication on family atmosphere and parents' educational anxiety.

5 Discussion and Explanation

Aiming at the situation of family education of primary school parents in Zhejiang Province, China, this paper makes a comprehensive investigation and analysis of the current educational environment of family education capital, family atmosphere, home-school communication and home-school cooperation, and discusses their influence on parents' educational anxiety and the moderating role of home-school cooperation and home-school communication.

It is found that the unbalanced distribution of educational resources and the limited educational resources may lead to parents' anxiety in providing educational resources. This leads to thinking about the equity of educational resources. Therefore, it is necessary for the government and education departments to allocate educational resources more equitably according to the actual situation, so as to ensure that all children can enjoy good educational resources, eliminate the anxiety of parents caused by imbalance, and thus improve the education quality and future development of children. In addition, a good family atmosphere has been proven to reduce parents' anxiety about education, so how to cultivate a positive family atmosphere and how to balance parents' expectations for their children have become important directions of thinking. In addition, studies have shown that home-school cooperation and home-school communication also play a positive role in reducing parents' educational anxiety, so how to promote more effective cooperative relationships, improve communication methods, and ensure the establishment of mutual trust and understanding have become issues that need attention.

Educational anxiety may have a negative impact on both parents and children. Therefore, in addition to the factors already discussed, it is necessary to further explore other factors that may affect educational anxiety and seek effective coping strategies. These studies suggest the direction of future research and practice, which will help to better understand and solve the problem of parents' educational anxiety, promote home-school cooperation, and improve the quality of education.

6 Conclusion and Prospect

The purpose of this study was to explore the influence of family education capital and family atmosphere on parents' educational anxiety, and the moderating role of home-school cooperation and home-school communication. Through descriptive statistical analysis of survey data from 647 parents of students, the present study found some key results. First, family educational capital and family atmosphere have a significant negative impact on parents' educational anxiety, which indicates that parents' educational anxiety level is relatively low when family educational capital is high and family atmosphere is positive. Secondly, home-school cooperation and home-school communication play an important role in alleviating parents' educational anxiety. The results show that home-school cooperation strengthens the negative impact of family educational capital on parents' educational anxiety, while home-school communication enhances the negative impact of family atmosphere on parents' educational anxiety. Therefore, the establishment of an effective home-school cooperation mechanism and smooth communication channels can provide more support and information for parents, help alleviate parents' educational anxiety, and thus promote students' better growth and development.

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