Educational Anxiety and Willingness to Buy a School District House for Parents

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Abstract. Children's education has always been one of the main topics in the family, and it has also caused anxiety to countless Chinese parents. This study aims to explore the influence of parent groups on the willingness to purchase houses in school districts in the context of educational anxiety. This research collected data from nearly four hundred parents through questionnaires and analyzed them using statistical analysis and content analysis techniques. According to the analysis, the study found that educational anxiety has a significant positive impact on parents' willingness to buy houses in school districts. These findings contribute to a deeper understanding of the behavior and decision-making of parent groups in situations of educational anxiety and provide a reference for relevant policy formulation. Although this study explores the psychological causes of home buying, it also has the problem of insufficient generalization. In the future, more psychological causes of housing in school districts can be explored.

Keywords: Education anxiety, school district housing, willingness to buy a house.

1. Introduction

Education anxiety is defined as an anxiety caused by parents' uncertainty about their children's future educational outcomes. It is considered a state of excessive anxiety. This anxiety is believed to be caused by parents' confusion about their own educational methods, such as tension and worry about the unknown that their children will face in the future, and produces corresponding externalizing behaviors [1]. Globally, to some extent, the world has entered an era of educational anxiety. Parents around the world, especially in China, are engaging in crazy involution and extremely fierce competition, which has raised parents' educational anxiety to a new level. As a result, parents will desperately look for better educational resources for their children. In China, some age groups adopt a school district enrollment system. Therefore, purchasing a house in a school district has become the main way for parents to obtain better educational resources for their children.

School district housing is a derivative of the real estate market. In industry terminology, school district housing is also called “educational real estate.” In a broad sense, a school district house refers to a property near a prestigious school; in a narrow sense, a school district house refers to a property that complies with the nearby admission policy and provides children with access to the school district without taking exams [2]. Some literature shows that as early as 2005 at the beginning of this century, China had begun to implement a strict “nearby enrollment” policy for primary and secondary schools across the country. This makes "school choice based on housing" a major way for Chinese parents to seek higher-quality education for their children [3]. In fact, there are many ways to enter higher education. Not only through purchasing a house in a school district, but also through computer lottery and recruiting students with special talents [4]. However, the computer lottery is highly uncertain as it is completely random, and the enrollment of students with special talents also requires a lot of investment from parents, and the competition is equally fierce. Buying a house in a school district has become the only choice for many parents.

Most of the research literature on school district housing focuses on the premium effect of school district housing and its impact on educational equity, the research on its accompanying real estate speculation, and the impact of China's "burden reduction" policy on school district housing prices in recent years. Their conclusions and suggestions are also proposals for education equity and restraining the phenomenon of "school district housing fever". Some studies believe that the "school

district housing" phenomenon is a monopoly on high-quality educational resources, an unfair phenomenon that goes against the original intention of the "nearby enrollment" policy, and will intensify social stratification and social conflicts [5]. However, these studies may have overlooked the reasons for such a high level of parents' willingness to buy a house in a school district. Some literatures believe that whether there are high-quality education resources and family economic strength in the school district has a positive effect on residents' choice and willingness of school district house purchase [6]. In addition, some articles explore the external factors that drive parents' pursuit of housing in school districts. Some authors believe that the scarcity of educational resources and the underutilization of land resources have resulted in high premiums for housing in school districts, which has seriously reduced people's quality of life. They believe that the problem of "school district housing fever" is inevitable and unsolvable [7]. It can be seen that the existing literature attributes the premium of housing in school districts or the strong willingness of parents to purchase houses to external factors, but there is a lack of research on the psychological activities of parents before their own house purchase decisions.

According to online searches, the average price of housing in Wenzhou's school districts is 32,000 yuan per square meter. In some schools that are better in the eyes of parents, the price of some houses is even close to 100,000 yuan per square meter. Although the high price of school district housing has brought serious financial burden to families, many parents are still interested in buying school district housing. This article aims to clarify the relationship between parents' educational anxiety levels and their intention to purchase a house in a school district.

2. Methodology

The whole research is based on the information gathered in the survey questionnaire. The questionnaire measures variables and shows the relationship between the independent variable, education anxiety and the dependent variable, the willingness to buy a house, after in-depth analysis [8-10]. The questionnaire will be based on an online questionnaire platform, "WenJuanXing" and can be distributed, completed, and collected online. The data will be analyzed in units of individual. The data will be collected individually from parents among Wenzhou citizen. The research will look at the data gathered from each individual and treat each response as an individual data source. In the data analyzing tool, SPSS, each sample will be placed in a unit as an individual.

This study needs to obtain parents' own degree of educational anxiety and their willingness to buy a school district house. Thus, the data will be collected by distributing questionnaires to parents. As this research needs the primary data and the measurement is about the attitude towards buying school district house, a questionnaire is required. The questionnaire will be used to collect data, analyze, and judge respondent's tendencies. The sampling method is decided to be snowball sampling under non-probability sampling methods to make the sample more extensive and more generalized. The snowball sampling method can help this study get closer to those parents who are concerned about their children's education and want their children to receive a better education so as to understand their views on Wenzhou's education policies and their intentions to purchase houses in school districts.

Variables are measured by questionnaire. Using a series of questions developed by other researchers, each element in a concept can be clarified. Brief theoretical framework is shown in Fig. 1. With this theoretical framework, one can get the following hypotheses: the parents' education anxiety will stimulate the willingness of buying the school district housing.

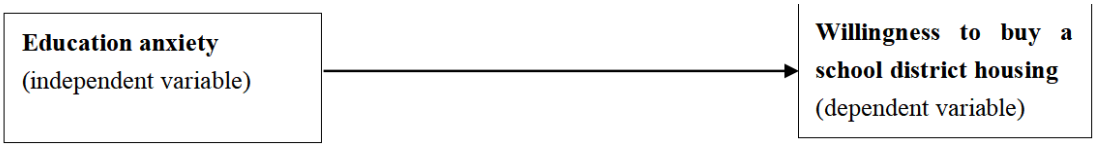


Figure 1. Brief theoretical framework

The data analysis of this study was carried out based on the data analysis software SPSS 26. The examination of questionnaire data will be divided into four steps. First, one needs to check whether

the sample size meets the analysis requirements: use KMO and Bartlett's test. To test the reliability of the questionnaire, this study will use reliability analysis, using Cronbach as the indicator. Check the consistency between the questionnaire and the measured variables. The validity of the questionnaire was checked, using the total variance explained as the criterion. One can use the bivariate relationship analysis function to analyze whether there is a relationship between the independent variable and the dependent variable.

3. Results and Discussion

3.1. Sample Characteristics

The questionnaire contains a total of 8 questions about demographic characteristics, including gender, age, family situation, income, etc. Below are statistics on participant characteristics. The questionnaire will be issued from the morning of February 1, 2024 until the number of copies has stabilized and no one will fill in any more. A total of 381 valid questionnaires were received. The makeup of the participants showed diversity. Most participants are over 30 years old and have one or more children. This means that most of the participants have some understanding of school district housing. Their children have gone through schooling, and they themselves know something about it or have most likely purchased a house in a school district directly. The annual family income of most participants is 200,000-500,000 yuan or more, which means they can afford to buy a house in the school district. The data set is deemed normal if value for skewness is between -2 and +2 and the value for kurtosis is between -7 and +7. According to these criteria, all of the items are followed the normal distribution. After analysis, some important descriptive statistics about the problem are presented in the Table 1. The kurtosis and skewness of all problems are within this range. Meet the above requirements. Cronbach's values of both variables are higher than 0.7, indicating that the questionnaire has high internal consistency in measuring the target concept. This means that this measurement tool is reliable in terms of repeatability and stability and can be used to collect data and conduct further analysis and interpretation.

Table 1. Important information about descriptive statistics of questionnaire

	Mean	Std	Variance	skewness	kurtosis
Average of all questions	3.477143	1.129286	1.282107	-0.35471	0.41196
Maximum	3.82	1.258	1.582	-0.1	-0.001
Minimum	3.12	0.981	0.963	-0.835	-0.853

The KMO and Bartlett test is shown in Table 2. Generally speaking, the closer the KMO value is to 1, the more suitable the data is for factor analysis. In this example, the KMO value is 0.937, which is very close to 1, indicating that the sample is very suitable for factor analysis. Significance is 0.000. Since the significance is less than the common significance level of 0.05, null hypothesis could be rejected and that there is a correlation between the variables. Therefore, this result supports the suitability of conducting factor analysis.

Table 2. KMO and Bartlett test of all questions

KMO and Bartlett test		
KMO sample appropriateness measure		.937
Bartlett sphericity test	Approximate chi-square	9343.170
	Degree of freedom	378
	significance	.000

The principal component analysis table shows the initial eigenvalues and sum of squared extracted loadings for each principal component in the data set, as well as their percent variance and cumulative percent (seen from Table 3). First, the first principal component has the largest initial eigenvalue (7.056), and its sum of squared extracted loadings is also the highest (64.147). This shows that the first principal component explains approximately 64.147% of the total variance in the data set and is the principal component with the most explanatory power. The cumulative percentage shows that in

the first principal component, approximately 64.147% of the total variance in the dataset is explained. As the principal components increase, the initial eigenvalues gradually decrease, indicating that the variance explained by subsequent principal components gradually decreases. However, even in the eleventh principal component (the last one), there is still a certain amount of variance explained (1.524), although this part of the variance is already very small compared to the previous principal components. The cumulative percentage reaches 100%, which means that all the variance has been explained. Seen from Table 4, the first principal component has the largest initial eigenvalue (8.293) and extracted sum of squared loadings (48.781), indicating that it plays a dominant role in explaining the variance of the dependent variable.

Table 3. Independent variable: total variance explained

Total variance explained: Independent variable						
ingredient	Initial eigenvalue			Extract the sum of squared loads		
	total	Percent variance	Cumulative	total	Percent variance	Cumulative
1	7.056	64.147	64.147	7.056	64.147	64.147
2	.916	8.326	72.473			
3	.578	5.251	77.724			
4	.554	5.033	82.757			
5	.372	3.383	86.140			
6	.356	3.239	89.379			
7	.302	2.749	92.128			
8	.257	2.334	94.462			
9	.244	2.219	96.681			
10	.197	1.795	98.476			
11	.168	1.524	100.000			

Table 4. Dependent variable: total variance explained

Total variance explained: Dependent variable						
ingredient	Initial eigenvalue			Extract the sum of squared loads		
	total	Percent variance	Cumulative	total	Percent variance	Cumulative
1	8.293	48.781	48.781	8.293	48.781	48.781
2	3.332	19.599	68.380	3.332	19.599	68.380
3	1.066	6.270	74.650	1.066	6.270	74.650
4	.917	5.394	80.044			
5	.525	3.089	83.132			
6	.410	2.414	85.547			
7	.359	2.109	87.656			
8	.318	1.871	89.527			
9	.283	1.665	91.192			
10	.279	1.639	92.831			
11	.234	1.374	94.205			
12	.206	1.212	95.417			
13	.185	1.087	96.504			
14	.171	1.004	97.508			
15	.163	.959	98.467			
16	.137	.804	99.271			
17	.124	.729	100.000			
Extraction method: principal component analysis.						

As the principal components increase, the initial eigenvalues and the sum of squared extracted loadings gradually decrease, which means that subsequent principal components explain less variance. The Cumulative Percent column shows the cumulative percentage of the total variance explained by the first few principal components. The first three principal components explain about 74.650% of

the total variance, and the first four principal components explain about 80.044% of the total variance. This indicates that the first four principal components capture most of the total variance.

3.2. Correlation Analysis

Table 5 shows the Pearson correlation between the independent and dependent variables. The Pearson correlation coefficient between the independent variable and the dependent variable is 0.614 (**, $p < 0.01$), indicating that there is a moderate positive relationship between them. This positive relationship means that when the value of the independent variable increases, the value of the dependent variable also increases accordingly.

Table 5. Correlation analysis of two variables

		COMPUTE iv=(Q9+Q10+Q11+Q12+Q13+Q14+Q15+Q16+Q17+Q18+Q19)	COMPUTE dv=(Q20+Q21+Q22+Q23+Q24+Q25+Q26+Q27+Q28+Q29+Q30+Q31+Q32+Q33+Q34+Q35+Q36)
COMPUTE iv=(Q9+Q10+Q11+Q12+Q13+Q14+Q15+Q16+Q17+Q18+Q19)	Pearson correlation	1	.614**
	Sig. (Double tail)		.000
	Number of cases	381	381
COMPUTE dv=(Q20+Q21+Q22+Q23+Q24+Q25+Q26+Q27+Q28+Q29+Q30+Q31+Q32+Q33+Q34+Q35+Q36)	Pearson correlation	.614**	1
	Sig. (Double tail)	.000	
	Number of cases	381	381

**. At level 0.01 (two-tailed), the correlation was significant.

The significance level (Sig.) of the Pearson correlation coefficient is 0.000 ($p < 0.01$), indicating that the value of the correlation coefficient is statistically significant. This means that the correlation between the independent and dependent variables is unlikely to be caused by random factors, but rather represents a real association. In the subsequent analysis, this study analyzed the relationship between the demographic characteristics collected by the questionnaire and the independent and dependent variables. Seen from Table 6, the level of educational anxiety and homebuying intentions differed among specific groups. The significant correlations with independent or dependent variables in the following demographic characteristicsAccording to the analysis, participants with higher annual household income showed less anxiety about education. This result indicates that for families with higher annual income, their perception of educational anxiety is less obvious.

Table 6. Csorrelation between independent variable and family yearly income

		COMPUTE iv=(Q9+Q10+Q11+Q12+Q13+Q14+Q15+Q16+Q17+Q18+Q19)	Your annual household income:
COMPUTE iv=(Q9+Q10+Q11+Q12+Q13+Q14+Q15+Q16+Q17+Q18+Q19)	Pearson correlation	1	-.153**
	Sig. (Double tail)		.003
	Number of cases	381	381
Your annual household income:	Pearson correlation	-.153**	1
	Sig. (Double tail)	.003	
	Number of cases	381	381

**. The correlation is significant at the 0.01 level (two-tailed).

The questionnaire for this study provided two options, one for owner-occupied housing and the other for rental housing. In the analysis, the owner-occupied housing is coded as 1, and the rental housing is coded as 2. The results in Table 7 show that it is more difficult for people who own their own housing to feel anxious about education. In addition, in the analysis of the correlation between demographic characteristics and the dependent variable, this study also found some associations. Seen from Table 8, in the questionnaire, this study provides a total of four options: "married without pregnancy, no children," "one child at home," "two children at home," and "more than two children at home." According to the analysis results, the more children they have, the weaker their intention to buy a school district house is.

Table 7. Correlation between Independent variable and family yearly income

		COMPUTE iv=(Q9+Q10+Q11+Q12+Q13+Q14+Q15+Q16+Q17+Q18+Q19)	Your current house belongs to:
COMPUTE iv=(Q9+Q10+Q11+Q12+Q13+Q14+Q15+Q16+Q17+Q18+Q19)	Pearson correlation	1	-.153**
	Sig. (Double tail)		.003
	Number of cases	381	381
Your current house belongs to:	Pearson correlation	-.153**	1
	Sig. (Double tail)	.003	
	Number of cases	381	381
*. The correlation is significant at the 0.05 level (two-tailed).			

Table 8. Correlation between dependent variable and family statues (having kids)

		COMPUTE dv=(Q20+Q21+Q22+Q23+Q24+Q25+Q26+Q27+Q28+Q29+Q30+Q31+Q32+Q33+Q34+Q35+Q36)	Your family status
COMPUTE dv=(Q20+Q21+Q22+Q23+Q24+Q25+Q26+Q27+Q28+Q29+Q30+Q31+Q32+Q33+Q34+Q35+Q36)	Pearson correlation	1	-.105*
	Sig. (Double tail)		.041
	Number of cases	381	381
Your family status	Pearson correlation	-.105*	1
	Sig. (Double tail)	.041	
	Number of cases	381	381
*. The correlation is significant at the 0.05 level (two-tailed).			

3.3. Discussion

According to the results of questionnaire analysis, there is a positive correlation between educational anxiety and the willingness to purchase a house in a school district. This has some implications for solving the housing craze in school districts. To alleviate parents' enthusiasm for housing in school districts, one can not only start from the real estate market control policy, but also consider the anxiety of parents. To alleviate parents' enthusiasm for housing in school districts, the government can not only start from the perspective of real estate market control policies, but also consider parents' anxiety. Provide more diverse enrollment channels for students of appropriate age. In addition, over-concentrated high-quality resources, such as famous teachers and famous courses, will be made accessible to more people through more forms (e.g., internet courses). In addition, parents should also take the initiative to regulate their own anxiety and fully understand local education policies, so as not to add a heavy burden to the family when buying a house in a school

district. Carry out targeted planning based on your child's learning situation, and seek admission in different ways based on your child's characteristics. At the same time, regarding the investment attributes of buying a house, you can consult some professionals to make long-term investment plans. At the same time, this study also has some limitations. The questionnaires collected in this study were mostly from parents in Wenzhou area. It can only represent the situation of Wenzhou, and this study can serve as a reference for the situation of other regions of the country. Because the policies and prices of school district housing in other regions and even parents' opinions on school district housing are different, the representation of other regions and even the whole country is not good.

4. Conclusion

To sum up, this study found that there is a positive correlation between educational anxiety and the willingness to buy a house in a school district. Educational anxiety will significantly increase the willingness to buy a house in a school district. This conclusion seems logical. For the more anxious parents, they are more willing to obtain better educational resources through the relatively convenient way of housing in the school district. This article evaluates the impact of educational anxiety on parents' home buying behavior in school districts. An in-depth study was conducted on the psychological causes of buying a house in a school district. The orientation of specific groups towards educational anxiety and housing purchase behavior in school districts was analyzed. In the future, more in-depth research can be done on the impact of school district housing prices on purchasing behavior and other psychological factors.

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