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The Impact of Family Economic Situation and Parents' Educational Expectations on Academic Performance of Junior High School Students

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Abstract: Under the new curriculum reform, an assessment and examination system adapted to the concept of quality education has been established. Academic performance remains the most direct way of reflecting students' academic achievement, and the family is one of the most crucial elements influencing children's performance, with parental expectations influencing the home education environment. This paper examines the influence of family economic conditions as a factor and parents' educational values as a factor of cultural perceptions on their educational expectations. A study was done on the effects of family economic conditions and parental expectations on junior high school students' academic achievement. Using information from the China Family Tracking Survey (CFPS) (2012-2016), this paper analyzes, through OLS regression, whether the influence of factors such as family economic level on junior high school students' achievement changes as time changes. That is, the desire for children to receive higher levels of education has a significant positive effect on children's current achievement ranking; the child's gender as male significantly improves current achievement ranking. The paper shows that the widening income gap raises parents' educational expectations for their children by increasing their material aspirations. However, the effect of family income on junior high school students' achievement was not significant; only parental expectations of education level and gender had a significant effect on achievement.

Keywords: Family financial income, Educational expectations, Student achievement

1. Introduction

Under the current education system, academic achievement is an important indicator of academic achievement, and academic achievement can most directly reflect the results of education. Family is the earliest environment that people are exposed to after birth, and family education is the most basic education and one of the most important factors affecting students' achievement. Families play an important role in laying the foundation for student development, and many parents have

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high educational expectations for their children. Among the many family factors, parents' expectations for their children are highly influential on their children's test scores, and parental educational expectations are even considered to be the most predictive factor for academic achievement [1, 2]. Widespread families believe that attending a bachelor's degree becomes the most common requirement [3]. However, due to family income inequality and differences in educational resources across schools, the educational expectations of families with better incomes have changed from attending a bachelor's degree to wanting their children to attend a "958" or "211" university [4]. Even more, educational expectations range from undergraduate to graduate school, from prestigious domestic schools to overseas Ivy League schools. However, families with low family income and economic status are not able to support their children's educational pursuits on a lasting basis.

With the application of the new curriculum reform and the change in the evaluation mechanism for students, there has been a change in the way students learn and an increase in the pressure of learning, and at this stage, the main thing students have to consider is to successfully enter high school, so the disadvantages of measuring a student mainly by scores are becoming more and more prominent. The relationship between family economic conditions and parents' educational expectations and the academic performance of junior high school students has long been a concern for all sectors of society. China is one of the largest countries in the world today in terms of education, and issues related to education can largely affect all aspects of the economy and society. While income disparity in society as a whole can also have an important impact on education, the issue of the impact of income disparity on educational expectations lacks adequate research. This study uses three periods of CFPS panel data from 2012-2016 to systematically explore the impact of the relationship between family economic conditions, parents' educational expectations, and students' academic achievement under the lens of income inequality.

2. Literature Review

Educational expectations refer to parents' expectations about the number of years of education and the educational qualifications obtained by their children are called educational expectations [5]. In studies on the academic achievement of students in rural areas, measures such as parents' education level and family income were used [6]. It is believed that there is a link between both family background and academic achievement of secondary school students, and the impact of indicators of family economic income and parents' educational level, on the academic achievement of secondary school students has been studied [7]. This suggests the problem of unequal distribution of educational resources suffered by families with lower economic status, which are limited by the family economy and have lower access to education. Therefore, families with lower economic incomes are forced to lower their expectations for their children's education. Due to the rapid expansion of higher education in China in recent years, the value return of education in the market is not enough to cover the cost of education, and lower-class families make a utilitarian choice between the benefits and costs of education and take the initiative to lower their educational expectations, forming the idea that "studying is useless" [8].

Among the studies on what factors influence students' academic achievement, the Coleman Report (1966) studied more than three thousand schools in the United States and concluded the following by examining data related to approximately six hundred and fifty thousand students and seventy thousand teachers, that family socioeconomic status was the most important factor influencing students' academic achievement, as school and teacher factors, which were previously thought to have a significant impact on academic achievement, were shown to have little influence in this study [9].

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The influence of educational expectations and junior high school students' achievement in China, because of the long-standing influence of Confucian culture, parents of various families generally have high educational expectations for their children. Parental educational aspirations are one of the most significant influencing variables in the family educational environment and have a significant impact on children's academic success. Parental educational expectations have their own unique self-evidencing influence, but if parents have higher expectations for their children to obtain higher levels of education compared to parents' expectations for lower levels of education, their children show higher academic achievement to achieve higher levels of education [10-12]. Parents with high educational expectations usually spend more time educating their children, they invest more attention and resources in their children's education, and they constantly expand their knowledge to provide academic help for their children.

3. Study Design

3.1. Data Sources

Panel data from the CFPS 2012-2016 III are the data used in this article. The Chinese Social Science Center at Peking University is the organization behind the extensive national social survey study known as CFPS. which conducted a baseline survey in 2016 and has been conducted since then, covering a total of 25 provincial administrative regions across China. In 2012, the total sample size was 624. In 2014, the total sample size was 1,524. In 2016, the total sample size was 1251.

3.2. Variables

3.2.1. Dependent Variable

The dependent variable in this study is academic achievement. At present, academic achievement in China is generally assessed by academic examinations, and in most cases, the full mark and grade system are used, and the accuracy and completeness of students' answers to questions and their ability to apply what they have learned to solve problems are used as reference standards for academic achievement [13]. In the CFPS questionnaire, students' academic performance is not asked for specific scores, but is measured by self-answering questions about academic performance. The question about academic achievement was "In the last midterm or final exam, your ranking in the grade was about", as shown in Table 1, with the following values: "Top 10%" = 1, "11%-25%" = 2, "26- 50%" = 3, "51-75%" = 4, and "Last 24%" = 5.

3.2.2. Independent Variable

The variables that are independent in this study are annual household income, educational expectation of children, and parents' education level. As shown in Table 1, annual household income "total wage income" includes wages, bonuses, subsidies, benefits in kind, etc. The values of annual household income are 0-10,000,000 RMB. Children's education expectation is divided into 6 categories, namely: Elementary, middle, high, junior high, technical, and vocational high schools; college; bachelor's and master's degrees; illiterate or semi-literate, and doctor's degree, coded as 1-8. D. and no need to study, coded as 1-9 respectively.

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Table1: Definition of variables

Variable Type	Variables	Variable Definition
Dependent variable	Achievement Ranking	1=Top 10% 2=11-25% 3=26-50% 4=51-75% 5=Last 24%
Independent variable	Family economic level	Total household income is taken as logarithm
	Father's education level	1 = illiterate/semi-literate 2 = elementary school 3=Junior high school 4=High school/junior college/technical school/vocational high school 5=College 6=Undergraduate
	Education level of mothers	1 = illiterate/semi-literate 2 = elementary school 3=Junior high school 4=High school/junior college/technical school/vocational high school 5=College 6=Undergraduate
	Educational Expectations	1 = illiterate/semi-literate 2 = elementary school 3=Junior high school 4=High school/junior college/technical school/vocational high school 5=College 6=Undergraduate 7=Master's degree 8=PhD
Control variables	Gender	1=Male 0=Female

3.2.3. Control Variables

The control variable in this paper was the gender of the student and it was found that the achievement ranking showed a significant positive correlation after controlling for gender.

3.3. Research Methods

3.3.1. Descriptive Statistics

As shown in Tables 2, 3 and 4, independent and control variables were selected separately and descriptive statistics were performed for the mean, standard deviation, maximum and minimum values of the samples from 2012-2016, respectively.

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Table2: Descriptive statistics of CFPS2012 sample distribution

Variable	Number of observations	Average	Standard deviation	Minimum value	Maximum value
Household income	613	10.207	1.198	0	14.111
Grade Ranking	624	2.428	1.225	1	5
Father's education level	624	2.901	1.097	1	6
Mother's education level	624	2.506	1.188	1	6
Educational Expectations	624	6.016	1.203	2	8
Gender	624	.519	.5	0	1

After processing a total of 624 samples were obtained in 2012.

Table3: Descriptive statistics of CPFS2014 sample distribution

Variable	Number of observations	Average	Standard deviation	Minimum value	Maximum value
Household income	1447	10.387	1.155	0	14.123
Grade Ranking	1524	2.564	1.186	1	5
Father's education level	1524	2.835	1.486	1	9
Mother's education level	1524	2.829	1.967	1	9
Educational Expectations	1524	5.722	1.11	2	9
Gender	1524	.53	.499	0	1

After processing a total of 1524 samples were obtained in 2014.

Table4: Descriptive statistics of CFPS2016 sample distribution

Variable	Number of observations	Average	Standard deviation	Minimum value	Maximum value
Household income	1250	10.699	.948	4.443	15.618
Grade Ranking	1251	2.571	1.173	1	5
Father's education level	1251	2.669	1.192	1	7
Mother's education level	1251	2.332	1.196	1	7
Educational Expectations	1251	5.73	1.061	2	8
Gender	1251	.553	.497	0	1

After processing a total of 1251 samples were obtained in 2016.

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3.3.2. Empirical Studies

This paper uses OLS models to analyze whether factors such as family economic level have an effect on junior high school students' achievement. OLS regressions were also conducted using data from each of the three periods to analyze whether factors such as family economic level changed over time on the achievement of junior high school students.

3.4. Hypotheses

Based on the logic of influence between household economic income, educational expectations, and gender, the following hypotheses are proposed in this study.

Hypothesis 1: The youngster will perform better if the family's money is higher and its parents have higher expectations for their child's schooling.

Hypothesis 2: The higher the level of parental education and the higher the parental expectations for their own child's education, the higher the child's achievement.

Hypothesis 3: Students' academic achievement influences parents' educational expectations, and there is a very strong correlation between the two.

4. Results

4.1. Descriptive Statistics Results

Table 5 shows the results of descriptive statistics for the variables of interest. It is possible to find differences in the data for the periods 2012, 2014 and 2016. In 2016, the total sample size was 1251, the mean value of achievement ranking was 2.571, the economic level of the family was 10.70, the educational level of the father was 2.669, the educational level of the mother was 2.332, and the educational expectation was 5.730.

Table5: Descriptive statistics

Variables	2012 (N=624)		2014 (N=1524)		2016 (N=1251)	
	Average value	Standard deviation	Average value	Standard deviation	Average value	Standard deviation
Achievement Ranking	2.428	1.225	2.564	1.186	2.571	1.173
Family economic level	10.21	1.198	10.39	1.155	10.70	0.948
Father's education level	2.901	1.097	2.835	1.486	2.669	1.192
Education level of mothers	2.506	1.188	2.829	1.967	2.332	1.196
Educational Expectations	6.016	1.203	5.722	1.110	5.730	1.061
Gender	0.519	0.500	0.530	0.499	0.553	0.497

4.2. Results of the Empirical Analysis

Combining the data in Table 6 and Table 1 reveals that educational expectations and gender have an effect on achievement ranking in the regression analysis of 2012 with a significance level of 1%.

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The higher the educational expectation of the child, the better the child's current achievement, i.e., the desire for the child to receive a higher level of education has a significant positive effect on the child's current achievement ranking; the child's gender as male has a significant positive effect on the current achievement ranking. There was no significant effect of family economic level and parents' education level on the child's current achievement ranking. In Tables 5 and 6, i.e., the regression analyses for 2014 and 2016 have similar results, i.e., educational expectations, and gender have a significant effect on current achievement at the 1% level of significance. There is no significant effect of family economic level and parents' education level on children's current achievement.

Table6: Effect of educational expectations, family economic level, and other factors on ranking

	2012 (1)	2014 (2)	2016 (3)
Educational Expectations	-0.236*** (-5.54)	-0.148*** (-5.34)	-0.149*** (-4.64)
Gender	0.454*** (4.79)	0.372*** (6.08)	0.298*** (4.52)
Family economic level	0.062 (1.49)	0.004 (0.14)	-0.033 (-0.88)
Father's education level	0.037 (0.67)	0.005 (0.23)	0.020 (0.59)
Education level of mothers	-0.047 (-0.97)	-0.007 (-0.45)	0.002 (0.05)
Constant term	2.984*** (6.43)	3.175*** (10.21)	3.552*** (8.56)
Observations	613	1,446	1,247
R-squared	0.093	0.044	0.033

*** p<0.01, ** p<0.05, * p<0.1

5. Discussion

The results of this study suggest that family socioeconomic status affects junior students' academic performance by controlling for gender.

The findings of this study indicate that educational expectations and gender have an effect on achievement ranking at the significance level. The higher the educational expectations of the child, the better the student's current achievement is likely to be; also there is a significant effect on the still academic ranking achievement when receiving a higher level of education; the child's gender being male has a significant positive effect on the current achievement ranking. Family economic level and parents' education level have no significant effect on current child achievement ranking. The reason for such results is that high parental educational expectations can put pressure on students and thus affect their performance. Therefore, a healthy family education mentality should be developed to avoid the negative effects of inequality in school education. Finally, family socioeconomic status does not directly affect secondary school students' learning engagement, but mainly influences learning through family functioning. In addition, there are some shortcomings in this study. The data used is not new enough because the database has not been updated and the updated data can be used in the future. Second, this study also did not differentiate between urban

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and non-urban residents, which is not enough to show the causal relationship between the variables. These issues will be the focus of future attention.

6. Conclusion

The aim of this study was to investigate how middle school students' family economic situation and educational expectations affected them. The analysis in this study shows that there is no significant effect of family economic status on junior high school students' achievement, there is a negative significant effect of parents' educational expectation on junior high school achievement, while among the control variables students' gender has a positive significant effect on students' achievement. In other words, family economic status does not directly affect student achievement, while family educational expectation affects student achievement, and high parental educational expectation is not necessarily a healthy and rational state of mind, and may even bring too heavy academic burden and psychological pressure to children. Therefore, parents should give their children appropriate expectations and actively encourage their children's development. At the same time, they should pay more attention to their children's psychological condition and provide timely guidance. The study can explain to a certain extent how to scientifically set educational expectations for children.

References

[1] *Zhang Yanyan., Haddad Eileen., Torres Bernadeth., Chen Chuansheng, (2011) The Reciprocal Relationships Among 'Parents' Expectations, 'Adolescents' Expectations, and Adolescents 'Achievement: a Two-wave Longitudinal Analysis of the NELS Data. Journal of Youth and Adolescence. 4*

[2] *William H. Jeynes. (2007) The Relationship Between Parental Involvement and Urban Secondary School Student Academic Achievement. Urban Education.*

[3] *Yang Xichao, Yao Yuan, et al. (2016) Research on the Influence of Family Social Status on Adolescents' Educational Expectations: an Empirical Analysis Based on CEPS2014 Survey Data. China Youth Studies, 7.*

[4] *Wang Fuqin, (2020) Family Socioeconomic Status and Graduate School Expectations - Mediating Effects of College Characteristics. Youth Studies, 3.*

[5] *Wang Fuqin Qiu (2021) Wanting: Family Social Class, Educational Expectations and Extracurricular Education - an Empirical Study Based on CFPS2016, China Youth Social Science, 6.*

[6] *Peng Yanlin, (2021) A Study on the Effects of Family Capital and Parental Education Involvement on Secondary School Students' Academic Performance in Mathematics. Southwestern University.*

[7] *Ren Xuehui, (2021) Effects of Family Educational Inputs on Adolescents' Academic Performance and Mental Health. Shandong University.*

[8] *Xie Ailei, (2017) "Reading Is Useless" or "Reading Is Hopeless"-a Re-conceptualization of the Education of the Rural Underclass, Peking University Education Review, 3. 3.*

[9] *James S. Coleman etal. (1966) Equality of Education Opportunity. Washington, DC : Government Printing Office,.*

[10] *Hou Linlin. (2013) A Study on the Relationship Between Parental Expectations, Self-efficacy and Achievement Motivation Among Junior High School Students in Yanbian Area. Yanbian University.*

[11] *Richard R. Pearce. (2006) Effects of Cultural and Social Structural Factors on the Achievement of White and Chinese American Students at School Transition Points. American Educational Research Journal. 1*

[12] *Susan Sy,John Schulenberg. (2005) Parent Beliefs and Children's Achievement Trajectories During the Transition to School in Asian American and European American Families. International Journal of Behavioral Development.*

[13] *M. R. Raupach. Response to Gu. (1998), "Comments on 'a Practical Lagrangian Method for Relating Scalar Concentrations and Source Distributions in Plant Canopies' by M. R. Raupach (1989: Quart. J. Roy Meteorol. Soc. 115, 609–632)". Boundary-Layer Meteorology, 87(3).*