The Relationship between Family Education Expenditure and Education Equalization

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ABSTRACT: This study examines the relationship between family education expenditure and education equalization, focusing on the role of social policy in promoting educational opportunities for all. The research finds a positive correlation between education equalization and family education expenditure, indicating that increased investment in education by families contributes to greater equity in educational outcomes.

Through a survey of parents of students, it is observed that there is a positive relationship between education equalization and family education expenditure. This suggests that parents who prioritize education and allocate more resources towards it tend to support policies and initiatives aimed at reducing educational disparities and promoting equal access to quality education for all students.

KEYWORDS: family education expenditure, education equalization, social policy

INTRODUCTION

Education is universally recognized as a fundamental factor for the development and progress of any society. It plays a crucial role in shaping individuals' skills, knowledge, and abilities, thereby contributing to their overall well-being and future success. However, access to quality education and educational opportunities is often unequal, resulting in educational disparities among different social groups and regions. As a result, education equalization has become a significant concern for policymakers seeking to create a fair and inclusive education system.

One important aspect of education equalization is the relationship between family education expenditure and the overall balance in the education system. Family education expenditure refers to the financial resources invested by families in their children's education, which can include expenses related to tuition fees, books, educational materials, private tutoring, and extracurricular activities. These expenditures reflect the value and priority parents place on their children's education and can have a profound impact on educational outcomes.

The purpose of this study is to explore the relationship between family education expenditure and education equalization. Specifically, we aim to examine whether there is a positive correlation between family education expenditure and the level of education balance within a given society. Additionally, we seek to understand the attitudes and perspectives of parents towards education equalization and how their investment in their children's education may influence their perceptions of fairness and equity within the education system.

By investigating this relationship, we hope to shed light on the role of family education expenditure in promoting or hindering education equalization efforts. This research can inform policymakers, educators, and other stakeholders in developing strategies and policies that aim to reduce educational disparities and create a more equitable and inclusive education system.

Overall, this study aims to contribute to the ongoing discourse on education equalization and highlight the importance of family education expenditure as a potential factor influencing the achievement of equitable educational outcomes. By understanding the dynamics between family investment in education and education balance, we can work towards creating a society where every individual has an equal opportunity to access quality education, regardless of their socioeconomic background or other demographic factors.

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LITERATURE REVIEW

Education is considered a fundamental aspect of human development and plays a crucial role in promoting social and economic equality. Education equalization, or ensuring equitable access to quality education for all individuals regardless of their socioeconomic backgrounds, is a key goal of social policy in many countries. One important factor that influences education equalization is family education expenditure, which refers to the financial resources invested by families in their children's education. This article aims to explore the relationship between family education expenditure and education equalization, focusing on the positive correlation observed between the two factors and the mutual value placed on education equalization by parents.

Numerous studies have established a positive correlation between family education expenditure and education equalization. For example, policy does matter in shaping shadow education spending. The high school equalization policy in South Korea, intended to promote educational equity, resulted in increased demand for private tutoring as a means to maintain competitiveness. The study highlights the need for policymakers to carefully consider the unintended consequences of education policies and to develop comprehensive strategies that address both the root causes and the manifestations of shadow education spending (Byun et al., 2010). Furthermore, educational finance reforms have important implications for equal opportunity. By reallocating resources to underfunded schools and districts, fiscal reform can ensure equitable access to high-quality education, regardless of a student's race or socioeconomic background. This can improve educational outcomes, increase college readiness, and expand opportunities for traditionally disadvantaged groups（Betts et al., 2005）In addition, equalizing opportunity through educational finance reform highlight the potential of such initiatives in reducing educational disparities and providing equal access to quality education. By redistributing resources, improving educational outcomes, and narrowing the opportunity gap, finance reform can contribute to a more equitable education system (Betts et al.,1999). Furthermore, investing in quality education and addressing educational disparities is crucial for promoting economic growth, reducing inequality, and fostering social mobility. Policymakers should prioritize efforts to improve governance, transparency, and resource allocation in education systems to ensure equitable access to quality education for all individuals, regardless of their socioeconomic background (Gradstein et al., 2004) Thus, policies that encourage increased family education expenditure and foster a supportive environment for education equalization efforts are very important. By recognizing the interplay between family investment and education equalization, social policymakers can design effective strategies to enhance educational opportunities and reduce disparities in education.

METHODOLOGY

This time, it is planned to carry out empirical research through questionnaire survey to prove the relationship between Educational equalization and Family education expenditure. This research refers to relevant literature to design the questionnaire. After the questionnaire is compiled, the specific questionnaire topics are as follows:

Table 1. Questionnaire topics

Topic	Content
Gender	(1) male (2) female
Education	(1) Under high school (2) Junior college (3) Undergraduate (4) Postgraduate
Age	(1) 18-25 years old (2) 25-35 years old (3) 35-45 years old (4) over 45 years old
equalization of education	Educational balance is the direction of future education development
	The balance of education needs to achieve the balance of high-quality resources
	Educational balance requires modernization of education governance capabilities
	Comprehensive and balanced development of education is the ultimate goal of

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	education
Family Education Expenditure	The current family education should increase family education expenditure
	Family education spending is worthwhile and helps children get a better education
	Children's education requires a certain amount of financial support from the family

Among them, the answers to questions about education equalization and family education expenditure are as follows: 1 point represents completely disagree, 2 points represents disagreement, 3 points represent general, 4 points represent agree, and 5 points represent completely agree.

Demographic variable description

This study conducted a survey through online questionnaires. By surveying the parents of the students and asking their students to add the recovered data, a total of 77 valid questionnaires were recovered. After the recovery, 5 invalid questionnaires with large missing answers and regular answers were eliminated, leaving 72 valid questionnaires. The effective rate of the questionnaire is 92.30%. The distribution of demographic variables of the research objects is shown in Table 2 below. It can be seen that the distribution of the parents, Gender, Education, Age and other variables is reasonable, indicating that the sample is real, effective and representative.

Table 2. Distribution of demographic variables

Variable	Group	Frequency	Percent
Gender	Female	40	55.6
	Male	32	44.4
Education	Below high school	16	22.2
	junior college	23	31.9
	Bachelor	22	30.6
	Postgraduate	11	15.3
Age	18-25	12	16.7
	25-35	42	58.3
	35-45	12	16.7
	More than 45	6	8.3

The specific fan chart distribution is as follows:
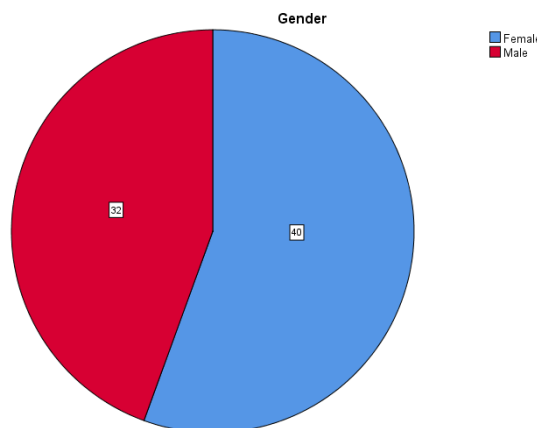
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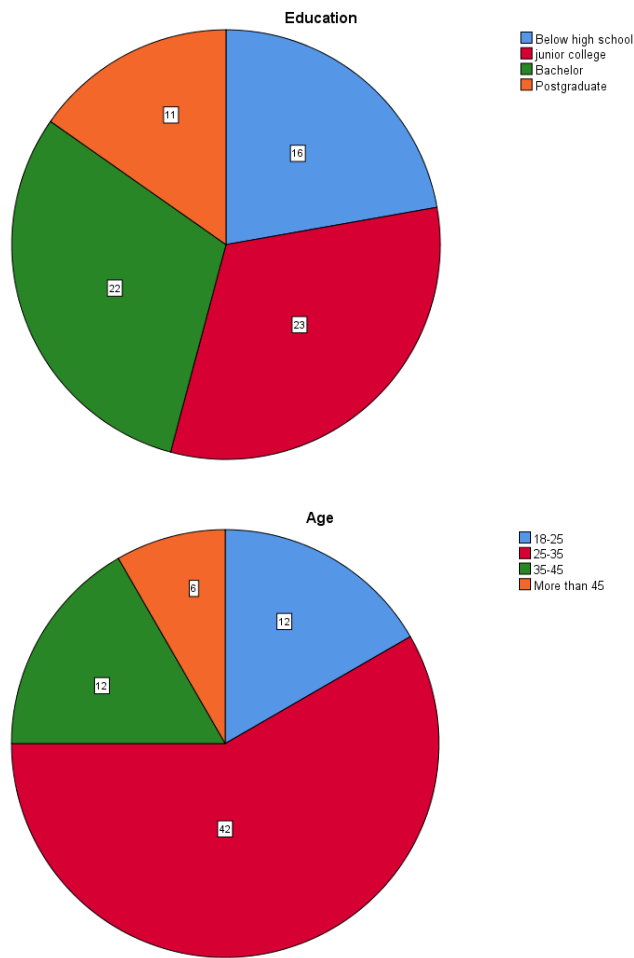
Trust level analysis

Reliability reflects the stability, reliability and consistency of multiple measurement results of measurement tools. This paper analyzes the reliability of the questionnaire. This paper uses Cronbach's α coefficient to measure the overall internal consistency reliability of each variable measurement item. The larger the value of Cronbach's α number, the greater the correlation between the variable items. The internal consistency of the scale is also higher. Generally speaking, when Cronbach's α>0.7, the reliability of the scale is good, and when Cronbach's α<0.7 indicates poor reliability, it should be adjusted and revised. The following table lists the Cronbach's α coefficients of the two variables of the questionnaire. The reliability of the two variable scales is above 0.7, which is high, indicating that the scale used in this study can meet the needs of the research.

Table 3. Reliability analysis

Variable	Item	CITC	Cronbach's α
Educational equalization	EQ1	0.684	0.897
	EQ2	0.861	
	EQ3	0.733	
	EQ4	0.82	
Family education expenditure	FEE1	0.761	0.861
	FEE2	0.757	
	FEE3	0.706	

Validity analysis

Validity refers to the extent to which a research scale can accurately reflect variables. Construct validity is the most widely used validity testing method in empirical research. Therefore, this paper uses construct validity as the validity testing method, and this

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study uses confirmatory factors to verify construct validity. Exploratory factor analysis was used to initially test the structural validity of the research questionnaire. If the factor loadings of each item of each variable are greater than 0.6, and the cross factor loadings are below 0.4, the scale is considered to have certain structural validity. Before factor analysis, it is necessary to perform KMO value test and Bartlett's sphericity test on samples (Thomas et al.,2001), if the KMO value is greater than 0.7, and the p-value of Bartlett's sphericity test is less than 0.05, it means that the scale data is suitable for factor analysis and variable extraction . The KMO value for testing this study is 0.819>0.7, Bartlett's sphericity test p=0.000<0.05, and the sample data is suitable for factor analysis. At the same time, in this study, the factors were rotated through the maximum variance, and it was found that two factors with eigenvalues greater than 1 were extracted in this study, and the eigenvalues were 4.252 and 1.189, respectively, corresponding to the two research variables of this study. Reached 70.107%>70%, in line with the requirements of exploratory factor analysis.

Table 4. KMO and Bartlett sphericity tests

KMO		0.819
	Approx. Chi-Square	333.293
Bartlett's Test of Sphericity	df	21
	p	0.000

Table 5. Rotated Factor Loadings

Variable	Component	
	1	2
EQ1	0.794	
EQ2	0.894	
EQ3	0.793	
EQ4	0.867	
FEE1		0.892
FEE2		0.833
FEE3		0.818

Note: The extraction method is PCA, and the default factor load less than 0.4 is not displayed.

It can be seen from the above that Educational equalization (EQ) corresponds to factor 1, and Family education expenditure (FEE) corresponds to factor 2. The main factor dimension of the subject of each factor is greater than 0.6, and the cross factor loading is less than 0.4, indicating that the exploratory factor analysis is qualified.

Related analysis

Correlation analysis refers to the analysis of two or more correlated variable elements, so as to measure the closeness of the two factors. Each variable is measured by the Likert five-level scale and is an interval variable. Therefore, the Pearson correlation analysis, to analyze the correlation between the two, the correlation of specific variables is as follows: Educational equalization and Family education expenditure have a significant positive correlation (r=0.558, p<0.05)

Table 5. Pearson correlation analysis

Variable		Educational equalization	Family education expenditure
Educational equalization	Pearson	1	.558**
	Sig. (2-tailed)		0.000
	N	72	72
Family education expenditure	Pearson	.558**	1
	Sig. (2-tailed)	0.000	
	N	72	72

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The above shows that there is a positive correlation between education balance and family education expenditure, and that among the parents of the students surveyed, there is a positive relationship between education balance and family education expenditure, and they value each other.

RESULTS AND DISCUSSION

The results of the study indicate a positive correlation between family education expenditure and education equalization. This finding suggests that as family education expenditure increases, the level of education equalization also tends to rise. This is an important finding as it highlights the role of financial investment in education in promoting equal opportunities for students. The positive relationship between education equalization and family education expenditure among the parents surveyed implies that parents who value education and are willing to invest more in their children's education are also more likely to support policies aimed at achieving education equalization. This indicates a mutual reinforcement between family education expenditure and education equalization, where parents who prioritize education are more likely to contribute to the overall goal of equalizing educational opportunities for all students.The study's findings align with previous research that emphasizes the significance of financial resources in shaping educational outcomes and reducing educational disparities. It underscores the importance of creating a supportive environment where families can afford to invest in their children's education, thereby fostering greater equality in access to quality education.

POLICY IMPLICATION AND CONCLUSIONS

The positive relationship between family education expenditure and education equalization has important policy implications. Policymakers should recognize the role of family financial resources in shaping educational opportunities and consider implementing policies that can alleviate the financial burden on families while promoting education equalization.

One potential policy implication is the introduction of targeted financial assistance programs aimed at low-income families. By providing financial support to economically disadvantaged families, such programs can help bridge the gap in education expenditure and promote greater equality in educational opportunities. Additionally, providing subsidies or grants to families based on their income level can encourage them to allocate more resources to their children's education, contributing to education equalization efforts.Furthermore, policymakers should focus on improving the quality and accessibility of public education. Enhancing the quality of public schools and ensuring that they provide an equitable education to all students can reduce the dependence on private education and alleviate the burden of high education expenditure for families. This can be achieved by investing in infrastructure, resources, and teacher training, as well as implementing inclusive educational policies that cater to the diverse needs of students.In conclusion, this study highlights the positive correlation between family education expenditure and education equalization. The findings suggest that as parents invest more in their children's education, there is a greater likelihood of achieving education equalization. The relationship between family education expenditure and education equalization underscores the need for policies that address the financial barriers to education and promote equal opportunities for all students.

Policymakers should consider implementing targeted financial assistance programs for low-income families and focus on improving the quality and accessibility of public education. By doing so, they can support families in their investment in education and work towards creating a more equitable educational system. Ultimately, fostering a strong partnership between families, communities, and policymakers is crucial in achieving education equalization and providing a solid foundation for the future success of all students.
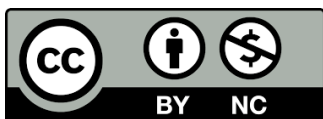
REFERENCES

1) Byun, S. Y. (2010). Does policy matter in shadow education spending? Revisiting the effects of the high school equalization policy in South Korea. Asia Pacific Education Review, 11, 83-96.
2) Betts, J., & Roemer, J. E. (2005). Equalizing opportunity for racial and socioeconomic groups in the United States through educational finance reform.
3) Betts, J. R., & Roemer, J. E. (1999). Equalizing opportunity through educational finance reform. San Francisco, CA: Public

Policy Institute of California.

4) Gradstein, M., Justman, M., & Meier, V. (2004). The political economy of education: Implications for growth and inequality. MIT press.

5) Anderson, P. J., Critchley, J. A. J. H., Chan, J. C. N., Cockram, C. S., Lee, Z. S. K., Thomas, G. N., & Tomlinson, B. (2001). Factor analysis of the metabolic syndrome: obesity vs insulin resistance as the central abnormality. International journal of obesity, 25(12), 1782-1788.