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Children Education Investment of Rural Families in Hechuan District of Chongqing Municipality

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Abstract Taking 20 relative poor families in Hechuan District of Chongqing Municipality as survey samples, taking 275 households of rural families selected by stratified sampling method as research objects, and taking family education investment behavior of this rural area as research content, this paper studied current situations of rural family education investment behavior in Hechuan District, difference in investment behavior and related influence factors. It is intended to provide references for family education investment of rural areas in Hechuan District and even Chongqing Municipality, and promote development of rural education undertaking in China.

Key words Rural family, Education investment behavior, Current situations, Influence factors

In this study, we selected rural families in Hechuan District of Chongqing Municipality as survey objects. Chongqing is the first city clearing off debts of popularizing nine-year compulsory education. Hechuan District is a district in the northern part of Chongqing Municipality, located in Third Ring and "One Hour Economic Circle" of Chongqing Municipality, is the link connecting Chongqing and northern areas with rich resources, and also the extension belt of intensive development of funds and technologies in Chongqing. It is reputed as "Economic Corridor" of Chongqing leading to northern Sichuan, Shaanxi, and Gansu. The whole district covers a total area of 2356.21 km² and includes 23 towns and 524 villages. In 2011, the whole district realized GDP of 30.6 billion yuan. Its total population was 1.55 million, including 1.03 million agricultural people.

According to report of Statistical Report of Hechuan District, by December 31, 2013, 23 towns of Hechuan District held 309552 agricultural people with 15–59 years old and 54977 agricultural people older than 60 years old. The per capita disposable income of whole district is 12894 yuan/year, per capita net income of farmers is 5673 yuan/year, deposit amount of residents in whole district is 5161.46 million yuan, and agricultural deposit amount is 208.22 million yuan. The effective irrigation area in the whole district is 15566.7 hm², including 26803 hm² cultivated land and 57569.6 hm² crop planting area. There are 176 schools (including kindergartens, primary schools, junior middle schools, and senior middle schools) in Hechuan District and numerous children in the right age for education in rural areas of Hechuan District.

Survey results indicate that since the middle of the 1990s, education expenses of rural residents in Hechuan District has been growing rapidly. In 2013, per capita education expenses of rural

residents in Hechuan District reached 450 yuan, 314 yuan more than in 1995, and the percentage of education expenses to total consumption expenses rose from 3% in 1995 to 8.5% in 2013. At the same time, due to factors such as family income, number of children and sex structure, family education expenses are varied. Taking 20 relative poor families in Hechuan District of Chongqing Municipality as survey samples, taking 275 households of rural families selected by stratified sampling method as research objects, and taking family education investment behavior of this rural area as research content, we studied current situations of rural family education investment behavior in Hechuan District, difference in investment behavior and related influence factors. It is intended to provide references for family education investment of rural areas in Hechuan District and even Chongqing Municipality, and promote development of rural education undertaking in China.

1 Current situations of rural family education investment of Hechuan District in Chongqing Municipality

1.1 Expenses for extra-curricular training classes In 277 households of surveyed rural families, we received 255 copies of questionnaire in total. In recent one year, 176 families (accounting for 69.02%) have participated in one or more training classes, and 79 families (30.98%) did not participate in any training class. With constant increase of students participating in various extra-curricular training classes, various extra-curricular training classes spring up, the training charges are varied and the effect is also different. Generally, the price of English training class is 500–600 yuan for each semester. In addition to various reference books and materials for review, there will be a huge amount of expenses. At present, the minimum price for music, dance and painting training classes is 25 yuan at Hechuan market, and the least expenses for these training classes are 100 yuan for each month. Big classes such as Olympic math and calligraphy need lower expenses. Therefore, participating in various training classes

has become a heavy burden for rural families.

According to statistics, in all 176 families participating in extra-curricular training classes, the number of families spending 200-500 yuan, 500-1000 yuan, 1000 – 2000 yuan, and more than 2000 yuan is 45, 52, 58, and 21, as listed in Table 1. These indicate that rural families in Hechuan spend a lot of money in extra-curricular training classes for their children.

Table 1 Expenses for extra-curricular training classes

Expenses	Number of households	Percentage %	Upward cumulative percentage // %
0 – 200 yuan	0	0.00	0.00
200 – 500 yuan	45	25.49	25.49
500 – 1000 yuan	52	29.41	54.90
1000 – 2000 yuan	58	33.33	88.23
More than 2000 yuan	21	11.77	100.00

Due to different purposes, time and effect of training classes, the charges are different. In 176 rural families participating in extra-curricular training classes, the education investment for children is sharply different. The highest proportion of participation is English training class, 86 families send their children to English training class and the investment amount is also highest. This is related to late start of English learning and poor English basis in rural areas. The next is music and dance and painting. These belong to cultivation of children’s interest and the average expenses for these training classes, up to 2125 yuan and 1294 yuan respectively. The calligraphy and Olympic math training classes have low charges and the average input is only 483 yuan, as listed in Table 2.

1.2 Teaching auxiliaries At present, children are facing increasingly tense examination for entering schools. In order to stand out in various examinations, common teaching resources are not sufficient. Apart from learning knowledge taught by teachers and completing homework and tasks arranged by teachers, children should pass various teaching guidance to improve ability, widen scope of knowledge, strengthen learning and examination ability. Since primary schools and junior middle schools implement compulsory education, teachers will ask students to buy some teaching auxiliary materials for learning and extra-curricular practice, which is a big sum of teaching expenses.

Table 2 Expenses for various extra-curricular training classes

Training classes	Number of households	Sum yuan	Average value // yuan
English class	86	77 250	898
Painting class	24	31 050	1 294
Calligraphy class	9	4 350	483
Olympic math class	9	4 350	483
Music and dance class	48	102 000	2 125

According to statistics, among 255 households of rural families surveyed, nearly all families have made investment in children

education. The number of households investing 0 – 100 yuan, 100 – 200 yuan, 200 – 500 yuan, 500 – 1000 yuan, and more than 1000 yuan is 57, 27, 145, 19, and 7 separately, as listed in Table 3. The highest proportion is 200 – 500 yuan, about 56.86%, and the lowest proportion is 2.75% in more than 1000 yuan.

Table 3 Expenses for various teaching auxiliaries materials

Expenses	Number of households	Percentage %	Upward cumulative percentage // %
0 – 100 yuan	57	22.35	22.35
100 – 200 yuan	27	10.59	32.94
200 – 500 yuan	145	56.86	89.80
500 – 1000 yuan	19	7.45	97.25
More than 1000 yuan	7	2.75	100.00

In 255 households of rural families surveyed, all families made investment in teaching auxiliary materials, because teaching auxiliary materials are used as necessary teaching auxiliary books for arranging extra-curricular homework and intensive exercise of ability. On average, the expenses for teaching auxiliary materials reach 255 yuan. Newspapers or periodicals are usually used as extra-curricular learning guidance. 178 households have subscription of newspapers and periodicals. However, compared with books and online courses, the cost of newspapers and periodicals is as low as 62 yuan on average. It should be noted that as a new learning approach, online course is being gradually popularized in rural areas. 32 households use online teaching materials, but the expenses are relatively high, the average amount is 166 yuan, as listed in Table 4.

Table 4 Expenses for various teaching auxiliary materials

Types of teaching auxiliary materials	Number of households	Sum yuan	Average value yuan
Teaching auxiliary books	255	58 575	255
Teaching auxiliary newspapers and periodicals	178	11 000	62
Teaching auxiliary web-sites	32	5 300	166

1.3 Tuition and incidental expenses Hechuan District actively responds to state education policy and implements nine-year compulsory education. The charging criteria for primary schools and junior middle schools include fixed item charges (including 70 yuan/semester for junior middle schools, 50 yuan/semester for primary schools, and charges for preschools, night self-learning) and non-fixed charging items (including book fees, examination paper fees, printing fees, physical examination fees, lodging expenses). The first type is tuition and the second belongs to incidental expenses. However, at different education stages, tuition and incidental expenses are different. In 255 households of rural families surveyed, family investment in children education is varied according to different education degrees. The statistical results are listed in Table 5.

From Table 3, we can see that tuition and incidental expenses for kindergarten reach 1570 yuan on average, higher than primary school and junior middle school, because the tuition of kindergarten is up to 1000 yuan. Primary schools and junior middle schools implement compulsory education. The tuition for primary school and junior middle school is 50 yuan and 70 yuan separately on average. The average incidental expenses are only 720 yuan and 1090 yuan. For senior middle schools, the incidental expenses

are 2720 yuan. In the households we surveyed, a lot of households have children studying in senior middle schools. The tuition and incidental expenses for universities are 6620 yuan and the tuition is up to 5000 yuan on average; the tuition and incidental expenses for postgraduates are 7120 yuan on average. The education investment in universities is the highest and the tuition accounts for the largest proportion.

Table 5 Investment of tuition and incidental expenses for various education stages (yuan)

Item of expenses	Kindergarten	Primary school	Junior middle school	Senior middle school	University	Postgraduate and above
Tuition	1 000	50	70	1 000	5 000	5 000
Lodging	250	250	400	800	1 000	1 000
Teaching materials	200	300	500	800	500	1 000
Physical examination	80	80	80	80	80	80
Medical insurance	40	40	40	40	40	40
Total number of people	23	45	73	111	46	13
Total amount	36 110	32 400	79 570	301 920	304 520	92 560
Average	1 570	720	1 090	2 720	6 620	7 120

2 Factors influencing education investment of rural families in Hechuan District

With popularization of education, education awareness gradually gets rooted in hearts of people. Rural family heads hope to bring material and non-material benefit to their whole family through education investment^[1-2]. Through analysis of survey results, we found that rural families in Hechuan District have strong willingness for education investment. However, strong willingness does not mean reasonable behavior. On the contrary, there are certain problems in their education investment.

2.1 Unfair sex structure in education investment of rural areas Different education degrees mean different amount of education investment. According to the above analysis, the tuition and incidental expenses for universities and postgraduate and above are 6000 –8000 yuan, which is a high burden for rural families. In rural families of Hechuan District, the education degrees of boys and girls are illustrated in Fig. 1.

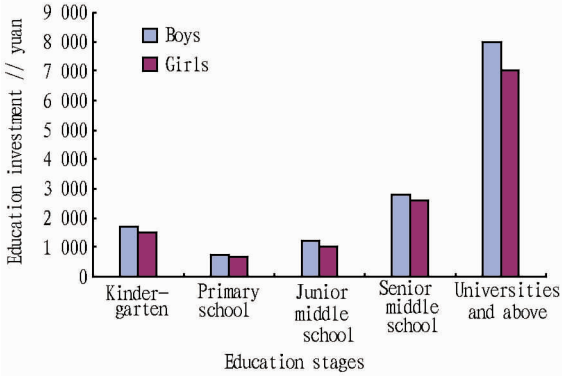


Fig.1 Comparison of education investment between boys and girls at different education stages

From Fig. 1, we can see that rural families invest higher

amount in boys than girls. This is because the idea of "regarding men as superior to women" is deeply rooted in rural areas. 2.2 Negative correlation between number of children and education investmentCurrently, rural families still have the traditional idea of "raising sons to support one in one's old age". Although the family planning policy is implemented, many families still have children outside the state plan. As a result, there are too many children in rural families. With children gradually growing to school age, education investment of children will certainly become a major portion of rural family expenditure. Due to reasons like family income, education level of children will also be influenced greatly, as shown in Fig. 2.

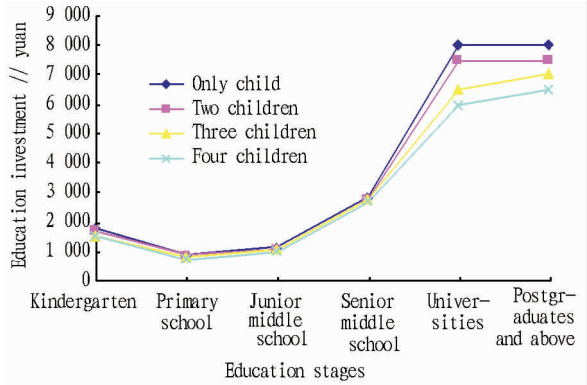


Fig.2 Education investment of rural families with different number of children at different education stages

From Fig. 2, we can see that families with different number of children have different education investment in children at different education stages. Families with only child pay more attention to child education and will invest more in their child education; families with three or four children make effort to invest in children education, but due to limited funds, they will be conser-

vative in education investment.

2.3 Positive correlation between family income and education investment

Economic situation of rural families is mainly reflected by per capita net income of families. Fig. 3 is statistic of per capita income of rural families. From it, we can get a general understanding of rural family income.

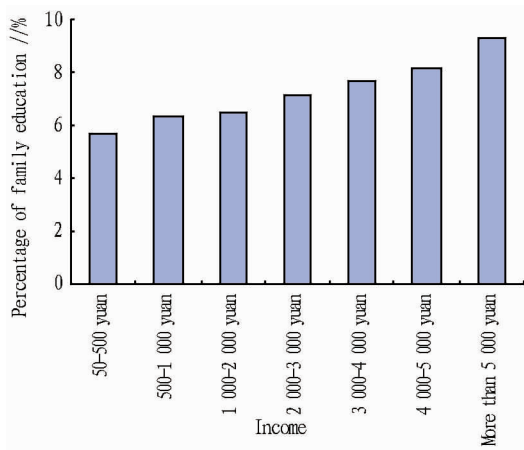


Fig. 3 Percentage of family education investment in per capita annual family income

Family income has direct influence on family education, because family income is a great support for education investment. Only when family income reaches certain level, may it be able to provide guarantee for education investment. From Fig. 3, we can see that the higher the family income, the higher proportion of education investment in per capita family income^[3-5].

2.4 Positive correlation between mother's educational level and education investment

Family education is an indispensable part of the whole education, while parents have education responsibility and obligation of their children. Many psychologists and educationist have stated that mother has comprehensive and permanent profound influence on their children, thus mother is an essential actor in children education. At the same time of fostering children, mother also plays the social actor of first educator. Firstly, the time of mother living together with children is always more than father and other people. Any words and acts of mother will become imitation object of children and imperceptibly influence formation of world view and life philosophy. Therefore, the essential position of mother in family education is irreplaceable, as shown in Fig. 4.

From Fig. 4, we can see that different mother's educational levels bring about different education investment at education stages of children. The higher the mother's educational level, the higher investment will be put in family education, which will provide better learning environment and related conditions^[6-7].

3 Policy recommendations

In conclusion, rural family education is determined by number and sex structure of children. Therefore, the number of children and sex structure of children are essential factors influencing education

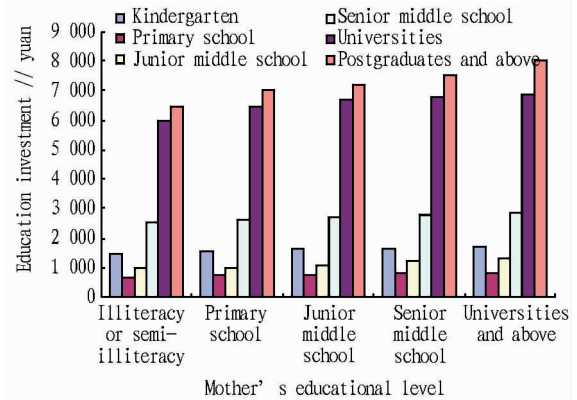


Fig. 4 The relation between mother's educational level and education investment at different education stages

investment action of rural families. Besides, educational level of mothers has direct connection with the method of rural families caring about their children. Educational level of mothers directly influences selection of rural families for methods of caring about their children. To a certain extent, income level of rural families and mother's educational level of rural families will not directly determine education investment of rural families. Therefore, it is required to change investment in children education of rural families and take many measures at the same time.

3.1 Energetically developing rural economy to increase farmers' income

It is recommended to energetically develop rural economy, to increase farmers' income and raise education investment ability of rural families. Besides, it is recommended to encourage rural families to support their children accept regular education, promote children to accept formal education, better grasp knowledge, provide some extracurricular reading materials or auxiliary learning materials on the basis of basic learning materials, to comprehensively improve overall quality of children.

3.2 Strictly implementing family planning policy to control number of family children

It is recommended to strictly implement family planning policy to control number of family children. Besides, it is recommended to raise healthier, better educated children, reduce education burden of rural families, and save education resources, to bring into play greater functions of limited education resources.

3.3 Increasing public input of government to education

It is recommended to increase public input of government to education, properly reduce charging standard, and regulate various expenses. In particular, government should make effort to solve children education of floating rural residents, increase transparency of expenses, reduce statutory education burden of rural families. This becomes extremely urgent for solving children education investment of rural families at non-compulsory education stages.

3.4 Accelerating construction of rural education resources and cultural market

It is recommended to accelerate construction of rural education resources and cultural market, to provide loose environment for voluntary education input of rural families to

construction land also increases, and there is a need to change more farmland to construction land. Meanwhile, to ensure the food supply, the amount of farmland must be guaranteed, therefore, there is a growing demand for land development, and it shows different development issues in various provinces, autonomous regions and at zonal levels. At the same time, China's land development is facing late start of consolidation and utilization, dwindling reserve resources, soaring costs and new resource and environment problems arising from land development and use in some regions. Therefore, it is necessary to strengthen land use transition, improve land utilization, give full play to the agricultural advantages of farming-pastoral zone, and develop water-saving techniques in water-deficient areas, in order to achieve rational development, efficient use and effective protection of land resources.

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children. Besides, it is recommended to improve rural education system and improve course setting of rural schools. Course reform of rural elementary education should orient towards agricultural, rural and farmers' requirements. Rural education should be not only education of entering a higher school, but also education for strengthening agriculture, farmers, and rural areas. In addition, short of education fund has become a bottleneck of rural education development. Therefore, it is required to increase input of government to rural education, especially elementary education. Only in this way, it may be able to provide abundant funds for rural education, ensure rural education environment, stabilize teacher team, improve rural teaching quality, and also reduce risk of farmers in education investment, and improve enthusiasm of farmers for education investment.

3.5 Deepening understanding of rural farmers about education value and family education through many channels

It is recommended to deepen understanding of rural farmers about education value and family education through many channels, give prominence to nature of education investment, and provide support for employment of university graduates, and strengthen expectation of rural residents for education income. Besides, it is recommended to encourage parents to stick to combining soft and hard measures of education investment, prevent their shortsighted opinion influencing their investment in children education,

and establish effective long-term incentive mechanism to encourage rural families to invest in children education. For example, it is feasible to provide direct living subsidies for labors of education investment, set up scholarship system, and give award for those perform excellent achievements. Government should improve rural policy environment and strengthen intrinsic drive of farmers for education pursuit.

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