

Does Family Separation Affect Children's Educational Performance? -- Analysis Based on Ordered Logistic Regression Model

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Abstract: Improving children's educational performance is the fundamental goal of education. The factors that affect children's educational performance are complex. Family factors are one of the key factors affecting children's educational performance. In order to analyze whether family separation will affect children's educational performance, there are differences in education performance of migrant, left-behind and migrant left-behind children in terms of family separation. The model analyzes the impact of family separation on the educational performance of three types of children: floating, left-behind and floating left-behind children. Studies have found that family separation has a significant impact on the educational performance of migrant and migrant left-behind children, and family education capital and education investment will also affect children's educational performance. Therefore, parents should increase the time of children's companionship and participatory learning, improve children's educational performance, strengthen family education capital investment and children's educational investment to improve children's educational performance.

Key words: family separation; educational performance; educational investment; family educational capital
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INTRODUCTION

The rapid development of economy has promoted the acceleration of urbanization and large-scale population migration. The limitation of the dualistic structure system of urban-rural division in China makes the migration of labor force have the characteristics of "they are just floating". Family members go out to work, and some members stay in the countryside. This phenomenon has led to widespread family separation problems in rural

families. By the end of 2017, the country's total floating population was 244 million, of which 12.8 percent were children, according to the China Migrant Population Development Report 2018. A large number of rural children left behind because of population mobility has become a social problem that cannot be ignored. According to statistics, more than 80 percent of left-behind children receive intergenerational supervision from grandparents and temporary supervision from relatives and

friends. Due to the limited educational level of surrogate guardians and the lack of guidance and supervision for children's study, left-behind children's performance is generally lower than that of children from normal families. Children's educational performance is a common concern of schools, parents and the society. How to improve children's educational performance is also the most basic goal of education. Existing literature in discussing the influencing factors of children's education performance focuses on the role of family, school and dialect, including family background,¹⁻³ education investment,⁴ parents' education expectation,^{5,6} parental involvement,⁷⁻¹⁰ education mode,¹¹ school facilities and dialect ability.^{12,13} Some scholars have noticed the influence of family on children's educational performance, they mainly focus on the influencing factors such as family capital and parents' participation, but do not pay enough attention to family separation, that is, the relationship between the length and form of family separation and children's educational performance is ignored. In addition, the data used in previous studies on children's educational performance are mostly questionnaire surveys targeted at specific cities,¹⁴ and the conclusions derived from this are hardly representative of the national sample and not representative of children from other regions.

In view of this, this paper mainly discusses three issues: one is how the form and duration of children's family separation affect their educational performance. Secondly, whether there is heterogeneity between educational performance and family separation of migrant children, left-behind children and migrant left-behind children. The third is whether there are differences in the educational performance of the three types of children by adding educational investment and family educational capital as interactive variables when the preceding variables remain unchanged. Therefore, this paper uses the data from the 2014-2015 China Education Panel Survey (CEPS) to study migrant children, left-behind children and migrant left-behind children in the eighth grade to investigate the impact of family separation on academic performance. The study found that the form and duration of children's family separation

had a significant impact on their academic performance, and there was heterogeneity in the educational realization of different types of children. From the perspective of influence mechanism, after increasing the two variables of family educational capital and educational investment, they also have significant influence on the educational performance of the three types of children. In short, this paper analyzes the impact of family separation of different types of children on educational performance from a micro perspective, which provides experience for the government to improve the education policy of migrant and left-behind children.

LITERATURE REVIEW

The Impact of Family Separation on Educational Performance

In the process of migration, some family members go out for work and some stay at home, leading to the widespread phenomenon of family separation. From the perspective of social security, the view of new migration economics holds that migration is a common phenomenon to maximize the family's expected income and minimize the family's risk. In developed countries, the capital credit market is relatively perfect, but it is not easy to achieve in China. Therefore, migration solves the two obstacles of credit market constraint and insurance market constraint. However, the damage caused by large-scale migration to families is indeed irreparable. The type of family separation refers to the separation of parents from their children, including the separation of a single parent from their children, and the separation of parents from their children. Separation of a single parent from the child includes separation of the father from the child and separation of the mother from the child. There may be three types of left-behind children: parents separated, father separated and mother separated. However, there are only two types of parent-child separation for migrant children: father separation and mother separation, and there is no separation between parents,¹⁵ which provides a good way for us to study the difference of the impact of family separation on children. Therefore, the influence of family separation on left-behind children cannot be ignored. The relationship between parents and

children will affect the educational performance and development level of children.¹⁶

Parent-child relationship is also an educational factor. As for divorce, most scholars believe that divorce will not have a negative impact on the educational outcomes of young children when their parents divorce, and the positive impact of divorce on young children is that divorced parents can compensate their young children after divorce.¹⁷ Some scholars have also pointed out that children's experience of family turmoil and academic achievement are significantly associated with the expected negative orientation.¹⁸ Family separation will lead to the lack of emotional communication and parent-child interaction between children and their parents, and make children lose psychological attachment and attachment to their parents.

Lack of parental care will have a negative impact on the education of left-behind children, and the possibility of entering a higher education or lifelong education will be greatly reduced.¹⁹ The differences in educational performance between left-behind children and migrant children are mostly influenced by their guardians' educational concepts and values. Most of the entrusted guardians of left-behind children are grandparents, and most of them lack the awareness of supervision over the education of left-behind children, lack of awareness of the importance of education, and relatively little investment in their education. In addition to their own busy jobs, the inability to afford the high tuition of urban schools is one of the reasons why parents of migrant workers are unwilling to bring their children to school. Cross-regional mobility of parents is not conducive to the improvement of children's academic performance.²⁰ Due to the lack of careful parental care, left-behind children cannot keep up with the nourishment needed by their bodies, and their ability to understand curriculum learning is weakened, which in turn affects the academic performance of left-behind children. Throughout the existing literature, scholars analyze the factors affecting children's family separation mainly concentrated in the quality of life, nutrition,²¹ psychological status, sense of security, academic performance, etc., and the dimensions of family separation are different. In the existing literature on the impact of family separation on

children's academic performance, family separation can lead to a lack of accompanying children, which has a negative impact on children's willingness to enter school, education and school.²² Left-behind children have problems such as unstable parenting relationship and lack of security in the process of survival and learning.²³ The more parents urge their children, the better their academic expectation and parent-child communication.²⁴ Parents' concern for left-behind children's physical, mental and academic will stimulate left-behind children's learning enthusiasm, so as to improve their academic performance. Many scholars on the education of left-behind children believe that one of the reasons for the decline of their children's academic performance and the low enrollment rate is that the family separates parents from migrant workers. Therefore, the following hypotheses are proposed:

Hypothesis 1: Family separation has a significant impact on children's educational performance.

Hypothesis 1a: The form of family separation has a significant impact on children's educational performance.

Hypothesis 1b: The length of family separation time has a significant impact on children's educational performance.

The Impact of Individual, Family, School and Educational Policy Factors on Children's Educational Performance.

Educational performance is the standard to measure one's learning ability and development potential. In the stage of compulsory education, children's physical and mental health is more sensitive, in the key point of individual development, education performance is easily affected by various aspects. Many scholars' research on the influence of junior high school students' educational performance has changed from qualitative research to quantitative research, and use correlation analysis, multiple regression, logical regression, structural equation model and meta-analysis to explore the influencing factors of children's educational performance. Parents' education mode and children's mental health problems are all factors affecting children's

educational performance. It has also been suggested that children's health is an important input to their educational achievement and that appropriate community-based interventions should be designed to address child health and possible nutritional outcomes as well as children's school performance.²⁵

In terms of personal factors, western scholars often use resource scarcity theory to explore the differences in the number of siblings and gender in the enjoyment of family resources in the same family, which affects children's educational opportunities and educational performance.²⁶ Due to resource limitations, the number of children, gender and birth order dilute the educational resources of the family. Families of floating children with more children spend significantly less time than those of the only child, but to a certain extent, it will be significantly higher than the previous, mainly because the migrant children's parents engaged in occupation prestige is higher, the nature of the work determines that they have more time to tutor their children to learn. The time spent on girls in migrant children's families is only 83 % of boys. After a series of transitions in China, boys' preferences still exist, and this preference affects family investment to a certain extent, resulting in more family education resources for boys than girls. Children's educational expectation is also an important indicator of individual factors. Students' expectation of their own education reflects children's educational aspirations for the future, and is an important factor affecting children's educational performance. On the one hand, as an important psychological factor, students' self-education expectation can stimulate their learning behavior and enhance their learning motivation. On the other hand, educational expectations can also promote their cognitive and non-cognitive level. In Wisconsin model, educational expectation is an important variable, which affects children's development in many ways. If young people have a higher expectation of their education, it usually means that they have a relatively correct attitude towards learning and that they are unlikely to have late, early withdrawal and absenteeism. Students' learning attitude also plays an intermediary role between educational

expectation and academic achievement. Students' expectations can improve their learning attitude to a certain extent, so as to promote the improvement of academic performance.

In terms of family factors, if parents go out to work, to a certain extent, it will be detrimental to the healthy growth of children. Due to the lack of parental care, left-behind children cannot keep up with the nutrition they need, and their understanding of curriculum learning is weakened, thus affecting their academic performance. On this basis, the researchers compared and analyzed the academic differences between the two groups through grouping, namely, the group with physical fitness not up to standard and the group with physical fitness up to standard, and found that the students in the group with physical fitness up to standard performed better in academic performance. After further analysis, it was found that obesity and leanness had a negative impact on the performance of boys, and girls' performance was only affected by obesity, which confirmed that academic performance was not only related to physical fitness, but also gender differences. In terms of school factors, students acquire knowledge mainly through classroom teaching, and teachers' teaching level directly affects students' knowledge acquisition and understanding. The level of teachers' education has a great relationship with the school to a certain extent. Some scholars have found that the informatization level of the school has an approximate inverted U-shaped nonlinear relationship with students' academic performance. School facilities and the quality of head teachers are the most key factors that cause the gap between students, and the level of education has a significant effect on students' education at a significant level of 1 %, and the correlation is 0.57.²⁷

In terms of educational policy, migrant children do not enjoy the same treatment as local urban children due to the different household registration systems and the allocation of educational resources in urban and rural areas, forming vulnerable groups in cities and fundamentally affecting the educational expectations of migrant children. Compared with the seventh grade students, the educational expectations of the ninth grade students are lower, which is mainly because the pressure of

entering school is not conducive to improving the educational expectations. Household registration plays a decisive role in the development of floating population. The household registration status of migrant children is closely related to whether they can go to school at their destination. However, the local government's education funds are limited, and schools recruit students to have household registration in the place of origin or in the place where the school resides in the city.

Classification of Children Types

With the deepening of reform and opening up and the sound of socialist market economy, great changes have taken place in the society. Under the background of this great transformation, the scale of social mobility is increasing. Children affected by population movements include migrant and left-behind children. floating children are also known as "floating population children"^{28,29}, "Children of Migrant Workers with Their Relocation"³⁰, "Children of Floating Population with Migration"³¹⁻³³. Different countries have different names, including not only migrant children, such as international migrant children, international refugee children, but also cross-regional children, such as domestic migrant children, street children and so on. There is little research on migrant children abroad, mainly because migrant children are a special group in the process of reform and opening up and economic development in China, and mainly migrant children in foreign countries. The floating children in this paper mainly refer to the children aged 0-17 in the floating population. Children left at home or cared for by one of their parents are called "left-behind children", and left-behind children include "urban left-behind children" and "rural left-behind children". It is found that most scholars mainly pay attention to "rural left-behind children" and are one of the most concerned social groups.^{34,35} A large proportion of urban left-behind children live in towns near the countryside. If their parents go out to work and do business, these floating children will become mobile left-behind children.³⁶ There is also a state in which children with mobile experience have to return to their hometown for reasons of higher education. At this time, and then stay behind. Parents left behind

because of migrant workers or business mobile children, while moving and left behind, we call mobile left-behind children. Compared with floating children, left-behind children enjoy mobile dividends and advantages, including high quality urban education resources and parents' attention to their children's education.³⁷ This is mainly reflected in the urban parents, who can more realize the importance of education and the return on education. The urban quality education resources will improve their children's academic performance. Compared with left - behind children, floating children will face more severe challenges. Some children may get better resources, adjust and strengthen their learning attitude and adaptability, and their academic performance is corresponding to be higher than that of left-behind children. Different from the family education environment owned by mobile children, floating left-behind children are facing the dual challenges of left - behind and mobility, and their school status and adaptation are more inferior.³⁸

Hypothesis 2: there is heterogeneity between children's educational performance and children's type.

The Impact of Investment in Education and Family Education Capital on Educational Performance

Parents' investment in education includes cognitive, emotional and behavioral aspects. The study shows that parents' investment in education has a direct or indirect impact on children's educational performance, whether it is family or school, it has different degrees of influence on children's educational performance. There is evidence that educational investment is proportional to academic achievement. Changes in family investment contribute to children's performance, and changes in family educational expectations and material support are the two most important factors.³⁹ Parents' concern for left-behind children's physical and mental health as well as their studies will stimulate their learning enthusiasm. While teachers and educational administrators are strongly committed to drawing parents into their children's education, the academic outcomes for children can be very positive.⁴⁰ A favorable family

and educational environment has a positive influence on the sports development of preschool children.⁴¹ The educational resources of schools protect the learning ability of mobile and left-behind children. Left-behind children face challenges at all stages of school education, especially the development of preschool education lags behind.⁴² At present, educational resources are different between urban and rural areas, and the investment of educational resources is closely related to students' academic achievement. In terms of educational opportunities, left-behind children have relatively higher school opportunities, while floating children have relatively lower school opportunities.⁴³ Compared with floating children who are restricted by household registration and do not enjoy the quality education resources in the inflow places, left-behind children are more likely to receive compulsory education where their registered permanent residence is located, so they have higher opportunities to receive education. Mobile children in the inflow places, have a process of adapting to the curriculum and school environment. The study has found that floating children have gender differences in school adaptation, and boys are more adaptable than girls.⁴⁴ The educational resources and barriers of public schools and private schools are different, and the teaching environment of public schools is more conducive to improving the adaptability of floating children to schools. Some studies have found that the understanding of the economic and cultural gap between home and local cities has an impact on the adaptation process of floating children.⁴⁵ For migrant children to adapt to local urban life, it depends on local social support and parents to accompany the life and study. According to research results, relative to family income and parents' occupational level, the key variable that has a significant relationship with children's education as measured by children's language and mathematics achievement is parents' education level.⁴⁶ Some scholars believe that parents' expectations can indirectly affect students' academic performance through four media variables: parent involvement, student motivation, student academic self-efficacy and teacher evaluation.⁴⁷ Parents of higher social classes tend to

adopt tolerant parenting styles, and authoritative parenting styles are more conducive to improving children's academic performance.⁴⁸

As early as in the Coleman report, it has been mentioned that family education capital has an impact on children's educational performance, and that compared with school teaching conditions, family socioeconomic status can be better for children's academic performance. Parents' educational background and family atmosphere will affect their children, and then affect their school life style and learning situation. The research shows that the capital of family education greatly affects the learning process and performance of children. The cultural capital of parents has a great impact on the education of their children, and the social class of the family and the social and cultural capital of the family also have a great impact on the children's learning experience and the relationship between the family and the school. The higher the education level of parents, the stronger the family capital, the greater the advantage of children in education. The higher the educational level of parents, the higher the academic achievement is, which can be used as a measure of family capital. According to Coleman's theory, economic capital is measured by household economic income, which provides material resources that help achieve educational achievement: fixed learning places within the family; auxiliary learning materials, etc. The following assumptions are therefore made:

Hypothesis 3: Educational input has a significant impact on children's educational performance.

Hypothesis 3a: Educational investment has a significant impact on children's educational performance.

Hypothesis 3b: Family educational capital has a significant impact on children's educational performance.

Inter Medi Ary Role Analysis of Education Investment and Family Education Capital on Children's Academic Performance

Family separation is not necessarily negative for children's educational performance, because the family separation caused by family migration is designed to increase family welfare and improve

family economic conditions, improving educational performance by increasing educational input. The study found that parents do not always negatively affect their children's academic performance, but also improve their academic performance.⁴⁹ And even facing the disadvantage of their parents to go out, many left-behind children can still work hard, be self-reliant and achieve excellent results.⁵⁰ It can be seen that parents' official duties are not always conducive to improving their children's educational performance. Some scholars also believe that parents go out to work to increase income to relieve family pressure, can provide better learning conditions for children to improve academic performance.⁵¹ Most of these studies are based on the survey of poor rural areas in the western region. Compared with the poor areas in the eastern part of the central region, the economic development of the western rural areas is not very fast, and the educational resources are scarce. In addition, school quality has a big impact on children's educational outcomes between the two levels. Although migrant children can now enter the urban education system, they can only attend low-quality public schools in industrial areas.⁵² There are differences in educational resources and schooling threshold between public schools and private schools. Better teaching atmosphere in public schools is more conducive to accelerating the school adaptation of migrant children. Although family education plays an irreplaceable role in children's growth, school education has a long-term impact on children's physical and mental development.

To sum up, it is found that there are two problems in the above research: first, the comparative perspective needs to be further supplemented. In fact, the three types of children, floating children, left-behind children and mobile left-behind children, should not be divided groups, but caused by different educational decisions made by parents because of migrant workers. Second, most studies use correlation analysis, and there are unobservable missing variables that lead to endogenous bias in the model, but simple descriptive analysis can not obtain true causality,⁵³ And lack of reliable conclusions.

This paper makes a marginal contribution to the literature: (1) This paper studies the floating children, left-behind and mobile left-behind children, analyzes the differences of mobile left-behind children, and broadens the research perspective, which is the innovation of this paper. (2) Considering the influence of mobile left-behind state on educational performance, this paper adopts multiple regression and interactive analysis, which solves the problem of missing important variables and endogenous problems. (3) On the basis of basic variables, the core variables are controlled, and the family education capital and education investment are increased as interactive models to analyze the heterogeneity of three kinds of children. This paper not only improves and complements the research literature on family separation for children and has important academic value, but also attracts more attention to the capital investment of floating left-behind children, and can effectively play a role to provide decision-making reference for the government to take measures to improve the current situation of mobile and left-behind children.

RESEARCH FRAMEWORK: SELECTION OF FACTORS INFLUENCING CHILDREN'S EDUCATIONAL PERFORMANCE

There are many influencing factors for children's educational performance. Considering the existing research, this study mainly analyzes from three levels, namely children individual, family and school, and increases the family separation time and form to the variables, thus analyzing whether family separation besides three levels will have an impact on the educational performance of floating children.

The basic characteristics of children include children's learning attitude, educational expectation and household registration, only child and so on. Children's learning attitude and educational expectation are the endogenous motive force of children's educational performance. The type of household registration represents the difference between urban and rural areas.

Family characteristics include parents' education degree, education expectations, family relations, academic requirements for children, etc., parents'

education degree will affect their educational expectations for children, whether it will increase educational companionship and participation, and academic requirements for children will directly affect children's educational performance.

School characteristics include whether the class according to the grades, the teacher and the teacher's working attitude, the teacher's degree represents its knowledge level, and the children's education expectations, will translate in the teacher teaching, the teacher's work satisfaction also expressed whether it will pour more energy into children's education, the improvement of children's academic performance.

Education policy factors mainly reflect the floating children, left - behind children and floating left - behind children take different types of policy measures, including the above three types of children get education investment, and whether you can access equal education opportunities, especially can enter oneself for an examination in local high school, the above two points reflect the fairness of education policy.

Figure 1 is the research framework of factors influencing educational performance, including family separation, educational input of children type, children, home-school characteristics and educational policy factors.

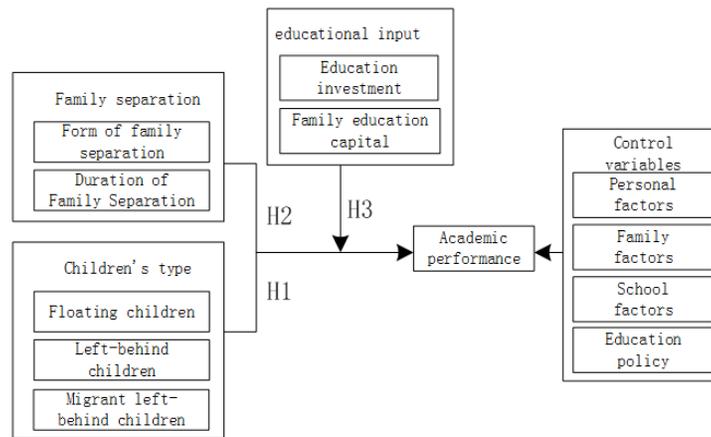


Figure 1 Research framework of influencing factors of educational performance

DATA SOURCES AND METHODS

Data and Samples

Data used in this study are from the china education tracking survey (China Educational Panel Survey, CEPS) 2014-2015. The survey is divided into five questionnaires, namely, parents, children, teachers, class teachers and school questionnaires, which are nationally representative tracking survey data. The basic information on migrant children in the survey includes basic information such as sex, age, place of birth, place of residence, and education performance, time of family separation, social integration, school situation, etc.

According to the sample, the sample was preliminarily screened, and all three kinds of children were analyzed. Specifically, there were 10751 samples, including 1522 floating children, 2989 left-behind children and 240 floating left-behind children.

Research Design and Variable Processing

Using stata 15.0 statistical software, because the academic performance of the dependent variable is a sequential variable, the family separation in the Logistic regression analysis method, representing the family separation, the time of the party not returning home, the father, mother, or neither of the couple lived with the child .The influencing factors of child education performance were analyzed through the three variables of family separation. First separate the data of floating children, take family separation experience as "1", no family separation experience as "0". The specific assignment is in the table as follows: In the research framework of this paper, independent variables are divided into three types: Core interactive variables and independent variables and control variables, and control variables are divided into four levels, namely children their basic situation (whether the

one-child, account type, learning attitude, psychological and health), education expectation (parents education expectations, the child's education expectation), school education level and education policy; The core independent variable is family separation, mainly including whether the family separation, the length of family separation and the form of family separation. The three aspects can explain family separation together. The interactive variables include family educational capital (the educational level of the father and mother, family economic situation) and educational investment (whether to attend remedial classes and the cost of remedial classes), as detailed in Table 1.

In this study, the order Logistic regression model was used to analyze whether children separated from their families, the length of family separation and the form of family separation. To analysis flow, and flow of left-behind children in whether there is difference in education performance, this study conducted a chi-square test and bivariate methods of binary classification logistic regression and describes research within the framework of the various factors and the correlation between the dependent variable, and to analyze the different types of child family separation on the influence of the education performance. Finally, two variables, family educational capital and educational investment, are added to analyze their effects on the educational performance of three types of children.

EMPIRICAL FINDINGS

Table 1
Characteristics of Factors Influencing Educational Performance of Floating Children

variable	option
dependent variable	
school achievement	Not good =0; middle =1; medium =2; middle =3; good =4
Core independent	
Separation of families	
Separation of families	Yes = 0 ; No = 1
Family separation duration	Never =0; once a year =1; every six months =2; once a month =3; once a week =4; once a week and above = 5
Family separation forms	Parents do not live =0; live with father or mother =1; live with parents =2
Interactive independent variables	
investment in education	
Whether remedial remedial classes	No = 0 ; Yes = 1
The cost of attending classes	No cost =0; 5000 and below =1; 5000-10000 =2; Over 10,000 =3
Family education capital	
family economic status	Very difficult = 0 ; relatively difficult = 1 ; medium = 2 ; relatively rich = 3 ; very rich = 4
Education of the father	No education =0; primary =1; junior high =2; senior high =3; specialist =4; undergraduate or above = 5
Educational attainment of mothers of children	No education =0; primary =1; junior high =2; senior high =3; specialist =4; undergraduate or above = 5
controlled variable	
Is it an only child	not =0; yes =1
Account Registration Type	agricultural registered permanent residence =0; Non - farm Account Registration =1; Household registration =2; No account =3
Children's Learning Attitude	Very careless =0; Not too serious =1; General = 2; Careful =3; Seriously = 4
Students' expectations of their education	Don't read it now =0; Junior high school = 1; High school = 2; Junior College =3; Bachelor degree or above =4
Parents' educational expectations for their children	Don't read it now =0; Junior high school = 1; High school = 2; Junior College =3; Bachelor degree or above =4
Teacher's teaching level	Poor =0; medium =1; good =2
Whether does the student of outside county household register have to be born to all cost	Yes, the same as the county household registration students =0; Yes, lower than the county household registration students =1; No average student fee =2; The school has no other county residence register students =3
Can children enroll in high school in this city	Don't know =0; I can't report to =1; Can only enroll in regular high schools, but cannot enroll in key high schools =2; Can enroll in key high school =3

The Regression Results of Children's Family Separation and Educational Performance

Table 2 is the results of orderly classification Logistic regression analysis, All through the child family separation condition and the return of the education performance, clear: first, the core variable separation, whether family and separating the length of the family for children's education, there is no significant effect, families in the form of separation, however, whether living with their parents on children's education performance has significant correlation. Therefore, Hypothesis 1a is verified, while Hypothesis 1 and 1b are not.

Secondly, in terms of the control variables, children's learning attitude is significantly positively correlated with their educational performance. The better their learning attitude is, the better their educational performance will be. Learning attitude is particularly important for children's active learning, which directly affects their academic performance. Whether children are only children showed significant negative correlation with education performance, namely, only child's education performance than the children of families with many children is poorer, only reflection for families with many children on the access to education resources superiority, may exist differences in the efficiency of using resources, children of families with many children psychological and exchanges will also promote the good state of mind, Make full use of educational resources to improve their academic performance. Similarly, the type of household registration presents a significant negative correlation for children without household registration, especially for children without household registration, which will have an impact on children's psychology and thus affect their educational performance.

At the family level, compared with children of their education expectation, parents expect for children's education and its education has significantly positive correlation, children expect instead of their own education to no association of their education, parents' education expectation will directly into the participation of children's education, will increase the education investment of

children, and thus indirectly influence the children's education, However, children's initiative to transform their educational expectations into education is low, which has little influence on their educational performance.

At the school level, the school's teaching level and the education of children also show significant positive correlation, namely the quality of school education, the better, the education of children, the better the performance, school level of education for children of knowledge acquisition and learning method to master can make a difference, thus affect the academic performance of children, the school's education quality is the key reason for parents to choose the school.

At the same time, it is worth noting that, in terms of education policy, the investment in education of children registered in other places and whether they can take the local high school entrance examination have an impact on children's educational performance. The investment in children's education, including the investment in teachers and basic education facilities, will have an impact on children's educational performance. Generational shift along with our country floating population group, second and third generation of the floating population will continue to increase, with the accelerating of urbanization, the population will move to small cities and towns to live, will also continue to flow out, however, will produce the other part of the group, the flow of left-behind children, domicile and residence, and not live with their parents, thus, More attention should be paid to the educational performance of migrant left-behind children. In addition to the basic influencing factors, education policies and systems for migrant left-behind children should be taken into account to provide a more perfect urban education environment for the children of migrant population.

To sum up, children's educational performance is affected by children's household registration, one-child families, parents' educational expectations, school teaching quality and education policies. Meanwhile, parents' company is also crucial for children's educational performance.

Results of the Regression on Educational Performance of Three Types of Child Family Separation

It can be seen from Table 3 that there are significant differences in the academic performance of the three types of children. There are three models in the table, namely, floating children, left-behind children and floating left-behind children. There are differences in their educational performance in terms of the form and duration of family separation. After segmentation for three kinds of children, family separation on the education of children show the existence difference,

the influence of family separation conditions on the education of left-behind children show significant correlation, children have a family separation of experience, will affect their academic performance, left-behind children do not live together with their parents for a long time, will have a larger impact on the academic performance. For migrant children and migrant left-behind children, the duration and form of family separation have no significant influence on their academic performance. Therefore, Hypothesis 2 is verified.

Table 2
Results of orderly classification Logistic regression analysis

Variant characteristics	Model 1	Model 2	Model 3	Variant characteristics	Model 1	Model 2	Model 3
Family separation (yes)				Junior high school = 1	0.29	0.32	0.38
No = 1	-0.11			High school = 2	-1.10	-1.08	-1.11
Length of family separation (never)				Junior college =3	-0.57	-0.54	-0.58
Once a year =1		-0.85		University degree =4	-1.12	-1.15	-1.16
Once every six months =2		-0.17		Graduate and above =5	-1.13	-1.13	-1.03
Once a month =3		-0.67		Parents' educational expectations for their children (Don't read it right now)			
				Junior high school = 1	0.53	0.53	0.50
Once a week =4		-0.60		High school = 2	0.68	0.69	0.63
Once a week or more =5		-0.50		Junior college =3	1.72*	1.77*	1.83*
Form of family separation (neither parent lives)				University degree=4	2.73***	2.77***	2.74***
Living with one parent =1			-2.11**	Graduate and above=5	2.46**	2.51**	2.30**
Living with parents =2			-2.31**	Teaching level (poor)			
Only child (No)				Medium=1	4.77***	4.76***	4.66***
Yes=1	-2.13**	-2.06**	-2.29**	good=2	1.83*	1.87*	1.86*
Type of Account (Agricultural Account)				Whether there is an average student fee for students with household registration in other counties (yes, the same as for students with household registration in this county)			
Non-agricultural registered	-0.94	-0.92	-1.02	Have, lower than this county household registration student =1	-2.42**	-2.40**	-2.30**
				No average student fee =2	1.33	1.24	1.38
Resident Hukou =2	-1.12	-1.19	-1.41	The school has no other county residence register students =3	1.84*	1.83*	1.98**
No hukou =3	-	-2.98***	-	Whether the child can enter for an examination in this city high school (Don't know)			
	2.95***		3.18***	I can't report to =1	1.86*	1.81*	1.95*
The child's attitude towards learning (very careless)				Only ordinary high schools can not register for key high schools =2	3.45***	3.35***	3.52***
Not too serious =1	2.58**	2.41**	2.50**	Can enroll in key high school	1.70*	1.67*	1.54
General = 2	7.56***	7.38***	7.57***				
Serious =3	8.61***	8.45***	8.64***				
Students' educational							

expectations of themselves =3
(Don't read it now.)

Note: *** means P <0.01; ** means P <0.05; * means P value <0.1; Reference groups are shown in brackets

In terms of other basic variables, there are also significant differences in the influencing factors of the three types of children's educational performance.

In terms of children's own characteristics, whether left-behind children are the only child has a poor educational performance, and whether floating children and floating left-behind children are the only child has a relative impact on their educational performance, that is to say, the educational performance of children who live apart from their parents is more likely to be affected by

family children. In terms of household registration type, the three types of children show the same characteristics, that is, children without household registration have poor educational performance. In terms of learning attitude, except the floating left-behind children, the learning attitude of the other two types of children is obviously positively correlated with their learning performance. On the whole, the educational performance of the floating left-behind children is affected by family separation and household registration type, indicating that the educational performance of the floating left-behind children is difficult to predict.

Table 3
Results of orderly classification Logistic regression analysis

Variant characteristics	Floating children	Left-behind children	Migrant left-behind children	Variant characteristics	Floating children	Left-behind children	Migrant left-behind children
Duration of Family Separation				Children's expectations of their education			
Once a year =1	0.29	3.01***	-0.96	Junior high school = 1	-0.92	-0.46	0.42
Once every six months =2	-0.59	1.81*	-1.49	High school = 2	-2.24**	0.49	-1.01
Once a month =3	-0.82	2.59*	-1.38	Junior college =3	-2.06	2.09**	-0.55
Once a week =4	0.10	2.74***	-0.59	University degree =4	-0.17	4.34***	0.42
Once a week or more =5	-0.19	1.90*	-1.43	Parents' educational expectations for their children			
Form of family separation				Junior high school = 1	-1.70*	0.05	-0.82
Living with one parent =1	-0.38	1.96*	-0.10	High school = 2	-0.88	1.75*	-0.82
Living with parents =2	-0.34			Junior college =3	0.98**	3.69***	0.92
Whether they are the only child				University degree =4	2.68***	5.40***	1.26
yes=1	-0.39	-1.63	-0.69	teaching level			
Account				Medium=1	4.26***	6.08***	1.97**
Registration Type				good=2	2.16**	7.71***	0.14
agricultural registered permanent residence=0				Whether does the student of outside county household register have to be born to all cost			
Non - farm Account Registration=1	-2.94***	-1.07	-1.39	Have, lower than this county household registration student =1	-0.05	-1.19	---
Household registration=2	-2.57**	-3.34***	-1.59	No average student fee =2	2.86***	1.14	-0.08
No account=3	-2.43**	-	-2.73***	The school has no other	1.28	---	---
		10.04***					
Children's							

Learning Attitude				county residence register students =3	Whether the child can enter for an examination in this city high school		
Not too serious =1	3.20***	2.23**	-0.11	I can't report to =1	0.28**	0.05	0.77
General = 2	7.25***	7.75***	1.11**	Only ordinary high schools can not register for key high schools =2	1.67***	-0.81	1.72
Careful =3	11.56**	12.38***	2.62***	Can enroll in key high school =3	1.14*	3.30***	1.41
Very seriously = 4	13.61**	15.37***	4.09***				

Note: *** means P <0.01; ** means P <0.05; * indicates a P value <0.1

"—" indicates that there is less data on this option, and the model is counted as missing value in the calculation process

Table 3 Results of orderly classification Logistic regression analysis

At the family level, compared with the educational expectations of children themselves, except for migrant left-behind children, the educational expectations of the parents of the other two types of children are significantly correlated with their academic performance, which further demonstrates the complexity and unpredictability of the factors influencing the educational performance of migrant left-behind children. Similarly, at the school level, the teaching level of the three types of children's schools is significantly correlated with children's educational performance in different degrees.

On education policy, this three kinds of children's education and the education policy show significant correlation in different degree, you can see, the flow for floating children, left-behind children and left-behind children's education policy, such as whether to attend local tests or the entrance examination, and in view of the three kinds of children's education investment, can affect children's education expectation and psychological sense of belonging, This affects children's educational performance.

Interactive Model Results

According to the analysis of the above model, there are significant differences in the academic performance of the three types of children in the case of family separation. However, children's performance is also affected by educational investment and family educational capital. In addition, two interactive models are made in this study, namely, educational investment and family educational capital. In basic control variables, combined with core variables constant, respectively to join education and family education investment capital as a moderator variable, the model based

control variables and the core, a representative model increase the education investment as interaction, model 3 increased family education capital as interaction, analysis of the differences between three types of children's education performance, specific see Table 4.

In Model 2, it can be seen that the educational investment has a positive and significant impact on the educational performance of left-behind children, but not a strong significant impact on the educational performance of migrant left-behind children, but a negative and significant impact on the educational performance of migrant children. Therefore, an appropriate amount of extracurricular tutoring is beneficial to the educational performance of children. At the same time, the significance of education level and parents' educational expectation is enhanced after the education investment moderator variable is added, indicating that the appropriate amount of education investment has a significant correlation with children's educational performance.

In model 3, increased the family education capital, the family's economic situation has significantly influence on children's education performance, especially for the left-behind children, family economic foundation determines the education investment, education investment obviously significant also reflected in these children, flow for migrant children and left-behind children, family economic condition of its education show no significant correlation. For children, the educational level of father and mother can enhance their educational expectations, thus increasing educational investment and reducing family separation, thus improving children's educational performance. However, the educational

level of father and mother also has different influences on children's educational performance. The educational level of fathers is significantly positively correlated with the educational performance of migrant children and left-behind children, but not significantly correlated with the educational performance of migrant left-behind children. The mother's education level has strong significance among the three kinds of children. According to the status quo of children's education in Chinese families, most children's education in Chinese families is supervised and completed by mothers. Therefore, mothers have a high degree of participation in children's education, which is closely related to their education level. For fathers,

since fathers are less involved in children's education, their education level determines their expectations for children's education and increases educational investment, thus improving children's educational performance. From the perspective of the significance of increasing other variables of family educational capital, the correlation has not weakened significantly, indicating that family economic status and father's education level have a significant correlation with children's educational performance. Therefore, hypothesis 3 is confirmed, as are hypotheses 3a and 3b.

Table 4
Classification logistic interaction models for three categories of children

	Floating children		Left-behind children		Migrant left-behind children	
	Model 1 (Education investment)	Model 2 (Family Education Capital)	Model 1 (Education investment)	Model 2 (Family Education Capital)	Model 1 (Education investment)	Model 2 (Family Education Capital)
Education investment						
Whether remedial classes (No)						
yes=1	1.74		2.88***		1.28	
Cost for attending remedial classes (no cost)						
5000 and below=1	-0.82		2.07**		0.40	
5000-10000=2	1.44		0.40		1.46	
Over 10,000=3	-2.22**		0.91		—	
Family education capital						
Financial situation of families (very difficult)						
More difficult=1		1.07		2.41**		0.56
Medium=2		0.72		1.56**		1.05
More affluent=3		0.36		1.02		-0.65
Very rich=4		0.42		-0.88		—
Education of the father (No education)						
Primary school = 1		2.24**		7.24***		-0.20
Junior high school = 2		2.22**		6.73***		-0.33
High school = 3		1.99**		6.45***		-0.16
Specialized subject = 4		1.08		5.02***		0.04
Bachelor degree or above =5		2.15**		5.89***		-0.44
The education level of the child's mother (No education whatsoever)						
Primary school = 1		1.97**		0.58		1.52
Junior high school = 2		1.65*		2.62***		3.15***
High school = 3		1.83*		2.31**		2.35**
Specialized subject = 4		1.65*		1.45		0.63
Bachelor degree or above =5		1.57		2.47**		3.30***

Family separation						
Length of family separation						
Once a year =1	0.18	-0.20	2.93***	2.31**	-1.04	-0.95
Once every six months =2	-0.57	-0.67	1.72*	1.10	-1.52	-0.96
Once a month =3	-0.87	-1.01	2.50**	2.05**	-1.47	-0.85
Once a week =4	-0.03	-0.02	2.69***	2.07**	-0.76	-0.17
Once a week or more =5	-0.28	-0.28	1.90*	1.39	-1.53	-1.07
Form of family separation						
Living with one parent =1	-0.35**	-0.16**	1.80*	1.37	-0.13	-0.53
Living with parents =2	-0.25***	-0.26**	—	—	—	—
Basic variables						
Whether they are the only child						
yes=1	-0.65	-1.11***	-1.64	-2.74***	-0.56	-0.86
Account type						
Non - farm Account Registration=1	-2.59**	-2.85	-0.97	-1.65	-1.27	-1.42
Household registration=2	-2.35**	-2.27**	-3.31***	-3.52***	-1.43	-1.35
No account=3	-2.25**	-2.03**	-9.60***	-7.70***	-2.57**	-2.82***
Children's Learning Attitude						
Not too serious =1	3.13***	3.47***	2.35**	2.93***	0.01	0.23
General = 2	7.21***	7.28***	7.81***	7.80***	1.23**	1.13*
Careful =3	11.55***	11.57***	12.47***	12.42***	2.75***	2.80***
Very seriously = 4	13.64***	13.66***	15.37***	15.26***	4.16***	4.16***
Students' expectations for their own education						
Junior high school = 1	-1.02	-0.91	-0.55	-0.62	0.38	0.85
High school = 2	-2.27**	-2.03*	0.25	-0.03	-1.25	-0.87
Junior college =3	-1.96*	-1.96*	2.03**	1.54	-0.79	-0.36
University degree =4	-0.07	-0.17	4.33**	3.64***	0.23	0.55
Parents' educational expectations for their children						
Junior high school = 1	-1.73	-1.74*	-0.04	-0.81	-0.97	-0.95
High school = 2	-0.81	-0.82	1.59	0.70	-0.74	-0.27
Junior college =3	1.04	0.96	3.50***	2.57**	1.00	1.57
University degree =4	2.83***	2.77***	5.13***	4.29***	1.30	1.84*
teaching level						
Medium=1	4.47***	3.69***	6.00***	4.65***	2.05**	1.90*
good=2	2.21**	1.60	7.60***	6.05***	0.13	0.06
Whether does the student of outside county household register have to be born to all cost						
Have, lower than this county household registration student =1	-0.09	-0.15**	—	—	—	—
No average student fee =2	2.71***	2.81***	-1.15	-0.63	-0.15	0.87
The school has no other county residence register students =3	1.32	1.22	1.32	1.16	—	—
Whether the child can enter for an examination in this city high school						
I can't report to =1	0.32	0.16	0.18	-0.02	0.88	0.80
Only ordinary high schools can not register for key high schools =2	1.61***	1.44	-0.72	-1.00	0.24	0.85
Can enroll in key high school =3	1.23	0.73	3.24***	3.06***	1.22	1.93*

Note: *** means P <0.01; ** means P <0.05; * indicates a P value <0.1

"—" indicates that there is less data on this option, and the model is counted as missing value in the calculation process.

CONCLUSIONS AND DISCUSSIONS

This paper takes migrant children, left-behind children and migrant left-behind children as the research objects, and examines the impact of family

separation on children's educational performance against the background of family separation. Based on the data of China Education Tracking Survey (CEPS) in the 2014-2015 school year, this paper finds that : (1) family separation has a significant

effect on children's educational performance, and there are differences in educational performance among the types of children. (2) Educational investment also affects children's educational performance, and family educational capital and educational investment also have differences in children's educational performance.

Parental Participation is Crucial to Children's Educational Performance

First of all, family means residence or joint separation habitant is changed, the children in order to adapt to the new environment, the physical and psychological will produce certain effect, both affect the education, therefore, during the period of children by education, family separation is not very suitable choice, which is more significant on left-behind children.

Secondly, parents or children's first teacher, whether it's the parents' education expectation, or to the parents' level of education, or family economic status, and the converted to children's education for the company, will directly affect the children's education, therefore, for the universal education capital investment will be more long-term impact to the education level of the whole nation.

Finally, the right amount of extracurricular counselling can enhance the level of the education of children, however, cannot leave the education of children pinned in extracurricular counselling, also found in the above analysis, left-behind children education investment can present positive correlation, migrant children education investment of negative correlation, and the flow of left-behind children education investment has no significance, This may be related to the continuity and unity of after-class tutoring brought by children's fixed residence, and the continuous after-class tutoring will have an impact on children's educational performance.

Educational Equity and the Degree of Integration of Urban Education Will Have an Impact on the Educational Performance of Migrant and Left-Behind Children

First of all, from the perspective of educational policies, the educational performance of migrant

left-behind children is not significant due to the change of policies. However, for migrant and left-behind children, whether they can take the high school entrance examination in their place of residence will have an impact on their educational expectation and learning motivation, thus affecting their educational performance.

Secondly, education investment has a strong significance for the educational performance of migrant and left-behind children. The investment in school education will be reflected in the improvement of teachers' quality and education level, so as to improve their educational performance. Therefore, the fairness of education and the degree of integration of urban education are translated into educational policies, which play an important role for migrant children and left-behind children.

The Factors Influencing the Educational Performance of Migrant Left-Behind Children are More Complex and Profound

The emergence of the second and third generation of migrant workers will inevitably bring more migrant left-behind children. The educational performance of such children is also related to the development of the whole city. Therefore, the educational performance of migrant left-behind children should be paid more attention. However, the educational performance of migrant left-behind children is affected by more factors, which are more complex and deeper. Therefore, the analysis of the factors influencing the educational performance of migrant left-behind children should also be more in-depth.

The influencing factors of children's educational performance are complex and diverse, and the influencing factors of different types of children's educational performance are also different. Especially for floating children, left-behind children and floating left-behind children, the educational performance of the above three types of children should be paid more attention. In the process of urbanization, increasing the educational investment of the whole people will play an important role in increasing the human capital of the whole people. At the same time, the equity of

education and the integration of the city, which will be translated into educational policies, are particularly important for the educational performance of migrant and left-behind children.

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References

1. Gu JX, Luo YZ. The influence of family capital on the quality of doctoral education and academic performance: An empirical study of Jiangsu Province. *Science in Education*. 2016; 32(06): 63-71.
2. Jin XH, Wang JM. Behavioral problems of left-behind children in urban and rural areas: The influence of parent-child separation and family education. *Educational Research and Experiment*. 2015; (03): 43-48+57.
3. Shen WS, Hu LC, Emily H. Effect pathways of informal family separation on children's outcomes: Paternal labor migration and long-term educational attainment of left-behind children in rural China. *Social Science Research*. 2021; 7(97): 102576.
4. Yang BY. Influencing Factors and Mechanism of Academic Performance Differences among Urban and Rural Junior High School Students -- Based on the Analysis of Educational Input, Learning Input and Educational Values. *Research in Education Science*. 2017(03): 68-75.
5. Lin XY, Wang S, Zhang MY, Zhou J. Study on the influence of educational expectations, educational investment and learning investment on the academic performance of migrant children. *Journal of Beijing Normal University (Social Science Edition)*. 2009; (05): 41-47.
6. Fang S, Huang J, Jami C, Birkenmaier J. Family assets, parental expectations, and children educational performance: An empirical examination from China. *Children and Youth Services Review*. 2018; 87(4): 60-68.
7. Huang L. An Empirical Study on the Influence of Parent Participation in School Education on the Performance of Junior Middle School Students' Cognitive Ability -- Based on the Baseline Data of Chinese Education Tracking Survey. *Research in Education Science*. 2016; (12): 53-59.
8. Min Z. Assets, parental expectations and involvement, and children's educational performance. *Children and Youth Services Review*. 2006; (08): 961-975.
9. Yao J, Zhang HF, Yao XG. An empirical analysis of the influence of parental neglect on the educational development of left-behind children. *Educational Development Research*. 2016; 36(08): 51-58.
10. Wang WD, Dong YQ, Liu XH, Bai YL, Zhang LX. The effect of parents' education on the academic and non-cognitive outcomes of their children: Evidence from China. *Children and Youth Services Review*. 2020; (117): 105307.
11. Gong JH, Zhong ZB. Integration and Difference: Family Education and the Academic Performance of Migrating Children in the Context of Urbanization. *Learning and Practice*. 2016(06): 100-108
12. Liu JK, Zhang YL. Dialect Competence and Academic Performance of Migrant Children: Evidence from the Chinese Education Tracking Survey. *Society*. 2020; 40 (5): 213-236.
13. Ma YN, Hou X, Huang J, Wang WW, Li YP, Zhou XC, Du X. Educational inequality and achievement disparity: An empirical study of migrant children in China. *Children and Youth Services Review*. 2018; (87): 145-153.
14. Huang L., Zhao DC. The effect of school bullying on students' educational performance: Evidence from PISA2015. *Education and Economics*. 2020; 1: 31-41+53.
15. Tang was rich and smooth. The effect of parent-child separation on left-behind children: An empirical study based on parent-child separation. *Population Journal*. 2011; (05): 41-49.
16. Fan XZ, Guo QY. Review and Reflection on the Education of Rural Left-behind Children. *Journal of China Agricultural University (Social Science Edition)*. 2015; 32(01): 55-64.
17. Juliette CB, Rozenn H. Parental divorces and children's educational outcomes in Senegal. *World Development*. 2021; 145(09): 105483.
18. Hanscombe Ken B, Haworth, Claire M. A, Davis, Oliver S. P, Jaffee Sara R, Plomin Robert. Chaotic homes and school achievement: a twin study. *Journal of Child Psychology and Psychiatry*. 2011; 52(11): 1212-1220.
19. Yao J, Zhang HF, Yao XG. An empirical analysis of the influence of parental neglect on the educational development of left-behind children. *Educational Development Research*. 2016; 36(08): 51-58.
20. Hu F, Li ST. The influence of parents' migrant work on the education of left-behind children in rural areas: An empirical analysis based on the survey of migrant workers in five cities. *Management World*. 2009; (02): 67-74.
21. XU ZG, Wu BB, Zhou N. Family separation, parental division of labor and nutrition of left-behind children in rural areas. *Journal of Dongyue*. 2019; 40(09): 42-53.
22. Li Yunsen. Self-choice, parental travel and left-behind children's academic performance: An empirical study based on the survey of underdeveloped areas. *Economics Quarterly*. 2013; 12(03): 1027-1050.
23. Sun WZ. Family-oriented: Left-behind Children's Care Service Demand and Social Support System. *Development and Research*. 2016(06): 137-142.
24. Jin XH, Wang JM. Behavioral problems of left-behind children in urban and rural areas: The influence of

- parent-child separation and family education. *Educational Research and Experiment*. 2015 (03): 43-48+57.
25. Ramu R, Sayeed U. Association between nutritional status of scheduled caste children and their educational performance in rural Barabanki district, Uttar Pradesh, India. *Clinical Epidemiology and Global Health*. 2021; 10-12(12): 100849.
 26. Xie YF, Cheng JB, Zheng SZ. An Empirical Study on the Investment of Migrant Children in Family Education: An Analysis Based on Resource Dilution Theory. *Journal of Yunnan Institute of Administration*. 2018; 20(06): 159-163.
 27. Yuan ZH, Wang XB, Luo RF, Zhang LX. The Troubles of School Choice: Study on the Difference of Academic Performance between Migrant Children and Rural Children. *Journal of China Agricultural University (Social Science Edition)*. 2019; 36(01): 128-136.
 28. Li S, Su RY. A study on the influencing factors of floating population's willingness to settle down. *Southern Population*. 2020; 35(04): 41-56+67.
 29. Zhang DH. Microscopic Power: Ethnography of the School Life of the Children of the Urban Floating Population. *Journal of Central China Normal University (Humanities and Social Sciences Edition)*. 2019; 58(02): 168-175.
 30. Jiang B, He WX. Cultural adaptation of migrant workers' children: A positive psychological perspective. *Research in Educational Development*. 2019; 39(20): 78-84.
 31. Wang LZ, Xu JJ, Yan QQ. Research on the compulsory education policy of floating population children: Based on the analysis of policy documents in 18 cities. *Learning and Exploration*. 2020; 3: 23-31+174.
 32. Li WL, Liang Z. A comparative study on the decision making of children of two generations of floating population in China. *Population Journal*. 2019; 41(03): 77-90.
 33. Xie YF, Yang JH. Family capital and educational opportunities for children who have migrated with them: A comparative analysis of three educational stages. *Education and Economics*. 2016; 3: 75-82.
 34. Hu CY, Mao DQ. A study on the relationship between parents and children in rural areas. *University of Journalism*. 2019; 6: 57-70+123.
 35. Zhao LL, Jia A. Study on the Influence Factors of Left-behind Children's Learning Status in Rural Areas. *Research in Education Science*. 2018; 10: 40-46.
 36. Ren, Y. Family - oriented migration and policy analysis to improve migrant family welfare. *Social Science*, 2020; 9: 73-84.
 37. Zhu B, Wang YC. *Population and Development*. 2019; 25(06): 38-51+95.
 38. Du HF, Zhang RC, Liu S. The status and adaptation of "left-behind children" in school under the background of local and local urbanization. *Journal of Xi 'an Jiaotong University (Social Science Edition)*. 2018; 38(03): 1-11.
 39. Li YS, Wang JH, Luo L. Family migration and educational outcomes of migrant children in China: the roles of family investments and school quality. *Asia Pacific Education Review*. 2020; 21(03): 505-521.
 40. Milad K, Sayid DG. The role of parental involvement affect in children's academic performance. *Procedia - Social and Behavioral Sciences*. 2011; (15): 1204-1208.
 41. Hua J, Duan T, Gu GX, Wo D, Zhu QQ, Liu JQ, Liu M, Wu ZC, Meng W. Effects of home and education environments on children's motor performance in China. *Developmental Medicine and Child Neurology*. 2016; 58(08): 868-876.
 42. Duan CR, Lv LD, Wang ZP. Family education and school education of left-behind children in rural areas under the background of urbanization. *Educational Review of Peking University*. 2014; 12(03): 13-29+188-189.
 43. Yang JH, Duan CR. A comparative study of educational opportunities of migrant children, left-behind children and other children in rural areas. *Population Research*. 2008; 32(1): 11-21.
 44. Li XW, Zou H, Wang L. A Comparative Study on the Adaptation of Migrant Children's Schools to Public Schools in Beijing. *China Special Education*. 2009; 9: 81-86.
 45. Liu Y, Fang XY, Cai R, Wu Y, Zhang YF. *Journal of Beijing Normal University (Social Science Edition)*. 2008; (03): 9-20. (in Chinese)
 46. Qi D, Wu YC. Family's social economic status and child educational outcomes in China: The mediating effects of parenting practices and children's learning attitudes. *Children and Youth Services Review*. 2020; 118(11): 105387.
 47. Yamamoto Y, Holloway SD. Parental expectations and children's academic performance in sociocultural context. *Educational Psychology Review*. 2010; 22(03): 189-214.
 48. Yang J, Zhao XH. Parenting styles and children's academic performance: Evidence from middle schools in China. *Children and Youth Services Review*. 2020; 113(06): 105017.
 49. Chen XX, Zhang LX, Luo G, Shi YJ. Children's Learning Performance of Rural Left-behind Children: A Survey from Shaanxi Province and Ningxia Hui Autonomous Region. *China Population Science*. 2009; 5: 103-110+112.
 50. Zhang QH, Yang H, Liu FC, Li SZ. Parental Educational Expectations and Learning Engagement of Left-behind Children: The Mediating Role of Parental Educational Involvement and Self-educational Expectations. *Special Education in China*. 2020; 3: 76-82.
 51. Xue HP, Wang D, Wu XW. Research on the Influence of Extracurricular Tutoring on the Academic Achievement of Left-behind Children in Compulsory Education. *Peking University Education Review*. 2014; 12(03): 50-62+189-190.
 52. Ma GM, Wu QB. Social capital and educational inequality of migrant children in contemporary China: A multilevel mediation analysis. *Children and Youth Services Review*. 2019; 99(04): 165-171.
 53. Zhou Hao, Rong Shan. A review of research on migrant children in China. *Population and Economy*. 2011; 3: 94-103.