

Differences in Preschool Education Funding between the East and the West in China

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Abstract:

Pre-school education is an important part of the national education system, it is an important stage for children to lay the foundation for lifelong learning and all-round development. However, there are obvious differences in population, number of kindergartens, and teacher level between the eastern and western regions, which has caused a shift in the country's investment in education. The eastern provinces have a high level of urbanization, close to the coast, and occupy geographical advantages, most of the investment in education funds is higher than that of the western provinces, and the education level is also ahead of the west. To balance the differences in education between regions and improve the inclusive system of preschool education, the country should increase investment in education in key western provinces to optimize educational resources and reduce information gaps. Promote education legislation to enhance the social status of rural teachers, while establishing a "compensation" type of fiscal fund transfer payment system to increase the income of low-income groups, to balance the problem of regional funding differences.

Keywords: Pre-school education; national finance; regional development

1. Introduction

Since the 18th National Congress of the Communist Party of China, the country has implemented three consecutive action plans for preschool education, promoting rapid development of preschool education and enabling more families to have access to education without being troubled by high tuition fees. Although preschool education has made significant progress, it is still a weak link in the entire education

system, with prominent problems such as insufficient funding, imperfect cost-sharing mechanisms, inadequate protection of teacher benefits, and the need to improve the level of scientific education. To this end, the state has issued several documents to solve the bottleneck problem that restricts the system and mechanism of preschool education.

Preschool education is the beginning of lifelong learning, an important component of the national

education system, and also an important social welfare undertaking. The purpose of this paper is to study and analyze the imbalance in the development of preschool education between the East and the West caused by regional funding differences. Based on the data on national education allocation to provinces and cities in the past five years, as well as geographical and demographic differences, the reasons for this situation are analyzed, and relevant suggestions for the development of preschool education are given.

2. Differences between the East and West of Preschool Education

At present, most kindergartens are privately run. Although privately run kindergartens have reduced the pressure of government financial investment to a certain extent, the uneven tuition fees have brought distress to many people. Difficulty and high cost of education have become concerns for many parents. Therefore, the government has issued relevant documents to improve the popularization and accessibility of preschool education, increase the coverage of inclusive kindergartens, and increase the proportion of children in public kindergartens. Enable more children from low - and middle-income families to have access to education and avoid being burdened by high tuition fees.

However, in terms of the current development of preschool education in China, the urban-rural layout of kindergartens is unbalanced, and the development gap between the East and the West still exists significantly,

which is reflected in the difference between the East and the West of the national education financial expenditure.

2.1 Investment in Education

Children’s growth requires preschool education, which is the preparatory stage for children to enter the education system. It enhances children’s early cognitive and noncognitive abilities and plays an irreplaceable role. Although preschool education is crucial for cultivating children’s early development, there are serious inequalities in access to preschool education [1].

Table 1 shows the comparison of the differences in provincial education funding in China from 2018 to 2022 (unit: 100 million yuan). Among them, Jiangsu Province in the eastern region has invested more than 200 billion yuan in education in the past five years, and Zhejiang and Anhui have also broken the 100 billion mark. In the western region, only Xinjiang has nearly 100 billion yuan in education spending, and other provinces are far behind. Therefore, it can be seen that most of the eastern provinces have higher public education expenditure than the western provinces, which also causes the difference in educational resources and teacher-student ratio between the eastern and western provinces. Preschool schools in the eastern region have more resources and funds to invest in the construction of preschool education to obtain better teaching resources. The lack of funds in the West has also led to the inability of many schools to purchase advanced instruments and equipment, which in turn has caused a gap in educational information with preschool education in the East.

Table 1. Comparison of provincial education funding differences from 2018 to 2022 [2].

Region/Year	2018	2019	2020	2021	2022
Jiangsu Province	2040.47	2200.58	2419.23	2505.13	2544.33
Zhejiang Province	1567.41	1758.08	1879.70	2029.90	2182.55
Anhui Province	1111.49	1219.37	1260.11	1135.42	1420.07
Tibet Autonomous Region	229.02	261.58	293.37	290.36	316.67
Qinghai Province	198.94	219.88	218.01	230.36	230.92
Xinjiang Uygur Autonomous Region	815.64	863.84	909.76	942.93	947.50

2.2 Differences in Running Parks

Table 2 shows the basic situation of preschool education in 2022 according to the statistics of the Ministry of Education, In the eastern region, the number of kindergartens in Shandong and Henan is 24,886 and 23,922 respectively, and the number of children is also nearly one million. There are only 2,726 kindergartens in Hainan, but the number of children is more than 100,000, which is higher

than that in the western region. In the western region, the number of kindergartens in Xinjiang is 7,177, Qinghai is 1,765, and Tibet is 2,412, which is much lower than the average in the eastern region. In terms of the number of young children, only Xinjiang has reached 210687, exceeding 100,000. It can be seen that the number of kindergartens and the number of students in the eastern provinces are greater than those in the western region, but in terms of the concentration of kindergartens, the eastern

region is dense, but the western region is sparse. In the western region, Xinjiang accounts for one-sixth of the country's total land area, Tibet accounts for one-eighth, and Qinghai accounts for one-sixteenth. The number of kindergartens in these vast provinces is scarce, and in

Hainan, the smallest province in China, the area only accounts for 6.8% of the total land area of the country, of which the number of kindergartens is 2,726, which is higher than Tibet and Qinghai. The same is true for most of the rest of the eastern provinces.

Table 2. Basic statistics of preschool education In 2022 [3].

region	Number of Kindergartens	Number of Classes	Number of people entering kindergarten	The number of people in kindergarten	The number of people who left kindergarten
Shandong	24886	147323	1060793	3887244	1213273
Henan	23922	153323	933081	3714844	1433941
Hainan	2726	14600	115710	381420	137710
Tibet	2412	7442	62986	155833	63354
Qinghai	1765	8009	80540	219793	84188
Xinjiang	7177	32782	210687	874344	461425

2.3 Educational Soft Resources

Table 3 shows the statistics of the Ministry of Education of the Ministry of Education in 2022 for full-time preschool education teachers by academic qualifications. Among them, the number of teachers with bachelor's degrees in Jiangsu in the eastern region is 106155, far exceeding that of other provinces, while in the western region, only Xinjiang has more than 10,000 teachers, with 26,086. The number of teachers with a master's degree or above is 844 in Zhejiang, which is the highest in the country, and other provinces in the east also have over 100 teachers. However, in the Western region, highly educated

teachers are scarce. The number of teachers with master's degrees or above accounts for 13, 25, and 45 respectively in Qinghai, Xizang, and Xinjiang. It can be seen from this that the number of graduate and undergraduate teachers in eastern provinces and cities is significantly higher than that in western regions, with a more abundant pool of highly educated talents. Among them, Jiangsu province has 106155 undergraduate teachers, far exceeding other provinces. At the same time, the number of teachers in the eastern region is relatively stable, and there is little difference between the provinces and cities. In the western region, Qinghai, Ningxia, Xizang, and other provinces have formed a precipitous decline.

Table 3. Academic qualifications of full-time teachers in preschool education in 2022 [4].

Province/ Education	Doctor	Master	Bachelor degree	Graduated from a vocational college	High school graduation	High school stage and below
Jiangsu	2	685	106155	64245	975	86
Zhejiang	0	844	87775	65812	1138	9
Anhui	1	139	39705	87202	7815	47
Qinghai	0	13	3929	7862	1354	115
Xizang	0	25	4585	4131	117	15
Xinjiang	0	45	26086	39904	5380	45

3. Analysis of Causes and Effects

3.1 Population and Income Gap between Urban and Rural Residents

From Fig. 1, the main consumption data of urban and rural residents' income and expenditure in 2023, it can be seen that urban residents' expenditure on education, culture,

and entertainment is 3589 yuan, while rural residents' expenditure on education, culture, and entertainment is 1951 yuan [5]. The difference between the two is nearly twice, and the income gap has resulted in a lack of investment in family education, which has also led to a tightening of local school funding.

According to a report by China Development Network, the urbanization rate in eastern cities is 68.5%, while the

urbanization rate in western cities is 54.1% [6]. In terms of the proportion of the rural population, the proportion of the rural population in western China is greater than that in eastern regions.

Under the influence of the national will of urban centrism in the past, county schools and rural schools still face boundary barriers characterized by resource and spatial constraints [7]. This has created an information gap, and urban schools with high-speed networks can quickly transform teachers' teaching thinking and teaching models with technological advantages, fully leveraging the rein-

forcing role of information technology. On the other hand, rural schools are constrained by the "application gap" and struggle to effectively utilize information technology [8].

In summary, rural residents tend to move closer to cities to have better income and access to better learning resources for future generations. This has led to a surge in population in eastern cities, increased pressure on the preschool education sector, and a greater shortage of demand for national education finance. The population in the western region is scarce, and the demand for national education finance is naturally lower than that in the eastern region.

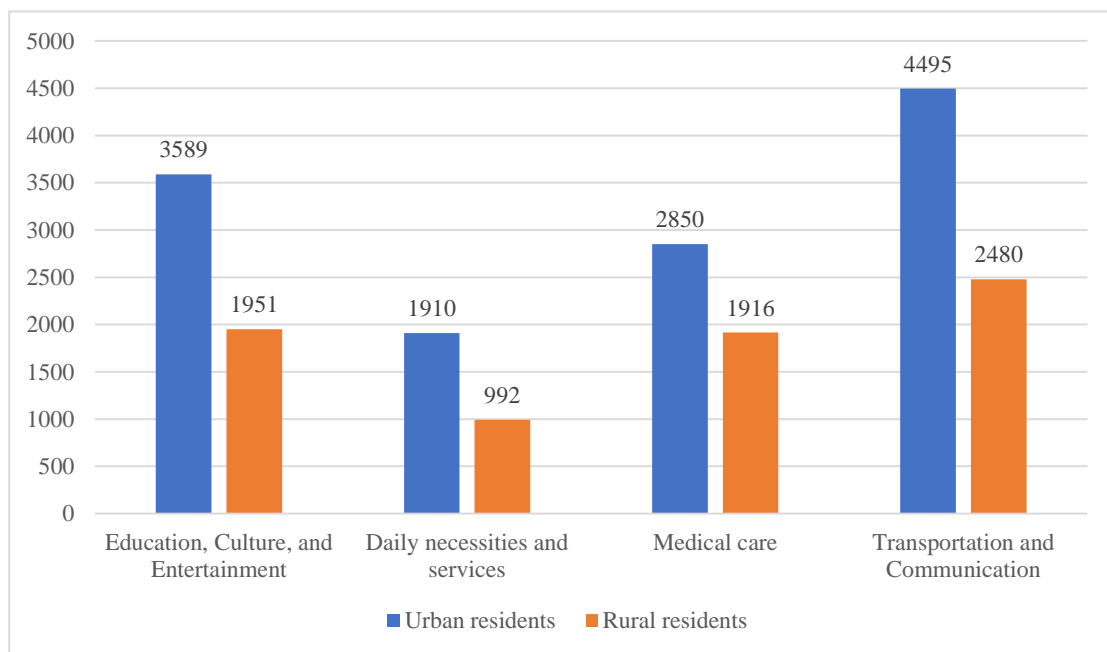


Fig. 1 Main Consumption Data of Urban and Rural Residents in 2023.

3.2 Lack of Social Status of Rural Teachers

Cultivating excellent rural teachers is the key to achieving high-quality development of rural education, while localized training is the key to the growth of excellent rural teachers. Localized training of rural teachers cannot be separated from professional support [9]. The key to developing rural preschool education lies in the construction of the rural preschool teacher team, but currently, most rural kindergarten teachers in China lack status recognition. Nearly half of the teachers consider themselves to be in the middle or lower class of society, while only 24.64% of teachers believe that their social status is higher than that of the middle class [10]. There are many factors involved, and the low monthly income of rural teachers is a major reason.

According to data released by the National Bureau of Statistics, the average national salary in the education industry in 2019 was 97681 yuan. According to the income

survey of rural teachers, the proportion of rural teachers in China with an average monthly income of 3000-4000 yuan (including 4000 yuan) is the highest, reaching 34.55%. However, the proportion of teachers with a salary of over 6000 yuan is the lowest, accounting for only 4.84%. Compared with the national average, the average monthly income of rural teachers is generally lower [11]. Among them, many rural teachers have their children to cultivate, and the low salary income brings great difficulties to their daily lives, which has led to a shortage of rural teachers. Although the country has policies such as the Western Education Support Program, the supported teachers are unable to fill the gap, and people are more willing to send their children to cities for learning. Education industry professionals in the central and western regions also go to eastern cities for better development, which has created an imbalance in the distribution of teachers between the eastern and western regions. As a result, the national education finance has shifted, requiring more

funds to be allocated to the development of education in the eastern region, leading to a difference in financial allocation for preschool education between the East and the West.

3.3 Wide Land, Sparse Population, and Insufficient Internal Factors for Development

Existing scholars have analyzed the allocation of rural preschool education resources in China and pointed out that the overall efficiency is relatively low. There are significant differences in the efficiency of rural preschool education resource allocation among different provinces and regions [12]. The construction of kindergartens not only needs to ensure the health and safety of children but also should be located in densely populated areas. This way, transportation is convenient for schools to enroll students, as well as for children to commute to and from school and teachers to and from work. However, the land area of western China is 6.87 million square kilometers, accounting for 72% of the country's total. According to the seventh national census data, the population of western China is 382852295, accounting for 27.12% [13]. The mismatch between population and area has led to a low population density, with most of the population concentrated in a few cities, resulting in a scarcity of kindergartens compared to the eastern region.

Some scholars have pointed out that in the investigation of factors affecting the development of kindergartens in the Western region, most kindergartens attribute their development factors to external factors and ignore their reasons. Such as "management and guidance by competent authorities" (48.6%) and "government attention level" (38.1%). It cannot be denied that the government's attention and funding are important factors affecting the development of kindergartens. However, people only analyze the current development difficulties of kindergartens from the perspectives of region, funding, system, and degree of attention, without recognizing factors such as the efforts and proactive behavior of kindergartens themselves [14]. The lack of internal factors in this development has led to a shortage of kindergartens in the western region, resulting in a relatively lagging development of preschool education in the western area.

4. Suggestions

4.1 Improve the Quality of Rural Preschool Education and Reduce the Information Gap between the East and the West

The country should attach importance to improving the

quality of rural preschool education and improving and optimizing local learning equipment, to reduce the information gap in preschool education between the eastern and western regions. At the same time, the country should continue to increase the national financial investment in education. The increase in financial expenditure on education can enable the agricultural registered residence population to obtain formal employment opportunities faster than the urban population, break through the barriers of registered residence discrimination, and promote the transformation of "agricultural to non-agricultural" registered residence registration. Narrowing the gap in social insurance participation rates between urban and rural residents will ultimately result in a long-term effect of narrowing the income gap between urban and rural residents [15]. Simultaneously balancing the income of various social classes and promoting a more stable olive-shaped transformation of China's social income distribution structure [16]. This will help alleviate the population shortage caused by population mobility in the western region and balance the population gap between the east and the west.

4.2 Promote Education Legislation and Enhance the Self-Identity of Rural Teachers

The state should pay attention to legislation on preschool education, improve the status and benefits, enable rural teachers to enjoy the social prestige they deserve and enhance teachers' self-identity. The self-identity of teachers is a process of continuous confirmation and construction, which involves reflexive thinking on the self-worth and meaning of teachers, such as "why I am a teacher", "what kind of teacher I am", "what kind of teacher I want to be", and so on [17]. This requires a deep understanding of the difficulties involved, and to establish a mechanism for teacher training institutions, local governments, primary and secondary schools, and kindergartens to collaborate on teacher training, teacher professional development, and educational reform. This is crucial for enhancing the professional identity of preschool teachers and increasing their living security.

At the same time, increases the salary and welfare benefits of rural teachers. For teachers from families facing difficulties, the rural government should actively ensure their basic quality of life and issue relevant documents and instructions to achieve the joint care of the government, society, and schools for rural teachers.

4.3 Create „Internet Plus Teaching and Research“ to Improve Family Education

With public institutions as the main force and the national western project as the support, encourage social forces

to move closer to the western region, actively participate in the construction of preschool education institutions in the western region, and create a network teaching and research model of “Internet plus teaching and research”. Online teaching and research are not limited to connecting teachers and experts from different places on the surface. At a deeper level, the development of online teaching and research also closely links teaching and research issues in different regions. It broadens the communication between teachers and social groups, allowing both parties to maintain an equal communication environment, while also providing new opportunities for the development of teaching and research [18].

At the same time, family education for young children in rural areas cannot be ignored. Scholars have pointed out that education for parents of children should be placed at the forefront of rural preschool education. It needs to make parents aware of and pay attention to their children’s preschool education, and optimize their educational methods in this process [19]. Family is the basic platform for cultivating children, and family education is the beginning of children’s growth and learning. The influence of family on children is not limited to genetic factors. The social status, economic status, lifestyle habits, and parents’ personal views on the education of the family can all have an impact on children’s behavior. To this end, it is necessary to do a good job in popularizing and promoting preschool education, so that more people can understand the importance of preschool education. The national finance also needs to focus on poverty-stricken rural areas and disadvantaged children, actively develop infrastructure to enhance job opportunities and encourage migrant workers to return to their hometowns for construction.

4.4 Establish a „Compensation“ Type Fiscal Fund Transfer Payment System

Fiscal transfer payments are funds disbursed by the central government to local governments, as well as by local governments to their subordinate district and county governments, without compensation. Their main function is to solve the problem of fiscal imbalance in different regions, and they are an important policy tool for the government to achieve control. To reduce the disparity in funding for preschool education between the East and the West, the government should increase investment in per capita funding for preschool education in the Western regions. Establish a “compensation” type fiscal fund transfer payment system to change the polarization of per capita funding investment between provinces. Considering that some economically underdeveloped provinces already have insufficient investment capacity in preschool education

funds, the government needs to achieve inter-provincial redistribution of preschool education funds through fiscal transfer payments to ensure that its weak government has the financial resources to provide standard preschool education public services [20].

5. Conclusion

In summary, the differences in preschool education between regions are influenced by national finance and also affect the investment of national finance in local areas. The country should analyze the specific factors that affect regional differences, starting from aspects such as education quality, teacher level, residents’ income, and personal attitudes toward education. Increase investment in education in key areas, and create an “Internet plus teaching and research” model to balance the education level of the East and the West; Establish a mechanism for teacher training institutions, local governments, primary and secondary schools, and kindergartens to collaborate on teacher training, professional development, and educational reform; Improve education legislation and increase the social status and treatment of rural teachers; Establish a “compensation” type fiscal transfer payment system to ensure that the government, which is lacking in resources, has the financial resources to provide standardized public services for preschool education. At the same time, the individual residents’ emphasis on education is also extremely important, which is a long-term and arduous process that requires joint efforts from schools, society, government, and other aspects.

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