

Urban vs. Rural Pathways to Higher Education: Analyzing Post-2020 Educational Inequity through Family Backgrounds and Resource Allocation in Guangdong

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Abstract

This study investigates the factors contributing to educational inequity between urban and rural areas in Guangdong Province, China, focusing on developments and trends post-2020. Understanding these disparities is crucial in the context of rapid urbanization and economic growth, as they have significant implications for social equality and economic development. Utilizing a quantitative research approach, data was collected from 385 high school graduates using a Stratified Random Sampling method. The study examines variables such as family background, economic capital, and access to educational resources to understand their impact on educational inequity. The methodology involved t-test to enabled the identification of significant differences between the urban and rural areas, and multivariate regression analysis to identify the key factors contributing to these disparities. The findings reveal significant differences in family income, education investment, and infrastructure between the two groups across these dimensions. Despite government initiatives to address these disparities, including teacher recruitment programs and financing reforms, educational inequity persists. The multivariate regression analysis, highlights the critical role of economic capital and family background in perpetuating educational inequities and achieving Sustainable Development Goal 4: Quality Education. These results suggest that, while existing policies have made some progress, they are insufficient in bridging the gap. The study underscores the need for more targeted interventions to promote educational equity, aligning with Sustainable Development Goal 4: Quality Education. Further research is proposed to explore how school and family factors influence students' access to higher education in the post-2020 context.

Keywords: Educational Inequity, Urban-Rural Disparities, Geographical Divide, Sustainable Development Goal 4

Introduction

Education is essential for the development of individuals and communities as it provides people with the values, knowledge and skills needed for individual and societal growth. Education can enable individuals to lift themselves out of poverty and promote social cohesion. A fair and inclusive education system is therefore essential for social justice (OECD, 2008).

According to the Organization for Economic Co-operation and Development (OECD) Ten Steps to Equity in Education (2008), equity includes fairness and inclusion, removing barriers and discrimination based on gender, race or socio-economic status. International interest in equity in education has increased, as evidenced by United Nations (UN) Sustainable Development Goal 4.3, which promotes “equal access to accessible technical, vocational and higher education” (UN, 2015, p. 19). The UN also emphasizes equitable access to higher education, promoting lifelong learning opportunities for all and promoting a fairer society.

However, educational inequality remains a pressing problem worldwide despite advances in education. Although educational resources in high-income countries across Europe and North America are abundant, secondary completion rates for the poorest youth still need to be improved, with only 18 of the richest 100 youth reaching this milestone (UNESCO, 2020). At the same time, mainly in sub-Saharan Africa, especially in rural areas, young women from poor backgrounds need more opportunities to complete secondary education (UNESCO, 2020). Limited access to educational resources and social prejudices creates significant barriers that prevent poor, rural young women from realizing their educational aspirations.

Educational inequity also persists in China, with significant differences between urban and rural areas. Despite impressive economic growth since the start of reforms and opening-up policies in 1978, which led to China overtaking Japan as the world's second largest economy in 2010, this progress has come at a cost. Economic success has led to an uneven distribution of economic, social and educational opportunities across the country. This imbalance is exacerbated by the migration of government investment, capital and labor from rural to urban areas, driven by the process of urbanization (Cheng, 2009).

Along with urbanization, social equity, especially education equity between rural and urban areas, has attracted public attention in China (Wen & Gu, 2017). Following the implementation of its reform and opening-up policy, the Chinese Government has developed additional initiatives to eliminate the imbalance between urban and rural education. To draw excellent teachers to serve in rural areas, the Chinese State Council, for example, started a Special-post teacher recruiting program in 2006. This plan, which is still being implemented, is a special policy in rural China to encourage and recruit qualified college graduates to find employment in rural areas. The purpose is to gradually improve the overall quality of rural teachers and narrow the gap in education quality between urban and rural areas (State Council, 2010).

Furthermore, in order to progressively support rural compulsory education through public financing, in 2015, China's State Council approved a circular on deepening the reform of the mechanism for guaranteeing the financing of compulsory education in rural areas. However, Xiang and Stillwell (2023) demonstrated that despite an initial string of policy wins, the

educational disparity between urban and rural areas still exists including at higher education level after reviewing national policies regarding minimizing rural-urban disparities in China.

In addition, the literature review demonstrates that research on family background and educational resources influences access to higher education, especially on education opportunity and attainment. However, most studies have focused on educational equity in compulsory education, with few focusing on higher education (Long et al., 2022; Zhang et al., 2018). Previous studies also focus on inequality in higher education between urban and rural students before 2020 (Goastellec & Välimaa, 2019; Jia & Ericson, 2017; Ou & Hou, 2018).

Higher education is crucial for fostering shared prosperity, economic progress, and decreased poverty, according to the World Bank (The World Bank, 2021). Therefore, addressing the inequity in student access to higher education between urban and rural areas is necessary to increase university enrollment rates and advance China's efforts to realize the Sustainable Development Goals (SDGs). Exploring the rural-urban educational inequity of students' access to higher education in China, serves the dual purpose of promoting social justice and attaining sustainable development objectives.

In this paper, we present a study that was conducted to identify and describe the key factors, especially those related to social, cultural, and economic capitals, especially the cultural and economic capital, that contribute to educational inequity between urban and rural areas in Guangdong, emphasizing the developments and trends that have emerged after 2020.

The significance of this study is that it offers data to help improve the empirical database for future investigations into China's educational inequity. The research's findings are especially important for China's efforts to achieve Sustainable Development Goal 4: Quality Education, since they highlight particular issues that need to be addressed and improved in order to guarantee equal educational opportunities for all. Furthermore, it is anticipated that the findings of this study will impact how Guangdong's Ministry of Education should develop and refine its educational policies. This will create an educational setting that bridges the gap between urban and rural areas and develops each student's potential.

Literature Review

Educational Equality

According to Bourdieu's (1986) Capital Theory, capital can be divided into social, cultural, and economic categories. The theory explains that economic capital as the possession of economic resources, such as cash and real estate. Social capital refers to a person's contacts, social network, and relationships that they can operate or participate in. Symbols, ideas, preferences, and tastes that can be strategically employed as tools in social action are referred as cultural capital (Bourdieu, 1986).

The theory also highlighted that the three types of capital can be converted into each other, and different forms of capital could significantly affect people's education experience and access to opportunities. As the root of all the other capitals of capital, economic capital presents the economic resources, and can be immediately and directly converted into money. For instance, families and schools with good economic conditions can provide children with higher material security and better educational resources. The theory (1986) argued that academic achievement depends on prior cultural capital invested by the family, which means

that the cultural capital of those born into wealthy families will accumulate faster than those from poverty. At the meantime, wealthy families with more social capital, such as valuable social networks, can gain more educational resources compare to poor families. Thus, family and social are significant factors that relate to educational equality.

Currently, educational equality in China is beginning to take shape, but significant disparities persist, particularly between regions (western vs. other regions), urban and rural areas, and different social classes. Children from western regions, rural areas, and migrant worker families face a relative lack of educational resources. At the same time, the concept of educational justice has shifted, with society's focus moving from "equity of opportunity" to "equity of quality."

Pang (2020) discusses the relationship between educational resources and educational equality, identifying the relative lack of resources and their unjust distribution as the main causes of current educational inequality in China. Wu et al. (2020) investigate an integrated model to evaluate the spatial equity of primary school facilities using GIS technology, focusing on accessibility, facility quality, and the supply-demand relationship. Similarly, Li (2019) examines the urban-rural gap in college enrollment during China's educational expansion, finding that unequal access to vocational schools is the main source of this disparity. Jia et al. (2023), using nationwide large-scale data from 2021, examine the relationship between education and family health in an urban-rural dual society. Their study reveals differences in family health, educational attainment, household income, healthcare coverage, and employment types between urban and rural China.

Internationally, several studies assess educational equity in different contexts. Salisbury (2021) draws on critical race theory, particularly the notion of whiteness as property, to examine school improvement efforts in the United States. These efforts, intended to increase educational opportunities for students of color, often ended up benefiting white students more, thereby limiting opportunities for students of color. Takyi et al (2019) assess how the Ghanaian education system promotes equity in education. Liu et al (2021) analyze changes in educational equality in Inner Mongolia using the Gini coefficient decomposition method, revealing significant insights.

These studies collectively reflect the challenges China faces in achieving educational equity, highlighting disparities between urban and rural areas, different regions, and social classes. Effective policies and strategies are needed to promote equity in education and ensure that all groups, especially those in remote and rural areas, have equitable access to high-quality educational resources. The international perspectives further underscore the complexity and multifaceted nature of educational inequality, emphasizing the importance of targeted interventions to achieve true educational equity.

Family Background and Educational Inequality

Through an analysis of the influence of economic, social, and cultural capital within Chinese families on children's education, Fan (2014) discovered that each aspect significantly impacts education, with cultural capital exerting the most substantial influence. Similarly, Jæger (2009) found that parental socialization, investment, and child investment independently contribute to educational inequality in Denmark. These studies substantiate the relationship between family background and children's educational outcomes.

i. Urban-Rural Disparities in Educational Opportunities

Researchers propose that children in urban areas, characterized by higher economic capital, enjoy enhanced access to educational resources. This assertion is based on comparative analyses of educational opportunities for children from rural and urban families (Jia & Ericson, 2017; Li et al., 2015). Children whose parents have greater social status, salaries, and educational attainment also have stronger academic aspirations and more prospects for further education (Lv & You, 2015; UNICEF, 2019).

Children's academic success is notably shaped by their family background. Jaeger and Breen (2016) indicate that children can amass cultural capital from their parents, aligning with Bourdieu's (2018) cultural reproduction theory. Zhu (2020) found that children from elite-class families benefit more from cultural capital, based on an investigation into the influence of family socioeconomic background on college students' advancement.

ii. Educational Inequity in Higher Education

Educational inequity between urban and rural areas regarding access to higher education has long been a topic in China. In 1999, the Chinese government embarked on educational reform and expanded enrollment in national higher education. However, inter-generational educational inequality persists, with family background continuing to shape students' opportunities (Li et al., 2015; Luo et al., 2018).

The impact of family background on access to higher education in China has become more pronounced with the surge in tuition fees during the 1990s. Jia and Ericson (2017) found that students with higher socioeconomic backgrounds, enrolled in superior high schools, and residing in urban areas had a greater likelihood of admission to prestigious colleges. Wang's (2013) research argued that higher tuition fees present financial barriers for rural students. Comparing education expenditure, Jia and Ericson (2017) found that urban residents are more likely to allocate spending to education than rural residents. Rural families tend to prioritize savings over educational expenditure.

iii. Challenges in Special Admission Programs

Additionally, rural children have very few specialties, which makes them lag behind their urban counterparts in the Independent Freshman Admission Program (IFAP). The IFAP program allows top universities to consider factors beyond test scores, such as excellence in arts, sciences, or sports, for admissions. Wu et al. (2018) investigated the determinants of students being admitted through IFAP programs to three prestigious Chinese universities (Peking University, Tsinghua University, and Renmin University). Their findings revealed that the enrollment of urban students was 13.8% higher compared to that of their rural counterparts.

iv. Influence of Parental Background

Yeung (2013) found that fathers' educational attainment significantly impacts students' capacity to enroll in higher education. Guzmán et al. (2022) found that the educational background of fathers is related to children's dropout rates and performance. According to UNICEF (2019), Undergraduates with high-status parents are more likely to anticipate completing higher education. Divergent upbringing environments predispose rural and urban children to unequal starting points in education (Zhao & Si, 2013). These findings demonstrate that children's chances of obtaining higher education are positively correlated with their parents' educational attainment and socioeconomic standing.

The allocation of educational resources

According to Bourdieu's social reproduction theory (Bourdieu, 2018), schools and teachers play a major role in the exclusion and reproduction of class inequity. Allocating educational resources and teacher qualifications are key factors in determining educational equity between urban and rural areas, affecting students' academic performance and access to higher education (Duan, 2016; Wen & Gu, 2017).

In modern education, hardware facilities are fundamental for students' access to higher education. Rural schools may have basic facilities such as teaching buildings, playgrounds, and dormitories, while urban schools often have additional resources like laboratories, reading rooms, and modern teaching facilities, producing more cultural capital. Despite government efforts to improve both urban and rural school facilities, geographical inequality remains prevalent (Bai, 2020). Irvin et al (2010) found that rural schools face technology barriers, such as poor internet connectivity, which limit online resources and distance learning options.

Substantial disparities exist in teacher quality and academic achievement between rural and urban schools. Zhang et al (2018) found that variations in teacher effectiveness significantly influence students' academic success in Chinese, Math, and English classes. Lei et al (2018) confirmed that insufficient teacher quality contributes to subpar academic achievement among rural students. Additionally, rural teachers face challenges in accessing professional training and adopting new teaching methods (Duan, 2016; Irvin et al., 2010). The lack of infrastructure, limited technology access, and inadequate teacher training further exacerbate educational disparities between rural and urban areas (Yang et al., 2018).

Schools with more economic capital have more educational resources and higher cultural capital, which is reflected in student achievement. Due to inequities in educational resources from economic and social capital, lack of infrastructure, and inadequate teacher training, collaborative teaching models are difficult to implement in rural schools (Yang et al., 2018). Consequently, individuals in rural areas often have lower educational attainment than those in urban areas.

Data from the Educational Statistics Yearbook of China (2011) shows disparities in higher education enrollment: 0.17% in rural areas compared to 2.42% in urban regions. Even beyond 2020, educational inequities persist, significantly impacting students' access to higher education in China.

Methodology

This study employed a quantitative methods approach, as it can clearly define a research challenge by characterizing trends or explaining how variables relate to one another (Creswell, 2012). The research was carried out in Guangdong province, China. Given its status as the largest province in China in terms of GDP, Guangdong has predominantly relied on the Pearl River Delta (PRD) core area, located near Hong Kong, for its economic advancement. However, despite its economic prowess, Guangdong exhibits significant regional inequality, with certain areas experiencing marked advancement in economic, educational, and resource development, while others lag behind (Gu et al., 2001; Lu & Wei, 2007).

To ensure a representative sample, a stratified random sampling method (Parsons, 2017) was employed, selecting 385 high school graduates from both urban and rural areas in Guangdong

Province. This sampling strategy aimed to capture the diversity of educational experiences and perceptions of equity across different regions within the province. The primary data source utilized was a structured questionnaire, meticulously designed to gather detailed information on the graduates' educational backgrounds and their perceptions of educational equity. This comprehensive approach facilitated a thorough analysis, yielding valuable insights into the disparities between urban and rural education in Guangdong.

The dependent variable in this study was high school graduates' post-graduation outcomes, encompassing their choices of universities, colleges, vocational institutions, or opting out of further education. Meanwhile, the independent variables comprised various factors such as family socioeconomic status (SES), school hardware facilities, community services, social resources, parents' education levels, and teacher qualifications. These variables were selected based on a conceptual framework drawn from Bourdieu's capital theory, which underscores the significant impact of different forms of capital on individuals' educational experiences and access to opportunities (Bourdieu, 1986).

To analyze the disparities between urban and rural high school graduates regarding social, economic, and cultural capital, a t-test was employed. This statistical method allowed for the identification of significant differences between the two groups across these dimensions. Additionally, multivariate regression analyses were conducted to explore the correlations between the dependent variable (post-graduation outcomes) and the various independent variables. This analytical approach aimed to elucidate the complex interplay of factors influencing educational inequity between urban and rural areas and its subsequent impact on high school graduates' trajectories beyond graduation.

Findings

Table 1 illustrates that 15 factors exhibit no significance ($p > 0.05$) between urban and rural areas, implying consistency across different regional samples. These factors include extracurricular guidance, high-income parental careers, cultural expectations, financial aid, the number of electronic equipment, knowledge of children's learning, social services, school hardware conditions, the number of classes in the same grade, school-based courses, school support services, average age of teachers, attention to student differences, teaching enthusiasm, and urban-rural differential factors. Conversely, significant differences ($p < 0.05$) were observed in 18 items, such as high school graduates' post-graduation outcomes, family financial resources, family monthly income, labor migration, highest educational level, educational investment fund, educational perception, number of libraries or bookstores, multimedia teaching equipment, multimedia library, number of playgrounds and gymnasiums, number of laboratories, one-to-many instruction, cultural and sports activities, satisfaction with teaching quality, average teacher qualifications, teaching level, and high-quality education resources.

Table 1

T-test analysis results

	Region (average \pm standard deviation)		t	P
	Urban(n=243)	Rural (n=142)		
High school graduates' post-graduation outcomes	1.10 \pm 0.32	2.18 \pm 0.43	-25.699	0.000**
Family financial resources	2.35 \pm 0.64	1.53 \pm 0.85	9.999	0.000**
Family monthly income	2.38 \pm 0.64	1.53 \pm 0.85	10.398	0.000**
Labor migration	2.90 \pm 1.00	2.63 \pm 1.05	2.457	0.015*
Extracurricular guidance	2.85 \pm 1.05	2.79 \pm 1.07	0.528	0.598
High-income parental careers	2.27 \pm 1.27	2.19 \pm 1.28	0.574	0.566
The highest level of family education	1.03 \pm 0.18	2.98 \pm 0.53	-42.706	0.000**
Cultural expectation	2.87 \pm 1.03	2.78 \pm 1.01	0.800	0.424
Financial aid	2.78 \pm 0.99	2.64 \pm 1.01	1.333	0.183
Education Investment Fund	1.05 \pm 0.23	2.86 \pm 0.35	-55.266	0.000**
Number of electronic devices	2.72 \pm 0.63	2.70 \pm 0.64	0.239	0.811
Knowledge of children's learning	2.54 \pm 0.83	2.44 \pm 0.92	1.047	0.296
Educational perception	1.13 \pm 0.36	2.82 \pm 0.39	-42.383	0.000**
Social services	2.85 \pm 1.02	2.73 \pm 1.01	1.078	0.282
Number of libraries or bookstores	1.17 \pm 0.40	2.75 \pm 0.46	-34.063	0.000**
School hardware condition	1.29 \pm 0.45	1.27 \pm 0.44	0.430	0.667
Number of classes in the same grade	1.59 \pm 0.49	1.52 \pm 0.50	1.280	0.202
Multimedia teaching equipment	1.19 \pm 0.39	2.77 \pm 0.60	-28.029	0.000**
Multimedia library	1.30 \pm 0.55	2.77 \pm 0.55	-25.491	0.000**
Number of playgrounds and gymnasiums	1.00 \pm 0.00	3.75 \pm 0.43	-75.868	0.000**
Number of laboratories	1.95 \pm 0.21	1.00 \pm 0.00	71.442	0.000**
One-to-many instruction	2.11 \pm 0.31	4.89 \pm 0.32	-84.215	0.000**
School-based curriculum	2.83 \pm 1.08	2.71 \pm 1.03	1.033	0.302
Cultural and sports activities	2.07 \pm 0.37	4.85 \pm 0.36	-72.028	0.000**
School Support services (counseling, etc.)	2.88 \pm 1.11	2.74 \pm 1.03	1.269	0.205
Satisfaction with teaching quality	2.81 \pm 0.96	2.57 \pm 1.07	2.171	0.031*
Average teacher qualifications	2.95 \pm 0.21	2.08 \pm 0.28	32.269	0.000**
Average age of teachers	1.52 \pm 0.67	1.59 \pm 0.63	-1.053	0.293
Attention to student differences	2.80 \pm 1.06	2.80 \pm 1.07	-0.003	0.998
Teaching enthusiasm	2.81 \pm 1.08	2.78 \pm 1.05	0.294	0.769
Teaching level	2.84 \pm 1.07	2.59 \pm 0.99	2.260	0.024*
High-quality educational resources	2.87 \pm 1.04	2.63 \pm 0.93	2.250	0.025*
Urban-rural differential factors	1.93 \pm 0.72	1.89 \pm 0.77	0.511	0.610

* p<0.05 ** p<0.01

	Region (average ± standard deviation)		t	p
	Urban(n=243)	Rural (n=142)		
<p>At the regional level, satisfaction with teaching quality exhibited significance at 0.05 ($t = 2.171, p = 0.031$), with urban averages surpassing rural averages (2.81 vs. 2.57). Similarly, regional significance for teaching quality was observed at 0.05 ($t = 2.260, p = 0.024$), indicating that urban averages (2.84) were significantly higher than rural averages (2.59). Furthermore, for high-quality educational resources, regional significance at 0.05 ($t = 2.250, p = 0.025$) was found, with urban averages (2.87) significantly exceeding rural averages (2.63).</p>				

Table 3 presents the results of the regression analysis, revealing the regression coefficient between family monthly income and high school graduates' post-graduation outcomes as -0.141, with a significance level of 0.000, indicating statistical significance. Similarly, the highest level of family education, educational investment fund, number of laboratories, one-to-many instruction, satisfaction with teaching quality, average teacher qualifications, teaching level, and high-quality educational resources all exhibited notable negative impacts on high school graduation outcomes. This implies that higher levels of these independent variables were associated with lower levels of dependent variables, and vice versa.

Table 3
Multivariate linear regression analysis

model	Unnormalized coefficient		Normalization coefficient	t	p	Collinear statistics	
	B	Standard error	Beta			Tolerance	VIF
(Constant)	2.093	.564		3.714	.000		
Family Monthly income	-.119	.032	-.141	-3.770	.000	.745	1.343
The highest level of family education	-.156	.069	-.223	-2.260	.000	.107	9.362
Education Investment Fund	.303	.141	-.394	2.150	.002	.031	32.405
Number of Libraries and bookstores	-.071	.068	-.088	-1.038	.000	.145	6.905
Multimedia teaching equipment	-.132	.111	-.169	-1.190	.235	.051	19.497
Multimedia library	-.048	.099	-.062	-.485	.628	.064	15.506
Number of Playgrounds and gymnasiums	.026	.093	.050	.276	.782	.032	31.193
Number of laboratories	-.243	.145	-.169	-1.671	.003	.101	9.882
One-to-many instruction	.315	.129	.618	2.438	.015	.016	61.998
Cultural and sports activities	-.069	.102	-.136	-.673	.501	.025	39.502

Satisfaction with teaching quality	.034	.032	-.048	1.068	.000	.505	1.980
Average teacher qualifications	-.192	.109	-.131	-1.757	.000	.185	5.403
Teaching level	-.009	.030	-.014	-.299	.001	.508	1.968
High-quality educational resources	-.043	.033	-.062	-1.314	.000	.459	2.179
A. Dependent variables: High school graduates' post-graduation outcomes							

These analyses highlight persistent disparities in both family background and the distribution of educational resources between students in rural and urban areas. Notably, differences were more pronounced in school factors, particularly regarding hardware and equipment. Significant disparities were also observed in satisfaction with teaching quality, teaching level, and high-quality educational resources between urban and rural areas. In terms of family background factors, higher family monthly income and increased education investment were associated with more favorable outcomes for high school graduates, underscoring the importance of socioeconomic factors in educational attainment.

Discussion and Implications

The findings of this study shed light on the persistent disparities in educational equity between urban and rural areas in Guangdong province, China. The analysis revealed significant differences in various factors, including high school graduates' post-graduation outcomes, family financial resources, and access to educational resources, between urban and rural regions. These findings align with previous research highlighting the challenges of educational inequality in China (Fan, 2014; Jæger, 2009).

Consistent with the literature, our study underscores the influential role of family background in shaping educational opportunities for students. Specifically, higher family monthly income was associated with increased likelihood of university enrollment, while lower income levels were linked to higher dropout rates. This echoes the findings of previous studies emphasizing the impact of socioeconomic status on educational attainment (Yeung, 2013; Guzmán et al., 2022).

Moreover, disparities in access to educational resources were evident between urban and rural areas, particularly in terms of school infrastructure and equipment. Urban schools tended to have better facilities, including multimedia teaching equipment and libraries, compared to their rural counterparts. This finding is consistent with prior research highlighting the unequal distribution of educational resources across different regions (Liu et al., 2021; Wu et al., 2020).

Our study also revealed significant differences in satisfaction with teaching quality between urban and rural areas. Urban schools reported higher levels of satisfaction with teaching quality compared to rural schools. This discrepancy in teaching quality may contribute to disparities in academic achievement between urban and rural students, as suggested by previous research (Salisbury, 2021; Zhang et al., 2018).

Furthermore, the regression analysis indicated that higher investment in education funds was associated with more favourable outcomes for high school graduates. This finding underscores the importance of government policies aimed at promoting educational equity and providing adequate resources to schools in rural areas (Jia et al., 2023).

Overall, our findings underscore the need for targeted interventions to address educational disparities between urban and rural areas in Guangdong province, China. Efforts should focus on improving access to educational resources, enhancing teaching quality, and implementing policies to mitigate the impact of socioeconomic factors on educational outcomes. By addressing these challenges, policymakers can work towards ensuring equal educational opportunities for all students, regardless of their geographic location or family background.

Suggestion for Future Studies

Based on the results of our study, we provide the following suggestions for reducing the educational inequity between rural and urban areas.

Firstly, enhancing the infrastructure of rural schools, particularly libraries, labs, and computer facilities, is fundamental to ensuring equitable access to educational resources for all children. This infrastructural upgrade is a crucial step towards leveling the educational playing field.

Secondly, investing in the continuous professional development of teachers, with a special focus on rural educators, is pivotal. Regular, high-quality training programs can significantly elevate the teaching standards in rural areas, thereby improving the overall educational quality. Additionally, addressing the unequal distribution of educational resources and providing more support to faculty members can inspire top-notch educators to commit to rural schools, further bridging the urban-rural educational divide.

Third, the lack of financial assistance in rural areas often hinders rural students from pursuing higher education. Prioritizing the establishment of scholarships and financial aid programs specifically for low-income rural families is essential. Such financial support can open doors to higher education that were previously closed due to economic constraints.

Our study contributes to the body of knowledge by improving the empirical data for future studies on China's educational inequity between urban and rural areas and by encouraging the nation to meet Sustainable Development Goal 4-Quality Education, which is different from previous research. However, due to a lack of consistent and comparable datasets throughout China, our study was restricted to factors for which comparable data are available in Guangdong Province. In the future, as more robust data becomes accessible, our research could be extended to incorporate additional influential variables and extend beyond the provincial level to encompass county and municipal levels. We should also investigate additional social, economic, and cultural capital factors to better understand the mechanisms via which these factors function and strengthen the capacity of our findings to support the formulation of public policy.

Conclusion

By examining the effects of educational inequity between rural and urban areas on students' access to higher education in Guangdong after 2020, we could first determine the family backgrounds of high school graduates in the urban and rural areas. We then analyzed the major factors influencing students' access to higher education and were able to provide recommendations based on the findings of our analyses. We discovered that family background, particularly the family's monthly income and education investment fund, which

are important over time, greatly impacted educational inequity between rural and urban areas.

The distribution of educational resources was also found to be related to educational inequity, although it was not evenly distributed. The findings showed that economic capital continues to have a large impact on the educational gap between urban and rural areas, contributing to differences in access to higher education between urban and rural students. Urban and rural areas differ significantly in the degree of influence of many factors, indicating the need for region-specific remedial measures.

Our empirical study, which re-examines the factor of urban-rural educational inequality in Guangdong and analyzes the relationship between factors of significant urban-rural differences in educational attainment and students' access to higher education, offers stronger evidence than previous research, although our conclusions are not surprising.

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