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Performance Comparison of Poverty Alleviation through Education, Employment and Industry during the Period of Targeted Poverty Alleviation

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ABSTRACT

Based on the income poverty level differences and multi-dimensional poverty perspective in China, this paper compares the performance of education poverty alleviation, employment poverty alleviation, and industry poverty alleviation. The hypothesis was tested by quantile regression and ordered probit model. The results show that: in the short term, the effect of poverty alleviation through education is not significant; however, the effect of poverty alleviation through employment and industry is significant, increasing the income of poor households to a certain extent. The effect of poverty alleviation through employment is high. In the long term, the effect of poverty alleviation through industry is good. For the deep poor households, the effect of poverty alleviation through employment is more significant in the short term. For the marginal poor, only industry poverty alleviation has a significant effect on poverty alleviation. Education poverty alleviation and industry poverty alleviation are conducive to improving multi-dimensional poverty. In the alleviation of multi-dimensional poverty, employment poverty alleviation and education poverty alleviation have a certain synergy.

KEYWORDS

Education poverty alleviation; Employment poverty alleviation; Industry poverty alleviation; Poverty alleviation performance; Multi dimension poverty

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1. Introduction

2020 was a critical year for China to fully enter a moderately prosperous society, lift the impoverished rural population out of poverty and lift the hat of an impoverished country. In order to achieve this goal, in recent years, all regions and departments have adhered to the basic idea and method of "precise poverty alleviation" and "targeted poverty alleviation". It is a relative concept with "extensive poverty alleviation", and it is an important poverty alleviation strategy for the "13th Five-Year Plan" period as finalized by the CPC (Communist Party of China) Central Committee. Therefore, the local governments set up special work departments and working groups and dispatch party cadres of the village to the households. Based on the characteristics of different poverty areas, and different poor farmers' economic and living conditions, different local government financial budgets have been "tailored". This was done through the identification and design of support ideas and tracking the effect to achieve accuracy and efficiency (Yang et al., 2020).

Compared with the traditional extensive poverty alleviation, precise poverty alleviation emphasizes precise identification, precise assistance, and precise management, from the emphasis on "blood transfusion" to the emphasis on "blood production". This they do by hoping to improve the poverty of the internal impetus of development using various poverty alleviation methods, enhancing their self-development ability and improving their multidimensional poverty situation. Based on this basic idea, in the new period of precise poverty alleviation, many poverty alleviation means have made completely new developments and changes. Thanks to accurate identification, universal access to finance has again lowered the barriers for people experiencing poverty and lowered marginalization. Because of the realization of village-to-home precise assistance, financial poverty alleviation has contributed more to industrial poverty alleviation and education and employment poverty alleviation. These are "customized" according to the specific conditions of poor households to improve the "blood-making capacity" of poor households (Li et al., 2022; Liu et al., 2021). Besides, compared to the period of extensive poverty alleviation, most of the financial funds are used for regional infrastructure upgrading during the period of precise poverty alleviation. Industrial poverty alleviation and education and employment poverty alleviation are the main methods used by CPC cadres stationed in villages in the actual work. Compared with financial poverty alleviation and other types of financial poverty alleviation, these three alleviation means can be more directly and precisely adapted to different poor households. However, the funds can also be more conveniently applied and used (Zameer et al., 2020). However, do industrial poverty alleviation and education, and employment poverty alleviation perform exactly in the same way, both in the short and long term? For people experiencing poverty, with different levels of poverty, do the benefits of poverty alleviation through industry, education, and employment benefit in the same way? What difference does the effect of these three different methods of poverty alleviation make when the meaning of poverty is expanded in the perspective of multidimensional poverty? Next, this paper will discuss these issues based on the data from field visits.

The research subject about the performance comparison of poverty alleviation through education, employment, and industry during the period of targeted poverty alleviation is particularly important in the context of China for several reasons: Poverty is a pressing global issue, and finding effective ways to alleviate poverty is a critical challenge facing policymakers and governments around the world. Therefore, understanding the relative effectiveness of different poverty alleviation strategies is crucial (Sachs, 2012). China is the world's most populous country, and poverty reduction is a crucial challenge facing the country. The Chinese government has made significant progress in reducing poverty in recent years, and understanding the relative effectiveness of different poverty alleviation strategies is critical to continuing this progress (Shi et al., 2022). Targeted poverty alleviation is a key strategy in China's poverty reduction efforts. The government has identified specific regions and populations that are most in need of assistance and has developed targeted interventions to address their

needs (Allison and Horemans, 2006; Hatta and Ali, 2013). Education, employment, and industry are important components of China's poverty reduction strategy (Li et al., 2022). Education can improve the skills and knowledge of the poor, enabling them to secure better jobs and improve their earning potential. Employment provides income and financial stability, while industry can generate economic growth and create job opportunities (Bridgstock, 2009). By comparing the performance of different poverty alleviation strategies in China, policymakers can identify which interventions are most effective in different regions and for different populations. This can help to ensure that poverty reduction efforts are targeted, efficient, and impactful.

In summary, the subject of performance comparison of poverty alleviation through education, employment, and industry during the period of targeted poverty alleviation is crucial in the context of China's poverty reduction efforts. By understanding the relative effectiveness of different poverty alleviation strategies, policymakers can improve their interventions and accelerate progress in reducing poverty. The innovative point of our research is that we used three important variables to study the performance comparison of poverty alleviation.

The remainder of the paper is structured as follows. Section 2 reviews the relevant literature. Section 3 presents the theoretical analysis and research hypotheses. The research design, including research samples, data sources, and model construction, is elaborated in the fourth section. Section 5 presents and discusses our empirical results and analysis. Some concluding remarks are made in Section 6.

2. Literature Review

In the period of precise poverty alleviation, the financial poverty alleviation mainly relies on precise household-based assistance methods. In terms of the Decision of the CPC Central Committee and the State Council on Winning the Hard Battle against Poverty, the Central Committee put forward five policy measures that are more pertinent: i) industrial support, ii) transfer of employment, iii) relocation from another place, iv) educational support, and v) medical assistance (Liang and Bao, 2018). During the period of precise poverty alleviation, the three most important means of financial poverty alleviation for poor households with file establishment and card establishment are direct monetary subsidy, industrial development fund for promoting industrial development, and education and employment training fund for promoting labor capacity enhancement (Dagdeviren, 2006; Li et al., 2022).

The nature of education and its economic and social functions are not only helpful for solving the current poverty situation of individuals, but also play an important and special role in solving the intergenerational transmission of poverty (Li et al., 2020). However, since the current stage of educational poverty alleviation involves both education and poverty alleviation, its output effect includes both the balanced development of compulsory education and precision education, thus creating cross-complexity. At the same time, due to social-level employment equity and distribution equity development issues, education for poverty alleviation cannot completely and effectively achieve the goal of interrupting the intergenerational transmission of poverty (Liu Xiaohong, 2018). In the context of targeted poverty alleviation, due to the more accurate basic information about the poor labor force, employment poverty alleviation relies on multiple forms to adapt to the skills training of each household. However, at the same time, due to the constraints of objective reasoning, the current employment poverty alleviation problem still has problems, such as the disconnection of skills training and enterprise needs and the low degree of organization of poor labor transfer employment (Yuan Linjun, 2018). There is currently no unified view on the issue of poverty alleviation in the agricultural industry. Some believe that agricultural industry poverty alleviation can guide farmers to employ more "efficient" upgrade strategies, improve self-hematopoiesis, and thus significantly increase the income of poor households (Hu Han et al., 2018). Others believe that the problems of "elite capture" and "absorption of the weak" occurred before the implementation of poverty alleviation measures in the agricultural industry. The problems of "policy burden" and "poor scale

management" have been discovered in implementing poverty alleviation measures. Later, there were the problems of "insufficient follow-up maintenance" and "damage to farmers' livelihoods (Xu Hanze and Li Xiaoyun, 2017). Therefore, the poverty alleviation effect of agricultural poverty alleviation methods is also controversial.

With regard to the three most important poverty alleviation tools, there are only a few existing comparative analyses on the differences between the three in terms of the time of action, specific effects, etc., and multi-dimensional poverty is not included in the analysis. Dagdeviren (2006), Yang et al. (2020), Yuan Linjun (2018), and Yang Long et al. (2019) conducted output performance analysis on poverty alleviation through education, employment, and industry, but they have not made any horizontal comparisons and did not take all measures, mentioned earlier, into account. From the perspective of multi-dimensional poverty analysis, Wu Benjian et al. (2019) built a theoretical model based on the perspective of multi-dimensional poverty to compare the performance of financial poverty alleviation during the targeted poverty alleviation period. With regard to grassroots poverty alleviation, cadres, who are the main means, have limited information.

Based on the research ideas of Wu Benjian et al. (2019), this article compares and analyzes the alleviation of different standard policies in fiscal poverty alleviation (industrial, education, and employment poverty alleviation) from the perspective of an increase in income of the poor and the improvement of multi-dimensional poverty. This article assumes that all the subsidies the poor received will be used for production. This paper uses the data of all registered poor households in a village in Fushi City, Guangdong Province, to analyze the impact of industrial, education, and employment poverty alleviation on the income increase of poor households with different income levels and multi-dimensional poverty alleviation. Policy adjustments provide a certain degree of reference (Wang et al., 2020). At the same time, it should be noted that due to the different factors such as the natural geographical environment, regional culture, regional economic macro environment, and the limited sample collection data, the conclusions from this article may be one-sided (Wunder, 2001).

The previous research discussed the importance of different policies for poverty alleviation during the targeted poverty alleviation period in China. The five policy measures mentioned are industrial support, transfer of employment, relocation from another place, educational support, and medical assistance. The three most important means of financial poverty alleviation for poor households are direct monetary subsidy, industrial development fund, and education and employment training fund. The article compares and analyzes the impact of industrial, education, and employment poverty alleviation on the income increase of poor households with different income levels and multi-dimensional poverty alleviation. The study assumes that all subsidies received by the poor will be used for production. This research notes that the conclusions may be one-sided due to different factors like the natural geographical environment, regional culture, and limited sample collection data.

3. Theoretical Analysis and Research Hypothesis

3.1. Three policy poverty alleviation methods and the definition of multidimensional poverty

China's educational poverty alleviation policy involves poverty alleviation in education and poverty alleviation through education (Yuan and Ding, 2023). In a broad sense, poverty alleviation through education contains many meanings, including guaranteeing compulsory education in rural areas and ethnic minority areas, ensuring balanced development of compulsory education in urban and rural areas and among regions, and guaranteeing the educational quality of children of poor families, among others (Guo and Wang, 2021). In the specific context of this article, our study archives are established, focusing on the assistance policies and funds to guarantee higher education opportunities beyond the continuous compulsory education for the children of the poverty-stricken households. The employment poverty alleviation work in China is carried out in accordance with the guiding opinions about how to effectively do a good job in employment poverty alleviation, including such

steps as getting to know the basic information, promoting local and nearby employment, strengthening labor cooperation, and strengthening skill training. Among them, labor training is the core and the key to employment poverty alleviation work through labor training. Poor people's labor skills and labor quality has been gradually improving in terms of employment—from physical types to skill types and transforming to intelligence. By upgrading their skills in the labor force, the poor can move out and work or join poverty-relief workshops nearby. The poverty alleviation studied in this paper focuses on labor training services as the main means. China's industrial poverty alleviation's internal thinking lies in the "hemopoiesis" that aims to stimulate poor households to generate momentum and then work towards stable poverty alleviation and sustainable development (Wang et al., 2020). At the grassroots level, the main objective is to adjust the measures to suit local conditions that can assist poor households by developing industries in light of their actual situations. This they do by providing special industrial poverty alleviation funds. Generally speaking, such industrial development plans vary in scale but often have a long life cycle.

In the early studies, with limited understanding, poverty means material deprivation or income inequality, but with recent studies, the concept of multidimensional poverty is gradually mentioned and accepted. For example, Amartya Sen's "Viability Approach" in goods and competencies evaluates "the ability of people to do what they want and live what they want" or is understood to be an examination of the differences in individuals' abilities to convert the resources they have into activities of achievable value" (reference with date and page number?). Multidimensional poverty extends the concept of poverty to include, in addition to income poverty, factors of many dimensions, such as access to infrastructure services (water, roads, sanitation), social welfare, and security. At present, domestic and foreign related research focuses on the multi-dimensional poverty of families (Alkire, 2011; Guo Xibao, Zhou Qiang, 2016). There are also studies on multidimensional poverty among individuals, which can be measured in terms of income, health, education, insurance, employment, and availability of infrastructure. For example, Wang Chunchao and Ye Qin (2014) chose four dimensions of income, health, education, and medical insurance to analyze the multi-dimensional poverty of migrant workers. Gao Shuai and Bi Jieying (2016) chose three dimensions of health, education, and living standards to study the dynamic multi-dimensional poverty of the rural adult population. In terms of the analysis of multidimensional poverty methods at two levels, since education poverty and employment poverty alleviation are poverty alleviation means from a personal situation, this paper focuses on the poverty dimension identification at the individual level. It better reflects the connotation of multidimensional poverty (Guo and Wang, 2021). Therefore, on the basis of existing research, combined with the actual situation of the poor village (comprehensive security infrastructure), this paper defines the multi-dimensional poverty of the individual as income dimension, health dimension, education dimension, and housing dimension. This is done based on the capacity of four dimensions as either inadequate or deprived (Liu et al., 2018).

3.2 The improvement mechanism of education, employment and industrial poverty alleviation to multidimensional poverty of poor population

Based on the "Iceberg Model" of individual poverty (Liu Xiaohong, 2019), in this paper, we discuss the practical benefits of education to solve individual poverty from the poverty of income, rights, ability, and psychological poverty of poor individuals and other five types of poverty, considering the effect of time factors, exploring the impact of education on poor households. As the chart below shows, the "Iceberg Model" of individual poverty starts with psychological poverty, and poor households may not have the psychological need to integrate into society or the psychological confidence to do so, further contributing to or enhancing the capacity and rights of poverty. These three kinds of poverty simultaneously lead to the formation of income poverty.

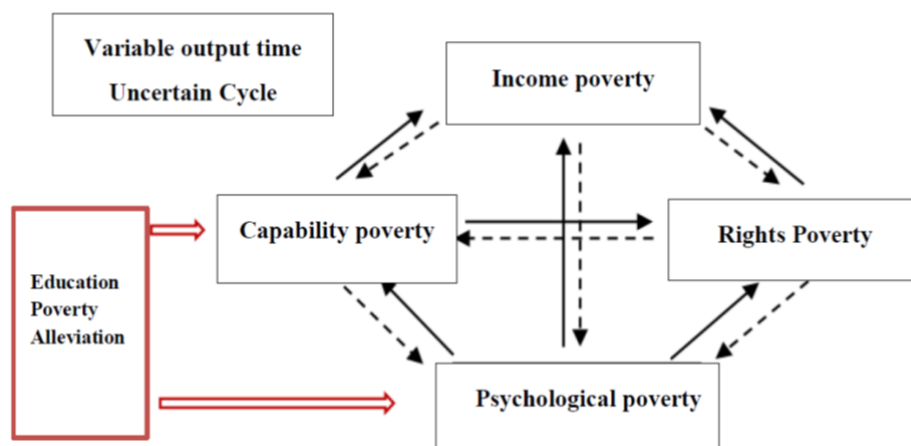


Figure 1. Output Effects of Education in Solving Individual Poverty.

As shown in Figure 1, the solid arrow indicates causality, and the dashed arrows indicate the negative feedback relation. Poverty alleviation through education also contributes to mental and capacity poverty. Primary education and further education can help to solve psychological poverty, improve psychological capital, and help low-income families to solve the psychological barrier. Second, poverty alleviation through education promotes poor households to receive general knowledge and professional skills quality training and education and helps them to improve their professional level and form knowledge and skills capital. Therefore, on the basis of solving psychological poverty and ability poverty, the cycle between the poverty types is broken, and the poverty-elimination result, which is not easily affected by an emergency, is truly realized. However, it is worth noting that in this mechanism, there is considerable delay in the positive or negative feedback at each link, first because education itself is a process that takes time. Secondly, it is difficult to define the time when evaluating the effect of education precision on poverty elimination. For example, how long should the education cycle be defined, and how should the start and end points of indicator observation be determined in assessing the effectiveness of education on poverty alleviation? It is because of the two basic characteristics of education poverty alleviation, that is, the long input cycle and uncertain output time. Even if we determine that education poverty can directly affect the income and education poverty dimensions through psychological poverty and capacity poverty in the case of uncertain time cycle selection, it is easy to make an error with time and may even lead to incorrect conclusions.

In this study, because the selected examples of education poverty alleviation funds are mainly used to subsidize people experiencing poverty to complete the stage in learning other than compulsory education (high school, vocational education college, university, etc.), evaluation of the time span cycle ensures that people experiencing poverty complete up to a certain stage of learning, that is, should be at least for three years. However, since it is less than four years from the beginning of precise poverty alleviation work in this region, the time span used in the actual evaluation is smaller than the ideal period, and the expected results may not be obtained. At the same time, the low poverty level of the individual receiving education will inevitably lead to a lack of labor. This consequently increases the possible cost of living. In the short term, education poverty alleviation may even increase poverty due to a lack of income for the individual.

The measures for employment and poverty alleviation at the grass-roots level mainly focuses on short-term skills training which can promote poor households to meet the employment needs of enterprises, increase employment opportunities, increase income, and alleviate the multi-dimensional poverty of poor households. For poor households to get jobs, measures should be taken to alleviate poverty through employment or broaden the

channels for poor labor forces to find employment locally or nearby, such as setting up local poverty-relief workshops, poverty-relief bases, and even community factories. In addition, employment opportunities for the poor laborers who move out of China for other purposes through job introductions led by cadres of local poverty-relief organizations should be enhanced. But at the same time, there are still some problems affecting the expected effect of the policy in China's employment poverty alleviation. First, under the new economic situation, the demand for the employment of enterprises has undergone a huge structural change, and the demand for high-skilled and high-quality labor cannot be met by short-term skills training (Yuan and Ding, 2023). In particular, the divide between the education level of poor rural laborers and the basic level of labor skills objectively limits the "ceiling" of skills training, and the process of transforming into a skilled labor force is full of hardships. Secondly, the effect of labor skills training is not satisfactory. In the actual life of labor skills training, it is often organized by the government, and poor households voluntarily sign up for collective learning. Government-led courses do not accurately reflect employers' needs. The model of collective learning is not suitable for low-income families with different educational levels. Similarly, in the assessment mechanism of employment poverty alleviation, more attention is paid to the complete index of the course on employment poverty alleviation or employment situation in the short term. No continuous tracking and feedback mechanism is established on the employment situation. Poor migrant workers are not trained in skills. Poor people who stay home but are trained in skills are often limited by factors such as their physical health. At present, the main means of employment poverty alleviation is short-term training. There are unreasonable design and implementation of specific measures, the training effect is limited, and at the same time, many poor areas are not in a position to establish the high-quality, sustained operation of local and nearby employment channels. This results in employment poverty alleviation are not really improving the sustainable development of the poor (Wang et al., 2020). In real life, it has a short-term effect on poverty alleviation, but over time, short-term skills training is not enough to provide poor households with continuous hematopoietic capacity.

Industrial poverty alleviation is one of the most important components of precision assistance measures. On the one hand, in the central deployment, industrial poverty alleviation covers 30 million poor rural people, which is the most crucial poverty alleviation measure. On the other hand, industrial poverty alleviation is an important foundation in the "policy chain" of poverty alleviation. After doing a good job in industrial poverty alleviation, poverty alleviation can better continue employment poverty alleviation, education poverty alleviation, and other measures, and eventually achieve long-term stable poverty alleviation of the poor population. There are various ways to carry out poverty alleviation through industries: One model is for cooperatives to directly drive farmers to increase their agricultural production and operating income by providing low-cost or free production inputs, improving the quality of agricultural products, or underwriting them. Another common model is asset-income poverty alleviation. In this model, the dividends are based on capital contributions, whereby the operator shares the natural resources, financial poverty-alleviation funds, and collective assets owned by people experiencing poverty, with them receiving a distribution of income (Haggblade et al., 2010).

The basic idea of industry poverty alleviation in this paper is based on the actual situation of poverty alleviation objects, such as industrial foundation, labor conditions, select feasible and characteristic projects of industry income that can be increased to achieve wealth, and then implement the measures of poverty alleviation for poor households to achieve long-term re-precision. The village working group on poverty alleviation has carried out a more comprehensive poverty alleviation program. First, according to local conditions, we should make good plans and arrangements for fine-grained industries and precise poverty alleviation, vigorously adjust the agricultural and industrial structure, and consolidate the leading poverty alleviation industries such as bamboo shoots, chili, Na,nyao, and ecological poultry. Further, we should accelerate the development of vegetables, perilla fruit, and other characteristic poverty alleviation industries. Second, the household registration project of

"one strong, two short" industries should be implemented with strength to enable the poor people who have established archives and cards to be stably lifted out of poverty. Third, the interest linkage mechanism should be innovated to strengthen the poor households' share in the industrial and interest chains (Hussain and Hanjra, 2004). We should adopt the mode where the company and the rural households can buy shares and distribute dividends to increase the per capita income of poor households. Fourthly, the mechanism of linking production with marketing should be innovated, the direct connection of agricultural products should be enhanced, and the canteens of organizations, schools, communities, hospitals, enterprises, public institutions, and other entities should be encouraged to purchase agricultural products, from poor villages to play the role of a coordination platform for poverty alleviation, and vigorously promote the development of agricultural and sideline products. Fifth, we should accelerate the development of e-commerce and tourism-related poverty alleviation, establish large-scale agricultural bases, and establish an e-commerce platform. We should carry out projects that involve driving to tourist areas, linking tourist industrial chain income to poor people who have established archives and cards with the help of tourist attractions, developing the collective economy of "Nongjiale" and the sale of agricultural and sideline products produced by local specialties. In terms of design ideas, the village industrial poverty alleviation policy focuses on industrial development. This is based on the development of the industrial chain, starting from the agricultural industry and expanding to additional industries. However, it also plans positive circular relationships within the industrial chain so that poor households can have a long-term "blood-forming function". Nevertheless, the village's industrial poverty alleviation policy does not focus on the heterogeneity of agricultural poverty alleviation policies. That is, when multi-dimensional poverty is considered, the participation of deeply impoverished households with multi-dimensional poverty in the agricultural industry poverty alleviation will not have a significantly positive impact on farmers' gross income in planting. Thus, the industrial poverty alleviation policy cannot precisely target multi-dimensional poverty improvement (Haggblade et al., 2010).

Based on the above analysis regarding the improvement mechanism of education, leading to employment and industrial poverty alleviation to multi-dimensional poverty of the poor, this paper puts forward hypothesis H1:

H1: In the short term, both employment and industrial poverty alleviation can significantly increase income for poor households. The effect of education and poverty alleviation on the income increase of poor households is not significant in the short term. In the long run, due to the positive nature of the design ideas, industrial poverty alleviation is better at increasing poor households' income.

In reality, the poverty level of poor households is also different in terms of income. The sensitivity of different levels of poor households to different poverty alleviation measures is different, and different poverty alleviation measures have different effects among the different levels of poor households. When categorizing the poverty level of poor households at the income level, this paper provides its definition, as shown in Table 1:

Table 1. The method of classifying poor households by income.

Income level of poor households	Poor household level
Below one-third of the income poverty line	Deeply poor households
Above one-third of the income poverty line but below two-thirds of the income poverty line	Ordinary poor households
The income level is higher than two-thirds of the income poverty line but below the income poverty line.	Marginal poor

This paper focuses on the comparison of the effectiveness of each support measure from the point of view of the "extreme" poor households, the deeply poor, and the marginally poor. Farmers can be driven into deep poverty for a variety of reasons. For example, a person who is disabled or ill and completely incapacitated is vulnerable to

deep poverty when he or she is the primary breadwinner in the family. For such deeply impoverished households, due to their self-selection process (Yang Long et al., 2019), the extent of their participation in industrial poverty alleviation, the form of participation, and the degree of their own factor integration are all limited. Relatively speaking, short-term skills training may have better poverty alleviation outcomes (De Janvry and Sadoulet, 2010). The majority of the marginalized poor are unable to expand their productive operations because of a lack of funds, methods, or psychological poverty (fear, resistance).

Based on the above analysis, the hypothesis H2 is proposed:

H2: In the short term, for poor households of different levels, the effects of employment poverty alleviation and industrial poverty alleviation in promoting income growth are different. For deeply impoverished households, the effect of employment poverty alleviation in the short term is more significant. In the short term, the poverty alleviation effect of industrial poverty alleviation is more significant.

From the perspective of multi-dimensional poverty, the performance evaluation of education poverty alleviation can directly affect the education dimensional poverty, and it has a more significant impact when the evaluation mechanism is measured by income alone. However, the current employment poverty alleviation problem has a certain "welfare dependence" (Yuan Linjun, 2018). This makes some poor households inert and worsen the multidimensional poverty situation. In essence, we can integrate the "iceberg theory" of education poverty alleviation to understand that employment poverty alleviation can be seen as merely alleviating poverty (Yuan and Ding, 2023). If, at this time, the psychological poverty of the poor household and other types of poverty have not been resolved, the role of employment poverty itself cannot be fully executed. So, it might be better to combine education with employment when addressing mental and capacity poverty.

Based on the above analysis, the hypothesis H3 is put forward:

H3: Education and industrial poverty alleviation can alleviate the multi-dimensional poverty of poor households. The current model of incomplete and inadequate employment poverty will lead to the multi-dimensional poverty of poor households becoming worse. In alleviating multidimensional poverty, there is a certain synergy between employment poverty alleviation and education poverty alleviation.

4. Research Design

4.1. Data sample

The data used in this paper is derived from the data of poor households who have been filed and registered in village X in a certain city in Guangdong Province during the 2020 Spring Festival. Village X is an administrative village composed of 24 natural villages, with 1,377 mu of cultivated land (including 803 mu of paddy field) and 9,736 mu of mountain land, 655 farm households, and 2,767 people. Among them, 186 are from 67 households of poverty relief, 143 are from 32 households of poverty relief, 21 are from 13 households of low-income households, and 22 are from 22 households of five-guarantees households. Villagers in the village mainly received income from planting oranges and rice and raising live pigs. Since the village committee did not have such industries as mountain farms, fish ponds, and paved areas, the collective economic returns of the village were basically zero. At the same time, some farmers suffer from various causes of poverty, such as natural disasters, man-made disasters, illnesses, disabilities, children's enrollment in schools, mental retardation, and lack of capital, technology, and labor force. In late 2016, the relevant authorities sent a task force on poverty alleviation to enter the village, and they began to carry out precise poverty alleviation work (Wunder, 2001; László, 2008). It is worth noting that although financial poverty relief for poor households existed during the period of precise poverty alleviation, only three financial poverty alleviation funds were obtained, and the amount was small, so they were not included in the study.

During the field visit, the actual situation of each poor household was visited separately, and the poverty characteristics, income, and income structure of 186 poor households (3 households identified as poor households in 2018) and 67 poor households from 2016 to 2019, were obtained by combining the data from the database established by the local working group in 2016. The data included information on absolute poverty in all aspects of production and the life of poor households. In this study, since Village X's precise poverty alleviation work began in 2017, beginning this year, the education poverty alleviation fund and employment poverty alleviation investment had begun to standardize the recording and management. Starting this year, we will be investing in the development of characteristic industries and the construction of industrial chains. Therefore, this study mainly analyzes the basic information of poor households over 17 years, the poverty alleviation investment, and the income of poor households over 18 years (the income of poor households over 19 years as a supplementary means of verification). At the same time, due to the advantages of the field visit, the data processing in this study is too lengthy. The maximum alleviation of the missing value and error value in the sample and the distribution of sample characteristics are shown in Table 2.

Table 2. Distribution of sample characteristics of poor households in Village X.

	Number (person)	Proportion (%)		Number of households (households)	Proportion (%)
male poverty target	91	56.17	General poor households	32	50.00
female poor	71	43.83	Five guarantees for poor households	25	39.06
Poor persons aged 18 years or less	44	27.16	Lack of labor leads to poverty	24	37.50
Persons in poverty aged 18-60 years	72	44.44	Poverty due to learning	8	12.50
Poor persons aged 60 years or older	46	28.40	Poverty due to illness/disability	25	39.06
			Poverty due to lack of funds	7	12.94

4.2. Variable selection and descriptive statistics

4.2.1. Interpreted variables

When studying the impact of different poverty alleviation policies on the income of people experiencing poverty, this paper selects the per capita disposable income of the poor households lagging behind as the explanatory variable. Secondly, in order to further study the impact of the poverty policy on the multi-dimensional poverty status of people experiencing poverty, we construct a multi-dimensional index. The poverty index serves as the second explained variable. Among the eight-dimensional indicators commonly used in China and abroad, this paper combines the actual situation of Village X (such as ensuring electricity, water, and basic insurance in the whole village) to select four poverty dimensions to construct a multidimensional poverty index. Among them, according to the standards of the "Guangdong Provincial Poverty Alleviation Information Network", launched at the end of 2016, poor households with an annual per capita disposable income of fewer than 4,000 yuan were identified as poverty subjects at the income level. Among them were subjects suffering from chronic diseases, serious illnesses, and disabilities. These were identified as those suffering from poverty in the health dimension. Subjects with education levels of junior high school and below (junior high school, elementary school, illiterate, semi-literate) were identified as poverty subjects from an educational dimension. Those living in dilapidated

houses or housing areas less than 20 square meters are identified as poverty subjects from the housing dimension. The statistics on the distribution of poverty in various dimensions of the sample poor households are shown in Table 3.

Table 3. Poverty situation of poor households in various dimensions.

Dimension	Incidence rate (%)
Income level	45.40
Health status	25.77
Education level	0.55
Housing situation	0.23

The same weight is assigned to each poverty dimension, and a summation was performed to obtain P, which is a multidimensional poverty index with the same weight in each dimension. The value range is 0 to 4, which is an ordered sequence. This article will use the ordered probit model to analyze the impact of different poverty alleviation policies on the multidimensional poverty index P.

4.2.2. Explanatory variables and control variables

The explanatory variables in this article are the education poverty alleviation variable, the employment poverty alleviation variable, and the industrial poverty alleviation variable. The variable of educational poverty alleviation is expressed by the amount of educational poverty alleviation subsidy received by people experiencing poverty in 2017, reflecting the intensity of educational poverty alleviation. The variable of employment poverty alleviation is expressed by the per capita investment in short-term skills training. The per capita investment in short-term skills training = total investment in skills training ÷ skills training number of poor households. The reason for selecting the per capita investment in skills training as a variable for employment and poverty alleviation is in the actual poverty alleviation work in Village X. The most important part of the employment poverty alleviation is the short-term skills training courses organized. The poverty alleviation cadres will contact the employers for recommendations. But this approach is difficult to sort out and quantify. At the same time, although Village X has a plan to establish a village enterprise, it has not yet been started. Therefore, the investment in short-term skill training courses can be regarded as the most important employment poverty alleviation expenditure. The industrial poverty alleviation variable is the poverty alleviation work performed in 2017, indicated by the industrial poverty alleviation funds received by the target per capita.

This paper selects gender, age, age square, family size, labor force ratio, and other individual and family characteristic variables as control variables based on the research studies conducted by Kevane and Wydick (2001) and Yang Yanlin and Fu Chenyu (2019), Guo Xibao and Zhou Qiang (2016). Among them, gender (1 for men and 0 for women) is a binary variable; family size is represented by the number of family population; the proportion of family labor force = family labor force / total family population.

4.3. Model setting

This article sets regression equation 1 to make a horizontal comparison of the three methods from the perspective of income increase, namely:

$$I_{t+1} = \alpha_1 JY + \alpha_2 PX + \alpha_3 CY + \sum \beta_j \text{Control}_j + \varepsilon \quad (1)$$

where variable I_{t+1} is the per capita disposable income of poor households in the lagging period, which is represented by 2018 per capita disposable income. The explanatory variables JY, PX, and CY represent per capita education poverty alleviation subsidies, per capita investment in short-term skills training, and per capita

industrial poverty alleviation funds. $Control_j$ is the control variable, α_1 、 α_2 、 α_3 are the coefficients to be estimated, and ε is the random error term.

Table 4. Variable definitions and descriptive statistics in this article.

	Variable name	Variable definitions	Mean	Standard deviation
Explained variable	$It+1$	Disposable income per capita in the lagging period, i.e., disposable income per capita in 2018 (yuan)	9386.01987	2033.3525
	$It+2$	Per capita disposable income for the two lagging periods, that is, the per capita disposable income in 2019 (yuan)	13350.7377	13161.9497
	P	Multidimensional poverty index with the same weight in all dimensions	1.83333333	0.93788572
Explanatory variables	JY	Per capita education poverty alleviation subsidy (yuan)	398.148148	1014.09154
	PX	Per capita investment in short-term skills training (yuan)	382.716049	558.789758
	CY	Per capita industrial poverty alleviation funds (yuan)	5944.13669	2408.03816
Control variable	$gender$	Gender of Poverty Object	0.5617284	0.49771351
	age	Age of poverty target	39.3765432	24.6425415
	$age2$	Age squared	2154.01852	2057.31157
	$family number$	Family size/population	4.44444444	2.16407713
	$labor$	Proportion of labor	0.38888889	0.38888889

In order to take multi-dimensional poverty into consideration, this article sets regression Equation (2), namely:

$$P = \theta_1 JY + \theta_2 PX + \theta_3 CY + \sum \lambda_j Control_j + \varepsilon \quad (2)$$

where P is a multi-dimensional poverty index calculated from the four poverty dimensions, which reflects the multi-dimensional poverty degree of people experiencing poverty. θ_1 、 θ_2 、 θ_3 are the coefficients to be estimated. In order to verify the interactive effects of employment poverty alleviation and education poverty alleviation in affecting the multidimensional poverty situation, this paper introduces cross-terms in the regression and sets the regression equation (3), namely:

$$P = \kappa_1 JY + \kappa_2 PX + \gamma JY * PX + \sum \lambda_j Control_j + \varepsilon \quad (3)$$

5. Empirical Results and Analysis

5.1. Regression results and analysis

Based on the regression Equation (1), Model 1 is constructed to analyze the impact of poverty alleviation through education, employment, and industry on the income increase of poor households. Then, the quantile regression method is used to construct Model 2 to discuss the effects of different poverty alleviation methods on different levels of poverty. The impact of households is different. The results of the two models are combined to jointly verify Hypothesis H1. Table 5 shows the regression results of the two models:

Table 5. The impact of poverty alleviation through education, employment, and industry on the income of poor households after the first period.

Variable	Model 1	Model 2		
		$0.3I_{t+1}$	$0.6I_{t+1}$	$0.9I_{t+1}$
<i>JY</i>	-0.546** (-2.42)	-0.493*** (-3.71)	-0.223 (-0.65)	-0.005 (-0.04)
<i>PX</i>	1.060** (2.34)	1.403*** (5.46)	0.642** (2.11)	0.265 (0.61)
<i>CY</i>	0.307*** (2.76)	0.482*** (4.28)	0.365*** (6.51)	0.200* (1.68)
<i>gender</i>	636.557* (1.65)	481.226 (1.29)	574.493** (1.97)	113.743 (0.17)
<i>age</i>	-42.253* (-1.84)	-54.966* (-1.89)	-13.336 (-1.08)	17.683 (0.34)
<i>age2</i>	0.411* (1.82)	0.585* (1.79)	-0.100 (0.57)	-0.159 (-0.27)
<i>Family number</i>	-334.299*** (-2.58)	-151.671* (-1.91)	-507.394*** (-25.69)	-1234.711** (-2.35)
<i>Labor</i>	5485.207*** (4.87)	2975.556*** (3.08)	5785.085*** (8.72)	7539.445** (1.95)
Constant	11209.55*** (8.74)	9085.529*** (10.05)	11800.560*** (43.18)	20228.047*** (3.31)
Number of observations	163	163	163	163
R-squared	0.412			

Note: ***, **, * indicate the significance level of 1%, 5%, and 10%, respectively; the *t* value is between brackets.

As seen from the regression results of Model 1, employment and industrial poverty, alleviation have a significant positive impact on the per capita disposable income of poor households after the first period. Specifically, in terms of the positive impact on the per capita disposable income of poor households after a lag period, the marginal contribution of employment poverty alleviation is seen as higher than that of industry poverty alleviation. It can be seen that employment poverty alleviation in the short term is more effective than industrial poverty alleviation. It is worth noting that in the short term, education poverty alleviation has a significant negative impact on the per capita disposable income of poor households after a lag period. Education loses productive time and even generates more expenses, negatively affecting the income of people experiencing poverty. This is exactly the deviation caused by the unclear time definition analyzed above.

From the regression results of Model 2, in terms of the positive impact of employment poverty alleviation and industrial poverty alleviation on the per capita disposable income of poor households after the first period, the significance level and marginal contribution of the two are as follows: disposable income increases and decreases. That is, whether it is poverty alleviation by employment or poverty alleviation by industry, the effect of promoting the income of marginal poor households is significantly worse than that of promoting the income of deeply impoverished households. In addition, for deeply impoverished households, the marginal benefit of employment poverty alleviation is still greater than the marginal benefit of industrial poverty alleviation. That is to say, for deeply impoverished households, both employment and industrial poverty alleviation are effective methods, but the poverty alleviation effect of employment poverty alleviation in the short term is more significant. For marginal poor households, employment poverty alleviation cannot significantly increase their income, and only industrial poverty alleviation has a more significant effect on poverty alleviation.

In order to solve the possible endogenous problems, this paper further uses the two-period lagging per capita disposable income of poor households (that is, the per capita disposable income in 2019) as the explained variable and constructs Model 3 and Model 4. The regression results are shown in Table 6.

Table 6. The impact of poverty alleviation through education, employment, and industry on the income of poor households in the two lagging periods.

Variable	Model 3	Model 4		
		$0.3I_{t+1}$	$0.6I_{t+1}$	$0.9I_{t+1}$
<i>JY</i>	-0.303 (-1.59)	-0.278** (-2.55)	-0.401* (-2.05)	-0.388* (-1.88)
<i>PX</i>	0.047 (0.12)	-0.056 (-0.27)	0.050 (0.10)	-0.468 (-0.74)
<i>CY</i>	0.800*** (8.39)	0.316*** (4.30)	0.687*** (2.62)	0.894*** (2.81)

Note: ***, **, * indicate the significance level of 1%, 5%, and 10%, respectively; the *t* value is between brackets.

The regression results of Model 3 show that the education and employment poverty alleviation have no significant effect on the per capita disposable income of poor households after two periods of lag. This is due to the end of part of the education cycle and the current problem of unsustainable efforts made in the context of poverty alleviation through employment. As analyzed in the previous article, because the main means of employment and poverty alleviation at present are short-term training programs, the effects are limited. At the same time, there is no condition for establishing a high quality and continuous operation of local and nearby employment channels, resulting in the fact that employment and poverty alleviation cannot truly improve the sustainable development of people experiencing poverty. The same results are found by Wang et al. (2020). The poverty alleviation effect was limited in subsequent periods. In contrast, the marginal contribution of industrial poverty alleviation to per capita disposable income in the two lagged periods is much greater than its marginal contribution of per capita disposable income in the one lagged period. This, in general, is consistent with the view expressed above, that industrial poverty alleviation measures are stronger "long-term" and "persistent". Looking further, the results of Model 4 suggest that inefficient skills training may become a burden for both the deep and the marginalized poor in the long run. And for people experiencing poverty, industrial poverty alleviation can significantly improve the disposable income of the people who lag behind two periods, and the marginal contribution of industrial poverty alleviation to people experiencing poverty is greater than the marginal contribution to them.

Combining the results presented in Table 5 and Table 6, it can be found that during the time period studied, educational poverty alleviation has a negative impact on the income of poor households at all levels of poverty. Among these, poor households in deep poverty are the most affected, but the negative impact gradually disappears over time. Further research must be carried out in order to thoroughly and comprehensively analyze the output effect of education poverty alleviation. Both employment and industrial poverty alleviation have the effect of promoting poor households, and the income increase effect of employment and poverty alleviation is more significant in the short term. Over time, in the long term, the poverty alleviation effect of industrial poverty alleviation will be more sustainable than that of employment. For the deeply poor, employment-based poverty alleviation will have a more significant effect in the short term, but the marginal benefit of this positive effect will decrease over time under the current model of training-based poverty alleviation. In the short and long term, only industrial poverty alleviation can have a more significant positive impact on the income of poor households. This verifies hypothesis H1.

Using the ordered probit model, Models 5, 6, and 7, based on the regression equation (3) are built to discuss the effects of education, employment, and industrial poverty alleviation on the multi-dimensional poverty index *P*, and cross-terms of education and employment are further introduced to build Model 8. The regression results are shown in Table 7.

Table 7. The impact of three poverty alleviation methods on the multidimensional poverty of poor households.

Variable	Model 5	Model 6	Model 7	Model 8
	Education for poverty alleviation	Employment poverty alleviation	Industrial Poverty Alleviation	Poverty Alleviation by Education X Poverty Alleviation by Employment
<i>JY</i>	-0.0002707** (-2.17)			-0.0004915*** (-3.13)
<i>PX</i>		.000258* (1.69)		-0.0002674* (-1.74)
<i>CY</i>			-0.000299* (-1.68)	
<i>JY*PX</i>				0.000** (2.03)

Note: ***, **, * indicate the significance level of 1%, 5%, and 10%, respectively; the *t* value is between brackets.

The regression results showed that both education and industry poverty alleviation have significant positive effects on the multi-dimensional poverty index, which indicated that these two kinds of measures are beneficial to the improvement of multi-dimensional poverty. Employment poverty alleviation has a significant negative impact on the multidimensional poverty index, which shows that it is not conducive to the improvement of multidimensional poverty. At the same time, the cross-item has a significant negative impact on the multi-dimensional poverty index, which indicates that the combined role of employment poverty alleviation and education and poverty alleviation can improve alleviation of the multi-dimensional poverty, and the poverty alleviation performance can be improved after integrating the two means. This verifies hypothesis H3.

From our results, we can say that China has made significant progress in poverty alleviation over the past few decades. One of the main strategies used by the government to alleviate poverty has been through education, employment, and industry. In this analysis, we will examine the impact of each of these strategies on the income increase of poor households in China. In terms of education, the Chinese government has invested heavily in education, especially in rural areas, to increase access to quality education for children from poor households. This investment has helped to reduce the education gap between urban and rural areas, which has been a significant factor in perpetuating poverty. Through education, individuals from poor households have been able to acquire skills and knowledge that are in high demand in the job market. This has increased their employability and income potential, leading to higher household incomes. Additionally, education has provided opportunities for individuals to start their own businesses, which has also contributed to poverty reduction.

In terms of employment, China has experienced rapid economic growth in recent years, which has created many job opportunities. The government has implemented policies to increase employment opportunities for individuals from poor households. This has been done through the development of industries in rural areas, as well as through the provision of training and skills development programs. Employment has had a significant impact on poverty reduction in China. By providing individuals with stable and well-paying jobs, they have been able to increase their income and improve their standard of living. Additionally, employment has provided individuals with a sense of purpose and dignity, which has contributed to their overall well-being.

And finally, in terms of industry, the Chinese government has also focused on developing industries in rural areas to promote economic growth and alleviate poverty. This has been done through the provision of infrastructure, subsidies, and other forms of support. Industry development has had a significant impact on poverty reduction in China. By creating jobs and economic opportunities in rural areas, it has helped to reduce the income gap between urban and rural areas. Additionally, industry development has contributed to the overall economic growth of the country, which has created a favorable environment for poverty reduction.

In conclusion, education, employment, and industry development have all had a significant impact on poverty

reduction in China. Through education, individuals from poor households have been able to acquire skills and knowledge that have increased their employability and income potential. Through employment, individuals have been able to access stable and well-paying jobs, which has increased their income and improved their standard of living. Finally, through industry development, the government has been able to create jobs and economic opportunities in rural areas, which has contributed to poverty reduction. Overall, these strategies have been successful in reducing poverty in China and can serve as a model for other countries facing similar challenges.

5.2. Endogenous processing and robust analysis

In order to solve the problem of mutual causality in comparative analysis, this paper chooses the interval time period with a lag of one period when choosing the explanatory variable and the interpreted variable. The regression results were verified with the indicators of two lagged periods, namely, the per capita disposable income in 2019 is the interpreted variable. In addition, as far as possible, in this paper, the actual life of the factors was related to both the core explanatory variables and the explained variables in the control variables.

In order to ensure the robustness of the regression results, this paper excludes the 5% of poor households which received the sum of the amount of poverty alleviation in the collected samples (because the variance of the education poverty alleviation funds and the employment poverty alleviation funds is small, compared to the industrial poverty alleviation funds). After the extremum value is removed, the sample size becomes 151. It still uses I_{t+1} and P as the explanatory variables, using 2016 data for the explanatory variables to construct Model 11, Model 12, and Model 13. The results are shown in Table 8.

Table 8. The impact of three poverty alleviation methods on income and multidimensional poverty after excluding extreme values.

Variable	Model11	Model12			Model13
		$0.3I_{t+1}$	$0.6I_{t+1}$	$0.9I_{t+1}$	
<i>JY</i>	-0.4194659* (-1.83)	-0.3959132* (-1.68)	-0.3236762* (-1.76)	-0.1869969 (-0.75)	-0.0002686** (-2.22)
<i>PX</i>	0.9531365** (2.05)	0.0005403 (0.00)	0.8814655** (2.03)	.1809592 (0.704)	.0002972* (1.68)
<i>CY</i>	0.219437* (1.88)	1.374854** (2.73)	0.3151647*** (2.99)	.1299122* (1.676)	-0.000128* (-1.82)
<i>JY*PX</i>					0.00* (1.79)

Note: ***, **, * indicate the significance level of 1%, 5%, and 10%, respectively; the *t* value is between brackets.

The results presented in Table 8 are not significantly different from those presented in Tables 5-7. Therefore, the regression results are considered to be robust.

6. Conclusion

In order to compare the effectiveness of the three policies commonly used in financial poverty alleviation in practical poverty alleviation, this paper firstly constructs the relevant regression equation from the angle of income increase and analyzes the different income increase effects of educational poverty alleviation, employment poverty alleviation and industrial poverty alleviation on poor households. Secondly, the output performance of educational, employment, and industrial poverty alleviation were studied by using quantile regression and standing for the deeply poor and the marginal poor respectively. Finally, a multidimensional poverty index is constructed according to the actual situation. This paper discusses the effects of education, employment, and industrial poverty alleviation on multi-dimensional poverty of poor households, and focuses on the analysis of the interaction between educational poverty alleviation, which has no significant effect in the short-term income promotion and employment poverty alleviation which has a significant effect in the short-term income promotion

but no sustainability. Based on the above analysis, the following conclusions are drawn.

First, in the short term, the effect of education for poverty alleviation in promoting income increase of poor households is not significant or even has a certain negative effect. Both employment poverty alleviation and industrial poverty alleviation can obviously promote poor households' income increase, and the effect of employment poverty alleviation in promoting poor households' income increase in the short term is higher than that of industrial poverty alleviation. In the long term, industrial poverty alleviation will be more effective in promoting poor households' income increase.

Second, whether it is poverty alleviation through employment or industry, its effect on promoting income growth for the marginalized poor is significantly worse than that for the deeply impoverished. Further, inefficient skills training can become a burden in the long run for both the deeply and the marginalized poor.

Third, for poor households with different levels of poverty, there are different ways to adapt to poverty alleviation at different times. For the deeply poor households, both employment poverty alleviation and industrial poverty alleviation are effective methods, but in the short term, the employment poverty alleviation effect is more significant. For the poor marginal households, whether in the short term or in the long term, the employment poverty alleviation cannot significantly increase their income, only industrial poverty alleviation has a more significant effect on poverty alleviation

Fourth, both education and industry poverty alleviation have significant positive effects on the multidimensional poverty index, which shows that both measures are conducive to the improvement of multidimensional poverty. Under this situation, when using education and employment to help the poor, their combined role can improve the alleviation of multidimensional poverty. This can achieve better results in improving multidimensional poverty.

The policy implications of this paper are:

First, as far as the educational poverty alleviation itself is concerned, because of its complex time cycle definition problem, the relevant governors need to further establish and improve the specific evaluation index system and a method for the performance evaluation of education poverty alleviation, form a complete set of data collection work. This will achieve a true and effective assessment of the output of education poverty alleviation, improve the relevant policies, achieve a combined compulsory education poverty alleviation and precise education poverty alleviation, tackle comprehensive psychological poverty and ability poverty, and eliminate intergenerational poverty inheritance. Such a research process would take a long time.

Second, we should improve the existing mechanisms for poverty alleviation through employment, enhance the effects of training on the skills of the existing labor force, and at the same time, add long-term intellectual poverty alleviation to the existing short-term skills training and enhance the fundamental working quality of the poor labor force for a long time. In the process of job introduction, the relevant working personnel should also break away from the mentality of "introducing work" in a small-scale way and actively demand the developmental paths of an organized and large-scale labor force. These include attracting outstanding enterprises to land, establishing rural enterprises, and improving the degree of organization of the poor labor force to move out for employment. In this way, the short-term, "task-oriented" "training to help the poor" can really be transformed into "employment to help the poor" which can improve poverty levels and employment quality positive cycle.

Third, the combination of education and employment-based poverty alleviation methods is an important measure to improve the quality of talent. For example, for the same poor people, it can be education poverty alleviation and employment poverty alleviation at the same time, which can improve the degree of multidimensional poverty.

Fourth, when carrying out poverty relief work, we can, on the basis of identifying poor households at different levels of poverty or in different dimensions of poverty, tailor their work to the specific conditions and use

three poverty relief methods in a comprehensive manner. For example, for marginalized poor households, there should be greater use of industrial poverty alleviation approaches. We should try our best to enhance the marginal contribution of the Poverty Alleviation Fund for the income improvement of poor households or to the improvement of multidimensional poverty conditions.

This paper includes a horizontal performance analysis on the two dimensions of income promotion and multi-dimensional poverty level improvement based on education poverty, employment poverty, and industrial poverty alleviation effect of poverty alleviation. At the same time, through the introduction of the intersection of education poverty alleviation and employment poverty alleviation, the synergy between them for improving multidimensional poverty was also analyzed to some extent. But this discussion is limited to the synergetic mechanisms between education and employment and does not take into account the means of industrial poverty alleviation. Based on the findings from this paper, we can further study the cooperation mechanism and effect between education, employment, and industrial poverty alleviation, and thus draw a more comprehensive and innovative conclusion

Limitations and Research Perspectives.

Firstly, we can focus on the effectiveness of education-based poverty alleviation methods. We argue that education can play a crucial role in breaking the intergenerational transmission of poverty. However, there are challenges in achieving this goal, such as the complexity of education-poverty alleviation programs and the limitations of employment opportunities for the educated poor.

Secondly, some research has studied the effectiveness of employment-based poverty alleviation methods. They have pointed out that there are challenges in matching the skills of the poor with the needs of employers, and in facilitating the transfer of poor labor to employment centers.

One of the principal limitations of our study is the access to the data and the second limitation is that previous studies have conducted comparative analyses of the three poverty alleviation methods. Therefore, we can conduct a multi-dimensional poverty analysis to evaluate the impact of poverty alleviation policies on different aspects of well-being, including health, education, and living standards.

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Declaration of Competing Interest

The author claims that the manuscript is completely original. The author also declares no conflict of interest.

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