

An Empirical Study on the Impact of Economic aid on the Sustainable Development Ability of Impoverished College Students from the Perspective Conservation of Resource Theory Based on Computer Data Analysis

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Abstract:

For some poor students in colleges and universities, they are facing huge economic pressure, which may have a negative impact on their studies and their future sustainable development ability. Therefore, the importance of economic aid to the poor students is self-evident. From the perspective of resource conservation theory, a survey of 682 impoverished students from five universities was conducted based on computer data analysis. The results showed that: (1) economic aid has a positive impact on the sustainable development ability of poor students in colleges and universities; (2) affects the sustainable development ability through the effect of internal and external attribution and self-efficacy; (3) having the necessary resources is the basic condition for the sustainable development of poor students in colleges and universities. The empirical study on the impact of economic aid based on computer data analysis on the sustainable development ability of impoverished students in universities has enlightening significance for adjusting and optimizing the aid policy system and promoting the sustainable development of impoverished students.

Keywords: computer data analysis, economic aid, economic aid for poor students, theory of resource preservation.

INTRODUCTION

As a socially disadvantaged group, the education and development issues of impoverished college students have received more precise and efficient attention in the digital age through the intervention of computer technology. Economic assistance, as a key means to solve the economic difficulties of impoverished students, with the support of technologies such as big data, not only effectively assists them in completing their studies, but also has a profound impact on enhancing their sustainable development capabilities. "Run education to the satisfaction of the people", "develop quality education and promote education fairness", and "improve the student funding system covering the whole academic period." This is the goal of the state to run education well, and also the policy basis for financial support for colleges and universities. With the promotion of digital technology [1], the economic assistance policies for universities can be implemented more accurately, becoming an important tool for the country to ensure educational equity and block intergenerational poverty transmission. The state does not let a student drop out of school due to family economic difficulties through economic aid, and it helps poor students to complete their studies smoothly, which is an important means to ensure educational equity and promote social equity.

The state has invested a large amount of manpower, material resources and economic resources to subsidize poor college students to promote their development and protect their right to education. This has an important impact on the study of poor college students and their future development. Due to the reason of poverty, increased the poor students have psychological barriers and even to the problem of crime, but also affect the development of the poor students. Once the poor students can not get timely economic aid, it will affect the academic performance and life of the poor students, and even affect their physical and mental development, affect the formation of values, and then affect the self-development efficiency of the poor students. Therefore, it is of great theoretical and practical significance to study a more reasonable and accurate economic funding system to promote the sustainable development of poor students in universities.

THEORETICAL PRINCIPLE

Resource conservation theory (conservation of resources theory) is "a stress theory that seeks to find the process of stress generation and the underlying mechanisms when people cope with stressors. The material resources in the resource preservation theory provide a material basis for the poor college students to cope with the pressure." [2] (P1334) The resource preservation theory is a psychological theory that people tend to protect and preserve their resources, such as money, time, energy, and social support. When resources are threatened, people feel stress and anxiety, which may affect their mental health and behavioral performance. For poor college students, their economic resources are usually very limited, so they are more vulnerable to resource threats and pressures.

Economic aid can provide the necessary economic support for the poor college students, so as to relieve their economic pressure. This support can include people in the form of scholarships, grants, loans, and so on. With these economic aid, students can focus more on study and self-development without having to worry too much about economic problems. This focus and engagement may have a positive impact on their academic performance and future career development.

In addition, economic aid can also provide more opportunities and resources for poor college students, such as participating in extracurricular activities, internships, research and so on. These opportunities can help students expand their social networks and enhance their skills and abilities, thus laying a solid foundation for their future career development. These opportunities and resources can also help students better adapt to college life and improve their self-confidence and self-esteem.

Economic aid has an important influence on improving the sustainable development ability of poor students in colleges and universities. From the perspective of resource conservation theory, economic aid can relieve the economic pressure of poor college students and provide more opportunities and resources, so as to help them better adapt to college life and future career development. However, it is also necessary to be aware that economic aid is only a part of the solution, and we also need to pay attention to and support the overall development of poor college students in a wider scope. This requires the cooperation and efforts of the government, schools, society and other aspects to create a more just and equal educational environment.

RESEARCH DESIGN

Research Methods

The research adopts computer analysis method, literature research method, questionnaire survey method, and quantitative analysis method.

Research Hypothesis

The following 11 study hypotheses were proposed from the study. As shown in the Table 1.

Table 1. Study hypotheses

H1: The economic aid environment has a negative impact on the relief of the external pressure of poor undergraduate students
H2: The economic aid environment has a positive impact on the sustainable development ability of poor undergraduate students
H3: The economic aid environment has a negative impact on the internal self-regulation of poor undergraduate students
H4: Economic aid has a positive impact on alleviating the external pressure of poor undergraduate students
H5: The intensity of economic aid has a positive impact on the sustainable development ability of poor undergraduate students
H6: The intensity of economic aid has a positive impact on the internal self-regulation of poor undergraduate students
H7: The economic aid method has a positive impact on the relief of the external pressure of the poor undergraduate students
H8: The economic aid method has a positive impact on the sustainable development ability of poor undergraduate students
H9: The economic aid method has a positive impact on the internal self-regulation of poor undergraduate students
H10: External pressure relief has a positive impact on the sustainable development ability of poor undergraduate students
H11: Internal self-regulation has a positive impact on the sustainable development ability of poor undergraduate students

Sample Selection and Data Collection

Jiangxi funding is also an indispensable part of state funding."As an economically underdeveloped central province, Jiangxi has more poor students in universities, which is also representative in the whole country"[3]. The selected Jiangxi universities are based on the data of the 2023 Jiangxi University Comprehensive Strength ranking of universities (the latest version).[4] finally selected Nanchang University, Jiangxi Agricultural University, Nanchang Medical College and Yuzhang Normal University to issue questionnaires.

A total of 826 questionnaires were distributed and 791 were recovered, with a recovery rate of 95.76%. Excluding those who did not meet the criteria, 682 valid questionnaires were obtained.

Demographic Overview of the Respondents

In this study, the ratio of men and women was greatly, with women significantly more different than men. Most of them were from rural areas, and the vast majority of participants were liberal arts majors. Among the 682 respondents, 675 applied for economic aid because 98.9 percent of their families wanted to reduce the burden on their families. Details are shown in the Table 2 below.

Table 2. Basic sample information (N=682)

name	option	frequency	percentage
sex	man	120	17.6
	woman	562	82.4
Where are you coming from	town	103	15.1
	rural area	579	84.9
specialty	science and engineering	26	3.8
	liberal arts	599	87.8
	art	1	0.2
	else	56	8.2
Per capita monthly household income	<¥2000	261	38.3
	¥2001~¥3000	255	37.4
	¥3001~¥4000	120	17.6
	¥4001~¥5000	46	6.7
Monthly living expenses	<¥500	14	2.1
	¥501~¥1000	457	67.0
	¥1001~¥2000	211	30.9
	≥¥2001	4	not agree with
Received economic aid while in school	<¥2000	201	29.5
	¥2001~¥3000	175	25.7
	¥3001~¥5000	214	31.3
	≥¥5001	92	13.5

Source: collation of this study

HYPOTHESIS VERIFICATION

This study constructs the structural equation model of the sustainable development ability of poor students in universities. The model includes the economic aid environment, economic aid strength, economic aid way independent variables, external pressure relief and internal self regulation mediation, self efficacy regulation and sustainable development ability, a total of four parts, seven latent variables, forty observation variables, focus on the influence of the sustainable development ability, economic aid through the internal and external attribution mediation and the regulation of self-efficacy, and the influence of economic aid on the ability of sustainable development. In this paper, this article uses Amos 24.0 software to draw structural equation models for computer analysis (as shown below). Finally, the structural equation model was run to obtain the fit of the model and the path coefficient between the discovered latent variables.

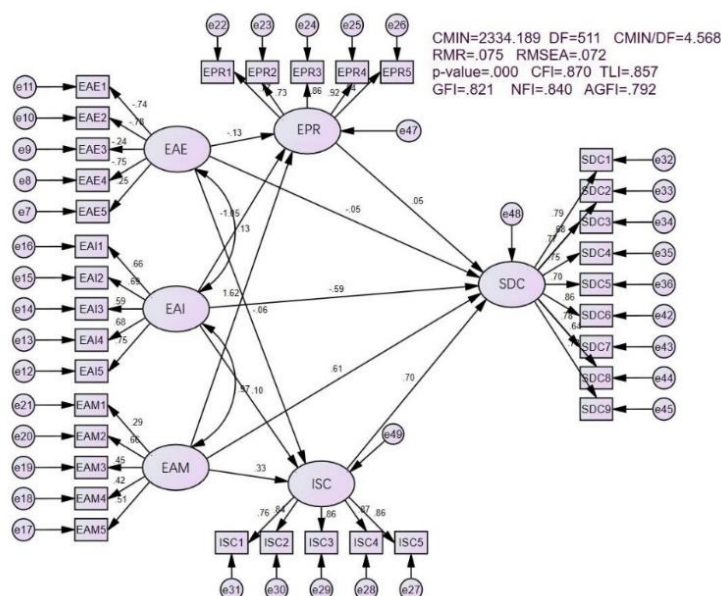


Figure1. Direct effect hypothesis test

Source: collation of this study

As shown in the Figure 1 above, GFI=0.821, AGFI=0.792, NFI=0.840, TLI=0.857, CFI=0.870, RMSEA=0.072. In summary, all the indicators of the validation factor analysis have reached the standard, and the overall fit of the model is good. As shown in the Table 3.

Table 3. Direct effect hypothesis test model fitting indicators

reference index	X ² /df	GFI	AGFI	NFI	TLI	CFI	RMSEA
statistic	4.568	0.821	0.792	0.840	0.857	0.870	0.072
reference value	<5	>0.8	>0.8	>0.8	>0.8	>0.8	<0.08
The standard situation	reach the standard	reach the standard	reach the standard	reach the standard	reach the standard	reach the standard	reach the standard

In this paper, the AMOS 24.0 software is used to verify the 11 proposed research hypotheses. The path used in this study analyzed the path coefficient (standardized estimate), the estimated standard error (S.E.) and the critical ratio (C.R.) of the structural equation model. The path coefficient reflects the relationship and degree of influence between the variables, with the smaller S.E. indicating that the closer the sample statistic is to the value of the population parameter. Typically, when the C.R. value is greater than 1.96 (or the absolute value is greater than 1.96). C.R. is equivalent to the t value and is used to obtain the P value. If the P value shows a significance level (less than 0.05), it indicates that the two variables connected by the path have a significant influence relationship.

Table 4. Pathinfluence relationship test results

way			Standardization coefficient	S.E.	C.R.	P	result
External stress relief	<---	Economic funding environment	-0.134	-0.108	-4.543	***	found
Sustainable development capacity	<---	Economic funding environment	-0.052	-0.060	-0.708	0.479	false
Internal self-control	<---	Economic funding environment	-0.060	-0.079	-4.67	***	found
External stress relief	<---	Strength of economic funding	0.132	0.107	2.931	0.003	found
Sustainable development capacity	<---	Strength of economic funding	-0.593	-0.025	-0.391	0.696	false
Internal self-control	<---	Strength of economic funding	0.101	0.026	1.994	0.046	found
External stress relief	<---	Economic funding	-0.061	-0.175	-0.907	0.365	false
Sustainable development capacity	<---	Economic funding	0.613	0.042	2.873	0.004	found
Internal self-control	<---	Economic funding	0.330	0.048	4.786	***	found
Sustainable development capacity	<---	External stress relief	0.053	0.034	3.107	0.002	found
Sustainable development capacity	<---	Internal self-control	0.701	0.058	18.638	***	found

Source: collation of this study

According to the analysis results in the above table 4, in the pathway hypothesis relationship test of this study, the analysis yielded the following results:

The standardized path coefficient from the economic aid environment to external stress relief was -0.134, C.R. value -4.543, C.R. absolute value greater than 1.96, and the measure of P for significance is ***, indicating $P < 0.001$, meeting the requirement of significance less than 0.05. This indicates that the economic aid environment has a significant negative impact on the external pressure relief. The economic aid environment, the smaller the external pressure to poor students, the smaller the demand for external pressure relief, that is, the environment and the poor students pressure is inversely proportional, pressure and pressure relief is proportional, namely the better economic environment, the smaller the poor students external pressure, need to ease the pressure is less. Thus, assuming that H1 is supported.

The standardized path coefficient from the economic aid environment to the sustainability capacity is -0.052, C.R. value of -0.708, which does not meet the requirement of C.R. absolute value greater than 1.96, and the P measuring significance is 0.479, indicating $p > 0.05$, which does not meet the requirement of significance less than 0.05. This suggests that the economic aid environment does not have a significant impact on sustainability capacity. That is, the better the economic aid environment has nothing to do with the sustainable development capacity. Therefore, assuming H2 is not supported and assuming H2 is not true.

The standardized path coefficient from economically funded environment to internal self-control was -0.060, C.R. A value of -4.670, $p < 0.001$, which implies a negative prediction of individual internal self-control. In the case of poor economic aid environment, individuals internal self-control ability will be enhanced, and poor students can better control their own behaviors and impulses, so that they are not prone to bad behavior or decision-making. On the contrary, in the better economic aid environment, poor students do not have to worry about their basic life needs and weaken their self-control ability, so that they can focus more on achieving their self-goals. In theory, it further supports the influence of the environment on the individual behavior and psychological state. In practice, it is suggested that the impact on the recipients internal self-control should be considered when designing economic aid policies. For example, better economic support can be provided to help the recipients to better maintain self-control, thus better promoting the sustainable development of poor students. Thus, assuming that H3 is supported.

The standardized path coefficient from the intensity of economic funding to external stress relief was 0.132, C.R. value of 2.931, and the P for the measure of significance was 0.003, $p < 0.05$, meeting the requirement of significance less than 0.05. This indicates that the intensity of economic funding has a significant impact on the external pressure relief. That is, the intensity of economic aid is closely related to the relief of external pressure. The intensity of economic aid promotes the relief of external pressure. In other words, the intensity of economic aid has a significant positive impact on the relief of external pressure of poor undergraduate students. Therefore, hypothesis H4 is supported and hypothesis H4 holds.

The standardized path coefficient from the intensity of economic support to sustainability is -0.593, C.R. value of -0.391, which does not meet the requirement of C.R. absolute value greater than 1.96, and the P of significance is 0.696, indicating $p > 0.05$, which does not meet the requirement of significance less than 0.05. This suggests that the intensity of economic funding does not have a significant impact on sustainability capacity. That is, the intensity of economic funding is not related to the sustainable development capacity. Thus, assuming that H5 is not supported.

The standardized path coefficient from economic aid strength to internal self-control was 0.101, C.R. value of 1.994, and the P measure of significance was 0.046, $p < 0.05$, meeting the requirement of significance less than 0.05. This suggests that the economic funding strength has a significant influence on the internal self-control. That is, the intensity of economic support is closely related to internal self-control. The intensity of economic aid and internal self-control have a positive relationship, that is, the greater the intensity of economic aid, the more it can promote the internal self-control of poor students, and the less the impact of economic aid on the internal self-control of poor students. Therefore, hypothesis H6 is supported and assumes that H6 holds.

The standardized path coefficient from economic aid mode to external pressure relief is -0.061, C.R. value of -0.907, C.R. absolute value less than 1.96, does not meet the requirement of C.R. absolute value greater than 1.96, and the P of significance is 0.365, indicating $p > 0.05$, and does not meet the requirement of significance less than 0.05. This indicates that the economic aid method does not have a significant impact on the relief of external pressure. That is, the quality of the economic aid method has nothing to do with the relief of the external pressure of the poor students. Therefore, assuming H7 is not supported and assuming H7 is not true.

The standardized path coefficient from the economic funding approach to sustainability capacity was 0.613, C.R. value of 2.873, and the P measuring significance was 0.004, $p < 0.05$, meeting the requirement of significance less than 0.05. This indicates a significant impact on sustainable development capacity. How to provide economic aid to poor students in colleges and universities is not only related to the study and life of poor students, but also closely related to their sustainable development ability, that is, the way of economic aid is closely related to the sustainable development ability. Thus, assuming that H8 is supported.

The standardized path coefficient from economic aid mode to internal self-regulation was 0.330, C.R. A value of 4.786, and the P measuring significance was * * *, $p < 0.01$, meeting the requirement of significance less than 0.05. This indicates that the economic aid method has a significant influence on the internal self-regulation. In fact, the economic aid of poor students is closely related to the self-regulation of poor students. Different economic aid methods bring different internal self-regulation to

the poor undergraduate students in colleges and universities. For example, the economic aid methods of national scholarship, inspirational scholarship and national grant and the economic aid methods of national student loan have different effects on the internal self-regulation of the poor students. National scholarship, inspirational scholarship and national grant are direct cash aid to poor students belong to free aid, which has little impact on the internal self-control of poor students. And the student loan is through the poor students to borrow money from the national bank (repayment within 2 years after graduation) the way that the national discount interest economic aid, it is the student to obtain economic aid directly according to the family economic situation or individual academic achievement, belongs to the paid type economic aid, this affects the internal self-regulation of the poor students greatly. Poor students will carry out different internal self-regulation according to the different economic aid methods they receive. [5] That is, the way of economic aid is closely related to the internal self-regulation of poor undergraduate students. Thus, assuming that H9 is supported.

The standardized path coefficient from external stress relief to sustainability was 0.053, C.R. value of 3.107, and the P for measuring significance was 0.002, $p < 0.05$, meeting the requirement of significance less than 0.05. This suggests that external stress relief has a significant impact on sustainability capacity. Poor students often face greater pressure in their academic, life and psychological aspects, which may hinder their academic progress and all-round development. When these external pressures are relieved, they can promote the academic progress and development of poor students, and the sustainable development ability of poor students can be improved. Therefore, when solving the problem of poor students, colleges and universities should not only pay attention to their material needs, but also pay attention to their external pressure and sustainable development ability cultivation. That is, the external stress relief is closely related to the sustainable development ability. Thus, assuming that H10 is supported.

The standardized path coefficient from internal self-control to sustainability was 0.701, C.R. value of 18.638, and the P measuring significance was * * *, $p < 0.05$, meeting the requirement of significance less than 0.05. This suggests a significant impact of internal self-control on sustainability capacity. Colleges and universities should pay attention to the cultivation and improvement of the self-regulation ability of poor students, and help them to enhance their self-regulation ability and promote their all-round development. This is not only conducive to the personal growth and future development of the poor students, but also is of great significance to the harmony, stability and sustainable development of the society. Therefore, the internal self-control is closely related to the sustainable development ability. Thus, assuming that H11 is supported.

SURVEY RESULTS FOR DISCUSSION

The model of influencing factors of economic aid on the sustainable development ability of poor undergraduate students is constructed, the path analysis of economic aid on the sustainable development ability of poor undergraduate students, and the influencing factors and mechanism of sustainable development ability of poor undergraduate students is expounded, and provides theoretical and practical support for them.

This study utilizes big data technology and computer analysis within the theoretical framework of resource conservation theory, analyze and optimize the economic aid policy system environment, and optimize the environment from the micro and macro aspects from the policy level to improve the sustainable development ability of poor undergraduate students. Through empirical analysis, based on the intermediary role, the influencing factors of economic aid on the sustainable development ability of poor undergraduate students are attributed to two points, one is the internal self-regulation factors of poor undergraduate students, the other is the external pressure relief factors of poor undergraduate students. In resource preservation theory to provide theoretical support, economic aid through internal and external for the sustainable development of college undergraduate students sustainable development ability, in the survival and development (Existence), relationship development (Relatedness) and growth (Growth) ERG theory as the support, discusses the college undergraduate students ability of sustainable development practice. Under the role of economic aid, the poor undergraduate students academic development, employment development, the influence of physical and mental development and alleviate economic and life external pressure produce different reaction, namely the economic aid in poor undergraduate students internal self regulation and external pressure relief mediation, promote the sustainable development of poor students ability to ascend. That is to say, through economic aid, it promotes the academic development, employment development and physical and mental development of poor undergraduate students, and alleviates their economic pressure and life pressure, which plays an important role in promoting the sustainable development ability of poor undergraduate students.

The conclusion of this paper mainly includes two aspects: (1) to explore the influencing factors and mechanism of "sustainable development ability of poor college students", and provide theoretical and practical support; (2) to optimize the environment of funding policy system and optimize the environment of micro and macro aspects from the policy level. To achieve these two

goals, two main theories, resource preservation theory, are adopted to construct the conceptual framework and research hypotheses. The assumed relationship and conceptual framework are based on two main theories: resource preservation theory. Specifically, this article uses big data technology and computer analysis to study the causal relationship between economic support (economic aid environment, economic aid intensity, and economic aid methods), internal and external attribution (internal self-regulation and external pressure relief), and sustainable development capacity.

RESEARCH CONCLUSION

By studying the current situation of financial aid in universities and utilizing big data technology to analyze survey questionnaires using computers, the influence of economic aid under the theory of resource preservation on the sustainable development ability of poor students in universities is mainly discussed. Specific research work can be summarized in the following four points.

Economic Aid has a Positive Impact on the Sustainable Development Ability of Poor Students in Colleges and Universities

Based on the theory of resource preservation, the relationship structure model of economic aid environment, economic aid intensity and economic aid is proposed. Through analysis, it is concluded that economic aid has an important positive impact on the sustainable development ability of poor students in universities. The overall environment of economic aid affects the practice of economic aid. The practice of economic aid has a positive impact on the sustainable development ability of poor students through the self-regulation mechanism of internal and external poor students.

For poor students in colleges and universities, 96.85% of respondents apply for economic aid is the reason of the family poverty, want to reduce the burden on the home, get economic aid can reduce the economic pressure, relieve the pressure of life, help reduce the burden, these empirical findings also reflects the economic aid to promote the sustainable development of poor students in college ability has a positive positive impact.

Economic aid is helpful to relieve the economic pressure of poor students, to improve the social support level of poor students, to stimulate the endogenous power of poor students, that is, self-development power, and to promote the all-round development of poor students. Economic aid can make the poor students in the academic, psychological, social and other aspects of the comprehensive development. When the basic living needs of the poor students are met, the poor students can focus more on their own interests and development direction, so as to achieve better results in all aspects.

Internal Self-Regulation Determines the Sustainable Development Direction of Poor Students in Colleges and Universities

This paper uses multiple linear regression analysis to analyze the influence of economic aid on the sustainable development ability of poor college students. Mainly to the influence of poor students by academic pressure, employment pressure, economic pressure and life pressure, This paper analyzes the internal attribution of self-cognition, values and physical and mental health, survival ability through economic aid, relationship ability and growth ability of social communication, The degree and influence of the learning ability, adaptability ability, practical ability and innovation ability of poor students, The questionnaire showed that most poor college students performed well in internal self-regulation, Have confidence in your decisions, be able to adjust yourself, control your actions and emotions, make appropriate comments on yourself, And can face criticism and praise correctly. These positive self-regulation abilities have a positive impact on the development of the poor students. It fully verifies that economic aid has no significant impact on internal self-regulation, and has a significant impact on the sustainable development ability of poor college students. The relief of external pressure cannot promote the sustainable development ability of poor students, while the internal self-regulation can promote the sustainable development ability of poor students. This also proves from another side, "the internal cause is the source of the development of things, is the basis of the change and development of things, is the fundamental cause of the development of things, determines the nature and development direction of things." [6] (P145) Although the internal self-regulation and professional and gender relationship of poor students is not obvious, the internal self-regulation determines the sustainable development direction of poor students.

The Role of Economic Aid through Internal and External Attribution and Self-Efficacy Affects the Sustainable Development Ability of Poor College Students

In terms of alleviating external pressure, poor students can conclude that the impact of economic aid on alleviating external pressure has been recognized by most poor students in universities. Most respondents agreed that economic aid could relieve the pressure on poor students. Among the options, "very agree" and "agree" combined exceeded 70%, indicating that the impact of economic aid on stress relief was shared by a majority of respondents. 74.33% of the respondents believed that economic aid had the most significant effect on the relief of learning stress.

In terms of the self-efficacy of poor students [7], the overall degree of recognition of self-efficacy is high, but there are still some uncertainty and confidence in the determination to do and the improvement of academic performance, which may be related to the life experience, psychological state and educational background of poor students. Most people tend to agree or strongly agree with the self-efficacy view that most people agree or strongly agree with what can do what they are determined to do [8]. At the same time, it can be seen that the self-efficacy of the poor students is more complex, with both a high sense of identity and a low sense of identity. In general, his overall performance is relatively positive, and he has a high confidence and positive attitude towards what he is determined to do, decide what happens in his life and improve his academic performance. These results are helpful to understand the psychological state of the poor students and provide reference for the development of relevant education and help measures.

Having the Necessary Resources is the Basic Condition for the Sustainable Development of the Poor College Students

It can be seen from the questionnaire that the average monthly income of more than three quarters of the poor students is less than 3000 yuan (n=516, 75.66%), while for nearly 70% of the poor students monthly living expenses are less than 1000 yuan (n=457, 67.01%), and even more than 2.1% of the poor students monthly living expenses are less than 500 yuan, equivalent to only 6 yuan per day. These data show that the majority of people have moderate moderately, while lower and higher levels of living expenses are relatively small, and these families have less resources. This may be related to factors such as personal income level, lifestyle and regional economic development level. The empirical results show that under the framework of resource preservation, two of the three dimensions of economic aid are positively correlated with students ability for sustainable development. However, the impact of economic funding strength on sustainability capacity was not significant. This study investigates the resource ownership of the poor students in China, and finds that most of the poor students think that the poor students do not have enough resources, and some students are still facing the problem of resource shortage in life, study and psychology.

economic aid can relieve the economic pressure of poor students and enable them to focus more on their studies. The study found that appropriate economic aid has a positive impact on the sustainable development of poor students. However, the higher the intensity of funding is not the better. Too high funding may lead to students dependence and affect their ability to develop independently.

Providing rich learning resources can help the poor students to improve their academic performance and comprehensive quality. Schools and all sectors of society should pay attention to the learning needs of the poor students and provide them with sufficient learning materials and academic support.

In short, resource conservation theory is mainly used to explain how individuals develop their abilities through the continuous acquisition, preservation and utilization of resources. According to this theory, individuals need to use various resources (such as economy, society, psychology, etc.) to deal with them, which are of great significance to the sustainable development of individuals, that is, providing necessary resources is of great significance to improving the sustainable development ability of poor students in colleges and universities. The government and colleges and universities should increase the support for the poor students, pay attention to their needs in life, study and psychology, and create a fair and loving growth environment for the poor students. On this basis, the poor students themselves should also cherish the opportunity, and strive to improve their own ability, to achieve sustainable development.

POLICY SUGGESTIONS

This study utilizes big data technology and computer analysis [9], trying to optimize the overall environment of economic aid practice based on the sustainable development of poor students, and explaining the way that universities can better serve the sustainable development of poor students. Put forward suggestions for improving the ongoing national economic aid policy in order to improve the sustainable development ability of poor students in universities.

Optimizing the Practice System of Economic Aid: The Basis of Sustainable Development of Poor Students in Colleges and Universities

In the practice system of economic aid, poor students in universities, as a special group, need to get attention and support. However, there are still many problems in the implementation process of the current economic funding system, such as a single funding method and a limited amount of funding. In order to make the poor students get more comprehensive funding, this paper proposes the strategy to optimize the economic aid practice system, so as to ensure that the poor students get substantial help in their study, life and development.

There are some problems with the existing economic aid system. First, the funding method is a single way: the current economic aid system mainly exists in the form of grants, scholarships and loans, but these funding methods are mostly aimed at the basic living and learning needs of poor students, and provide limited support for their comprehensive development. Second, the amount of funding is insufficient: although various grants, scholarships and other funding projects have eased the economic pressure of poor students to some extent, the amount of funding is still difficult to meet the needs of poor students in life, study and growth. Third, there is a certain degree of unrefinement and formalization in the implementation process of funding policies, which leads to the uneven distribution of funding resources, and it is difficult to truly benefit all the poor students.

In view of the problems existing in the economic aid system, it is necessary to optimize the economic aid practice system. First, to enrich the funding methods and expand the scope of the funding. Second, increase the amount of funding to meet the actual needs of poor students. Third, simplify the funding process and improve the efficiency of funding. Fourth, strengthen the publicity and popularization of economic aid policies.

Improving Self-Cognition and Psychological Quality: The Key to the Sustainable Development of Poor Students in Colleges and Universities

Through the in-depth investigation of the self-cognition and psychological quality of the poor students, it is found that the poor students have some deficiencies in these aspects. Therefore, in order to improve the sustainable development ability of poor students, we must pay attention to and pay attention to the self-cognition and psychological quality of poor students.

To improve the self-cognitive ability of poor students. Self-cognition is "the insight and understanding of themselves.

Self-cognition education can help college students improve their self-cognition ability."[10] (P55) Having good self-cognition ability helps the poor students to better face the difficulties in life, adjust their mentality, and develop positively. To this end, colleges and universities can help poor students understand their advantages, disadvantages and potential development space by offering self-cognition courses and holding lectures.

Strengthen the psychological quality

Psychological quality refers to "the ability of individuals to control and adjust the internal psychological process, and adapt to and change the environment in the process of the interaction with the environment".[11] (P12) [12] (P2416) The poor students with good psychological quality can resist all kinds of difficulties in life and gradually realize self-growth. In order to improve the psychological quality of the poor students, we can carry out psychological counseling, strengthen psychological quality education [13] (P281), create a caring atmosphere, enhance the ability to resist frustration and other measures.

Establish and improve the long-term mechanism of economic aid: the guarantee of the sustainable development of poor students in colleges and universities

Economic aid is an important guarantee for the poor college students to achieve sustainable development [14]. This study found that the poor college students generally agree with the existing economic aid policies and evaluations, but there is still some room for improvement [15]. In order to give better play to the role of economic aid, it is necessary to establish a sound long-term mechanism of economic aid, ensure the fairness, justice and transparency of funding, and provide an important guarantee for the sustainable development of poor college students.

First, we should strengthen the publicity and guidance of economic aid policies. Colleges and universities can adopt a combination of online and offline methods, and popularize the relevant knowledge of economic aid policies through lectures, symposiums, brochures and other forms, so as to help poor students fully understand the content of the policy and improve the utilization rate of the policy.

Second, we will establish and improve a dynamic adjustment mechanism for economic aid targets. On the one hand, to ensure the authenticity of the recipients, avoid the non-poor students to claim the economic resources; on the other hand, to pay attention to the life changes of the poor students, for the economic situation of students, timely adjust the level of economic aid, so that the limited resources to better benefit the poor students who really need.

Third, to improve the correlation between economic aid and academic achievement. Colleges and universities can set up a scholarship system to give priority to the poor students with excellent academic performance and high comprehensive quality [16]. In addition, grants can also be set up to encourage poor students to actively participate in practical activities and improve their innovation ability training, so as to improve their comprehensive quality and development potential.

Fourth, strengthen the supervision and evaluation of economic aid policies. On the one hand, it is necessary to strengthen the supervision of the funding process to prevent abuse and false claims; on the other hand, we should pay attention to the implementation results of the funding policy, evaluate its impact on the sustainable development ability of poor students, and provide the basis for the policy improvement. Through the continuous optimization of economic aid policies, to help the poor college students to achieve sustainable development.

Fifth, pay attention to the mental health education of poor students [17]. Colleges and universities should pay attention to the mental health education of poor students, provide psychological counseling, psychological counseling and other services, help poor students establish a correct outlook on life and values, face the challenges of life with a positive attitude, and create a good growth environment for poor students.

Based on the analysis and application of computer technology [18], the economic aid policies for universities can be implemented more accurately and efficiently. With the help of big data technology, universities can accurately identify impoverished students. Through the joint efforts of the government, universities, and various sectors of society [19], we should continuously improve our funding policies and create a better environment for the growth and development of impoverished students. Reform and improve the long-term mechanism of economic assistance for impoverished students in universities from multiple levels. By continuously adjusting and optimizing the funding policy system, we aim to enhance the sustainable development capabilities of impoverished students in universities and provide comprehensive support for their sustainable development.

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