



# Research on the Path to Enhancing Public Satisfaction with Education Through Policy Effectiveness in Chinese Universities

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**Abstract.** The "Implementation Plan for the Reform of China's National Vocational Education" clearly states: "Promote the high-quality development of higher vocational education. Encourage enterprises and social forces to offer high-quality vocational education; strengthen the Party's overall leadership in vocational education; improve the national vocational education system framework." Advancing high-quality vocational education and enhancing public satisfaction with education are the top priorities for the next stage of vocational education development. According to the "White Paper on the Competitiveness of Chinese Higher Vocational Colleges," many universities have included public satisfaction with education as an essential performance indicator in their annual performance objectives. Furthermore, based on the 2023 survey on professional talent cultivation, it was found that the primary motivation for universities' work stems from superior policies. When policy effectiveness is well implemented, teaching quality and public satisfaction with education achieve notable results.

This paper takes representative universities in China's Yangtze River Delta region as the research subjects. It primarily employs SPSS 20.0 and Smart PLS 4.0 software to analyze the study. The research selects the impact of university policy effectiveness, social support, and the quality of higher education on public satisfaction. Through an empirical survey conducted from November 2023 to January 2024, involving 260 faculty and students from over 30 universities in the Yangtze River Delta region, this paper aims to explore the influencing path of public satisfaction with education and contribute to the theoretical and practical significance of improving public satisfaction with university education. The findings of this study are expected to provide valuable insights for the construction and development of universities.

**Keywords:** Policy effectiveness; public satisfaction with education; social support; educational quality

## 1 Introduction

The 20th National Congress of the Communist Party of China emphasized that "building a powerful country in education is the fundamental project for the great rejuvenation of the Chinese nation. It is imperative to prioritize education, deepen educational reform, accelerate education modernization, and strive to provide education that satisfies the people." To improve people's livelihood, it is urgent to achieve educational equity, ensuring that all regions and people are treated equally in accessing public educational services. There is also an urgent need to understand the higher and newer demands arising from China's rapid economic development among the people, respond to these demands, enhance public satisfaction with education, and fundamentally tackle the most pressing educational issues that people are concerned about in their daily lives.

As China's economy and society continue to develop, the public's demand for public educational services has continually increased. Given that China's economic development has entered a new stage, various disciplines undoubtedly face new pressures and challenges in providing public educational services. In this context, exploring ways to further enhance satisfaction with public educational services holds significant theoretical value and urgent practical importance.

Previous research on public service satisfaction has primarily focused on the public's evaluation of overall public services, with relatively insufficient studies specifically targeting educational public services [1]. Moreover, research on satisfaction with educational public services has mainly concentrated on case studies and qualitative analyses of phenomena, with only a handful of studies conducted from a micro-empirical perspective. Many issues and controversies remain in these studies [2], leading to a lack of profound understanding of the overall situation, internal laws, and development prospects of the evaluation of educational public service supply from a satisfaction perspective.

Building upon existing research, this paper conducts an empirical survey of 260 faculty and students from over 30 representative universities in Shanghai, Zhejiang, and Jiangsu provinces in China. By incorporating the characteristics of university policy effectiveness, this study explores how to enhance public satisfaction with university education while also integrating social support and the quality of higher education into the model. It aims to propose corresponding solutions and recommendations to promote the sound and orderly development of university work by exploring the paths to enhancing public satisfaction with university education.

## 2 Theoretical Definitions and Hypotheses

Policy effectiveness serves as the core indicator for examining the state of policy activities, and whether a policy achieves its intended objectives is the basis for judging its validity. Existing research argues that the effectiveness analysis of university-industry cooperation policies should focus on the demands of stakeholders, policy decision-makers, and implementation agents. Policy effectiveness represents a purposeful and organized dynamic development process encompassing various aspects such as policy

formulation, implementation, evaluation, feedback, and revision. [3] suggest that university policy effectiveness should be considered from multiple dimensions, including policy-making entities, the rationality and effectiveness unity of policy content, cooperative relationships among different stakeholders, third-party evaluation mechanisms, and internal and external environments. Drawing on the definitions of [4], this paper emphasizes the policy effectiveness content in terms of human capital investment and social relationship reconstruction from individualistic, structural, and relational perspectives. It examines how these factors enhance the learning willingness, educational quality, and employment quality of disadvantaged groups and verifies that policy effectiveness can improve educational quality, optimize the use of educational funds, perfect the educational process, and achieve educational equity, thereby enhancing public satisfaction with education.

In academia, the definition of social support primarily encompasses the following perspectives: social support is a social interaction between individuals [5]; it is the behavior that arises from mutual assistance; it involves the exchange of social resources between individuals and other groups through social networks [6]; and it is a systematic psychological activity encompassing behavioral, cognitive, emotional, and spiritual aspects [7]. Drawing from the perspectives of foreign scholars and early Chinese scholars, this paper defines university social support from the perspective of support providers as the collective term for a series of assistance provided by formal organizations, such as national, provincial, and municipal governments, grassroots organizations, and social institutions, to those in need. [8] found that universities that receive support from national, provincial governments, and social institutions experience significant qualitative leaps in social reputation, educational funding, and work quality compared to their previous states. [9] discovered that public satisfaction with university education is not only influenced by social factors but also by the subjectivity of educational satisfaction. Social support also considers whether relevant policies can be implemented, which is a crucial factor mediating the relationship between policy effectiveness and public satisfaction with education.

Compared to general products, the quality of higher education encompasses more dimensions due to the diverse stakeholders with varying needs. The primary stakeholders who demand quality in higher education include the state and society, students and their parents, employers, sponsors and investors, universities, and their employees. [10] suggests that when higher education aligns with the quality requirements of the state and society, the work performance of the public participating in education often improves as well. [11] studied universities and found that student and family demands as well as employer requirements are also crucial issues in educational quality. Only by continuously enhancing educational content in response to these demands can educational satisfaction be achieved. [12] discovered that educational quality partially mediates the relationship between policy effectiveness and public satisfaction with university education during the employment process, and higher teaching quality positively moderates the relationship between policy effectiveness and public satisfaction with education. Based on these findings, the following hypotheses are proposed:

*H1: University policy effectiveness has a positive correlation with public satisfaction with education.*

*H2: University social support has a positive correlation with public satisfaction with education.*

*H3: University teaching quality has a positive correlation with public satisfaction with education.*

*H4: Social support positively mediates the relationship between university policy effectiveness and public satisfaction with education.*

*H5: Teaching quality positively mediates the relationship between university policy effectiveness and public satisfaction with education.*

### **3 Analysis of Research Results**

#### **3.1 Research Design**

Based on the aforementioned hypotheses, this study developed survey instruments. In selecting the scales, this research opted for the well-established 7-point Likert scale commonly used in sociological research, ranging from 1 (completely disagree) to 7 (completely agree), to measure user attitudes. To ensure the reliability and validity of the scales, adaptations were made from previously used scales in relevant studies, and all items were referenced from mature scales for reference. The policy effectiveness scale adopted the evaluation model constructed by [13], for the effectiveness of university education program development policies, comprising four dimensions (input, process, output, impact) with 13 items. The public satisfaction scale utilized the content of the scale developed by [14] to measure public satisfaction with education, including four items related to educational quality and funding. The university education quality scale employed the dimensional scale developed by [15]; while the social support scale adopted the "Social Support Scale" compiled by [16].

#### **3.2 Descriptive Statistical Analysis**

The study conducted field investigations and surveys from November 2023 to January 2024, targeting 260 faculty and students from 20 representative universities in the Yangtze River Delta region of China to collect data. A total of 260 questionnaires were distributed, all of which were returned, achieving a 100% response rate. After reviewing and screening the questionnaires to eliminate data with obvious inconsistencies, 247 valid samples were obtained, resulting in a 95% effective response rate.

In this survey, SPSS 20.0 and Smart PLS 4.0 software were primarily used for analysis. The analysis of the survey questionnaires revealed that among the university faculty and students surveyed, students accounted for 68.01%, faculty and staff for 21.05%, and others for 10.93%. In terms of age, approximately 63.15% were aged 18-22, 20.64% were 23-35, 14.17% were 36-45, and 2.02% were over 45.

### 3.3 Reliability and Validity Analysis

To validate the structural effectiveness, two tests were conducted: convergent validity and discriminant validity. [17] proposed that a structure exhibits convergent validity if the factor loadings of indicators are greater than 0.5, the extracted average variance (AVE) is greater than 0.5, and the reliability is greater than 0.7. Table 1 shows that all structures meet the recommendations proposed by [17], indicating good convergent validity. Additionally, the square root of AVE was tested to ensure it was greater than the inter-construct correlation coefficients to confirm discriminant validity. According to Table 2, the structures demonstrate discriminant validity.

**Table 1.** Reliability and validity results.

Constructs		Items	Factor Loading	Cronbach's $\alpha$	rho_A	CR	AVE
Policy effectiveness	Policy Efficiency	Policy Supply	0.895	0.902	0.907	0.932	0.773
		Funding Input	0.852				
		Budgetary Structure	0.863				
		Teaching Conditions	0.88				
		Teaching Facilities	0.901				
	Policy Utility	University-Industry Collaboration	0.866	0.858	0.859	0.913	0.779
		Teaching Reform	0.900				
	Policy Effectiveness	Employment Quality	0.915	0.889	0.891	0.931	0.818
		Achievements in In-house Specialty	0.898				
		Construction Social Recognition	0.905				
	Policy Benefits	Social Contribution	0.871	0.913	0.915	0.939	0.794
		Radiation and Driving Effect	0.878				
Characteristics and Innovation		0.888					
Public Satisfaction with Education	Educational Quality	0.906	0.860	0.867	0.915	0.720	
	Educational Funding	0.857					
	Educational Process	0.848					
	Educational Equity	0.846					
Quality of Higher Education Quality	Quality Requirements of the State and Society	0.872	0.87	0.873	0.911	0.720	
	Quality Requirements of Students and Their Parents	0.827					
	Quality Requirements of Employers	0.845					
	Quality Requirements of Sponsors and Investors	0.816					
Social Support	Leaders and superiors often provide good advice and guidance.	0.834	0.882	0.884	0.914	0.680	
	Relevant social departments will assist me in resolving issues.	0.841					
	Relevant social departments can offer me excellent suggestions.	0.818					

	There are genuine social departments that welcome and accommodate us.	0.801				
	When I need the cooperation of relevant social departments, they can fulfill their part.	0.845				
	When I am in need, relevant social departments will extend a helping hand at the right time.	0.816				

**Table 2.** Fornell–Larcker criterion.

	Policy effectiveness	Satisfaction with public education	Quality of Higher Education Quality	social support
Policy effectiveness	0.835			
Satisfaction with public education	0.487	0.884		
Quality of Higher Education Quality	0.695	0.628	0.640	
social support	0.493	0.552	0.813	0.848

**Note 1:** The diagonal elements of the correlation matrix represent the square roots of the Average Variance Extracted (AVE).

### 3.4 Path Analysis and Hypothesis Testing

Utilizing the Bootstrap method in Smart PLS software to test the path coefficients, with 2000 iterations of resampling to calculate the 95% confidence intervals, the results presented in Table 3 indicate that for the hypotheses H1, H2, H3, H4, and H5, the Original Sample (O) coefficients are 0.446, 0.872, 0.144, 0.707, and 0.815, respectively. The corresponding T-values are 7.279, 73.589, 2.527, 28.709, and 39.589, and the P-values are all less than the significance level of 0.05. Therefore, the hypotheses H1, H2, H3, H4, and H5 are supported and considered valid.

**Table 3.** Path coefficients.

Hypothesis		Original Sample	Sample Mean	Standard Deviation	T Statistics	Decision
H1	Policy effectiveness -> Satisfaction with public education	0.446	0.440	0.061	7.279***	support
H2	social support-> Satisfaction with public education	0.872	0.872	0.012	73.589***	support
H3	Quality of Higher Education -> Satisfaction with public education	0.144	0.139	0.057	2.527*	support
H4	Policy effectiveness-> social support-> Satisfaction with public education	0.707	0.707	0.025	28.709***	support
H5	Policy effectiveness-> Quality of Higher Education-> Satisfaction with public education	0.815	0.815	0.021	39.589***	support

**Note 1:** \*\*\*p<0.001; \*\*p<0.01; \*p<0.05.

## 4 Conclusions

This study focuses on the relationship between volunteering motivation and job performance among science popularization volunteers, and explores the impacts of university policy effectiveness, social support, teaching quality, and public satisfaction with education. A research model is proposed, and data are collected through questionnaires. Utilizing Smart PLS4.0 and SPSS software, a series of tests and model validations are conducted on the collected data, ultimately leading to the following conclusions:

### 4.1 Positive Impacts of Policy Effectiveness, Social Support, and Teaching Quality on Public Satisfaction with Education

The study finds that policy effectiveness, social support, and teaching quality significantly predict public satisfaction with education. This indicates that in exploring the implementation paths of policy effectiveness, social support, and teaching quality to enhance educational satisfaction, various factors should be considered. We should explore ways to strengthen these aspects from multiple dimensions to foster a positive interaction with the public and fundamentally improve the satisfaction of Chinese citizens in education.

Based on this analysis, this paper attempts to propose a vision for China's institutionalized participation model, demonstrating an overall cyclic pattern. Specifically, policy support from the government and relevant social entities is implemented, and universities provide feedback on policies and support through university-industry collaboration, in-house specialty construction achievements, social contributions, and radiating effects. In this bidirectional interaction process, to make the interaction smoother, universities, as the direct contact point with the public, need to enhance the service awareness and skills of their staff. The government should also provide encouragement and establish a regular supervision mechanism throughout the process.

### 4.2 Mediating Effects of Social Support and Teaching Quality Between Policy Effectiveness and Public Satisfaction with Education

The study demonstrates that social support and teaching quality have substantial mediating effects between policy effectiveness and public satisfaction with education. To enhance public satisfaction with education, it is insufficient to focus solely on educational policy inputs; investments in teaching quality and social support are equally important. Otherwise, national policy investments may fall into a significant void without achieving the desired effects.

Therefore, universities should prioritize addressing the specific requirements of the state and society, students and their parents, employers, sponsors and investors, as well as the university staff. Efforts should be made to cultivate prosocial behaviors among the public, starting from family, school, and social education. This involves enhancing university teaching, social services, and research work to help establish a positive image of universities. By providing more relevant activities, more people can understand,

care about, and participate in university-related activities, thereby promoting the development of public satisfaction with university education.

## 5 Limitations and Future Directions

This study's survey population focused on university faculty and students. During field research, it was found that there was a lack of representation from enterprises, university leaders, and student parents, which may have introduced some bias in the questionnaire responses. Secondly, due to practical limitations in human and material resources, the study only selected representative universities in the Yangtze River Delta region, limiting the breadth of the sample and introducing uncertainty regarding the generalizability of the findings. Finally, in measuring the selected variables, this study primarily relied on questionnaires, and there may have been imperfections in the selection of indicators, which could have influenced the results.

Future research should consider these factors. Face-to-face interviews should be conducted whenever possible to obtain additional information beyond the questionnaire and ensure complete responses. More representative samples should be drawn to enhance the scientific rigor of the study. Comprehensive and detailed questionnaires should be developed to analyze survey results in finer dimensions.

## Acknowledgments

Shanghai Technical Institute of Electronics and Information of high-level and Scarce talents funding project "Research on the Transformation of New Business Education in Higher Vocational Colleges under the Background of digital intelligence" (GCC2023013).

Shanghai Technical Institute of Electronics and Information of high-level and Scarce talents funding project "Research on the Training Model of Vocational Undergraduate Education Talents based on the experience of developed countries and Taiwan" (GCC2024016).

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