

A study on the effect of university education service quality on trust and positive behavioral intentions: Focusing on students in technical universities in Jiāngsū Shěng

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Abstract: The purpose of this study was to link the quality of university education services perceived by university students in China with trust and to suggest a way to inspire positive behavioral intentions among university students in China. In order to achieve the purpose of the study, based on domestic and foreign literature and previous studies, the theoretical basis regarding university students in China, university education service quality, trust, and positive behavioral intentions was prepared. Based on this, a research model and research hypothesis were set up and verified through empirical analysis. The results of the empirical analysis are as follows: The educational content, educational environment, and teaching ability of the university education service quality were found to have a significant positive effect on trust, so Hypotheses 1, 2, and 3 were accepted. In addition, Hypothesis 4 was also accepted because it was found that trust had a significant positive effect on positive behavioral intention. The implications of the empirical analysis of this study are as follows: First, in order for universities in China to attract students, they should not have a tendency to be biased towards certain factors of university education service quality, and continuous efforts should be made to build trust through various factors of university education service quality. Second, to raise the trust of students, universities should actively seek ways to inspire the trust of students in various aspects by developing programs that can enhance the quality of educational services, such as improving the educational environment, teaching skills, and educational content. Third, enhancing trust in the university through the quality of educational services provided to current students can generate behavioral intentions among them. Therefore, the university should develop strategies to consistently maintain the reliability of its educational service quality.

Keywords: Higher education service quality, Jiangsu province, Structural equation path analysis, Positive behavioral intention, Trust.

1. Introduction

People's Republic of China is rapidly developing into a G2 country and leading the world on major issues. In the process of economic growth, higher education in particular occupies the most important position. China has selected education as a top priority project among people's livelihood issues and has implemented various policies to realize education modernization in accordance with the national strategy that science and technology have to be one of national priorities. The basic goal of education at a university is to produce excellent talents through the enhancement of students' competencies, and educational services can be said to be the most essential services provided to university students. It can be said that the quality of university education services is an essential factor for nurturing and producing excellent talents, securing the competitiveness of universities, and seeking the survival of universities in a global competitive environment.

Therefore, this study presents the following research objectives to suggest a way to inspire positive behavioral intentions of students in the future by linking the quality of university education services felt by students in college with trust. First, we would like to determine whether the educational content factor has a significant effect on trust among the factors of university service quality. Second, among the factors of educational service quality, we would like to determine whether the educational environment has a significant effect on trust. Third, we would like to determine whether teaching ability has a significant effect on trust among the factors of educational service quality. Lastly, this study determines whether students' trust in the university influences their positive behavioral intentions. In addition, the purpose of the study is to identify the results and differences of previous studies and to suggest ways to secure the competitiveness of universities to attract students through differentiation in the quality of educational services provided by universities.

In order to meet the purpose of the study, this study will pursue the theoretical basis of educational service quality, trust, and positive behavioral intention through domestic and foreign literature and previous studies, and based on this, this study establishes a research model and research hypothesis and verify them through empirical research. In the empirical study, after confirming the suitability of the questionnaire through previous studies, the survey respondents were asked to fill out the questionnaire themselves in the sample area for college students enrolled in a three-year community college in Jiangsu Province. The collected survey data will be used as basic data for empirical analysis, and demographic analysis, validity and reliability analysis, confirmatory factor analysis, correlation analysis, and structural equation model analysis will be performed using statistical programs SPSS Ver 26.0 and AMOS Ver 26.0. Then, based on the results of the empirical analysis, the actual meaning of the research results and the research direction of subsequent studies are summarized.

2. Theoretical Background

2.1. *Quality of Higher Education Services*

2.1.1. *The Concept of Quality of Service in University Education*

Depending on the type of service, the researcher's perspective, and her or his ways of approach, the definition of service quality varies widely.

Parasuraman, et al. [1] considered service quality as a decision based on customer expectations and performance and defined it as an overall judgment or attitude related to service excellence to the degree of discrepancy in perception. Woo-Geuk [2] defined educational service quality as a factor for educational institutions to meet the expectations and needs of learners in order to differentiate themselves from other educational institutions in a study on customer satisfaction, brand image, voluntary behavioral intention, and the structural relationship between educational service quality and service value. Kim [3] described education services as tangible and intangible services that involve educational institutions and learners in order to achieve educational objectives.

Therefore, this study aims to define educational service quality as the tangible and intangible educational services provided by higher education institutions to students who are beneficiaries in order to achieve educational objectives based on the definition of previous studies.

2.1.2. *Components of Quality of University Education Services*

Yu-Ri and Suk-Bin [4] studied the relationship between educational service quality and student satisfaction and loyalty by deriving the components of educational service quality as administrative factors, human factors, welfare factors, and educational factors. They presented useful implications for the operation of special graduate schools through empirical analysis. In the study of Oh Nara and Choi Na-Ra and Jong-Lyul [5] lecturers' qualities, educational environment, and lecture programs were classified as sub-factors of educational service quality. In the study of Seong-Jo [6] the quality of university education services was divided into faculty competence, educational environment, educational programs, and administrative services.

Therefore, in this study, based on the previous research, we will select three components of educational service quality: educational content, educational environment, and teaching skills.

2.1.3. Previous Research on the Quality of University Education Services

Educational content is related to actual education and directly contributes to education. Alliger, et al. [7] found that when learners perceive the curriculum of instruction as practical, they are more likely to apply the trained knowledge and skills in practice. The educational environment refers to the overall educational support such as the educational field, educational media, and teaching method. Not only should it be suitable for the purpose and content of education, but it should be able to enhance the learning effect. Teaching skill refers to the teaching ability of an instructor to prepare and implement instructions for students, and in education, the instructor generally acts as a coordinator of the learning activities of the learners. Therefore, it plays a role in inspiring learners, motivating them to learn, removing their fear of learning, and awakening their interest in the subject [8].

2.2. Trust

2.2.1. Definition of Trust

According to Cook and Wall [9] trust refers to the degree of confidence that someone possesses good intentions towards oneself and society and has the capacity to act according to those intentions. Mayer, et al. [10] explained that trust is an act of taking risks and trusting the other person, which inevitably entails vulnerability Byung-Jik and Ji-Yeon [11]. Yu-Je [12] defines trust as an expectation of the other person's ability or sincerity to endure and wait even when an adverse situation arises based on faith in the other person, whether individual or organizational.

Therefore, this study defines trust as the belief in the services provided to students by the university based on the definition of previous studies.

2.2.2. Previous Studies on Trust

Sook-Jeong and Han [13] proved that the more positive a student's perception of the professor is, the more adaptable the student is to school life. At the same time, it was found that there is a high correlation between the trustworthiness of a professor and school life. Jae-Kon and Ko [14] found that the higher the trust in professors, the higher the attachment to the university, and this trust serves as a basic foundation for adapting to university life, showing a high level of engagement in the university. Sung-Gag and Hyun-Jin [15] found that the higher the level of trust in professors, the higher the academic performance of college students.

2.3. Behavioral Intention

2.3.1. Definition of Behavioral Intention

Hyong-Jun and Yong-Il [16] said that behavioral intention is a useful final variable for understanding and explaining consumer behavior and that positive behavioral intention determines the consumer's decision to maintain a continuous relationship with the subject. In addition, behavioral intention can be said to be an important variable from a marketing point of view that hopes for a continuous relationship with consumers. Not only is it necessary to accurately analyze consumers' tendencies to maintain a continuous and friendly relationship, but it is also necessary to take an in-depth look at consumers' behavioral intentions as they play an important role in the management of a company [17]. Behavioral intention is the customer's behavior which is one that is caused by his or her emotional and cognitive activities after purchase, which is a response to subjective norms and control based on the intensity of belief and the evaluation of purchases. In other words, it is the recommendation intention based on return visits and positive word of mouth [18].

Therefore, this study, based on previous studies, defines behavioral intention as positively recommending, promoting the university to others, and maintaining ongoing engagement with the university after receiving the services provided by the institution.

2.3.2. Previous Studies on Behavioral Intention

Woo-Geuk [2] studied the structural relationship between educational service quality and service value, customer satisfaction, brand image, and voluntary behavioral intention, and found that customer satisfaction has a significant positive (+) effect on customers' voluntary behavioral intentions, such as participation intention, cooperation intention, and loyalty. A study by Sung and Yang [19] examined the main factors influencing students' intention to support their university and found that in order to promote student advocacy behavior, universities should ensure that students enjoy active communication and a high-quality university experience, as well as a good relationship and favorable reputation with students.

Woo-Geuk and Ho Gyu [20] conducted a study on the effect of educational service quality on service value, customer satisfaction, and voluntary behavioral intention among college students. Their study suggested that customer satisfaction has a positive effect on loyalty, participation intention, and cooperation intention. These results demonstrate that the more satisfied students are, the more positive and active participation, cooperation, and loyalty they have to the school. In addition, he said that continuous efforts are needed to increase the loyalty of voluntary behavioral intentions with a systematic management system that can maintain continuous interaction between current students and graduates.

3. Research Design

3.1. Research Models and Research Hypotheses

This study began with the premise that the quality of educational services will have a significant effect on positive behavioral intention through trust among students enrolled in a three-year community college in China. Therefore, this study conducts an empirical analysis to investigate the structural relationship between trust and positive behavioral intention according to the quality of educational services. In order to empirically verify the flow of research, the research model as [Figure 1] was presented based on the previous research presented in the theoretical background to study the effect of university education service quality on trust and behavioral intention.

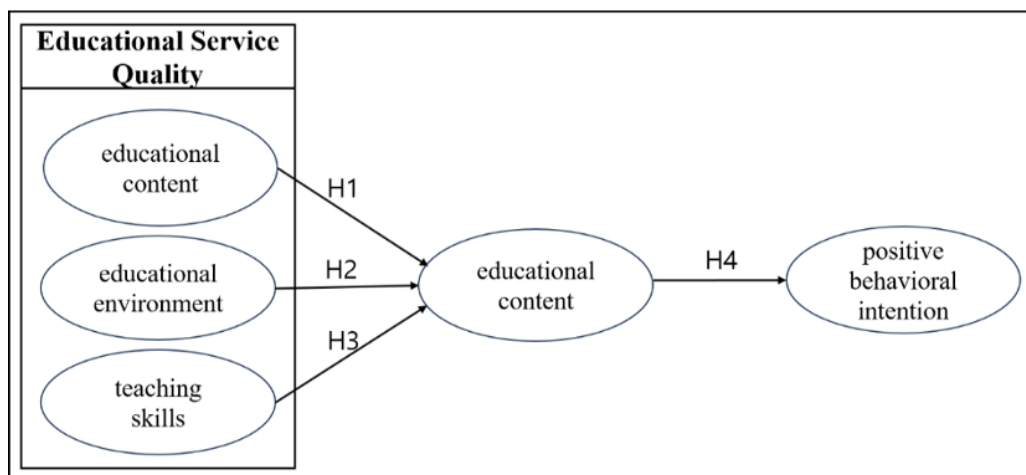


Figure 1.
Research Model.

This study selects educational content, educational environment, and teaching skill as constituent factors of educational service quality, which are independent variables. It presents the hypothesis of this study based on the results of previous studies to investigate the interactive relationship between trust as a parameter and positive behavior ion as a dependent variable.

In a study on the impact of management education service quality on reliability and satisfaction, Seung-Jea and Han Kyung [21] analyzed the effect of education service quality on professors' reliability and that of reliability on students' satisfaction and proposed a plan to improve education service quality by increasing the satisfaction level of students. As a result of the empirical analysis, the study showed that all the factors except the formation of a relationship with the professors among the educational service quality factors have a significant effect on the trustworthiness of the professor.

Ju-Hee [22] conducted a study on the effect of service quality of Incheon International Airport tourist information center on information reliability, satisfaction, and behavioral intention. It found that the subfactors of service quality, such as empathy, reliability, and tangibility, have a statistically significantly positive (+) effect on information reliability.

In a study on the relationship between service quality, reliability, satisfaction, and behavioral ion in the mobile open market by Hyeong-I [23] it was found that both the characteristics of mobile service quality have a significantly positive (+) effect on both system reliability and seller trustworthiness. Therefore, in this study, the following hypotheses were established based on the research results of previous studies.

Hypothesis 1. The educational content of the quality of higher education services will have a significant positive (+) effect on trust.

Jae-Sin, et al. [24] confirmed the positive (+) influence relationship between educational service quality, educational service trust, and attitude toward the host country in a study on foreign students, and Jeong and Park [25] examined the relationship of trust between students and professors among university students and found that the higher the level of trust in professors perceived by college students, the higher the level of adaptation of college students to university life. In addition, Yeong-Hee [26] found that all factors of educational service quality have a significantly positive (+) effect on satisfaction, and only some elements of educational service quality have a positive (+) effect on trust and engagement. In addition, in the relationship between relationship quality factors, satisfaction has a significant positive (+) effect on trust, and satisfaction and trust have a significantly positive (+) effect on engagement. And in terms of total effects, trust was found to have the greatest impact.

Hypothesis 2. The quality of higher education services in the educational environment will have a significant positive (+) effect on trust.

Myung-Lag [27] conducted a study on the effect of customer service quality on choice satisfaction, customer trust, and consumer behavior and found that responsiveness and empathy with service quality have a significant effect on behavioral trust, and the reliability of service quality has a significant effect on cognitive trust. In addition, among service qualities, certainty was found to have a significant effect on attitudinal trust. A study by Joo-Young and Ju-Hui [28] found that tangibility and responsiveness had a significant effect on satisfaction, but reliability, certainty, and empathy did not have a significant effect. Eun-Hye [29] conducted a study on Chinese international students on the relationship between service quality, satisfaction, and loyalty at universities, and found that educational service quality had a positive effect on educational service satisfaction. These results indicate that the higher the quality of education services, the higher the satisfaction with educational services.

Hypothesis 3. The teaching ability of the quality of higher education services will have a significant positive (+) effect on trust.

Yoon-Joo [30] explored ESG management activities from a marketing perspective and found that corporate ESG management activities have a significant positive (+) effect on trust based on goodwill, which has a positive effect on consumer purchase ion and recommendation ion. Yong-Il Kim [31] found that the more trust in online reviews increases, the more actively customers' behavioral ions are reinforced when they book hotels online, and Sang-Ho and Joo-Yeon [32] proved that the more trust gained from festival visitors, the stronger the ion to return and recommend. In addition, even if it is a small local festival, if it secures authenticity and credibility, it can induce visitors to come back.

Hypothesis 4. Trust will have a significant positive (+) effect on behavioral intention.

3.2. Operational Definition, Survey Design, and Analysis Methods Variables

3.2.1 Operational Definition of Variables

Among the variables used in the previous research related to educational service quality, this study selected three educational contents, educational environment, and teaching skill that were judged to meet the purpose of this study as independent variables, and selected trust as a parameter and behavioral ion as a dependent variable.

When it comes to the items of the measurement, educational content is composed of the learning objectives, positive help for learning, systematic lecture structure, content conducive to learning, and reflection of learners' needs. The five items of the educational environment is made up of lecture-oriented educational facilities, classroom cleanliness, amenities, sufficient educational facilities, and the friendly attitude of teaching staff. In the case of teaching skills, high level of knowledge, high on-site ability, level of knowledge on subjects, feedback, and logical/systemic lectures were made up as their 5 items. As for trust, the trust in the university, the trust in the professor, the trust in the major, and the trust in the environment were measured. Furthermore, positive behavioral ion consisted of 3 items: recommendation to others, recommendation to juniors in other regions, and continuous publicity. Measurements were taken using a Likert 5-point scale.

3.2.2. Survey Design and Analysis Methods

In order to achieve the purpose of this study, the sample subjects were university students enrolled in a three-year vocational college in Jiangsu Province, China, and respondents were questioned for a total of 15 days from June 1, 2024 ~ June 15, 2024. A total of 350 copies of the questionnaire were distributed, 330 copies were recovered, 20 of the questionnaires with insincere responses were excluded, and 310 valid samples were used as data for the final analysis.

The collected survey data were verified using the statistical programs SPSS Ver 26.0 and AMOS Ver 26.0 for empirical analysis. The specific analysis method is as follows.

First, frequency analysis was performed to identify the demographic characteristics and general characteristics of the subjects of this study. Second, exploratory factor analysis was performed to determine the reliability and validity of the scales used in this study. Factor analysis was performed using the Verimax Rotation method, and reliability analysis measured Chonbach's α coefficients by excluding items that impede internal consistency. Third, confirmatory factor analysis and correlation analysis were performed to verify the discriminant validity and the intensive validity of the sample. Hypothesis testing was carried out through structural equation model analysis.

4. Empirical Analysis

4.1. Demographical Characteristics

Table 1 summarizes the results of the analysis of the demographic characteristics of the sample of this study, and the contents are as follows.

Table 1.
Demographic Characteristics.

Division		Frequency (Persons)	Percentage (%)
Gender	Male	127	41.0
	Female	183	59.0
Major	Humanities And Social Sciences	276	89.0
	Natural Science	34	11.0
Academic Year	Year 1	34	11.0
	Year 2	54	17.4
	Year 3	222	71.6
Region of Origin	From Jiangsu Province	154	49.7
	From Other Regions	156	50.3
Total		310	100

As a result of the demographic analysis, the number of females was higher than that of males, with 127 males (41.0%) and 183 females (59.0%). 276 students (89.0%) majored in humanities and social sciences and 34 students (11.0%) majored in natural sciences. In terms of grades, 34 students (11.0%) were in the first year, 54 students (17.4%) were in the second year, and 222 students (71.6%) were in the third year. In terms of region of origin, 154 (49.7%) were from Jiangsu, and 156 (50.3%) were from other regions. These results show the appropriateness of sample selection for this study.

4.2. Reliability and Validity Analysis

Table 2 shows the results of exploratory factor analysis of the measurement tools used in this study.

Table 2.
Exploratory Factor Analysis.

Factors	Component					Covariance	Reliability
	1	2	3	4	5		
Teaching Skill 4	0.808	-0.026	0.025	0.047	-0.003	0.656	0.828
Teaching Skill 3	0.783	0.002	-0.024	0.067	0.005	0.618	
Teaching Skill 1	0.775	-0.029	-0.028	-0.069	-0.050	0.609	
Teaching Skill 2	0.769	0.038	-0.045	-0.037	-0.031	0.597	
Teaching Skill 5	0.751	0.106	-0.060	-0.066	-0.022	0.584	
Educational Environment 2	0.019	0.808	0.031	0.019	0.005	0.655	0.828
Educational Environment 1	0.063	0.793	-0.010	0.047	-0.014	0.636	
Educational Environment 5	-0.011	0.785	-0.035	-0.058	-0.044	0.623	
Educational Environment 3	0.043	0.752	0.021	0.125	0.078	0.589	
Educational Environment 4	-0.019	0.707	0.035	-0.060	-0.020	0.506	
Educational Content 5	-0.027	-0.018	0.816	0.082	0.043	0.676	0.838
Educational Content 2	-0.052	0.021	0.809	0.038	-0.005	0.659	
Educational Content 1	0.019	-0.033	0.754	0.012	-0.002	0.569	
Educational Content 3	-0.058	-0.024	0.734	-0.012	-0.066	0.547	
Educational Content	-0.016	0.101	0.731	-0.048	-0.057	0.550	
Trust 4	-0.014	0.000	-0.019	0.825	-0.034	0.682	0.813
Trust 1	0.027	0.038	0.019	0.795	0.043	0.637	
Trust 3	-0.085	-0.021	0.027	0.793	-0.036	0.639	
Trust 2	0.017	0.038	0.032	0.780	0.062	0.614	
Positive Behavioral 1	-0.001	0.017	0.050	-0.003	0.892	0.799	0.816
Positive Behavioral 2	-0.052	-0.005	-0.034	0.006	0.854	0.734	
Positive Behavioral 3	-0.040	-0.011	-0.099	0.030	0.818	0.681	
Eigan-Value	3.263	3.087	2.794	2.561	2.155		
Variance %	14.832	14.032	12.700	11.642	9.796		
Cumulative Variance %	14.832	28.865	41.565	53.207	63.004		

Kaiser-Meyer-Olkin Measure of Sample Adequacy = 0.740
Bartlett's Spherical Test Approximate Chi-Square = 2588.319, Degree of Freedom = 231, Significance = 0.000

As a result of exploratory factor analysis, the KMO measure is 0.740, which is close to 1, so this tool can be considered suitable data for factor analysis.

Bartlett's unit matrix verification statistic is 2588.319, degrees of freedom = 231, significance probability = 0.000, so it is statistically verified that it is not a unit matrix, and it can be seen that it is suitable for factor analysis. The commonality of the measured variables was 0.506~0.799, and all of them were .5 or higher.

The extracted factors are 5 factors: teaching skill, educational content, educational environment, trust, and behavioral ion, and the total explanatory variable by these factors is 63.004%. Therefore, it can be said that the use of the sum average of the variables included in each factor in the subsequent analysis does not put much strain on the semantic interpretation.

4.3. Confirmatory Factor Analysis

In this study, confirmatory factor analysis was performed to test the single dimensionality of each metric using multiple items. Table 3 summarizes the results of confirmatory factor analysis.

Table 3.
Confirmatory factor analysis.

Conceptual variables	Variables	Estimate	S. Estimate	S.E.	C.R.	CR	AVE
Educational Content	Educational Content 2	1	0.911	-	-	0.753	0.506
	Educational Content 3	0.604	0.759	0.063	9.553		
	Educational Content 5	0.674	0.766	0.07	9.606		
Educational Environment	Educational Environment 1	0.871	0.896	0.087	9.968	0.775	0.537
	Educational Environment 2	1	0.769	-	-		
	Educational Environment 5	0.903	0.752	0.089	10.117		
Teaching Skill	Teaching Skill 1	0.599	0.613	0.069	8.666	0.815	0.605
	Teaching Skill 3	0.648	0.653	0.072	8.984		
	Teaching Skill 4	1	0.953	-	-		
Trust	Trust 1	0.649	0.596	0.076	8.576	0.715	0.613
	Trust 3	0.71	0.686	0.077	9.237		
	Trust 4	1	0.927	-	-		
Positive Behavioral	Positive Behavioral 1	1	0.866	-	-	0.799	0.571
	Positive Behavioral 2	0.72	0.765	0.059	12.114		
	Positive Behavioral 3	0.618	0.703	0.054	11.546		

Note: *Items With An Initial Load Value Of 1

$\chi^2=78.189$ (Df=80, P= 0.536), $\chi^2/Df=0.977$, RMR=0.052 GFI=0.967, AGFI=0.950, NFI=0.949, RFI=0.910, IFI=1.001, TLI=1.002, CFI=1.000, RMSEA=0.000, SRMR=0.032.

As a result of the analysis, $GFI \geq 0.9$, $AGFI \geq 0.9$, NFI (Normed Fit Index) ≥ 0.9 , and $CFI \geq 0.9$ were all found to be above 0.9, which can be said to be an acceptable level of the overall goodness-of-fit index. In addition, in this study, the factor load of the metrics for each variable was found to be in the range of 0.5 to 0.95 or less. The composite reliability is 0.7 or higher. And the mean variance (AVE) all showed values of 0.5 or higher. Therefore, since the indicators indicating factor load and composite reliability all meet the standard values, it is judged that there is no major problem with concentration validity.

4.4. Correlation Analysis

Correlation analysis between each factor was performed to verify the discriminatory validity between each factor whose intensive validity was verified by the results of confirmatory factor analysis. When compared with the square root value of the average variance extraction index (AVE) value of the diagonal, it can be seen that the discriminant validity was secured because no correlation coefficient value was found. In addition, the correlation analysis showed that all items were significant, and the correlation coefficient value was less than 0.7. The results of the correlation analysis are shown in Table 4.

Table 4.
Correlation Analysis.

Item	Educational Content	Educational Environment	Teaching Skill	Trust	Behavioral Ion
Educational Content	0.506(0.712)				
Educational Environment	0.045***	0.537(0.732)			
Teaching Skill	0.048***	0.021***	0.605(0.778)		
Trust	0.024***	0.013***	0.042***	0.613(0.783)	
Behavioral	0.016***	0.014***	0.032***	0.030***	0.571(0.756)

Note: * The square root value of the Average Variance Extraction Index (AVE) value of the diagonal, ***p<.001

As a result of the analysis, all items were found to be statistically significant and showed a positive (+) correlation. These results are consistent with the direction of the relationship between the variables proposed in the research hypothesis. In addition, the correlation coefficient values are all below .7, so it is judged that there is no problem with multicollinearity. Therefore, the adequacy of the data can be considered secured.

4.5. Research Hypothesis Testing

This study investigates the causal relationship between educational content, educational environment, teaching skill, trust, and positive behavioral ion of a three-year college in Jiangsu, China, and the hypothesis test results and structural equation path coefficient values of each research unit can be found in Figure 2.

Table 5.
Research Hypothesis Testing Results.

Hypothesis	Path		Parameter Estimates	Standardized Co-Efficient	S.E.	T	P	Hypothesis Adoption	
H1	Educational Content	-->	Trust	0.124	0.025	0.068	1.371	0.072*	Adopted
H2	Educational Environment	-->	Trust	0.113	0.016	0.086	1.183	0.015***	Adopted
H3	Teaching Skill	-->	Trust	0.003	0.003	0.061	0.042	0.000***	Adopted
H4	Trust	-->	Behavioral Ion	0.010	0.009	0.057	1.155	0.000***	Adopted

Note: * p<.1, ** p<.05, *** p<.01.

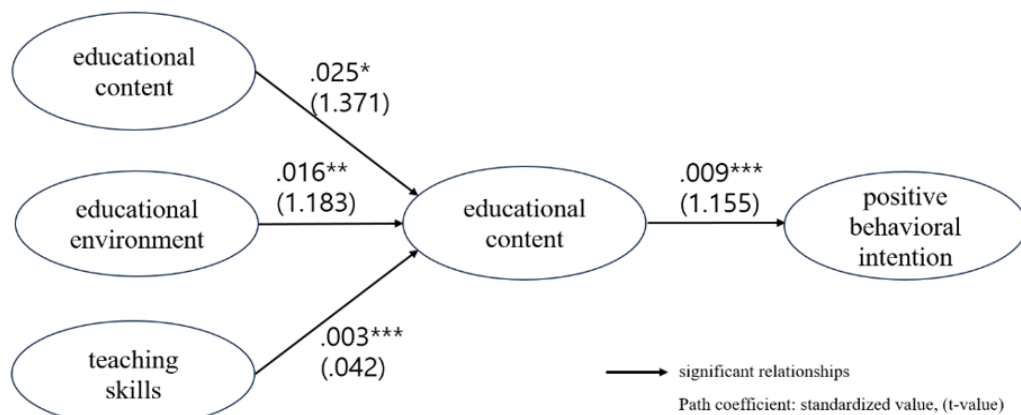


Figure 2.
Research model path diagram.

As a result of structural equation path analysis to test the research hypothesis, hypothesis 1 has a t value of 1.371, a p value, and a p-value of 0.072($p < .1$), which shows that it is statistically significant. Thus, hypothesis 1 was adopted. And the path coefficient value shows a positive (+) value, and it can be confirmed that the better the educational content, the higher the trust.

Hypothesis 2 has a t value of 1.183 and a p value of 0.015 ($p < .5$), indicating that it is statistically significant. Thus, hypothesis 2 was adopted. In addition, the path coefficient value has a positive (+) value, which shows that if the educational environment provided by the university is better, trust increases.

Hypothesis 3 has a t value of 0.042 and a p value of 0.000 ($p < .01$), indicating that it is statistically significant. Thus, hypothesis 3 was adopted. And if the faculty members of a school are highly competent, it can be seen that trust is high.

Hypothesis 4 has a t value of 1.155 and a p value of 0.000 ($p < .01$), which shows that it is statistically significant. Thus hypothesis 4 was adopted. It can be seen that there is a structural relationship between trust and behavioral ion, but it can be seen that when trust is high, the behavioral ion that appears after that also increases.

5. Conclusion

This study aims to propose ways to enhance the positive behavioral ions of current students by examining the perceived quality of educational services among students at a three-year vocational college in Jiangsu Province, China, and linking it with trust. Accordingly, this study selected the university education service quality as an independent variable and set the education content, educational environment, and teaching skill as sub-variables to empirically analyze the relationship between the influence on trust and behavioral ion. The results of the empirical analysis are summarized as follows.

As a result of the verification of hypothesis 1 that the educational content of the three-year college students has a significant positive (+) effect on trust, the educational content of the university education service quality has a statistically significant positive (+) effect on trust. So, hypothesis 1 was adopted. In addition, as a result of the verification of hypothesis 2 that the educational environment has a significant positive (+) effect on trust among the factors of higher education service quality, it was found that the educational environment has a statistically significant positive (+) effect on trust. So, hypothesis 2 was adopted. Moreover, among the factors of higher education service quality, teaching skill was found to have a statistically significant positive (+) effect on trust. So, hypothesis 3 was adopted. Finally, as a result of the test of hypothesis 4 that trust has a significant positive (+) effect on positive action ion, it was found that trust has a statistically significant positive (+) effect on positive action ion. So, hypothesis 4 was adopted.

Based on the results of this empirical analysis, this study can present the following implications of the study.

First, it can be seen that, when choosing the quality of educational services, students enrolled in three-year colleges in Jiangsu Province consider all of the factors such as educational content, educational environment, and teaching skills. Therefore, there should be no tendency to be biased towards certain factors of the quality of university education services for the management of current students and the attraction of new students, and continuous efforts should be made to improve the trust of various university education service factors.

Second, in order to build trust with students, universities need to make continuous efforts to ensure good educational content, educational environment, and high-quality faculty. In addition, in order to inspire students' trust in the quality of university education services, it is necessary to actively seek ways to enhance the confidence of students in various aspects, such as improving the environment of dormitories and lecture halls where students use, improving courses that meet students' needs and can be up on the trends, and developing programs to adapt to university life.

Third, since the quality of university education services is directly linked to positive behaviors, it is necessary to pay continuous attention not only to the quality of university education services in terms of educational content, educational environment, and teaching skills presented in this study but also to various factors related to the quality of university education services that students encounter in their university life.

Despite the results of this study, we would like to suggest the direction of future research based on the limitations found in the progress of this study.

First, by biasing the sample of this study to a certain region, it has the fallacy of generalization that many studies tend to make. Therefore, in future research, it is judged that if the study is conducted on universities in all regions of China, rather than being limited to a specific region, it will be possible to derive more objective research results.

Second, the sub-variables of the quality of higher education services have been variously suggested in previous studies. However, this study limited the subvariables of university education service quality to educational content, educational environment, and teaching skills. In future research, it is considered necessary to derive a wide range of research results on the quality of university education services by presenting various variables.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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References

- [1] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "A conceptual model of service quality and its implications for future research," *Journal of Marketing*, vol. 49, no. 4, pp. 41-50, 1985. <https://doi.org/10.1177/002224298504900403>
- [2] S. Woo-Geuk, "A study on the structural relationships among the educational service quality, service value, customer satisfaction, brand image and voluntary behavioral intention: Focused on the Moderating Effects of Value Congruence," KongJu National University, Ph.D, Thesis, 2015.
- [3] Y.-g. Kim, "Moderating effect of instruction and curriculum on relationship between educational service quality and student satisfaction in universities in China," *Journal of Service Research and Studies*, vol. 9, no. 3, pp. 73-86, 2019.
- [4] J. Yu-Ri and C. Suk-Bin, "The impact of service quality in higher education on students' satisfaction and loyalty," *International Journal of Tourism Management and Sciences*, vol. 23 no. 2, pp. 139-155, 2009. <https://doi.org/G704-000941.2008.23.2.023>
- [5] O. Na-Ra and C. Jong-Lyul, "The influence of service quality of education student at vocational training institute to educational satisfaction - personality as a moderating variable," *Journal of Tourism and Leisure Research*, vol. 28 no. 8, pp. 221-240, 2016. <https://doi.org/G704-000823.2016.28.8.013>
- [6] Y. Seong-Jo, "The effect of university education service quality on department satisfaction and career decision-making self-efficacy: For aviation service students," *Journal of Tourism and Leisure Research*, vol. 33 no. 11, pp. 415-435, 2021.
- [7] G. M. Alliger, S. I. Tannenbaum, W. Bennett Jr, H. Traver, and A. Shotland, "A meta-analysis of the relations among training criteria," *Personnel Psychology*, vol. 50, no. 2, pp. 341-358, 1997. <https://doi.org/10.1111/j.1744-6570.1997.tb00911.x>
- [8] L. Gi-Hwan, "Learner' motive of participation and satisfying degree in the program for lifelong education," Daegu University, PhD Thesis, 2003.
- [9] J. Cook and T. Wall, "New work attitude measures of trust, organizational commitment and personal need non-fulfilment," *Journal of Occupational Psychology*, vol. 53, no. 1, pp. 39-52, 1980. <https://doi.org/10.1111/j.2044-8325.1980.tb00005.x>
- [10] R. C. Mayer, J. H. Davis, and F. D. Schoorman, "An integrative model of organizational trust," *Academy of Management Review*, vol. 20, no. 3, pp. 709-734, 1995. <https://doi.org/10.2307/258792>

- [11] K. Byung-Jik and K. Ji-Yeon, "The relationship of transformational leadership and organizational commitment: Focusing on mediation effect of organization justice on trust," *Journal of Industrial Innovation*, vol. 28 no. 4, pp. 211-239, 2012. <https://doi.org/10.22793/indinn.2012.28.4.008>
- [12] J. Yu-Je, "The influence of leader supervision behavior on follower's organizational citizenship behavior: Intervening effect of organizational justice," Trust, Kyungil University, Ph.D, Thesis, 2014.
- [13] L. Sook-Jeong and J.-S. Han, "A study of the development and validation of teacher-trust scale for adolescences," *The Korean Journal of Educational Psychology*, vol. 18, no. 3, pp. 23-39, 2004. <https://doi.org/G704-000199.2004.18.3.014>
- [14] L. Jae-Kon and J.-H. Ko, "Study on the student satisfaction and behavior intention according to professor reliance," *Journal of Tourism Management Research*, vol. 19, no. 2, pp. 241-263, 2015. <https://doi.org/G704-SER000009812.2015.19.2.005>
- [15] L. Sung-Gag and J. Hyun-Jin, "The effects of professor's emotional leadership on student's professor-trust and learning performance: Focused on university students of Gwang-ju and Geon-nam Province Majoring in tourism," *Journal of Tourism and Leisure Research*, vol. 31 no. 3, pp. 405-420, 2019.
- [16] K. Hyong-Jun and K. Yong-Il, "The influence of building trust by characteristics of e-WOM based on application of food information service on behavior intention," *Korean Journal of Hotel Administration*, vol. 23, no. 1, pp. 45-64, 2014. <https://doi.org/G704-001024.2014.23.1.010>
- [17] Y. Min-Hyeong, "The effect of multilevel service quality of food service industry on consumer behavior intention: Centered on moderation effect of Inward and outward personality types," Daejeon University, Ph.D, Thesis, 2017.
- [18] K. Kyoung-Tae, "A study of relationship between self-congruity of dessert Café's consumer, consumption value, and behavior intention," *Journal of Tourism Management Research*, vol. 24 no. 3, pp. 49-69, 2020.
- [19] M. Sung and S.-U. Yang, "Student-university relationships and reputation: A study of the links between key factors fostering students' supportive behavioral intentions towards their university," *Higher Education*, vol. 57, pp. 787-811, 2009. <https://doi.org/10.1007/s10734-008-9176-7>
- [20] S. Woo-Geuk and C. Ho Gyu, "The effects of educational service quality on service value, customer satisfaction, voluntary behavioral intention: Focused on the moderating effects of value congruence," *Journal of Social Science*, vol. 54 no. 2, pp. 181-215, 2015. <https://doi.org/G704-SER000010755.2015.54.2.012>
- [21] M. Seung-Jea and J. Han Kyung, "The effect of educational service quality in business administration on assurance and satisfaction," *The Journal of Business Education*, vol. 23, no. 1, pp. 201-218, 2009. <https://doi.org/G704-001402.2009.23.1.022>
- [22] L. Ju-Hee, "A study on the influence of service quality of a tourist information center on information credibility, satisfaction, and behavioral intention at Incheon International Airport: Focusing on foreign tourists to Korea," *International Journal of Tourism and Hospitality Research*, vol. 33 no. 7, pp. 161-177, 2019. <https://doi.org/10.21298/IJTHR.2019.7.33.7.161>
- [23] P. Hyeong-I, "The relationship between service quality, reliability, satisfaction and behavioral intention of customers in the mobile open market: Moderating effect of brand awareness," *WonKwang University, Ph.D, Thesis*, 2020.
- [24] O. Jae-Sin, J. Hyeong-Yu, and L. Jung-Yoon, "The effects of perceived country images on education service quality, trust, and country attitude: Focused on foreign students," *International Business Review*, vol. 16 no. 1, pp. 25-47, 2012. <https://doi.org/G704-001740.2012.16.1.002>
- [25] E. I. Jeong and Y. Park, "Development and validation of the professor trust scale (PTS)," *Korean Journal of Psychology: General*, vol. 28, no. 2, pp. 405-426, 2009. <https://doi.org/G704-001037.2009.28.2.004>
- [26] L. Yeong-Hee, "The effects of educational service quality on relationship quality and customer loyalty and the moderating effects of school-grade," *Korean Journal of Business Administration*, vol. 27 no. 2, pp. 263-284, 2014. <https://doi.org/G704-000789.2014.27.2.007>
- [27] K. Myung-Lag, "The effect of customer service quality in golf course on selection satisfaction, customer reliability, and consumer behavior," KyungHee University, Ph.D, Thesis, 2013.
- [28] J. Joo-Young and E. Ju-Hui, "Investigating the structural relationships among service quality, time management behavior, satisfaction and learning persistence in K-MOOC for grades," *Journal of Korean Association for Educational Information and Media*, vol. 23 no. 4, pp. 763-788, 2017. <https://doi.org/10.15833/KAFEIAM.23.4.763>
- [29] C. Eun-Hye, "An empirical study on the relationships among the service quality of university, students' satisfaction and loyalty - focused on chinese students in Korea," DanKook University, Ph.D, Thesis, 2017.
- [30] K. Yoon-Joo, "The effects of firm's esg activities on consumer's trust and behavioral intentions," Ewha Womans University, Master Thesis, 2022.
- [31] G. K. Yong-Il Kim, "The influence of building trust by e-WOM characteristics based on social media of hotel on behavior intention," *Journal of Hospitality and Tourism Studies*, vol. 17 no. 6, pp. 151-166, 2015. <https://doi.org/G704-001700.2015.17.6.015>
- [32] L. Sang-Ho and K. Joo-Yeon, "The influence of festival quality and authenticity on festival trust and behavioral intention by visitor perception: Focused on two cultural tourism festivals in Busan," *International Journal of Tourism and Hospitality Research*, vol. 33, no. 11, pp. 5-18, 2019. <https://doi.org/10.21298/IJTHR.2019.11.33.11.5>