(RESEARCH ARTICLE)

The Mediating Role of Institution's Perceived Service Quality on the Relationship Between Service Delivery and Student Satisfaction

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Abstract

In today's competitive higher education landscape, ensuring student satisfaction is vital for institutional success. This study aimed to determine the mediating role of perceived service quality in the relationship between service delivery and student satisfaction, conducted at a higher education institution in Ozamiz City during the academic year 2024–2025, with 500 student respondents selected through stratified random sampling. Using a descriptive-correlational design, data were collected through validated questionnaires and analyzed using means, standard deviations, Pearson correlations, and multiple regression. Results revealed that the institution had excellent service quality. The institution also had a very highly effective service delivery. Students were very highly satisfied with the institution's services. A very highly significant positive relationship was found between service quality and service delivery. There was also a very highly significant positive relationship between service quality and student satisfaction. A very highly significant positive relationship was found between service delivery and student satisfaction. Perceived service quality significantly mediated the relationship between service delivery and student satisfaction, highlighting its vital role in strengthening the overall connection among these factors and ensuring that students consistently experience high levels of trust, confidence, and fulfillment in the services provided by the institution. It is recommended that the institution strengthen responsiveness, empathy, and efficiency through regular feedback, streamlined processes, active faculty engagement, and innovative teaching to enrich the student experience.

Keywords: Service Quality; Service Delivery; Student Satisfaction; Higher Education; Mediation

1. Introduction

Service quality has become an important factor in determining student satisfaction in higher education [1]. Universities today face growing competition, which requires them to provide efficient and reliable services to meet students' expectations [2]. When services are delivered effectively, students develop a positive perception of their academic experience, leading to higher satisfaction and loyalty [3]. On the other hand, poor service delivery can negatively affect how students view the institution [4].

The SERVQUAL model developed by Parasuraman, Zeithaml, and Berry identifies five dimensions of service quality—tangibility, reliability, responsiveness, assurance, and empathy [27]. This framework helps evaluate how students perceive the quality of services offered by their institutions [5]. Perceived service quality also plays a mediating role in the relationship between service delivery and student satisfaction [6]. It determines how students interpret their educational experiences and overall trust in the institution [7].

This study aims to determine the mediating role of an institution's perceived service quality on the relationship between service delivery and student satisfaction. The purpose is to identify how perceived service quality influences the

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connection between the delivery of services and students' overall satisfaction. The findings will help higher education administrators develop better strategies to enhance student experiences and improve institutional performance.

2. Materials and Methods

2.1. Research Design

This quantitative research approach used the descriptive-correlational design. The descriptive design is a type of non-experimental research that investigates the relationship between two or more variables [22]. This design fits this study as it allowed the researchers to analyze existing patterns and correlations, ensuring an accurate representation of their natural relationships within the institution.

2.2. Research Setting

This study was conducted in one of the higher education institutions in Ozamiz City. It was the first institution in Northern Mindanao to be granted "Autonomous Status" by the Commission on Higher Education (CHED). The university's ISO 21001:2018 certification was certified by Det Norske Veritas (DNV). The university's teacher education, criminology, and information technology departments were designated as Centers of Development by CHED. With a total of 11 colleges, this university was recognized by PACUCOA (The Philippine Association of Colleges and Universities Commission on Accreditation) as having the most accredited programs in Region X for two consecutive years. Students from these diverse colleges provided valuable insights into how perceived service quality in various academic programs influenced their overall satisfaction and academic experience, aligning with the study's focus on service delivery and student satisfaction.

2.3. Respondents of the Study

This study included 500 students. They were chosen using stratified random sampling. The following criteria were used to select the respondents: (1) Students who were enrolled in the second semester of SY 2024-2025; (2) Students who were willing to participate in the study; (3) Students from various academic programs to ensure diverse representation; (4) Students who had completed at least one semester in the institution. Before starting the surveys, the researchers ensured that all the criteria were followed.

2.4. Research Instrument

This study used the following questionnaires as data-gathering instruments:

A. Service Quality Questionnaire (Appendix A). This was a researcher-made questionnaire. The items were constructed using a 5-point Likert scale format, and the students responded to the statements on a scale ranging from strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). The instrument contained 25 items with five constructs, namely tangibles, reliability, responsiveness, assurance, and empathy. To ensure validity, experts in education and institutional service quality reviewed the questionnaire, refining items for clarity, relevance, and accuracy. A pilot test evaluated its appropriateness. For reliability, the questionnaire underwent a Cronbach's alpha test, with a 0.70+ value indicating consistency. The results confirmed its effectiveness in capturing students' perceptions of institutional service quality: Tangibles – 0.787; Reliability – 0.7; Responsiveness – 0.866; Assurance – 0.801; Empathy – 0.859.

In determining the perceived service quality, the following scale was used:

Responses	Continuum	Interpretation
5- Strongly Agree	4.20 - 5.00	Very Good
4- Agree	3.40 - 4.19	Good
3- Neutral	2.60 - 3.39	Fair
2- Disagree	1.30 - 2.59	Poor
1- Strongly Disagree	1.00 - 1.29	Very Poor

B. Service Delivery Questionnaire (Appendix B). This was a researcher-made questionnaire. The items were constructed using a 5-point Likert scale format, and the students responded to the statements on a scale ranging from strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). The instrument contained 20 items with four constructs, namely accessibility, efficiency, student support, and administrative services. To ensure validity, experts in education and institutional service quality reviewed the questionnaire, refining items for clarity, relevance, and accuracy. A pilot test evaluated its appropriateness. For reliability, the questionnaire underwent a Cronbach's alpha test, with a 0.70+ value indicating consistency. The results confirmed its effectiveness in capturing students' perceptions of institutional service quality: Accessibility – 0.708; Efficiency – 0.835; Student Support – 0.777; Administrative Services – 0.823.

In determining the perceived service quality, the following scale was used:

Responses	Continuum	Interpretation
5- Strongly Agree	4.20 - 5.00	Very Highly Effective
4- Agree	3.40 - 4.19	Highly Effective
3- Neutral	2.60 - 3.39	Moderately Effective
2- Disagree	1.30 - 2.59	Less Effective
1- Strongly Disagree	1.00 - 1.29	Not Effective

C. Student Satisfaction Questionnaire (Appendix C). This was a researcher-made questionnaire. The items were constructed using a 5-point Likert scale format, and the students responded to the statements on a scale ranging from strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). The instrument contained 20 items with four constructs, namely academic experience, faculty engagement, institutional services, and learning environment. To ensure validity, experts in education and institutional service quality reviewed the questionnaire, refining items for clarity, relevance, and accuracy. A pilot test evaluated its appropriateness. For reliability, the questionnaire underwent a Cronbach's alpha test, with a 0.70+ value indicating consistency. The results confirmed its effectiveness in capturing students' perceptions of institutional service quality: Academic Experience – 0.803; Faculty Engagement – 0.9; Institutional Services – 0.9; Learning Environment – 0.835.

In determining the perceived service quality, the following scale was used:

Responses	Continuum	Interpretation
5- Strongly Agree	4.20 - 5.00	Very Highly Satisfied
4- Agree	3.40 - 4.19	Highly Satisfied
3- Neutral	2.60 - 3.39	Average
2- Disagree	1.30 - 2.59	Needs Improvement
1- Strongly Disagree	1.00 - 1.29	Unsatisfactory

2.5. Data Collection

Before gathering data, the researchers submitted a letter of permission to the college dean to obtain consent to conduct the study. The researchers then obtained approval from the DSAS head and the research teacher. After receiving the approval, the researchers prepared a consent letter for the participants. They explained the purpose of the study to the respondents and discussed the ethical considerations. The researchers printed copies of the three research questionnaires and distributed them to the students for completion. They ensured that all the responses were gathered and stored safely for analysis. After data collection, the researchers retrieved the completed questionnaires, tallied all the responses, interpreted the data, and reported the findings.

2.6. Ethical Considerations

By following the ethical guidelines set forth by Republic Act No. 10173, also referred to as the Data Privacy Act of 2021, which emphasized the significance of protecting people's personal information and upholding their rights to privacy

and data protection, the study's ethical component was preserved. Additionally, by adhering to ethical principles, the study maintained its ethical integrity (Bryman & colleagues, 2022). The respondents' consent was obtained prior to data collection, and they suffered no harm while participating in the study. The participants signed the informed consent form to indicate their willingness to participate. The objectives, benefits, and potential risks of the study were explained in detail to the respondents. Participants were allowed to withdraw from the questionnaire at any time, and their responses were kept confidential. False information of any kind and biased reporting of primary data findings were avoided. All sources of funding, conflicts of interest, and affiliations were disclosed. All correspondence regarding this study was conducted honestly and transparently. If participants had any questions or concerns, they were encouraged to contact the researchers.

2.7. Data Analysis

- The study used the following tools in analyzing the data gathered with the use of Jamovi 2.4.8.
- Mean and Standard Deviation were used to assess the level of service quality, service delivery, and student satisfaction.
- Frequency and Percentage were used to determine the mediating role of the institution's perceived service quality.
- Pearson Product-Moment Correlation Coefficient was applied to examine the relationship between service delivery and student satisfaction regarding the mediating role of the institution's perceived service quality.

Multiple Regression Analysis was used to examine the direct and mediating effects of service delivery and the institution's perceived service quality on student satisfaction, allowing for a comprehensive understanding of their relationships.

3. Results and Discussions

3.1. Level of Institutional Service Quality

Table 1 shows that the institution's service quality was rated Very Good (M = 4.48, SD = 0.48). Tangibles obtained the highest mean (M = 4.51), followed by assurance (M = 4.50), empathy (M = 4.48), reliability (M = 4.47), and responsiveness (M = 4.44). Students were most satisfied with facilities, staff appearance, and professionalism [4]. High assurance scores indicate trust and confidence in staff competence [5]. These findings support the SERVQUAL model, which identifies tangibility, reliability, responsiveness, assurance, and empathy as key quality dimensions [27].

Table 1 Level of Institutional Service Quality (n=500)

Constructs	M	SD	Remarks
Tangibles	4.51	0.45	Very Good
Reliability	4.47	0.48	Very Good
Responsiveness	4.44	0.52	Very Good
Assurance	4.50	0.46	Very Good
Empathy	4.48	0.49	Very Good
Overall Service Quality	4.48	0.48	Very Good

Note: 4.20-5.00 (Very Good); 3.40-4.19 (Good); 2.60-3.39 (Fair); 1.30-2.59 (Poor); 1.00-1.29 (Very Poor)

3.2. Level of Effectiveness of Institutional Service Delivery

Table 2 presents a Very Highly Effective rating for service delivery (M = 4.51, SD = 0.47). Student support received the highest mean (M = 4.53), followed by accessibility (M = 4.52), administrative services (M = 4.51), and efficiency (M = 4.47). These results imply that students view institutional services as accessible, reliable, and supportive [11]. The findings align with prior studies showing that service delivery directly influences satisfaction [14].

Table 2 Level of Effectiveness of Institutional Service Delivery *(n=500)*

Constructs	M	SD	Remarks
Accessibility	4.52	0.45	Very Highly Effective
Efficiency	4.47	0.49	Very Highly Effective
Student Support	4.53	0.45	Very Highly Effective
Administrative Services	4.51	0.5	Very Highly Effective
Overall Service Delivery	4.51	0.47	Very Highly Effective

Note: 4.20-5.00 (Very Highly Effective); 3.40-4.19 (Highly Effective); 2.60-3.39 (Moderately Effective); 1.30-2.59 (Less Effective); 1.00-1.29 (Not Effective)

3.3. Level of Institutional Student Satisfaction

Table 3 shows students were Very Highly Satisfied overall (M = 4.50, SD = 0.48). The learning environment ranked highest (M = 4.54), followed by institutional services (M = 4.51), academic experience (M = 4.49), and faculty engagement (M = 4.47). These results confirm that institutional support and teaching quality significantly enhance satisfaction [16]. Prior findings also note that faculty engagement strengthens students' academic experiences [19].

Table 3 Level of Institutional Student Satisfaction (n=500)

Constructs	M	SD	Remarks
Learning Environment	4.54	0.47	Very Highly Satisfied
Institutional Services	4.51	0.48	Very Highly Satisfied
Faculty Engagement	4.47	0.49	Very Highly Satisfied
Academic Experience	4.49	0.47	Very Highly Satisfied
Overall Student Satisfaction	4.5	0.48	Very Highly Satisfied

Note: 4.20-5.00 (Very Highly Satisfied); 3.40-4.19 (Highly Satisfied); 2.60-3.39 (Average); 1.30-2.59 (Needs Improvement); 1.00-1.29 (Unsatisfactory)

3.4. Significant Relationship between the Institutional Service Quality and Service Delivery

Table 4 Significant Relationship Between Institutional Service Quality and Service Delivery (n=500)

Variables		Accessibility	Efficiency	Student Support	Administrative Services
Tangibles	*r*	0.61***	0.65***	0.6***	0.61***
	p	0.001	0.001	0.001	0.001
Reliability	*r*	0.6***	0.66***	0.61***	0.65***
	p	0.001	0.001	0.001	0.001
Responsiveness	*r*	0.65***	0.69***	0.62***	0.66***
	p	0.001	0.001	0.001	0.001
Assurance	*r*	0.71***	0.7***	0.67***	0.64***
	p	0.001	0.001	0.001	0.001
Empathy	*r*	0.7***	0.69***	0.67***	0.63***
	p	0.001	0.001	0.001	0.001

Note:***p<0.01 (Very Highly Significant); **p<0.01 (Highly Significant); *p<0.05 (Significant)

Table 4 indicates all correlations between service quality and service delivery were very highly significant (p = 0.001). Tangibles and assurance had strong links with accessibility and efficiency, while empathy was associated with student support. This confirms that service quality directly affects institutional performance [21].

3.5. Significant Relationship Between Institutional Service Quality and Student Satisfaction

Table 5 shows significant positive relationships (p ≤ 0.01) between service quality dimensions and student satisfaction constructs. Reliability and assurance most strongly predicted satisfaction, while empathy strengthened faculty engagement [25]. These findings support the SERVQUAL and Motivation–Hygiene theories in explaining satisfaction in education [2, 27].

Table 5 Significant Relationship Between Institutional Service Quality and Student Satisfaction (n=500)

Variables		Learning Environment	Institutional Services	Faculty Engagement	Academic Experience
Tangibles	r	0.59***	0.59***	0.57***	0.57***
	p	0.001	0.001	0.001	0.001
Reliability	r	0.57***	0.61***	0.59***	0.58***
	p	0.001	0.001	0.001	0.001
Responsiveness	r	0.61***	0.67***	0.62***	0.54***
	p	0.001	0.001	0.001	0.001
Assurance	r	0.65***	0.67***	0.69***	0.6***
	p	0.001	0.001	0.001	0.001
Empathy	r	0.66***	0.65***	0.67***	0.59***
	p	0.001	0.001	0.001	0.001

Note: ***p<0.01 (Very Highly Significant); **p<0.01 (Highly Significant); *p<0.05 (Significant)

3.6. Significant Relationship Between Service Delivery and Student Satisfaction

Table 6 shows significant relationships (p ≤ 0.01) between service delivery and student satisfaction. Accessibility and efficiency were key contributors to satisfaction across all domains [29]. These results affirm that effective service systems foster a supportive learning environment [32].

Table 6 Significant Relationship Exists Between Service Quality and Student Satisfaction. (n=500)

Variables		Learning Environment	Institutional Services	Faculty Engagement	Academic Experience
Accessibility	r	0.66***	0.7***	0.65***	0.57***
	p	0.001	0.001	0.001	0.001
Efficiency	r	0.67***	0.7***	0.68***	0.59***
	p	0.001	0.001	0.001	0.001
Student Support	r	0.65***	0.7***	0.66***	0.64***
	p	0.001	0.001	0.001	0.001
Administrative Services	r	0.66***	0.7***	0.66***	0.61***
	p	0.001	0.001	0.001	0.001

Note:***p<0.01 (Very Highly Significant); **p<0.01 (Highly Significant); *p<0.05 (Significant)

3.7. Mediating Role of Institutions' Perceived Service Quality in the Relationship Between Service Delivery and Student Satisfaction

Table 7 reveals that perceived service quality significantly mediates the relationship between service delivery and student satisfaction (p < .001). The indirect effect (Estimate = 0.395) indicates that students' perceptions of service quality strengthen the link between delivery and satisfaction [34]. This finding supports prior evidence that high-quality services enhance satisfaction and institutional loyalty [35].

Table 7 Mediating Role of Institutions' Perceived Service Quality in the Relationship Between Service Delivery and Student Satisfaction *(n=500)*

| Effect			Label	Estimate	SE	95% Confidence Interval				
						Lower	Upper	Z	p	% Mediation
Indirect			a x b	0.395	0.0298	0.336	0.453	13.3	<.001	47.2
Direct			c	0.442	0.0332	0.377	0.507	13.3	<.001	52.8
Total			c+a x b	0.837	0.0234	0.791	0.883	35.7	<.001	100.0
Path Estimates										
Student Satisfaction	→	Service Quality	a	0.791	0.0259	0.74	0.842	30.6	<.001	
Service Quality	→	Service Delivery	b	0.499	0.0339	0.433	0.566	14.7	<.001	
Student Satisfaction	→	Service Delivery	c	0.442	0.0332	0.377	0.507	13.3	<.001	
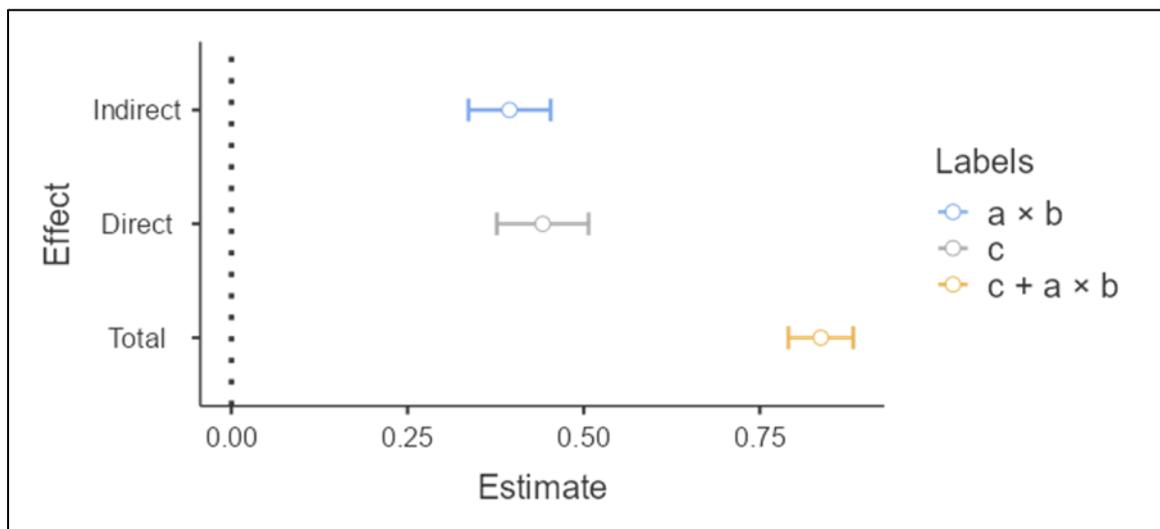
Figure 1 Estimate Plot

4. Conclusion

This study demonstrated that the institution upholds strong standards of service quality, characterized by reliable facilities and professional staff. Service delivery was found to be very highly effective, addressing student needs through consistent support and accessibility. Likewise, students reported very high satisfaction levels, reflecting a positive learning environment and enriching academic experiences.

Results confirmed that service quality and service delivery are closely connected, where improvements in one reinforce the other. Service quality significantly enhances student satisfaction by fostering reliability, responsiveness, and empathy, while effective service delivery promotes efficiency and dependable support. Most importantly, perceived service quality mediates the relationship between service delivery and student satisfaction, ensuring that effective institutional services lead to meaningful and lasting fulfillment among students.

These findings emphasize the importance of maintaining excellence in service systems to strengthen institutional reputation and ensure continuous student-centered development.

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Compliance with ethical standards

Disclosure of conflict of interest

All authors confirm that they have no financial, institutional, or personal relationships that could have influenced the findings, interpretation, or outcomes of this research.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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