



ASSESSMENT OF DIGITAL SERVICE QUALITY AND ITS IMPACT ON OVERALL STUDENT SATISFACTION IN HIGHER EDUCATION INSTITUTIONS

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Abstract:

In the contemporary landscape of higher education, institutions are evaluated not solely on academic excellence but also on the quality of services they provide to students. Elements such as academic instruction, administrative efficiency, campus infrastructure, internet accessibility, and the overall campus environment significantly influence students' educational experiences and satisfaction levels. This study seeks to assess the service quality of higher education institutions and explore its impact on student satisfaction. Data were gathered from a sample of 50 students using a standardized questionnaire, and the responses were analyzed using descriptive statistics, Pearson's correlation, cross-tabulation, and Chi-square tests. The analysis revealed a strong positive correlation between service quality and student satisfaction ($r = 0.963$, $p < 0.01$), suggesting that improvements in service delivery are significantly linked to higher levels of student contentment. These findings suggest that enhancing service delivery can significantly boost student satisfaction levels. Cross-tabulation analysis indicates that service components such as higher education support and student life services consistently contribute to sustained satisfaction. In contrast, teaching and administrative services show variability in perceived quality, leading to intermittent or mixed levels of satisfaction. The Chi-square test further confirms a significant association between service quality dimensions and student satisfaction ($\chi^2 = 78.058$, $df = 6$, $p < 0.01$). The study underscores the importance of maintaining and improving service quality across all domains to foster student satisfaction, support institutional growth, and enhance competitiveness in the higher education sector. Key recommendations include the regular monitoring of service quality, targeted improvements in teaching and administrative services, and the continual upholding of high standards in academic and student support services to enrich the overall student experience.

Key Words: Service Quality, Student Satisfaction, Higher Education, SERVQUAL, Customer Satisfaction, Education Management

Introduction:

In today's rapidly transforming academic environment, higher education institutions (HEIs) are assessed not only on their academic excellence but also on the quality of services and facilities they offer to students. As the primary stakeholders and end-users of educational services, students now expect institutions to provide efficient, responsive, and student-centric support systems that cater to both their academic and personal development. Amidst increasing competition among HEIs, the provision of high-quality student services has emerged as a strategic imperative-critical for attracting, engaging, and retaining students, as well as for promoting their overall well-being and success. The assessment of service quality in higher education typically spans several dimensions, including instructional effectiveness, administrative responsiveness, campus infrastructure, digital accessibility, library and learning resources, and the general campus environment.

These services have a significant impact on students' perceptions of their institution, their educational experiences, and their overall satisfaction. A high level of student satisfaction is closely linked to greater engagement in learning, stronger institutional loyalty, and more favorable public perception-all of which are vital for the long-term success of higher education institutions. As educational institutions shift toward a more student-centered approach, it becomes essential to continuously evaluate and enhance the quality of services offered to students. Understanding the relationship between service quality and student satisfaction enables institutions to identify areas for improvement, align services more effectively with student needs, and enrich the overall student experience. The aim of this study is to assess the quality of services offered by higher education institutions and to analyze their impact on student satisfaction, with the goal of providing practical insights to enhance service delivery and administrative efficiency in an increasingly competitive and globalized academic environment.

Review of Literature:

Service quality has been extensively studied across various industries, with its application in the higher education sector receiving growing scholarly attention in recent years. One of the foundational frameworks in this area is the SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1988), which identifies five key dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. Expanding on this, Hill (1995) emphasized that students assess their university experience not solely on academic outcomes but also through their interactions with institutional support services. Further validating SERVQUAL in educational settings, Sultan and Wong (2013) found that responsiveness and assurance were particularly strong predictors of student satisfaction. Similarly, Athiyaman (1997) argued that student satisfaction significantly influences retention rates and overall institutional performance, thereby underlining the importance of maintaining high service quality standards within higher education institutions (HEIs).

In their study of student perceptions of service quality in a UK university's business and management faculty, Oldfield and Baron (2000) discovered that students highly valued the responsiveness and competence of teaching staff, demonstrating the

importance of interpersonal relationships in determining perceived service quality. Similarly, Cinkir, Yildiz, and Kurum (2022) investigated the relationship between the quality of perceived service and student commitment, finding a significant positive effect of perceived service quality on undergraduate students' commitment levels, implying that improving service quality can strengthen loyalty of learners to institutions.

Adhikari (2024) investigated the association between non-academic service quality parameters and student happiness at Nepal's Prithvi Narayan Campus. The study, which used descriptive and inferential statistics, discovered that while overall student happiness was higher than normal, non-academic factors, notably extracurricular activities, had a low positive connection with student satisfaction. Interestingly, only extracurricular activities had a substantial impact on satisfaction, highlighting the need of strengthening non-academic components to improve overall student experiences. These studies show that service quality, including both educational and non-academic characteristics, has a considerable impact on student happiness and loyalty at higher education institutions. The findings also show that dimensions such as responsiveness, faculty competence, infrastructure, and non-academic services have a significant impact on students' perceptions and experiences, emphasizing the importance of continuous monitoring and improvement of service delivery within HEIs to foster student satisfaction and institutional success.

Objectives of the Study:

To evaluate students' perceptions of service quality in higher education and examine its relationship with student satisfaction, with the aim of providing actionable recommendations for improving service delivery within higher education institutions (HEIs).

Research Methodology:

This study utilizes both primary and secondary data sources to ensure a comprehensive analysis. Primary data were gathered through a structured questionnaire administered to students enrolled in the MBA in Logistics and Shipping Management program at selected business schools. Secondary data were obtained from a wide range of credible sources, including peer-reviewed academic journals, magazines, books, newspapers, websites, online databases, and relevant blogs. The questionnaire was designed using a 5-point Likert scale, with response options ranging from "strongly agree" to "strongly disagree," to assess students' perceptions of service quality and their overall satisfaction with institutional services.

Data Analysis and Interpretation:

Correlations:

Table 1: Pearson correlation analysis between Service Quality and Student Satisfaction

		Service Quality	Student Satisfaction
Service Quality	Pearson correlation	1	.963**
	Sig.(2-tailed)		0.000
	N	50	50
Student Satisfaction	Pearson correlation	.963**	1
	Sig.(2-tailed)	0.000	
	N	50	50

** Correlation is significant at the 0.01 level (2-tailed)

The Pearson correlation study of Service Quality and Student Satisfaction reveals a very strong positive relationship with a coefficient of 0.963, which is significant at the 0.01 level ($p = 0.000$). This suggests that when perceived service quality improves, so does student satisfaction. The sample size (N) for this analysis is 50, which is adequate to consider this connection credible in the context of the study. Because the p-value is less than 0.01, the outcome is statistically noteworthy, indicating that the observed link is not coincidental. In conclusion, service quality has a large and powerful impact on student satisfaction at the researched institution. Improvements in quality of service are likely to increase student satisfaction.

Table 2: Student Satisfaction

Crosstabs						
Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	
	50	100.00%	0	0.0%	50	100.00%

The Case Processing Summary indicates that all 50 cases (respondents) are legitimate, with no missing cases (0%) for the factor Student Satisfaction. This implies that all respondents provided complete data on student satisfaction, confirming the data integrity and trustworthiness of the cross tabulation study. Thus, no data imputation or exclusion were required, and the analytic results can be confidently interpreted for the complete sample of 50 respondents.

Table 3: Service Quality * Student Satisfaction

Service Quality * Student Satisfaction Cross Tabulation					
	Student Satisfaction			Total	
		Regular	Occasional	Both	
Service Quality		15	0	0	15
Higher Education	%Within Quality	100.00%	0.00%	0.00%	100.00%
	%Within Satisfaction	68.20%	0.00%	0.00%	30.00%
Student Life and Support	%Within Quality	5	0	0	5
		100.00%	0.00%	0.00%	100.00%
	%Within Satisfaction	22.70%	0.00%	0.00%	10.00%
Teaching and Course Content	%Within Quality	2	16	0	18
		11.10%	88.90%	0.00%	100.00%

	%Within Satisfaction	9.10%	88.90%	0.00%	36.00%
Administrative Services	%Within Quality	0	2	10	12
		0.00%	16.70%	0.00%	100.00%
	%Within Satisfaction	0.00%	11.10%	100.00%	24.00%
Total	%Within Quality	22	18	10	50
		44.00%	36.00%	20.00%	100.00%
	%Within Satisfaction	100.00%	100.00%	100.00%	100.00%

The cross-tabulation looks at the association between Service Quality aspects and the satisfaction of students (Regular, Occasional, and Both). In Higher Education, all 15 respondents (100%) reported Standard satisfaction, making up 68.2% of the Regular satisfaction group, indicating great consistency. Similarly, all five respondents (100%) in the Student Affairs and Support reported frequent satisfaction, accounting for 22.7% of the group, reaffirming constant contentment. However, in Teaching and Course Content, just 2 (11.1%) of 18 respondents claimed regular pleasure, while 16 (88.9%) indicated occasional satisfaction, accounting for 88.9% of the Occasional group, indicating heterogeneity in perceived quality.

For Administrative Services, 2 (16.7%) of 12 respondents indicated Occasional satisfaction, while 10 (83.3%) reported Both, accounting for 100% of the Both group and suggesting mixed experiences. Overall, 44% of students expressed regular satisfaction, 36% occasional satisfaction, and 20% both, indicating that while the majority of students are frequently satisfied, a sizable proportion experience occasional or mixed pleasure depending on the service quality factor.

Table 4: Association between Service Quality and Student Satisfaction

Chi- Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi- Square	78.058 ^a	6	0
Likelihood Ratio	81.72	6	0
Liner - by- Linear Association	39.488	1	0
N of Valid cases	50		

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 1.00.

The p-value is less than 0.01, indicating a statistically significant relationship between the quality of service and Student Satisfaction. This suggests that variances in quality of service categories are linked to differences in satisfaction among learners within the institution.

Findings:

The analysis shows a strong positive association between quality of service and Student Satisfaction, substantiated by a very significant Pearson correlation value of 0.963 ($p < 0.01$). This suggests that improving service quality directly enhances student satisfaction. The dataset is full and dependable, with all 50 responses (100%) valid, allowing for strong and accurate findings. Examining service quality factors and satisfaction patterns, the higher education sector and Student Affairs and Support services earned 100% regular satisfaction, indicating persistent favorable experiences. However, Teaching and Course Content received 88.9% Occasional contentment, indicating heterogeneity in perceived quality, whilst Administrative Services scored 83.3% Mixed (Both) happiness, indicating variable student experiences.

Overall, 44% of students expressed regular happiness, 36% occasional satisfaction, and 20% both, indicating that, while the majority are continuously satisfied, a sizable proportion experience changing or mixed pleasure depending on the service dimension. The Chi-Square test ($\chi^2 = 78.058$, $df = 6$, $p < 0.01$) reveals a statistically significant relationship between service quality and satisfaction, highlighting the impact of different service categories on student satisfaction levels. These findings highlight the importance of focused adjustments, notably in Teaching/Course Content and administrative Services, to improve overall student satisfaction.

Suggestions:

To improve student satisfaction, the school should prioritize consistency with regard to instruction and course content, as 88.9% of students express only occasional satisfaction, by implementing regular feedback systems, faculty training, and curriculum revisions. Furthermore, Administrative Services requires improvement, as 83.3% of students report mixed satisfaction, requiring streamline procedures, improved communication, and stronger support mechanisms to reduce variability. Meanwhile, the school should build on its strengths in higher learning and Student Affairs & Support services, which consistently obtain 100% satisfaction, by maintaining present high standards. Finally, periodic evaluations of satisfaction should be used to track progress, evaluate the impact of enhancements, and assure ongoing improvement across all service excellence aspects.

Conclusion:

The study shows that quality of service has a considerable and powerful impact on student satisfaction at the analyzed institution. Improvement in service quality are likely to lead to greater levels of student satisfaction, emphasizing the importance of continuous quality improvement across all service dimensions. While Higher Education and Student Life and Support have consistently high levels of satisfaction, specific interventions in Teaching, Course Content, and Administrative Services are required to improve consistency and reduce variability in students' experiences. Overall, maintaining and enhancing the quality of service will directly contribute to increased student satisfaction, in line with the institution's objective to provide quality higher education as well as assistance services.

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