



Assessing the Impact of SERVQUAL Dimensions on Student's Satisfaction: An Empirical Study

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Abstract

As higher education becomes increasingly market-oriented, students are now perceived as primary stakeholders and customers of educational services. Consequently, understanding and enhancing student satisfaction has become a vital component of institutional success and sustainability. Student satisfaction reflects how effectively an institution meets or exceeds students' expectations in terms of academic, administrative, and support services, which collectively define the perceived quality of education. This research paper aims to assess the impact of SERVQUAL Dimensions on student's satisfaction. The present study is descriptive and analytical in nature. Multi stage sampling technique was adopted for selecting higher education institutions in Punjab. Six districts from three regions of Punjab were selected on basis of highest literacy rate. From Malwa region, districts Mohali and Ludhiana, from Majha region, districts Pathankot and Amritsar, from Doaba region districts Jalandhar and Hoshiarpur are selected for having highest literacy rate in respective regions. The study targeted only those students who are in the final year students of undergraduate and postgraduate courses of higher education institutions of in the selected districts. For selection of sample of students purposive or judgmental sampling is adopted. Sample size for the study is 600 students. For hypothesis testing ANOVA & Multiple Regression is applied. The study concluded that perceived service quality of the students has significant relationship with student satisfaction and suggested that institutions should establish a continuous quality improvement system by conducting regular SERVQUAL-based surveys to monitor gaps between student expectations and perceptions.

Keywords: [SERVQUAL Dimensions, Students, Satisfaction, Higher Education Institutions]

I. Introduction

In today's knowledge-driven global economy, higher education institutions (HEIs) play a pivotal role in shaping the intellectual capital and socio-economic development of a nation. The quality of education provided by universities and colleges not only determines the competency of graduates but also contributes to the country's overall competitiveness. As higher education becomes increasingly market-oriented, students are now perceived as primary stakeholders and customers of educational services. Consequently, understanding and enhancing student satisfaction has become a vital component of institutional success and sustainability. Student satisfaction reflects how effectively an institution meets or exceeds students' expectations in terms of academic, administrative, and support services, which collectively define the perceived quality of education.

Service quality has emerged as a crucial determinant of student satisfaction in the higher education sector. The SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1988), provides a comprehensive framework for evaluating service quality by examining the gap between customers' expectations and their perceptions of the actual service received. This model identifies five core dimensions of service quality—tangibility, reliability, responsiveness, assurance, and empathy—that collectively influence customers' overall satisfaction and loyalty. Applying the SERVQUAL model in the higher education context enables institutions to assess their performance across multiple service areas and to identify specific attributes that contribute to or detract from students' satisfaction levels.

Each SERVQUAL dimension offers a unique perspective on how service quality is perceived by students. *Tangibility* reflects the appearance and adequacy of physical facilities, equipment, and staff presentation. *Reliability* pertains to the consistency and accuracy with which promised services are delivered. *Responsiveness* captures the willingness and promptness of staff and faculty in assisting students. *Assurance* encompasses the competence, courtesy, and credibility of institutional personnel that build trust and confidence among students.

Lastly, *empathy* represents the degree of personalized attention and care provided to students. Together, these dimensions form the foundation for evaluating the service quality experience in higher education.

Given the increasing competition among HEIs to attract and retain students, it is essential to examine how these SERVQUAL dimensions influence student satisfaction. Understanding these relationships can help administrators and policymakers identify areas of strength and improvement to enhance institutional performance and reputation. Therefore, this study aims to assess the impact of the five SERVQUAL dimensions—tangibility, reliability, responsiveness, assurance, and empathy—on student satisfaction in higher education institutions. The findings are expected to provide valuable insights for improving service quality strategies and ensuring a more student-centered approach to higher education management.

Objective of the Study

To study the impact of SERVQUAL service quality dimensions on student's satisfaction

Hypothesis of the Study

H₀₁: There would be no significant impact of student's perceived service quality on student satisfaction

Research Methodology

The research methodology under the present study is summarized below:

Universe of the Study

The universe of the study is confined to the final year students of undergraduate and postgraduate courses of higher education institutions of Punjab.

Research Design

The present study is descriptive and analytical in nature

Collection of Data

a) Primary Data: To collect primary data, the study employed survey method because data is collected from large number of respondents. The research instruments used for the collection of data self-structured questionnaire. Questionnaire consisted of open as well as close ended questions. Google forms were circulated among the students of higher education institutions in Punjab

b) Secondary Data: The present study make use of secondary data collected from various electronic and non-electronic publications of governmental and non-governmental organizations. National and International journals related to education and higher education were referred to, local and international newspapers were also referred.

Sample Design

Sampling Technique

Multi stage sampling technique was adopted for selecting higher education institutions in Punjab. Punjab is divided into three regions- Malwa, Majha, Doaba. 2 districts from each of region selected on the basis of highest literacy rate in the region as per www.punjabdata.com From Malwa region, districts Mohali (83.8) and Ludhiana (82.2), from Majha region, districts Pathankot (84.6) and Amritsar (76.3), from Doaba region districts Jalandhar (82.5) and Hoshiarpur (84.6) are selected for having highest literacy rate in respective regions. The study targeted only those students who are in the final year students of undergraduate and postgraduate courses of higher education institutions of in the selected districts. For selection of sample of students purposive or judgemental sampling was adopted.

Sample Size

Cost and time constraints are important factors for deciding the size of sample. At the same time accuracy of results is very important. To meet the requirements of objectives, a sample of 600 students was considered.

Sample Size Determination of Students

This sample size can be justified by following two arguments.

First, following formula can be used to determine sample size (Nargundakar, 2003).

$$N = \frac{(z)^2 p (1 - p)}{d^2}$$

Where,

n = Sample Size

Z = Z value from the standard normal distribution for the confidence level desired by the researcher. (for a level of confidence of 95%, z = 1.96, for a level of confidence of 99%, z = 2.575)

For this study, we assumed 95 percent confidence level. Then, from the standard distribution table, the Z value is 1.96.

p = estimated proportion of the population that presents the characteristic (when unknown we use p = 0.5).

e = Tolerable error. (This can be decided by the researcher. For this study we assumed tolerable error 0.05.

Using above formula, whatever be the value of p, the sample size comes to be 385. This implies that the sample size of 600 is more than enough to estimate the population proportions with 95 percent confidence level and allowing tolerable limit of 0.05.

Second, as this research used multivariate techniques to test the proposed hypotheses, a sample size of 600 respondents is most appropriate for this study.

Statistical Tools and Techniques

For hypothesis testing, ANOVA and multiple regression is applied.

II. Results & Discussions

Table 1: Relationship between Students' Perceived Service Quality and Student Satisfaction

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
18	.759	0.636	0.619	0.18729

Source: Researcher's Calculations

Predictors: (Constant) PAS, CLF, PFBI, CLS, SSR, CBIF, EFAS, QASR, PARI, FKF, SSC, MTE, AQE, MPAS, ASRN, AFOH, TOCC, CMS

- PAS= Personal Attention to Students
- CLF=Classroom and Lecture Hall
- PFBI= Promises such as placements, scholarships etc. fulfilled
- CLS= Classes and Lectures as per Schedule
- SSR= Staff Student Relationship
- CBIF= Campus Buildings & Infrastructure
- EFAS= Error Free Administrative Services
- QASR= Quick Academic & Administrative Staff Response
- PARI= Prompt Attention to Requests and Issues
- FKF= Faculty Knowledge in their Fields
- SSC= Safe and Secure Campus
- MTE= Modern Technological Equipment
- AQE= Ability to Provide Quality Education
- MPAS= Managing Personal and Academic Issues of Students
- FASRN= Flexibility to Accommodate Special Requests and Needs
- AFOH= Availability of Faculty during Office Hours
- CTQC= Consistent Teaching Quality throughout the Courses
- CMS= Counselling and Mentoring Services

As per table 1 null hypothesis H_{01} : There would be no significant relationship between students' perceived service quality and student satisfaction is rejected and alternative hypothesis is accepted. It implies that perceived service quality has significant relationship with student satisfaction.

Table 2: Statistical Significance of the Model Establishing Relationship between Service Quality Factors and Student Satisfaction

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	15.734	18	0.874	58.27	0.000*
Residual	8.833	581	0.015		
Total	24.567	599			

Source: Researcher's Calculations

*p value < .05 (significant at 5 % confidence level)

Table 2 shows statistical significance of the model that is formulated on the basis of students' perceived service quality across several service quality factors and overall student satisfaction.

Table 3: Relative Importance of the Service Quality Factors that impact Satisfaction

Variables in the Model	Beta Value	T	Sig.
PAS	0.241	4.02	0.000*

CLF	0.267	6.96	0.000*
PFBI	0.219	7.11	0.000*
CLS	0.272	5.32	0.000*
SSR	0.176	3.99	0.000
CBIF	0.196	4.28	0.000*
EFAS	0.217	4.82	0.000*
QASR	0.126	2.96	0.008*
PARI	0.154	3.55	0.000*
FKF	0.123	2.79	0.004*
SSC	0.149	3.63	0.000*
MTE	0.152	3.71	0.000*
AQE	0.121	2.96	0.008*
MPAS	0.125	2.58	0.005*
FASRN	0.088	2.23	0.034*
AFOH	0.111	2.69	0.007*
CTQC	0.124	2.85	0.004*
CMS	0.089	2.13	0.024*

Source: Researcher's Calculations

*P value < .05 (significant 5 % confidence level)

On the basis of beta values table 3 shows the relative importance of the service quality factors that have significant impact on overall student satisfaction.

Table 4: Service Quality Factors having no Significant Impact on Student Satisfaction

Variables in the Model	Beta Value	T	Sig.
LLF	.065	1.56	0.12*
SEFA	.082	1.94	0.063*
HSCG	.034	0.82	0.416*
ATI	.079	1.77	0.079*
RFSS	.070	1.68	0.094*
AIF	.085	1.96	0.067
USNC	.072	1.70	0.096

Source: Researcher's Calculations

*p value > .05 (not significant at 5% confidence level)

LLF=Library Laboratory Facility

SEFA= Staff & Faculty Professional Appearance

HSCG= Handling Students Complaints & Grievances

ATI= Accurate and Timely Information

RFSS= Response to Feedback and Suggestion of Students

AIF= Academic Integrity and Fairness

USNC= Understanding Specific Needs and Challenges

Table 4 shows the variables that are not included in model, as they are statistically not significant on student satisfaction.

III. Conclusions & Suggestions

The study concluded that perceived service quality of the students has significant relationship with student satisfaction. The factors of service quality like personal attention to students, classroom and lecture hall, promises such as placements, scholarships etc. fulfilled, classes and lectures as per schedule, staff student relationship, campus buildings & infrastructure, error free administrative services, quick academic & administrative staff response, prompt attention to requests and issues, faculty knowledge in their fields, safe and secure campus, modern technological equipment, ability to provide quality education, managing personal and academic issues of students, flexibility to accommodate special requests and needs, availability of faculty during office hours, consistent teaching quality throughout the courses and counselling and mentoring services.

Finally, institutions should establish a continuous quality improvement system by conducting regular SERVQUAL-based surveys to monitor gaps between student expectations and perceptions. Student feedback should be actively incorporated into policy and service design to ensure that improvements are data-driven and student-focused. By aligning institutional practices with the SERVQUAL dimensions, higher education institutions can build stronger relationships with students, enhance satisfaction levels, and maintain a competitive advantage in the rapidly evolving education sector.

References

[1]. Adinegara, G.N.J., & Putra, P.S.E. (2016). Assessment of Service Quality in Higher Education: Case Study in Private University, *International Journal of Business and Management Invention*, 5(9):82-88. ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X www.ijbmi.org

- [2]. Agarwal, P., Verma, A., & Malhotra, S.K. (2021). An Analysis on Perceived Service Quality and Students' Satisfaction of E-Learning during Covid-19 in Higher Education Institution, *The Online Journal of Distance Education and e-Learning*, Vol. 9, Issue. 3
- [3]. Alemu, A. (2023). Assessing service quality in tertiary Education using adapted SERVQUAL scale, *Cogent Education*, 10:2, 2259733, DOI: 10.1080/2331186X.2023.2259733
- [4]. Asad Ilyas, A., Nasir, H., Hussain, F., Malik, M.R., Munir, S., & Sarwar, Z. (2013). Evaluating Business Schools Service Quality Using SERVQUAL Model, *Journal of Basic and Applied Scientific Research*, 3(5):710-716
- [5]. Borishade, T.T., Ogunnaike, O.O., Salau, O., Motilewa, B.D., & Dirisu, J.I. (2021). Assessing the relationship among service quality, student satisfaction and loyalty: the NIGERIAN higher education experience, *Heliyon* 7 (2021) e07590
- [6]. Kobero, W., & Swallehe, O. (2022). The Effects of Service Quality on Customer Satisfaction in Higher Learning Institutions in Tanzania, *Open Journal of Business and Management*, 10, 1373-1391. <https://doi.org/10.4236/ojbm.2022.103074>
- [7]. Cherian, M., & Mathew, B. (2020). Service Quality in Higher Education Institutions for Better Marketability-A SERVQUAL Analysis in Karnataka, *International Journal of Management(IJM)*, 11(5): 2421-2433. Article ID: IJM_11_05_245 Available online at <https://iaeme.com/Home/issue/IJM?Volume=11&Issue=5> ISSN Print: 0976-6502 and ISSN Online: 0976-6510
- [8]. Dugenio-Nadela, C., Cañeda, D. M., Tirol, S. L., Samillano, J.H., Pantuan, D. J. M., Piañar, J. C., Tinapay, A. O., Casas, H. M. S., Cometa, R. A., Conson, S. O., Urot, M. V., Ancot, J. M., Nadela, R. L., Dugenio-Terol, I., Baluyot, A. M., Pevida, K., Olivar, J. I., & Decena, E. (2023). Service Quality and Student's Satisfaction in Higher Education Institution, *Journal of Human Resource and Sustainability Studies*, 11, 858 870. <https://doi.org/10.4236/jhrss.2023.114049>
- [9]. Goumair, O., Aoula, E.S., & Souda, S.B. (2020). Application of the SERVQUAL Model for the Evaluation of the Service Quality in Moroccan Higher Education: Public Engineering School as a Case Study, *International Journal of Higher Education*, 9(5). <http://ijhe.sciedupress.com/doi:10.5430/ijhe.v9n5p223> URL: <https://doi.org/10.5430/ijhe.v9n5p223>
- [10]. Hajdari, S. (2019). Measuring Service Quality in Higher Education Using SERVQUAL Model: Evidence from An Albanian Public Faculty, *International Journal of Economics, Commerce and Management*, VII(8). <http://ijecm.co.uk/>
- [11]. Hoque, U.S., Akhter, N., Absar, N., Khandaker, M.U., & Mamun, AI. (2023). Assessing Service Quality Using SERVQUAL Model: An Empirical Study on Some Private Universities in Bangladesh, *Trends High. Educ.*, 2, 255–269. <https://doi.org/10.3390/higheredu2010013> <https://www.mdpi.com/journal/higheredu>
- [12]. Kanakana, M.G. (2014). *Assessing Service Quality in Higher Education using the SERVQUAL Tool*, Proceedings of the 2014 International Conference on Industrial Engineering and Operations Management, Bali, Indonesia, January 7 – 9, 2014
- [13]. Khan, S.K., Siddiqui, T.A., Rais, M. (2021). Assessing The Relationship among Service Quality Dimensions in Higher Education Institution and Student Satisfaction by Applying The SERVQUAL Model, *PJER*, Vol 4, Issue 4.
- [14]. Khattab, F. (2018). Developing a Service Quality Model for Private Higher Education Institutions in Lebanon, *Journal of Management and Marketing Review*, 3(1):24-33
- [15]. Magasi, C., Mashene, R.G., & Dengenesa, D.M. (2022). Service Quality and Students' Satisfaction in Tanzania's Higher Education: A Re-examination of SERVQUAL Model, *International Review of Management and Marketing*, 12(3):18-25 DOI: <https://doi.org/10.32479/irmm.13040>. available at <http://www.econjournals.com>
- [16]. Malik, M. E., Danish, R.Q., & Usman, A. (2011). The Impact of Service Quality on Students' Satisfaction in Higher Education Institutes of Punjab, *Journal of Management Research*, 200X, Vol. 2, No. 2: E10. ISSN 1941-899X
- [17]. Mondal, A.S. (2015). Perceived Service Quality and Its Impact on Students' Satisfaction with reference to Management Education in Kolkata, Doctor of Philosophy thesis submitted to Department of Business Administration, The University of Burdwan.
- [18]. Otaibi, S.A.A., Yusof, S.M., & Ismail, W.K.W. (2020). Service Quality and Student Satisfaction in Higher Education Institutions in Saudi Arabia, *International Journal of Management*, 11(7):648-665. <http://iaeme.com/Home/issue/IJM?Volume=11&Issue=7>
- [19]. Raju, M.S., & Bhaskar, N.U. (2017). Service Quality in Higher Education: A Review and Conceptual Model, *International Journal of Science Technology and Management*, 6(2)
- [20]. Rolo, A., Rui Alves, R., Saraiva, M., & Leandro, G. (2023). *The SERVQUAL instrument to measure service quality in higher education – A case study*, SHS Web of Conferences 160, 01011 (2023) <https://doi.org/10.1051/shsconf/202316001011> IES2022
- [21]. Schijns, J.M.C. (2021). Measuring service quality at an online university: using PLS-SEM with archival data, *Tertiary Education and Management*, 27:161–185
- [22]. Saleem, M., Hussain Ch., A., & Ahmad, S. (2017). Identification of Gaps in Service Quality in Higher Education, *Bulletin of Education and Research*, 39(2):171-182
- [23]. Shafiq, M., Lasrado, F., & Islam, A. (2018). Service Quality Scale Development for Higher Education Institutions: The Asian Context, *Journal of Quality and Technology Management*, XV(1) : 37 – 55
- [24]. Thapa, M. (2022). Impact of Service Quality on Student Satisfaction: A Case Study of Public Sector Higher Secondary Institution, *THE BATUK: A Peer Reviewed Journal of Interdisciplinary Studies*, 8(1):1-15. ISSN 2392-4802
- [25]. Vetri Selvi. M. V., & Ponniah, V.M. (2019). Student Satisfaction: on Service Quality (SERVQUAL) in Indian Management Education: Empirical Evidence from the State of Sikkim, India, *International Journal of Research in Business Studies*, 4(2). ISSN: 2455-2992
- [26]. Wider, W., Tan, F.P., Tan, Y.P., Lin, J., Fauzi, M.A., Wong, L.S., Tanucan, J.C.M., & Hossain, S.F.A. (2024). Service quality (SERVQUAL) model in private higher education institutions: A bibliometric analysis of past, present, and future prospects, *Social Sciences & Humanities Open* 9, 100805
- [27]. Yousapronpaiboon, K. (2014) SERVQUAL: Measuring higher education service quality in Thailand, *Procedia - Social and Behavioral Sciences*, 116,1088 – 1095