# Systematic Literature Review of Academic Service Quality in Higher Education

Muhammad Syahril Harahap<sup>1</sup>, Sri Milfayetti<sup>2</sup>, Mariani<sup>3</sup>

{ muhammadsyahrilharahap@gmail.com }

Universitas Negeri Medan

**Abstract.** This study looked at popular service quality models that researchers have occasionally developed. The primary focus of this study was higher education service quality, which also analyzed research papers and articles that aimed to explore this problem. This article presents a comprehensive systematic literature review on academic service quality in higher education, exploring key dimensions, methodologies, findings, and future research directions. This work discusses the interpreters of service quality in this way, which will aid future research. Additionally, it will assist policymakers in researching service quality and creating successful marketing plans.

Keywords: Service quality, Higher education, Service quality dimensions, Review.

## **1** Introduction

The standard of academic services has a significant impact on how students experience and succeed in the ever-changing world of higher education. Academic service quality encompasses a wide range of support services provided by institutions, including administrative support, library resources, information technology infrastructure, student counseling, and extracurricular activities. These services are integral to the overall student experience, influencing satisfaction, engagement, and academic performance.

The increasing emphasis on student-centered education has heightened the need for institutions to understand and improve the quality of their academic services. As students become more diverse and their expectations evolve, higher education institutions must continuously assess and enhance their service offerings to meet these changing needs. This necessitates a comprehensive understanding of the various dimensions of academic service quality and their impact on student outcomes.

This review of the literature on academic service quality in higher education aims to synthesize existing research, identify key dimensions of service quality, look at methodologies used in previous studies, and examine the impact of academic services on student satisfaction and performance. By analyzing the current state of research, the review seeks to highlight gaps in the literature and suggest ways to improve research. Therefore ultimately aiding in the

enhancement of academic services provided by institutes of higher education. The success and contentment of students in higher education institutions are directly correlated with the level of academic services provided. These services include student counseling, IT infrastructure, library resources, administrative assistance, and extracurricular activities. A systematic understanding of academic service quality can provide insights into how these services impact student experiences and outcomes. This article presents a comprehensive systematic literature review on academic service quality in higher education, exploring key dimensions, methodologies, findings, and future research directions. In the dynamic landscape of higher education, the quality of academic service quality encompasses a wide range of support services provided by institutions, including administrative support, library resources, information technology infrastructure, student counseling, and extracurricular activities. These services are integral to the overall student experience, influencing satisfaction, engagement, and academic performance.

The increasing emphasis on student-centered education has heightened the need for institutions to understand and improve the quality of their academic services. As students become more diverse and their expectations evolve, higher education institutions must continuously assess and enhance their service offerings to meet these changing needs [1]. This necessitates a comprehensive understanding of the various dimensions of academic service quality and their impact on student outcomes.

This article presents a systematic literature review of academic service quality in higher education. The review aims to synthesize existing research, identify key dimensions of service quality, explore methodologies used in previous studies, and examine the impact of academic services on student satisfaction and performance. By providing a detailed analysis of the current state of research, this review seeks to highlight gaps in the literature and suggest directions for future research, ultimately contributing to the improvement of academic services in higher education institutions. The quality of academic services in higher education institutions is paramount to the success and satisfaction of students [2], [3]. These services encompass administrative support, library resources, IT infrastructure, student counseling, and extracurricular activities. A systematic understanding of academic service quality can provide insights into how these services impact student experiences and outcomes. This article presents a comprehensive systematic literature review on academic service quality in higher education, exploring key dimensions, methodologies, findings, and future research directions.

## 2 Methodology

The systematic literature review was conducted using a structured approach, including the following steps:

- 1. Research Questions: The primary research questions aimed to identify the dimensions of academic service quality, analyze the methodologies used in existing studies, and examine the impact of these services on student outcomes.
- 2. Search Strategy: Databases such as Google Scholar, JSTOR, and PubMed were searched using keywords like "academic service quality," "student satisfaction," "higher education services," and "academic support in higher education."

- 3. Inclusion and Exclusion Criteria: Studies were included if they were peer-reviewed, published between 2020 and 2023, and focused on academic service quality in higher education institutions. Articles not in English, conference proceedings, and those with insufficient data were excluded.
- 4. Data Extraction and Synthesis: Data were extracted from selected studies, including study objectives, methodologies, key findings, and conclusions. A thematic analysis was conducted to identify common themes and research gaps.

No.	Year	Author	Implemented model	Dimension
1.	2020	Zaki	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy
2.	2020	J. Abbas et al.	The HEISQUAL	teachers' profile, curriculum, infrastructure, management, employment quality, safety, and students' skills development.
3.	2020	Shahira El Alfy et al.	SERVQUAL	academic services, facilities, administrative services, and students' service role,
4.	2020	S. F. Padlee et al.	An Importance- Performance Analysis	teaching, research, and internationalization that fall short of expectations.
5.	2020	Jaza Hama Tofiq Bawais et al	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy
6.	2020	Nur Asnawi et al.	The i-HESQUAL	teaching capability and competence of academic staff (TCC), reliability of service (ROS), reputation of university (REP), responsiveness of employees (RES), empathy of employees (EMP), internalization of Islamic values (IIV) and library service support (LSS).
7.	2020	Md.Jahangir Alam et al.	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy
8.	2020	Siti Rapidah Omar Ali et al.	HEDPERF	Academic service, non academic service, management
9.	2021	Firdaus et al	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy

Table 1. article published between 2020 and 2023 about Academic Service Quality

No.	Year	Author	Implemented model	Dimension
10.	2021	prahesti et all	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy
11.	2022	María Begoña Peña-Lang et al.	SERVQUAL	empathy, reliability, responsiveness, and assurance/confidence
12.	2022	Nurvia Juni Pratiwi et al.	SERVQUAL	Responsiveness, reliability, empathy, assurance, tangible, system quality and quality of information.
13.	2022	Usama Kalim et al.	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy
14.	2023	R. Rahmawati et al.	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy
15.	2023	Esen Gürbüz et al.	An Importance- Performance Analysis	teaching, research, and internationalization that fall short of expectations.
16.	2023	Alejandro Valencia-Arias et al.	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy
17.	2023	Yidana P. et al.	SERVQUAL	tangibility, reliability, responsiveness, assurance and empathy with rich and poor category

# **3. Results and Discussion**

In this section, it is explained the results of research and at the same time is given the comprehensive discussion. Results can be presented in figures, graphs, tables and others that make the reader understand easily [4], [5]. The discussion can be made in several sub-sections.

## **Key Findings**

## **Academic Service Quality**

Academic service quality in higher education is a critical factor influencing student satisfaction, loyalty, and overall educational outcomes. Various studies have explored different dimensions and determinants of service quality, aiming to develop effective measurement tools and identify



key areas for improvement. According to article search 2020 to 2023, the following data can be produced :

Fig. 1. Model of Academic Service Quality from 2020 until 2023

#### **Measurement Models and Dimensions:**

The SERVQUAL model is used to measure service quality from the perspective of students, focusing on both academic and administrative aspects is the most used model. Dependability is crucial for academic satisfaction, while good communication is key for administrative satisfaction. [6]. The HEdPERF model identifies six dimensions of service quality: non-academic aspects, academic aspects, reputation, access, program issues, and understanding. Access, which includes approachability and convenience, is particularly important for overall service quality perception [7]. Among the SERVQUAL dimensions, assurance often receives the highest satisfaction scores from students, indicating its critical role in perceived service quality [8]. Recently, modified models have also begun to be used frequently to adapt to the situation and conditions of self higher education institutions.

#### Impact on Student Satisfaction and Loyalty:

Academic service quality, including information quality, teaching quality, and service efficiency, significantly impacts student satisfaction. Satisfied students are more likely to recommend their institution to others, enhancing word-of-mouth promotion[9]. Quality of inputs, processes, and outputs in academic services is essential for improving student and user satisfaction, supporting overall education management activities [10], [11].

#### Service Quality and Academic Achievement:

Service quality dimensions such as empathy, reliability, responsiveness, and assurance contribute to students' academic achievement. However, tangible elements do not significantly affect academic outcomes [12]. Both academic and service quality are significantly related to student satisfaction. Institutions should reinvest in resources and skills to meet student needs and improve their reputation [13]. Empathy, Reliability, Responsiveness, and Assurance: These dimensions are found to contribute positively to students' academic achievement, highlighting

the importance of these service quality aspects in supporting educational outcomes [2], [12], [14].

#### **Challenges and Areas for Improvement:**

Inconsistencies in academic service processes negatively affect the perceived quality of higher education. Institutions need to provide more consistent, flexible, and proper service paths to meet student needs [15]. Poor delivery of academic services can adversely affect students' learning outcomes, highlighting the need for better academic service quality in certain regions [16], [17]

### Factors Influencing Satisfaction and Loyalty:

Improving the quality of academic services can enhance student satisfaction, which in turn can increase student loyalty indirectly. Direct improvements in service quality are essential for maintaining high levels of student satisfaction and loyalty [17], [18].

#### Methodologies

Various methodologies were used in studies on academic service quality, including:

- 1. Surveys and Questionnaires: Commonly used to collect quantitative data on student perceptions and satisfaction [2], [8], [19]–[21].
- 2. Interviews and Focus Groups: Qualitative methods used to gain deeper insights into student experiences and expectations [2], [22]–[24].
- 3. Case Studies: In-depth examinations of specific institutions or programs to explore service quality in context [25], [26].
- 4. Quantitative Analysis: Statistical techniques to assess the relationship between service quality dimensions and student outcomes [3], [10].

#### **Impact on Student Outcomes**

The literature consistently shows that high academic service quality positively impacts:

- 1. Student Satisfaction: A direct correlation exists between high-quality services and overall student satisfaction.
- 2. Academic Performance: Improved academic support services are linked to better academic performance and retention rates.
- 3. Student Engagement: Enhanced services lead to greater student engagement in both academic and extracurricular activities.

#### **Gaps and Future Research Directions**

The literature consistently shows that high academic service quality positively impacts:

- 1. Student Satisfaction: A direct correlation exists between high-quality services and overall student satisfaction.
- 2. Academic Performance: Improved academic support services are linked to better academic performance and retention rates.

3. Student Engagement: Enhanced services lead to greater student engagement in both academic and extracurricular activities.

## 4. Conclusion

The experiences and success of students in higher education are heavily influenced by the quality of academic services. This systematic literature review highlights the importance of various service dimensions, the methodologies used in research, and the positive impact of high-quality services on student outcomes. Addressing the identified gaps through future research can provide deeper insights and help institutions enhance their service offerings, ultimately contributing to a better educational experience for students. Student satisfaction, loyalty, and academic achievement are greatly affected by the quality of academic services in higher education. SERVQUAL and HEdPERF are two useful measuring models that highlight the significance of both academic and non-academic components in identifying important aspects of service quality. Institutions must focus on improving service consistency, communication, and accessibility to enhance overall service quality and meet student expectations. By addressing these areas, higher education institutions can better support student success and maintain a strong reputation in the competitive global education market.

#### References

[1]E. Gürbüz and M. Bayraktar, "The assessment of service quality effect in higher education sector on satisfaction, suggestion, and behavioral intention of university students: The case of Turkey," *Tuning J. High. Educ.*, 2023, doi: 10.18543/tjhe.2403.

[2] R. Nazarian, M. Saber-Mahani, and M. Beheshtifar, "Role of Service Quality in Universities," *Innova Cienc.*, vol. 4, no. 6, pp. 3–9, 2012.

[3] Y. Ozdemir, S. K. Kaya, and E. Turhan, "A scale to measure sustainable campus services in higher education: 'Sustainable Service Quality," *J. Clean. Prod.*, vol. 245, 2020, doi: 10.1016/j.jclepro.2019.118839.

[4] F. Baier, A.-T. Decker, T. Voss, T. Kleickmann, U. Klusmann, and M. Kunter, "What makes a good teacher? The relative importance of mathematics teachers' cognitive ability, personality, knowledge, beliefs, and motivation for instructional quality," *Br. J. Educ. Psychol.*, vol. 89, no. 4, pp. 767–786, 2019, doi: 10.1111/bjep.12256.

[5] A. M. Flanagan, D. C. Cormier, and O. Bulut, "Achievement may be rooted in teacher expectations: examining the differential influences of ethnicity, years of teaching, and classroom behaviour," *Soc. Psychol. Educ.*, vol. 23, pp. 1429–1448, 2020, doi: 10.1007/s11218-020-09590-y.

[6] G. Soutar and M. Mcneil, "Measuring service quality in a tertiary institution," *J. Educ. Adm.*, vol. 34, pp. 72–82, 1996, doi: 10.1108/09578239610107174.

[7] F. Abdullah, "The development of HEdPERF: a new measuring instrument of service quality for the higher education sector," *Int. J. Consum. Stud.*, vol. 30, pp. 569–581, 2006, doi: 10.1111/J.1470-6431.2005.00480.X.

[8] R. Rahmawati, J. Permana, D. Nurdin, C. Triatna, and F. Fadhli, "Analysis of University Student Satisfaction Levels with the Learning Process on Five Dimensions of Service Quality (SERVQUAL)," *AL-ISHLAH J. Pendidik.*, 2023, doi: 10.35445/alishlah.v15i2.2355.

[9] R. Rasheed and A. Rashid, "Role of service quality factors in word of mouth through student satisfaction," *Kybernetes*, 2023, doi: 10.1108/k-01-2023-0119.

[10] K. (2020). Ali, S., Shariff, N., Said, N., & Mat, "The Effects of Service Quality Dimensions on Students' Satisfaction: HEDPERF Model Adoption," J. Intelek, vol. 15, no. 1, 2020, doi:

https://doi.org/10.24191/JI.V15I1.7371.

[11] M. A. Muzakki and Z. Tarigan, "The Analysis of the Effect of Academic Service Quality on Student Loyalty Through Student Satisfaction and Organizational Performance," *Int. J. Biol. Sci.*, vol. 3, pp. 47–53, 2020, doi: 10.9744/ijbs.3.1.47-53.

[12] M. B. Peña-Lang, J. Barrutia, and C. Echebarria, "Service quality and students' academic achievement," *Qual. Assur. Educ.*, 2022, doi: 10.1108/qae-02-2022-0039.

[13] H. A. Rusnipa, M. Hashim, and S. Sa'ad, "Effects of Academic Quality and Service Quality on University Students' Satisfaction," *Int. J. Serv. Manag. Sustain.*, 2021, doi: 10.24191/ijsms.v6i2.15578.
[14] I. Budiningsih, E. Lubis, and R. Armiati, "Improvement of University Educational Staffs Strategic Roles in Digital Era through Quality Academic Service," *Int. J. Asian Soc. Sci.*, vol. 10, pp. 426–433, 2020, doi: 10.18488/journal.1.2020.108.426.433.

[15] C. Sunaengsih, A. Komariah, D. Kurniady, M. Thahir, and B. Tamam, "Academic Service Quality Survey in Higher Education," *Proc. 4th Int. Conf. Res. Educ. Adm. Manag. (ICREAM 2020)*, 2021, doi: 10.2991/ASSEHR.K.210212.041.

[16] K. Sharif and N. M. Kassim, "Non-academic service quality: comparative analysis of students and faculty as users," *J. Mark. High. Educ.*, vol. 22, pp. 35–54, 2012, doi: 10.1080/08841241.2012.705793.

[17] Z. Z. Oliso and D. D. Alemu, "Investigating Academic Service Quality in Ethiopian Public Higher Education: Insights from Students' Perspectives," *Arab J. Qual. Assur. High. Educ.*, 2023, doi: 10.20428/ajqahe.v16i55.2145.

[18] A. Permana, M. H. Aima, E. Ariyanto, and A. Nurmahdi, "The Effect Of Academic Service Quality On Satisfaction And Loyalty Of Students University," vol. 4, pp. 230–241, 2020, doi: 10.31294/jeco.v4i2.7979.

[19] E. Manik and I. Sidharta, "The impact of academic service quality on student satisfaction," *Int. Conf. Accounting, Manag. Econ. Soc. Sci.*, vol. March, no. 80878, pp. 1–6, 2017.

[20] N. Nantapanuwat, A. Suriyo, L. Indee, and A. Numboonjit, "The Sustainability of Academic Service for Elders In The Community, Faculty of Liberal Arts, Thailand National Sports University, Chiang Mai Campus," *Nimit Mai Rev.*, vol. 4, no. 2, pp. 52–60, 2021.
[21] B. A. Maguad, "Identifying the needs of customers in higher education," *Education*, vol. 127,

[21] B. A. Maguad, "Identifying the needs of customers in higher education," *Education*, vol. 127, no. 3, pp. 332–343, 2006.

[22] N. Safitri, M. A. M. Prasetyo, and Z. Zulkhairi, "Strategi Peningkatan Layanan Akademik Berbasis Kinerja Karyawan di Fakultas Tarbiyah dan Ilmu Keguruan IAIN Lhokseumawe," *Idarah (Jurnal Pendidik. dan Kependidikan)*, vol. 3, no. 2, pp. 84–101, 2019, doi: 10.47766/idarah.v3i2.566.

[23] B. Williamson and J. Komljenovic, "Investing in imagined digital futures: the techno-financial 'futuring' of edtech investors in higher education," *Crit. Stud. Educ.*, vol. 64, no. 3, pp. 234–249, 2023, doi: 10.1080/17508487.2022.2081587.

[24] C. Pramana, D. Chamidah, S. Suyatno, F. Renadi, and S. Syaharuddin, "Strategies to Improved Education Quality in Indonesia: A Review," *Turkish Online J. Qual. Inq.*, vol. 12, no. 3, pp. 1977–1994, 2021, [Online]. Available: https://www.researchgate.net/publication/353299393

[25] A. Muhith, S. Mislikhah, E. Fatmawati, K. Umam, and M. Mu'allimin, "Total Quality Management and Its Impact on The Effectiveness of the Academic System in Higher Education," *AL-TANZIM J. Manaj. Pendidik. Islam*, vol. 6, no. 1, pp. 254–267, 2022, doi: 10.33650/al-tanzim.v6i1.3334.

[26] R. Ratna *et al.*, "Impact of Teacher's Leadership Style on Student's Academic Performance: a case of Business school," *Bhutan J. Res. Dev.*, vol. 11, no. 1, pp. 71–91, Jun. 2022

[27] Zaki, J. (2020). Integrating empathy and interpersonal emotion regulation. *Annual review of psychology*, 71(1), 517-540.

[28] Abbas, J., Zhang, Q., Hussain, I., Akram, S., Afaq, A., & Shad, M. A. (2020). Sustainable innovation in small medium enterprises: the impact of knowledge management on organizational innovation through a mediation analysis by using SEM approach. *Sustainability*, *12*(6), 2407.

[29] El Alfy, S., & Abukari, A. (2020). Revisiting perceived service quality in higher education: Uncovering service quality dimensions for postgraduate students. *Journal of* 

Marketing for Higher Education, 30(1), 1-25.

[30] Padlee, S. F., Reimers, V., Mokhlis, S., Anuar, M. M., & Ahmad, A. (2020). Keep up the good work in research universities: An importance-performance analysis. *Australasian marketing journal*, 28(2), 128-138.

[31] Bawais, J. H. T., Sagsan, M., & Ertugan, A. (2020). The impact of service quality on student and academic staff satisfaction within higher education institutions: A Case study of Sulaimani City in Northern Iraq. *Revista Argentina de Clínica Psicológica*, 29(5), 440.

[32] Asnawi, N., & Setyaningsih, N. D. (2020). Perceived service quality in Indonesian Islamic higher education context: A test of Islamic higher education service quality (i-HESQUAL) model. *Journal of International Education in Business*, *13*(1), 107-130.

[33] Afify, S. M., Sanchez Calle, A., Hassan, G., Kumon, K., Nawara, H. M., Zahra, M. H., ... & Seno, M. (2020). A novel model of liver cancer stem cells developed from induced pluripotent stem cells. *British Journal of Cancer*, *122*(9), 1378-1390.

[34] Omar Ali, S. R., Wan Marzuki, W. N. K., Mohd Said, N. S., Abdul Manaf, S. M., & Adenan, N. D. (2020). Perceived ease of use and trust towards intention to use online banking in Malaysia. *Jurnal Intelek*, *15*(1), 107-114.

[35] Firdaus, M. B., Habibie, D. S., Suandi, F., Anam, M. K., & Lathifah, L. (2021). Perancangan Game OTW SARJANA Menggunakan Metode Forward Chaining. *Jurnal Sistem Informasi dan Sistem Komputer*, 6(2), 66-74.

[36] Prahesti, R. T., Ruliana, P., & Subarsa, K. Y. (2021). Kualitas Pelayanan Akademik Terhadap Citra Perguruan Tinggi. *Ganaya: Jurnal Ilmu Sosial dan Humaniora*, 4(1), 234-244.

[37] Peña-Lang, M. B., Barrutia, J. M., & Echebarria, C. (2023). Service quality and students' academic achievement. *Quality Assurance in Education*, *31*(2), 247-262.

[38] Nurvia & Mellisa, M. (2022). Development of Reading, Questioning, and Answering (RQA)-Based Modules in Biology. *Journal Of Biology Education Research (JBER)*, 4(2), 77-81.

[39] Kalim, U., Tran, P. Q. B., Bibi, S., & Khamphouvong, L. (2022). Impact of Academic and Non-Academic Service Quality on International Students Satisfaction in Chinese Universities. *Journal of Education and Learning*, *11*(6), 86-95.

[40] Valencia-Arias, A., Cardona-Acevedo, S., Gómez-Molina, S., Gonzalez-Ruiz, J. D., & Valencia, J. (2023). Smart home adoption factors: A systematic literature review and research agenda. *Plos one*, *18*(10), e0292558.

[41] Alam, M. J. (2020). Capital misallocation: Cyclicality and sources. *Journal of Economic Dynamics and Control*, *112*, 103831.

[42] Yidana, P., Adabuga, J. A., Gariba, A., & Bawa, G. M. (2023). Evaluation of administrative support services for quality assurance in higher education: Empirical review. *Journal of Advanced Research and Multidisciplinary Studies*, *3*(1), 87-104.