



Measuring Service Quality In University Library Of Upes: A Servqual Analysis

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ABSTRACT

This study aims to evaluate the quality of services offered by the university libraries at UPES Dehradun. The SERVQUAL questionnaire was employed to gather responses on a five-point Likert scale, aimed at assessing both the expectations and perceptions of library users. The findings indicate that users perceive the quality of services offered by the university library as moderate, suggesting a level of dissatisfaction among them. The analyses yielded unfavorable gap scores. The results demonstrate that certain elements of service quality do not correspond with user expectations. Users hold specific expectations regarding the UPES Library; it ought to be focused on service and provide enhanced collections and services to effectively engage its users. The results showed that a majority of users in the UPES Library reported being satisfied with the assistance provided, the professionalism exhibited, the personalized attention received, their understanding of their needs, and the customized support linked to the empathy aspect of SERVQUAL. The results revealed the respondents expressed a high level of satisfaction regarding the elements linked to the responsiveness and assurance dimensions of SERVQUAL.

Key words: SERVQUAL; Service Quality, UPES; University Libraries

INTRODUCTION

Libraries serve as hubs of knowledge for education and research by offering access to information. The extensive adoption of Information and Communication Technology (ICT) has transformed the delivery of library resources and services. Currently, libraries are confronting a survival crisis due to competition from publishers, vendors, online services, and the internet. The fundamental objective of any organization is to ensure customer satisfaction. Historically, the evaluation of a library's quality relied heavily on the level of its collection and its overall size. As user demands and expectations evolve, this approach has become ineffective. Quality pertains to the effectiveness of a service, rather than its size or breadth (Nejati and Nejati, 2008). For many years, there has been a persistent challenge in showcasing the quality of services offered by librarians. Evaluating service quality represents a significant area of inquiry within Library and Information Science. Service quality refers to a service organization's capacity to deliver services that meet consumer expectations. This is a critical strategic concern in fields (Haneefa, Mohamed., Aswaani, 2017). Every library's existence depends mostly on quality services. Every single service that libraries offer should be constantly measured and evaluated. An institution may only be succeeded or sustained when it provides outstanding customer service. Libraries likewise do not have any exception. Measuring the quality of a service in numerical terms presents significant challenges. The measurement can be derived from users' perceptions of the services, with their expectations. Examining the gap between user expectations and perceptions helps one to evaluate the quality of a library service. If a positive gap exist, it is known as quality service; if a negative gap, one would believe that the service falls short of consumer expectations or lacks quality (Haneefa, Sajna and Sajna, 2014). University libraries currently encounter numerous challenges related to the underutilisation of resources. These issues stem from a variety of factors, including insufficient awareness, perceived irrelevance, time constraints, geographical distance, limited skills in navigating

electronic resources, reliance on personal collections or borrowing from peers, home internet access issues, slow connectivity, distracting study environments, inadequate collections, poorly managed information resources, unhelpful staff, and unfriendly environments (Das and Handique, 2020). Therefore, it is essential for university libraries to comprehend the needs of their users and address them effectively. This study evaluates the quality of library services by examining various key attributes in university libraries using the SERVQUAL dimensions. Faculty members, research scholars and UG/ PG students were the respondents of this study and analyze the gap between user expectations and perceptions (performance) regarding the quality of library services provided.

LITERATURE REVIEW:

Literature Review: Measuring Service Quality in University Libraries: A SERVQUAL Analysis

Introduction University libraries are fundamental to higher education, serving as crucial centers for teaching, learning, and research by providing access to quality information resources and services (Wiche, 2023; Twum *et al.*, 2022). In today's digital and competitive environment, these institutions are increasingly focused on improving their service quality to meet evolving user expectations (Javier *et al.*, 2015; Guo *et al.*, 2022). Historically, library quality was often measured by collection size and usage statistics, but this approach is now considered outdated; effective evaluation must be user-centric (Javier *et al.*, 2015; Sahu, 2007). The SERVQUAL model has emerged as a prominent instrument for assessing service quality from the customer's perspective (Sahu, 2007; Javier *et al.*, 2015).

Conceptualizing Service Quality in Academic Libraries Service quality in a library context is fundamentally defined as the difference between users' expectations and their perceptions of the service performance (Twum *et al.*, 2022; Sahu, 2007). It implies that "only customers judge quality," rendering other judgments largely irrelevant (Dash and Padhi, 2016; Javier *et al.*, 2015). The core aim of any library is to maximize user satisfaction and potentially surpass their expectations (Sahu, 2007). Quality, in essence, means the library's services and products "satisfy user's expectation" and contribute to "user's fulfillment" (Twum *et al.*, 2022; Mohindra and Kumar, 2015). This user-driven focus is paramount for a library's success and relevance (Dash and Padhi, 2016; Mohindra and Kumar, 2015).

The SERVQUAL Model: Dimensions and Application Developed by Parasuraman *et al.* (1985, 1988), SERVQUAL is a 22-item questionnaire that assesses service quality across five key dimensions: Tangibles, Reliability, Responsiveness, Assurance, and Empathy (Sahu, 2007; Emmanuel and Liu, 2021). These dimensions measure physical aspects, the ability to perform promised services accurately, willingness to help and provide prompt service, staff knowledge and ability to inspire trust, and the provision of caring and individualized attention, respectively (Sahu, 2007; Wang and Shieh, 2020). SERVQUAL has been widely adapted for various library settings, including academic institutions, to identify gaps between user expectations and perceptions (Emmanuel and Liu, 2021; Sajna and Mohamed Haneefa, 2021).

Studies applying SERVQUAL in university libraries highlight diverse findings. In India, a study at Jawaharlal Nehru University found overall service quality to be good but noted areas needing improvement in responsiveness and communication (Sahu, 2007; Sofiya and Devi, 2018). Research at the University of Colombo in Sri Lanka identified "Collection and Access" as the strongest predictor of service quality, with physical facilities being less significant (Somaratna and Peiris, 2011). Conversely, the Aga Khan University library in Kenya revealed significant negative gaps in reliability (staff accuracy), tangibles (facilities and equipment), empathy, and responsiveness, indicating that expectations often exceeded perceptions (Gathoni and Walt, 2016). Similarly, the Kerala University Library in India found that users' expectations were not fully met, particularly regarding individual attention and support from staff (Sofiya and Devi, 2018). Studies in academic libraries in developing countries frequently report negatively marked indicators and significant expectation-perception gaps, often due to issues like inadequate modern facilities and funding (Dash and Padhi, 2016) (Sajna and Mohamed Haneefa, 2021; Sofiya and Devi, 2018).

Challenges in Service Quality Delivery and Assessment Despite the clear importance of service quality, academic libraries face various challenges. Resource constraints, such as inadequate funding, unstable power supply, and slow internet speed, particularly in developing countries, impede the computerization and effective delivery of services (Wiche, 2023; Badda *et al.*, 2019). Additionally, a lack of communication can lead to users being unaware of available services (Sahu, 2007). The intangible nature of service quality also makes its consistent measurement complex (Gathoni and Walt, 2016). Addressing these challenges through continuous, user-based assessment is vital for libraries to remain relevant and effectively serve their communities (Gathoni and Walt, 2016).

Despite extensive SERVQUAL applications in academic libraries, a targeted analysis of *digital service quality* from user perspectives, especially in developing country contexts like UPES, is limited. Most studies broadly address traditional services or general ICT adoption challenges (Javier *et al.*, 2015).

OBJECTIVE OF THE STUDY:

The analysis offers valuable perspectives on user evaluations of the service quality within the UPES Library system. The primary aim of this study is

- To assess the comprehensive quality of services rendered by the UPES Library system with SERVQUAL.

- To analyse the gap between user expectations and perceptions (performance) regarding the quality of library services.

RESEARCH METHODOLOGY

The study aims to analyse user expectations and the performance of library service quality across SERVQUAL dimensions, such as tangibles, reliability, responsiveness, assurance, and empathy. This study employed a quantitative research strategy and was limited to the university library of UPES Dehradun. Survey questionnaires were administered on 5 dimensions of SERVQUAL with 25 items for data collection purpose. SERVQUAL is a survey tool designed to analyse the gap between library user expectations for quality and their perceptions/ performance of the service provided by the library.

Convenient sampling method was employed to achieve the study's objectives through a structured questionnaire. A 5-point Likert scale was employed to collect response from the library users showing level of agreement with the given statement. The survey questions use a scale showing "1" for "strongly disagree" and "5" for "strongly agree." SPSS and Microsoft Excel were used for the analysis of the data collected for this study. The respondents in the survey included faculty members, research scholars, and undergraduate and postgraduate students at the university.

DATA ANALYSIS AND INTERPRETATION

This study aims to evaluate the service quality offered by the University Library of UPES. The questionnaire comprises statements based on five dimensions: Tangibility, Reliability, Responsiveness, Assurance, and Empathy. The survey aims to collect information on the following aspects across five dimensions:

1. Tangibles: The library's physical appearance, equipment/furniture, communication material, staff.
2. Reliability: The Library's capability to delivered promised services reliably and accurately.
3. Responsiveness: The library staff eagerness to help users and offer quick service.
4. Assurance: Library Staff knowledge and courtesy along with their ability to convey trust & Confidence.
5. Empathy: The Library's personalized and caring attention to its user.

Library users possess a number of expectations which can serve as a basis for assessing the performance of a library. The quality of a library ought to be assessed from the perspective of its users, as they represent the fundamental element of the library's existence.

It is essential to engage users on a regular basis, ensuring their satisfaction remains a constant priority in order to foster a competitive system. This study involved respondents indicating their expectations regarding library services, with the responses detailed in the tables below.

Libraries must comprehend the informational needs and expectations of their patrons. Libraries must comprehend users' perceptions of the services offered by the institution. This understanding will assist libraries in enhancing the design and development of their information systems and services. The tables below illustrate users' perceptions regarding the performance of different services provided by the library, featuring 25 items that assess various dimensions of service quality.

The goal is to identify the discrepancy between the expectations and perceptions of users about the quality of library services. Conducting a gap analysis is essential. Gap analysis refers to the difference between users' expectations and their actual perceptions. This gap arises when there is a difference between customer expectations and perceptions. Consequently, to guarantee high quality, the libraries must match users' expectations or go beyond. Service quality is deemed satisfactory when perceptions meet or exceed expectations, and problematic when perceptions are below expectations. The formula $Q = P - E$ can be utilised for determination. Let Q represent perceived quality (Gap Score), while P and E denote the respective ratings of perceptions and expectations.

The tables below present the means for perception and expectation for each service quality dimension item, as well as the computed gap scores.

Table 1 Tangibles: The library's physical appearance, equipment/furniture, communication material, staff

Performance (Perception)	N	Mean	Expectation	N	Mean	Gap Score
Physical Facilities: The facilities at my university library are well-maintained and clean	226	4.30	Physical Facilities: The library facilities should be well-maintained and clean	226	4.59	-0.29
Library Collection: My library provides sufficient no of books, e-books, print/electronic journals, and databases	226	3.94	Library Collection: Library should have sufficient number of books, e-books, print/electronic journals, and	226	4.48	-0.54

			databases			
Modern Library Technologies: My library has adequate IT infrastructure (computers, Internet) and also equipped with modern technologies	226	4.10	Modern Library Technologies: The library should have adequate IT infrastructure (computers, Internet) and also equipped with modern technologies	226	4.46	-0.36
Communication Materials: The library's brochures, signage, and website at my university library convey information clearly and effectively	226	4.01	Communication Materials: The library's brochures, signage, and website should convey information clearly and effectively	226	4.32	-0.31
Comfort and Ambiance: My university library provides comfortable seating and easy accessibility for all users	226	4.01	Comfort and Ambiance: The library should provide comfortable seating and easy accessibility for all users	226	4.45	-0.44
Total		4.07	Total		4.46	-0.39

Table 1 shows a detailed breakdown of different statements created to evaluate what people expect and perceive about library facilities, library collection, library technologies, physical appearance, and communication material related to the tangible aspect of library service quality, including the mean value for perception and expectation for each item, along with the calculated gap scores.

Table 2 Reliability: The Library's capability to delivered promised services reliably and accurately.

Performance (Perception)	N	Mean	Expectation	N	Mean	Gap Score
Consistency of Service Delivery: My university library consistently provides the same high level of service during every visit	226	4.19	Consistency of Service Delivery: The library should consistently provide the same level of service during every visit	226	4.34	-0.15
Accuracy of Information: Information delivered by the staff at my university library is accurate and trustworthy	226	4.16	Accuracy of Information: Information delivered by library staff should consistently be accurate and trustworthy	226	4.42	-0.27
Dependability: My university library fulfills its promises and commitments to ensure trust and satisfaction	226	4.14	Dependability: The library should fulfill its promises and commitments to ensure user trust and satisfaction	226	4.35	-0.21
Error-Free Service: The services at my university library are delivered with a high degree of accuracy and free from errors	226	4.12	Error-Free Service: Library services should be delivered with a high degree of accuracy and free from errors	226	4.27	-0.15

Timeliness: My university library provides services promptly, as promised	226	4.19	Timeliness: The library should provide services promptly, as promised	226	4.35	-0.16
Total		4.16	Total		4.35	-0.19

Table 2 provides a clear overview of various statements used to assess what people expect and perceive about the consistency of service delivery, accuracy of information, dependability, error-free service, and timeliness in relation to the reliability of library service quality. It includes the Mean value for both perception and expectation for each item, as well as the calculated gap scores..

Table 3 Responsiveness: The library staff are eager to help users and offer quick service.

Performance (Perception)	N	Mean	Expectation	N	Mean	Gap Score
Willingness to Help: The staff at my university library are always willing to help me with my questions or concerns	226	4.29	Willingness to Help: Library staff should consistently demonstrate a willingness to assist users with their questions or concerns.	226	4.30	-0.01
Promptness of Service: My university library responds to requests in a timely and efficient manner	226	4.23	Promptness of Service: The library should respond to user assistance requests in a timely and efficient manner	226	4.26	-0.03
Availability of Assistance: There is always someone available to assist me whenever I need help at my university library	226	4.32	Availability of Assistance: Assistance should consistently be available at the library whenever required	226	4.25	0.07
Responsiveness to Requests: My university library effectively manage and respond to my specific requests and concerns	226	4.25	Responsiveness to Requests: The library should efficiently manage and respond to specific user requests and concerns	226	4.33	-0.08
Follow-Up: My university library follows up with me to ensure that my issues or requests are resolved satisfactorily	226	4.16	Follow-Up: The library should follow up with users to ensure that issues or requests are resolved satisfactorily.	226	4.22	-0.06
Total		4.25	Total		4.27	-0.02

Table 3 provides a clear overview of various statements used to assess what people expect and perceive in terms of willingness to help, promptness of service, availability of assistance, responsiveness to requests, and follow-up in relation to the responsiveness dimension of library service quality. It includes the mean value for both perception and expectation for each item, as well as the calculated gap scores.

Table 4 Assurance: Library Staff knowledge and courtesy along with their ability to convey trust & Confidence.

Performance (Perception)	N	Mean	Expectation	N	Mean	Gap Score
Staff Knowledge: The staff at my university library have the necessary knowledge to respond to my	226	4.19	Staff Knowledge: Library staff should possess adequate knowledge to respond to user	226	4.32	-0.12

inquiries with accuracy and confidence			inquiries with accuracy and confidence			
Staff Courtesy: The staff at my university library are polite and respectful in their interactions with me	226	4.32	Staff Courtesy: Library staff should demonstrate politeness and respect in all interactions with users	226	4.36	-0.04
Trustworthiness: I feel confident in the reliability and honesty of the staff at my university library	226	4.24	Trustworthiness: Library users should have confidence in the reliability and integrity of the staff	226	4.36	-0.12
Professionalism: The staff at my university library demonstrate a high level of professionalism in their conduct	226	4.34	Professionalism: Library staff are expected to exhibit a high standard of professionalism in all aspects of their conduct	226	4.32	0.02
Effective Communication: The staff at my university library communicate clearly and effectively when providing assistance	226	4.19	Effective Communication: Library staff should ensure clear and effective communication when assisting users	226	4.39	-0.19
Total		4.26	Total		4.35	-0.09

Table 4 provides a clear overview of various statements used to assess what people expect and perceive in terms of staff knowledge, staff courtesy, trustworthiness, professionalism, and effective communication in relation to the assurance dimension of library service quality. It includes the mean value for both perception and expectation for each item, as well as the calculated gap scores.

Table 5 Empathy: The Library's personalized and caring attention to its user

Performance (Perception)	N	Mean	Expectation	N	Mean	Gap Score
Personalized Attention: The staff at my university library provide personalized attention that meets my individual needs	226	4.10	Personalized Attention: The library staff should provide personalized attention that meets individual needs	226	4.05	0.04
Understanding User Needs: The staff at my university library understand my specific needs and concerns when I seek assistance	226	4.19	Understanding User Needs: Library staff should understand specific needs and concerns when users seek assistance	226	4.15	0.04
Caring Attitude: The staff at my university library show genuine care and concern for my needs and well-being	226	4.19	Caring Attitude: Library staff are expected to show sincere concern for users' needs and overall well-being	226	4.25	-0.06

Accessibility: It is easy to reach out to the staff at my university library for help and support whenever needed	226	4.31	Accessibility: Library staff should remain readily accessible to provide help and support whenever needed	226	4.36	-0.05
Individualized Support: The support and solutions provided by my university library are customized to fit my individual situation	226	4.17	Individualized Support: The support and solutions provided by the library should be customized to fit users' individual situations	226	4.14	0.03
Total		4.19	Total		4.19	0.00

Table 5 provides a clear overview of various statements used to assess what people expect and perceive in terms of personalized attention, understanding user needs, a caring attitude, accessibility, and individualized support in relation to the empathy dimension of library service quality. It includes the mean value for both perception and expectation for each item, as well as the calculated gap scores.

The tables above display the mean value, approximately 4, for all items across all dimensions of SERVQUAL, indicating the level of agreement among respondents with the item statements.

The negative gap scores presented in the tables above highlight a deficiency in service quality, as customer expectations were not sufficiently met by the service provided. The broader negative gap indicates a significant shortcoming and heightened dissatisfaction among customers regarding the quality of service provided.

The tables presented above illustrate the gap scores across 25 items intended to assess the service quality of the university library. The gap scores for all items, with the exception of availability of assistance, professionalism, personalized attention, understanding user needs, and individualized support, are negative. This suggests that the library system is falling short in meeting user expectations. However, the gap score regarding the availability of assistance, professionalism, personalized attention, understanding user needs, and individualized support is favorable. The results of the study suggests that users express satisfaction with the assistance received, the competence of library staff, the personalized attention afforded to them, the understanding user need, and the individual support offered. Such factors help to create a friendly surroundings for library users.

The Library Collection has the highest negative gap score, recorded at -0.54. This shows that the users are not satisfied with the library collection available to satisfy their information requirement. Conversely, the minimum gap score is recorded for the Willingness to Help, standing at -0.01. This signifies that users express satisfaction with the help and support offered by the library staff, and they are happy with the library staff as they are ready to help them. They have been satisfied with the help they have received, which emphasizes the professionalism of the library staff, the individualized attention they have received, their understanding of their needs, and the support they have received.

FINDINGS:

Findings of the study summarize as follows:

- The findings indicate that the expectations of users are not being fulfilled in the current delivery service of the UPES Library. It was observed that the expectations of the library service fall short of the actual performance regarding library services, with only a few exceptions noted.
- The findings indicate that most users in the UPES Library express satisfaction with the availability of assistance, professionalism, personalized attention, comprehension of user needs, and tailored support related to empathy dimension of SERVQUAL.
- The findings showed that a number of SERVQUAL's physical features have caused a great deal of dissatisfaction among library users. An improved collection to meet their information needs, updated library technology for the range of services provided, better physical facilities, a more pleasant atmosphere, and improved user communication are all obviously needed.
- The results demonstrate that the consistency of service delivery, accuracy of information, dependability, error-free service, and timeliness related to the reliability of library service quality do not meet user expectations. This indicates that the library must implement effective measures to ensure the provision of error-free services by delivering more accurate information to users and maintaining consistency in the timely delivery of library services. This will strengthen the confidence of library patrons.
- The results revealed that the gap scores for the responsiveness and assurance dimensions of SERVQUAL stand at -0.02 and -0.09, respectively, indicating that respondents are quite satisfied with the items associated with these dimensions.

The findings indicate that users anticipated more than their actual perceptions, resulting in dissatisfaction. Therefore, it is essential for the university library to enhance all aspects of service quality to achieve greater perceived service quality and user satisfaction.

CONCLUSION

As a service-orientated institution, UPES Library must address the continually evolving needs of its end users and ensure the provision of high-quality products or services. The organisation provides teaching, learning and research while also offering a range of resources, services, and products. However, the findings indicate that not all aspects of service quality align with user expectations. Users have certain expectations from UPES Library; it should be service-orientated and offer improved collections and services to engage users effectively. The UPES Library ought to improve its extension activities to inform users about new services and arrange training sessions to facilitate easier access to library resources.

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