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# Assessment of Service Quality of Libraries in Higher Educations: A Review

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## Abstract

*This review article compiles literature on library service quality assessment both nationally and internationally, and discusses user perceptions of library service quality in the higher education context, including why library service quality research is necessary, how customer satisfaction and library service quality are linked, and how service quality in higher education is measured using SERVQUAL, LibQUAL+, etc., The gap, according to the research, is primarily due to variances in expected and perceived service quality. While all of the great work can contribute to and be supplemented by an effective planning process, a closer look at the sources of variances might reveal the root causes. In addition, this study could help higher education libraries pinpoint which student segments they can target and then change the variables that worsen poor quality rankings.*

**Keywords:** Service Quality, Library, Higher Education, SERVQUAL, LibQUAL+

## Introduction

Previously, the quality of a library was assessed based on the amount of its collection, i.e., an assessment of what the library possesses instead of what the library provides. “A measure of library quality based purely on collections has become obsolete” (Nitecki, 1996) observed. As a result, the traditional metric for library quality has evolved away from collection quantity and toward "availability and accessibility of suitable learning resources, such as library and information technology support services." Academic libraries have shifted from a library-centric to a customer-centric perspective due to this movement in assessment. “The only criteria that count in evaluating service quality are defined by customers,” according to (Parasuraman et al., 1991), all other assessments are ultimately irrelevant; only customers judge quality.” “The higher the service quality, the more satisfied the customers,” according to (Petruzzellis et al., 2006). Customers, or users in the case of libraries, demand a particular

degree of service from them, and libraries strive to meet those expectations. Any library's major goal is to meet the needs of its clients, and its primary goal is to provide the correct document, at the correct time, in the correct location, and at the correct cost. Establishing relevant criteria for use in measuring the quality of service to clients is essential for an organization that aims to improve service. There are several methods to describe the characteristics of good service quality better, according to (Christou & Sigala, 2002), and the critical study in the area noted two essential dimensions in quality: "those of the service offering, as perceived by the service provider, and that of the received service, as perceived by the customer" (Nightingale, 2006)(Jones, 1991). SERVQUAL was created in this context by (Parasuraman et al., 1985) and is based on the "Gaps Model of Service Quality." SERVQUAL is a tool or instrument that aims to assess the quality of a company's service across five dimensions: *tangible, reliability, responsiveness, assurance, and empathy*. LibQUAL+ is a modified version of SERVQUAL. (Association of Research Libraries, 2016) launched LibQUAL+ in the United States in 2000 as an experimental campaign for assessing the perception of library service quality among 13 libraries. LibQUAL+ is a collection of services used by libraries to gather, track, analyze, and act on user feedback on service quality. The survey questionnaire assesses library users' minimum, perceived, and desired service quality levels in three areas: 'Affect of Service,' 'Information Control,' & 'Library as Place.' "Minimum Service Level" refers to the lowest quality of service that a customer would consider acceptable, "Perceived Service Level" refers to the level of service which customers believe their library provides, and "Desired Service Level" refers to the level of service that the customer individually desires.

## **The Objective of the Study**

The study's objective is to investigate library users' perceptions of quality service and how libraries in higher education have achieved in providing similar services. As a result, the study's objectives are as follows:

- i) To explore the existing research and discussions relevant to the assessment of service quality of libraries in higher education.
- ii) To investigate the influence of service quality on customer satisfaction in libraries of higher education.
- iii) To investigate the function of SERVQUAL and LibQUAL+ in assessing service quality in libraries of higher education.

## **Service Quality**

“Excellence is quality,” “value is quality,” and “conformance to specifications” are all terms used to describe quality (Pariseau & Mcdaniel, 1997). “Fitness for use” is the definition of quality (Juran & Gryna, 1988), (Parasuraman et al., 1985) argued that "quality involves compliance to specifications" (Crosby, 1979), "defect avoidance" (Crosby, 1984), and "meeting and/or surpassing customers' expectations" (Parasuraman et al., 1985). The entirety of an entity's features that bear on its capacity to achieve expressed and implied needs is referred to as 'quality.' Quality is “the standard of anything as judged against all other items of a same kind or level of excellence about something,” according to (Hornby et al., 2005). Delivering quality service entails consistently meeting consumers' expectations.

"Quality is a feature, an attribute, a trait, or perfection, or the existence of which bestows superiority upon an object, the people, or a concept. Even though the concept of service quality is not novel, evaluating service quality as a management tool has been increasingly important in most service companies during the last few decades, particularly in libraries and information centres" (Association of Research Libraries, 2018). According to (Parasuraman et al., 1985), service quality measures how well a product or service meets a customer's expectations. The following are the fundamental beliefs that underpin the concept of service quality:

- i) Measuring the quality of service is more complex than measuring the quality of a product.
- ii) The customer's view of service quality is crucial.
- iii) Service quality refers to the difference between the service's outcome and the customer's expectations before the service.

As a result, providing a high-quality service is critical to attracting and retaining library users, particularly in this information age, as this will improve library productivity and enhance the library's or institution's reputation in the educational area.

## **Library and its role in Higher Education**

Educational institutions have multiple users, according to (Kara & DeShields, 2004): students, employees, teachers, alumni, donors, and others. In higher education, the student has been the key consumer (Hill, 1995). “Higher education is more about the generation, conversion, and dissemination of knowledge,” (Laudon & Laudon, 2000) stated, “for which libraries are the repository of knowledge, organizing and administering systematically is the need for its successful

usages.” The college libraries must provide educators with primary research and study resources so that they can stay up to date on advancements in their specific area of interest; and they should provide facilities and services to ensure the success of all formal programs of teaching leading to the entrance of a gate to the vast study of literature, encouraging self-reading for pleasure and self-discovery of pedigree (Indian Education Commission, 1970). In the changing dynamics of librarianship, (Dasgupta, 2013) stated that the actual functioning of a library to meet the needs of its users is dependent not only on an extensive collection of materials and library services but also on the establishment of a valued and current information system. The relationship between the utilization, size, and quality of information sources for library services has been determined in universities in the Southeast of Nigeria libraries (Ugah & Chilaka, 2011). (Clink, 2015) reviewed research on student retention summarised why it is essential and provided some tactics that the author's library is employing as part of a campus-wide effort to enhance retention. (Rasul & Singh, 2010) looked at postgraduate students' perspectives on the role of academic library services in helping their research, as well as their satisfaction with the resources and services available. They gathered data by selecting random 375 postgraduate students from four Malaysian public universities, and the results show that the vast majority of respondents (90.1%) recognized the importance of libraries in facilitating research, and 72.5 percent of respondents were happy with the existing role of libraries, though certain areas, such as longer open hours, could be improved. (Namaganda & Sekikome, 2013) present the results of a small study of Makerere University Library (MakLib) services conducted in 2012. The goal of the study was to learn more about users' perceptions regarding the library and to see if their requirements were being satisfied. (Tait et al., 2016) provide an assessment of the role of IT utilities in the academic library services revolution. It begins with a summary of academic libraries' historical evolution, followed by a discussion of academic libraries' current challenges and prospects. To increase the quality of services provided to clients, one must first comprehend their demands, and to comprehend the needs, one must comprehend the quality traits that the customers possess. Quality is seen differently by each user (Chua, 2004).

## **Customer Satisfaction and Library Service Quality Assessment**

“Customer happiness and service quality are fundamental ideas, and service quality is considered essential in any modern organization because it contributes to greater customer satisfaction, profitability, lower costs, and improved customer loyalty and retention” (Temba, 2013). According to (Sureshchandar et al., 2010), “customer happiness and service quality are inextricably linked.” (Alam, 2020) discovered that “the library's physical amenities and staff

response had a substantial impact on customer happiness.” Because of the fast advancement of modern information technology, the explosion of data, and the fast growth of the internet and other factors, users' expectations have risen. According to (Moses et al., 2016), service quality has a substantial beneficial effect on library customer satisfaction. Libraries, particularly university libraries, must retain awareness of current information and new technology to satisfy their patrons. User surveys can provide valuable insights into the perceptions of quality library services, with a focus on assessing users' needs and satisfaction with their services. (Kassim, 2017) describes a “quantitative study that intends to monitor the effectiveness of an academic library in Malaysia by analyzing customers' satisfaction using (a) library services, (b) infrastructure/place/space, and (c) collection/information given by an academic library.” The respondents' thoughts on their satisfaction with the statements in terms of the three dimensions were assessed using a self-developed questionnaire. A total of 650 final-year students from three university faculties were given the questionnaire. In research, (Ackerman, 2007) explained three main sections: (i) Traditional library assessment, which included data on expenses, collections, human resources, and public utilities, PhDs conferred, faculty and enrollment, and so on. (ii) Interaction and the problem of appraising library services, instructions, components, and resources in the current state and (iii) Implications for library appraisal in the future. Evaluation is defined by (Weiss & Weiss, 1998) as "the systematic evaluation of a program's or policy's functioning and/or consequences in comparison to a series of explicit or implicit criteria as a means of contributing to the program's or policy's improvement." In addition, the library, as a critical component of the teaching-learning process in higher education, must meet certain criteria to meet the needs of its users. (Kumar & Merugu, 2014) present the findings of a survey of customer satisfaction with library services by age groups at the Bai Ratanbai Gharda Memorial Library in Mumbai. Users' use of the library and satisfaction with library services are dependent on the library's location, accessibility of appropriate learning materials, and competent personnel. Furthermore, it was stated that the primary mission of any library is to help its parent institution by methodically acquiring and organizing knowledge relevant to the institution's aims and making that information available to the institution's users (Abagai, 1993). According to (Twum et al., 2020), all service quality parameters strongly relate to library users' satisfaction.

## **Purpose of Assessment**

The purpose of assessment, according to (Brooks- Cork Library, 2002), can be divided into four categories: (i) assessing current levels of service; (ii) monitoring toward desired levels of performance; (iii) identifying specific problem areas or services that require improvement; and (iv) justifying resource allocation. (Lancaster, 1988) identifies four purposes for assessment: (i) establishing a "benchmark" in order to assess the level of service quality, (ii) comparing the services of other libraries, (iii) justifying its existence, and (iv) identifying prospects and possible causes of failure. To provide precise recommendations for a library's improvement, it's necessary to critically examine its programs and operations, which is the primary goal of assessment (Lyle, 1961).

## **Method of Assessment**

(Mikitish, 2015) identified five different models of evaluation which are reported in different literature reviews and meta-analyses. These are i) Gap Theory Model, ii) Outcome-Based Model, iii) Return on Investment Model, iv) Balance scorecard Model, and v) Total Quality Management Model. Further added to that explained four popular models i.e. i) System-based model, ii) Outcome-based Model, iii) Service Quality based Model, and iv) Balance scorecard based Model. (Alemna, 1999) stated that “the two main methods of library performance evaluation are subjective and objective. In subjective methods, user's opinions or attitudes are considered as the measure of effectiveness, so the users are taken as the unit of analysis, and questionnaires or interviews are the basic instruments for collecting user opinion. Further, stated that in the objective method, the factors to be considered for evaluation are –i) Library inputs - like physical facilities, services, resources, finance, and staff. Here effectiveness is considered directly proportional to the resources and the services utilized, ii) Relationship between library goals and tasks of employees for optimum performance, iii) Library's interaction with users where user studies may have a crucial role on evaluation, and iv) Impact on total populations as an outcome of the library services which will be reflected on the total library environment. (Hernon, 2002) discussed the Theory of Service Quality Gap, where the gap is calculated amongst customer expectations and management's perceptions from the view of users, not by the library manager. It also critiqued service quality measurement tools such as SERVQUAL and LIBQUAL+.

## **SERVQUAL for Service Quality Assessment**

A service quality model known as the PZB model or the SERVQUAL instrument was conceptualized by (Parasuraman et al., 1985), which has been used to conduct substantial research in various service industries. Many studies have discovered that attempts have been made to implement SERVQUAL in an academic setting, despite the language and some items symbolizing the corporate world's attitude (Soutar & Mcneil, 1996). (Lin Tan & Foo, 1999) reported using a customized SERVQUAL instrument to assess a special library's service quality (a statutory board library). SERVQUAL is a test instrument that consists of 22- items; during a 15-day survey period, a sample of library patrons was given a questionnaire analyzing the five service dimensions of Tangibles, Reliability, Responsiveness, Assurance, and Empathy. The Expectation-Service Gap Grid was utilized in the data analysis to identify service deficiencies across these five dimensions. (Coleman, Xiao, Bair, 1997) developed a SERVQUAL-based user survey to assess the overall service quality at the Sterling C Evans Library. The study asked users about their minimum, perceived, and desired levels of service, and the findings demonstrated a mismatch between library customers' priorities and the library's service quality. As a result, a team was established to improve the current quality of service to meet the demands of the users.

## **LibQUAL+ for Service Quality Assessment**

"LibQUAL+<sup>TM</sup> is a web-based library quality of service evaluation tool designed, which has been used in numerous different types of libraries throughout the world," says the company (Thompson et al., 2006). Data was gathered from over 500,000 library patrons. The protocol has been implemented in a variety of languages. The study's goal was to determine the stability of LibQUAL+<sup>TM</sup> score norms over time and across different user cohorts. If the consistency of the score standards can be shown, library staff may be more confident in benchmarking results. (The library and Information Service Center of SIIT, 2008) carried out a survey to analyze library service quality, using a LibQUAL+ questionnaire with 22 core items, and discovered that undergraduate students, employees, and faculty members used libraries more regularly than graduate students, employees, and faculty members. The library's quality of service is satisfactory, but it has to improve to meet the expected level of user service. Faculty and graduate students anticipated the library to provide higher-quality services than undergraduate students. Users also suggested that the quality be improved. Research at San Jose State University, (King, 2009) employed the LibQUAL+ approach to survey and evaluate how often



users use the library web page, library facilities, and non-library information sources. The LibQUAL+ survey was used to evaluate quality of library service of the Maharshi Dayanand University (MDU) central library in Rohtak, India. From the findings of the study, 'Library as Place' had the greatest desired expectations. It averaged 6.45, 6.41, and 6.19, followed by 'Information Control' and 'Affect of Service'. Overall library service quality perceived by the user was found to be below target. This study's findings might help libraries by identifying library service quality shortage areas and goods (Kumar & Mahajan, 2019). Respondents were mostly pleased with the comfortable and friendly environment, the desire to assist users and the space provided for group learning and peer study. The LibQUAL survey was used to assess the quality of college library services in Punjab Province, Pakistan. 998 college teachers and students were surveyed for data. The findings indicates that none of the service quality characteristics and dimensions fulfilled group and individual user expectations. There were significant gender, type, and academic discipline variations in library service quality. This research benefits the Punjab Higher Education Commission, college administrators, college libraries, and other emerging nations. It will help them prepare for the future, optimise resource allocation, and maximise resource usage (Mahmood et al., 2021). Electronic journal collecting, distant electronic accessibility, and other features were the least popular among users. (Shedlock & Walton, 2008) employed LibQUAL+<sup>TM</sup> in their study and polled for two years, providing useful information on Galter Library and how customers evaluate library service quality. Positive findings were presented in the first and second years, as more investigated and in-depth results were received, as well as information on what library customers want and need. When investigating specific treatments that would improve services, a comparative outcome provides more knowledge and best practices. The study discovered that the LibQUAL+<sup>TM</sup> score may be used to predict how users will react to actual changes in library services and programs. (Greenwood et al., 2011) at the University of Mississippi from 2001 to 2010 analyzed quantifiable adequacy gap scores as well as coded qualitative remarks from LibQUAL+ studies, looking for connections between LibQUAL+ outcomes and library policy revisions, and any additional dynamics which emerged. Although there was no link between policy changes and survey results, the analysis did uncover several trends over the course of the period studied. (Kyrillidou & Persson, 2006) a study found that a huge negative adequacy gap score was observed in the item 'a library website that allows me to find information on my own, implicating that websites of the libraries were not up to the mark and links of the online resources were not arranged properly and updated frequently. Also, it was found that the

"information control dimension" was most important for the library users but libraries understudy did not fulfil their needs in this dimension.

### **The benefit of studying SERVQUAL and LibQUAL+ in future**

According to (Blixrud, 2002), applying SERVQUAL has the following benefits in surveying the expectations and perceptions of library users in academic libraries. They are given below:

- i) Direct responses to the series of questions can be obtained from the surveyed community.
- ii) SERVQUAL helps in easily identifying the library user's needs and concerns.
- iii) Library performance can be measured from the users' perspective.
- iv) Quantifiable data can be acquired using SERVQUAL which can be statistically analyzed furthermore larger population is generalizable.

More than 1,340 libraries of higher education, including university and college libraries, health sciences, community colleges, and academic law libraries in 35 countries have participated in LibQUAL+ since 2000. LibQUAL+ survey data has been used by many library professionals to identify the best practices, analyze underperformances, and successfully allocate resources. LibQUAL+ assists libraries in better understanding users' perceptions of library quality of service by gathering and examining library feedback from users over time. Libraries are given comparable assessment information., *i.e.*, LibQUAL+ participants are allowed to compare their library performance with their peer institutions which help in identifying the best practices used in providing library service.

The present study would be useful and guide the higher education officials, librarians, as well as other clients in academic libraries in making decisions based on how to effectively utilize library and information services. The user experience will reflect the aspects where there is a need for constant improvement. The study would benefit scholars and researchers for a comparative study of academic library service quality in India in comparison to other regions in India and the world. The outcome of such assessment studies will not only help academic librarians but also public and special library professionals as well to answer questions like if a library is performing the way its parent institution claims it should be; at what cost and effects, during their respective accreditation process.

## **Suggestions for Improving Library Service Quality**

The library needs to first identify priorities in providing services and assessing its performance level among the demands of users and evaluate this service performance in areas which the users perceive important (Sharma et al., 2010). (Goud, 2013) suggested that the service quality studies should be a continuous feature that can assist the college library to know the library user satisfaction level and improve the service quality to meet the users' expectations for sustainable competitive lead. For the development of staff and customer relations, it is suggested that more funds should be provided by the libraries. 'Information Control' dimension is one of the important aspects which the library must pay attention to (Hariri & Afnani, 2008). (Mardani et al., 2014) suggested the decision-makers take into consideration the students expectations and upgrading the basic library services by subscribing to the latest journals, master thesis, electronic sources, and other library resources, etc., as users want comprehensive collection in print as well as the electronic format and expect for easy information access through library websites using modern tools and equipment (Rehman & Hadi, 2012).

## **Conclusion**

This literature review has discussed what service quality is, why the study of service quality is needed in the library, how library service quality and customer satisfaction is related, how service quality in libraries of higher education can be measured, its effect on students, different tools applied for measuring service quality, LibQUAL+. The purpose of this study was to propose that librarians can offer better service to the customers or users of the library by gaining an understanding of what service quality is and how it can be used to attract new users and retain the existing users of the library by understanding the gap between the level of perceptions and expectations of users. The study of different literature sources revealed that there is a prevailing gap in how users and employees perceive the quality of library services. The disparity is primarily caused by differences in the expected and perceived quality of services. Even though all of the noble intentions can contribute to and be supported by an appropriate planning process, a closer study may show the reasons for variances. Libraries in higher education could benefit using the results of this survey and by locating the student sections on which they should focus, they can then make a deliberate attempt to alleviate the limitations that exacerbate poor performance rankings. Measures should be taken to raise students' expectations and improve the quality of library services, as well as informing and mentoring library staff to practice a much more realistic perspective. While there is some disparity over

the existence of library service quality and if it is possible to measure a service quality accurately, and contradictory opinions on its sources and effects, there is general agreement in the literature that library service quality is worth investigating.

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