

Quality Assessment of the Services Offered by the JPL Multimedia Library of LPU–Laguna using Service Quality Gap Model

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ABSTRACT

The study determined the gap between perceived and expected service quality of JPL Multimedia Library of LPU–Laguna. Data were obtained from undergraduate students of College of Arts and Sciences, College of Business and Accountancy, College of International Tourism and Hospitality Management, and College of Engineering and Computer Studies. A final sample of 355 respondents was used for data analysis. The obtained data were analyzed by comparing mean and standard deviation of perceived and expected service quality. Gap analysis of expected and perceived service quality was also conducted. Findings reveal a disparity between the expectations and perceptions of respondents and thus, require that the library should enhance its services, especially staff orientedness. The results are beneficial and act as guidelines for the library management in identifying their strengths and weaknesses.

Keywords: SERVQUAL, library, library management, management in education

INTRODUCTION

Personal needs and past experiences are factors that determine a customer's expectation of a particular service. Most of the time, the expected service and the perceived service are not equal; thus, leaving a gap. The Service Quality Gap Model highlights the main requirements for delivering high service quality. It defines the five gaps that cause unsuccessful delivery. Customers generally have a tendency to compare the service they experience with the service they expect. If the experience does not match the expectations, there arises a gap.

There are a lot of definitions of quality, in a user-based approach, quality is compared with the satisfaction, the highest quality means the best satisfaction of consumers' preferences. As stated by Sharabati & Abusaimh (2019), the management of quality needs a different approach when it comes to the services sector. Among all the service sectors, higher education needs a special emphasis on evaluating issues related to quality of services and its measurement. As stated by Redmond (2008), like any other service industry, education is designed to meet the needs and wants of the users of its services. It is different from most other services, however, in two ways. One is that education is a 'pure service,' for there is no physical product involved (Evans & Lindsay, 2002). As stated by Adeniran (2011), academic libraries are libraries attached to academic institutions of learning to serve the teaching and research needs of students and staff. These libraries serve two complementary purposes—to support the university curriculum and to support research of the university faculty and students. In the process, the library plays a key role in the nation building process. Based on Adeniran's study (2011), libraries are service-oriented organizations established for the provision of relevant information resources and quality services to meet their users' information needs. Users are described as the reason why a library exists. Meeting the information needs of users requires the provision of actual information resources and services that will satisfy the needs of users.

According to Kotso (2010), libraries support the research process by collecting, preserving, and making available an array of information resources relevant to their research community. An academic library plays a vital role in teaching and learning of an academic institution. Its aims are to collect, process, preserve, and disseminate documents and information to serve the user community. In order to make resources available to its users easily and conveniently, different types of facilities and services are rendered by the library. Hiller (2001) had discussed the fact that library user satisfaction surveys have become widespread in academic libraries during the past 20 years. Surveys have often been used as a tool

to assess service quality and user satisfaction. Surveys can range from broad and comprehensive to those narrowly focused on specific services or activities.

Review of literature

Servqual model

Zeithaml, Bitner, & Gremler (2003) observed that service quality comprises attributes or dimensions that are critical to customers' evaluation of service quality. Therefore, a valuable method for measuring and improving service quality is to recognize what was considered vital when customers were appraising service attributes. According to scholar Jiang (2013), the SERVQUAL model assesses service quality by matching expectations with perceptions on five dimensions, namely: reliability, responsiveness, assurance, tangibility, and assurance.

Correspondingly, many scholars have raised concern that SERVQUAL is not a generic instrument to evaluate service quality, and they advocate that it should be modified to enhance its comprehensiveness and application in a varied industry.

Service quality in libraries

Ahmed, Soroya, & Malik (2015) studied the service quality of library front desk staff in medical colleges of Lahore. They found that the improvements in all five dimensions of service quality are required as expectations were found to be higher in all five dimensions as compared to perceptions. While comparing expectations between male and female users, the results indicate that male library users want more responsiveness and reliability from the staff.

Jayasundara (2008) said user perceptions and expectation studies have become one of the most popular studies in the area of service quality in many academic libraries. The user expectations and satisfaction have been used to determine service quality which is seen as critical for service organizations to position themselves strongly in a competitive environment. Based on Cook (2001), academic libraries are facing two major threats—a global digital environment and an increasing competition. They must improve the quality of their services in order to survive. Historically, the quality of an academic library has been described in terms of its collection and measured by the size of the library's holdings and various counts of its uses. A measure of library quality based solely on collections has become obsolete. Alternative approaches to measure quality emerged in the business sector. Specifically, through marketing research, the SERVQUAL (which was developed by Parasuraman, Zeithaml and Berry) has evolved as an instrument to measure service quality and what customers value as important.

Service with reliability

Bryceland & Curry (2001) define reliability as the ability to perform the required service to customers dependably and accurately as promised to deliver. Dealing with whatever problems in services encountered by customers, performing the required services right from the first time, rendering services at the promised time, and maintaining error-free record are the paradigms of reliability in terms of service quality which strongly influences the level of customer satisfaction.

Service with assurance

For Sadek (2010), assurance is defined as the knowledge and good manners or courtesy of employees. Further, it is also defined as the ability of employees, with the help of the knowledge possessed, to inspire trust and confidence that strongly strikes the level of customer satisfaction. In banking services provided to the customer, assurance means providing financial assistance in a polite and friendly manner, ease in accessibility of account details, comfort or convenience inside the bank, a well experienced, and professional management team which will ensure favorable outcomes on customer satisfaction.

Service with tangibility

Van Iwaarden, et al. (2003) defined tangibility as physical facilities, equipment, and appearance of employees and management team. Further, it is also defined as the ease in visibility of resources necessary for providing the service to customers, well groomed employees, and ease in accessing written materials like pamphlets, brochures, folders, information books, etc. that will have a favorable consequence on the level of customer satisfaction (Parasuraman, 2010). Modern looking or sophisticated equipments and visually appealing or attractive ambience are viewed as the positive impacts of tangibility on customer satisfaction in the banking sector (Arulraj & Ananth, 2011).

Service with empathy

According to Van Iwaarden, et al. (2003), empathy is defined as the ability to take care of customer's attention individually in providing service to customers. Further, it is researched that understanding customer expectations better than competitors in providing the required customer service at any time without any inconvenience will strongly influence the level of customer satisfaction (Parasuraman, 2010). Convenient working hours, individualized attention, and better understanding of customer's specific needs, enhanced communication between management and customers will have a positive outcome on customer satisfaction (Arulraj & Ananth, 2011).

Service with responsiveness

Kumar, et al. (2009) defined responsiveness as the interest shown in providing prompt service to customers when required. Further, it is researched that willingness or readiness of employees to provide the required customer service without any inconvenience at any time will strongly influence the level of customer satisfaction (Parasuraman, 2010). Customers are satisfied when banks provide individual attention and employees are paying attention to problems experienced by customers regarding safety in transaction.

Service gaps

According to the study of Dobbie & Fryer (2011), the customer gap is the difference between customer expectations and customer perceptions. Customer expectation is what the customer expects according to available resources and is influenced by cultural background, family lifestyle, personality, demographics, advertising, experience with similar products, and information available online. Customer perception is totally subjective and is based on the customer's interaction with the product or service. Perception is derived from the customer's satisfaction of the specific product or service and the quality of service delivery. The customer gap is the most important gap and in an ideal world, the customer's expectation would be almost identical to the customer's perception. In a customer-orientated strategy, delivering quality service for a specific product should be based on a clear understanding of the target market. Understanding customer needs and knowing customer expectations could be the best way to close the gap.

Conceptual framework

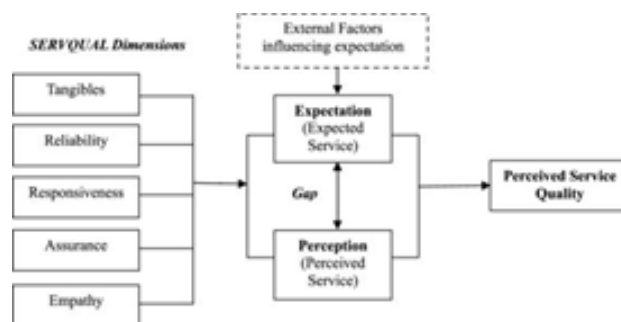


Figure 1. Conceptual framework of the study

Figure 1 shows the Servqual Model developed by Berry, Parasuraman, and Zeithaml (2001). It shows the process of measuring the perceived service quality by determining the gap between the customer's expectation and perception. The structured questionnaire is a pair of 22 expectation/perception questions designed to capture the five dimensions of service quality: reliability which refers to the ability to perform the promised service; assurance which refers to the knowledge and courtesy of employees and their ability to inspire trust and confidence; tangibility which refers to the appearance of physical facilities, equipment, personnel, and communication materials; responsiveness which refers to the willingness to help customers and the promptness of service; and empathy which refers to the individual caring attention given by the firm to its customers. After the customers' expectations and perceptions have been determined through the questionnaire, the gap between each pair of expectation and perception items under each dimension will need to be determined. After determining the gap between each of the 22 pairs, the average gap score for each dimension will be determined. Finally, the average gap score of all five dimensions will be computed in order to determine the average Servqual score which is also the measure of the perceived service quality. The broken lines boxing the external factors signify that in conducting a study using a Servqual model, the external factors may or may not be considered depending on the situation.

Objectives of the study

This study aimed to determine the quality assessment of the services offered by the JPL Multimedia Library of LPU–Laguna using the SERVQUAL Model. Specifically this will determine the demographic profile of the respondents in terms of college, age, sex, and year level; the level of expectation and perception of respondents towards the quality of the services of the library in terms of reliability, assurance, tangibility, empathy, and responsiveness; to test if there exists significant differences on the assessment of expectation and perception of services when grouped according to profile variable; and finally, to propose an action plan for the improvement of library services based on the result of this study.

METHODOLOGY

Descriptive method of research was used in this study. The respondents were 3rd and 4th year students of different colleges, such as: College of Business and Accountancy, College of Arts and Sciences, College of International Tourism and Hospitality Management, and College of Engineering and Computer Sciences enrolled in the second semester of SY 2017-2018. The questionnaire is composed of two parts. Part 1 determines the profile of the respondents that includes, age, sex, college, and frequency of library use. Part 2 contains the evaluation of service quality of the JPL Multimedia Library, it contains questions about the level of expectation and perception of the respondents towards the library. The data were encoded, tabulated, and analyzed using statistical tools—percentage and frequency for the demographic profile of the respondents, weighted mean to determine the level of expectations and perceptions, and gap score formula to determine the gap score for each statement

RESULTS AND DISCUSSION

The findings indicate that most of the respondents are female (58%). Majority of the respondents are from the College of Engineering and Computer Studies with a total of 119 respondents (35%). Slightly half of the respondents (49%) falls within the age group between 18 to 19 years old. Furthermore, 33 percent of the respondents used library services several times a week.

Table 1. Demographic results

Demographic information	Frequency	Percent
Gender		
Female	193	58
Male	142	42
College		
CAS	40	12
CBA	71	22
CITHM	103	31
COECS	119	35
Age		
18 – 19 years old	165	49
20 – 21 years old	126	38
22 years old and above	44	12
Frequency of library use		
Daily	58	17
Several times a week	110	33
Once a week	69	21
Less than once a week	38	11
Once a month	50	15
Others	10	3

Table 2. Expectations of respondents per dimension

No.	Service Quality Statements	CAS	CBA	CITHM	COECS
1	The library personnel keep the segmentation of books accurately	4.00	4.43	4.48	4.39
2	Library personnel are willing to assist students	4.00	4.30	4.39	4.41
3	Library personnel are always available for students request.	4.00	4.28	4.41	4.45
4	The library personnel are knowledgeable about the books	4.15	4.39	4.43	4.56
5	Library personnel are trustworthy for students' belongings.	4.20	4.43	4.55	4.45
6	The Library is offering services that is dependable at the time it promises to do so.	3.85	4.28	4.43	4.43
7	The Library provides services right the first time	3.93	4.36	4.43	4.42
8	When the students are experiencing problems, the Library staffs are sympathetic and well accommodating.	3.95	4.32	4.33	4.42
9	When the Library promises to take actions on different problems at a certain time it does so	4.00	4.36	4.39	4.52
10	Provide a place for all students to gather and learn.	4.15	4.58	4.52	4.57
11	The Library personnel are well dressed and neat at all times	4.02	4.60	4.51	4.47
12	The library provides meeting areas	4.02	4.54	4.44	4.51
13	The books in the library are updated.	4.17	4.46	4.45	4.45
14	The Library meets students' information needs.	4.15	4.50	4.38	4.44
15	Library staffs give students individual attention.	4.08	4.36	4.39	4.28
16	Library personnel understand students' specific needs	3.87	4.41	4.38	4.43
17	Library personnel have the students best interest at heart.	4.05	4.39	4.4	4.55
18	Library personnel are consistently courteous with students.	3.97	4.46	4.44	4.5
19	Library personnel are pleasant, friendly, and easy to talk to.	3.97	4.53	4.44	4.5
20	Library personnel are easily responding to students request for assistance	3.95	4.47	4.46	4.53
21	Library personnel are polite.	4.15	4.45	4.46	4.52
22	Students can trust the library personnel	4.15	4.45	4.54	4.56
Composite Mean		4.15	4.45	4.50	4.46

Table 2 shows the results of the expectations of the respondents on each of the five dimension of service quality. For the Collge of Arts and Sciences, the highest mean score is 4.20 for *the library personnel are trustworthy for students' belongings*; however, it got a lowest mean score of 3.85 for *the library is offering services that is dependable at the time it promises to do so*. For the College of Business and Accountancy, the highest mean score is 4.60, that is, *the library personnel are well dressed and neat at all times*; but according to the CBA respondents, the library got the lowest mean score of 4.28 for *the library is always available for personnel request*. For the College of International Tourism and Hospitality Management, the highest mean score given by the respondents is 4.55 for *library personnel are trustworthy for students belongings*; while the lowest mean score is 4.33 for *when the students got a problem the library staff are symphatetic and accommodating*. For the College of Engineering and Computer Studies, the highest mean score of 4.57 is given to the item *provides a place for all the students to gather and learn* and the lowest mean score of 4.37 is given to the item, *the library staff keep the segmentation of the books accurately*.

Table 3. Perceptions of respondents per dimension

No.	Service Quality Statements	CAS	CBA	CITHM	COECS
1	The library personnel keep the segmentation of books accurately	3.55	4.01	4.49	4.39
2	Library personnel are willing to assist students	3.68	4.23	4.39	4.41
3	Library personnel are always available for students request.	3.63	3.94	4.41	4.41
4	The library personnel are knowledgeable about the books	3.53	4.01	4.43	4.45
5	Library personnel are trustworthy for students' belongings.	3.98	4.19	4.55	4.56
6	The Library is offering services that is dependable at the time it promises to do so.	3.50	3.95	4.43	4.45
7	The Library provides services right the first time	3.55	3.95	4.43	4.43
8	When the students are experiencing problems, the Library staffs are sympathetic and well accommodating.	3.60	3.98	4.33	4.42
9	When the Library promises to take actions on different problems at a certain time it does so	3.55	4.09	4.39	4.42
10	Provide a place for all students to gather and learn.	3.63	4.01	4.52	4.52
11	The Library personnel are well dressed and neat at all times	3.75	4.25	4.51	4.57
12	The library provides meeting areas	3.53	3.99	4.44	4.47
13	The books in the library are updated.	3.43	3.90	4.45	4.51
14	The Library meets students' information needs.	3.70	3.99	4.38	4.53
15	Library staffs give students individual attention.	3.45	3.92	4.39	4.44
16	Library personnel understand students' specific needs	3.45	4.08	4.38	4.42
17	Library personnel have the students best interest at heart.	3.38	3.93	4.40	4.43
18	Library personnel are consistently courteous with students.	3.60	4.05	4.44	4.55
19	Library personnel are pleasant, friendly, and easy to talk to.	3.55	4.05	4.44	4.5
20	Library personnel are easily responding to students request for assistance	3.58	4.07	4.46	4.53
21	Library personnel are polite.	3.63	4.18	4.46	4.52
22	Students can trust the library personnel	3.80	4.25	4.54	4.56
Composite Mean		3.59	4.05	4.44	4.47

Table 3 reflects the results of the perception of the respondents on each of the five dimensions of service quality. For the Collge of Arts and Sciences, the highest mean score is 3.80, *students can trust the library personnel* and the lowest mean score is 3.38, *library personnel have the students' best interest at heart*. For the College of Business and Accountancy, the highest mean score is 4.23 that is *students can trust the library personnel*; however, according to CBA respondents, the library got the lowest mean score of 3.92, *library staff give students individual attention*. For the College of International Tourism and

Hospitality Management, the highest mean score given by the respondents is 4.49, *library personnel are trustworthy for students' belongings*, while the lowest mean score is 4.33, *when students got a problem, the library staff are sympathetic and accommodating*. For the College of Engineering and Computer Studies, the highest mean score of 4.57 is given to the item *provides a place for all the students to gather and learn* and the lowest mean score of 4.37 is given to the item, *the library staff keep the segmentation of the books accurately*.

Table 4. Gaps between expected and perceived services (ranked by gap size)

No.	Service Quality Statements	Expectations	Perceptions	Gap
1	The library personnel keep the segmentation	4.3	4.01	-0.29
13	The books in the library are updated.	4.39	4.29	-0.10
10	Provide a place for all students to gather and learn.	4.44	4.35	-0.09
14	The Library meets students' information needs.	4.37	4.30	-0.07
12	The library provides meeting areas	4.36	4.30	-0.06
15	Library staffs give students individual attention.	4.31	4.25	-0.06
17	Library personnel have the students best interest at heart.	4.31	4.25	-0.06
4	The library personnel are knowledgeable	4.35	4.30	-0.05
3	Library personnel are always available for	4.27	4.25	-0.02
19	Library personnel are pleasant, friendly, and easy to talk to.	4.35	4.33	-0.02
7	The Library provides services right the first time	4.28	4.27	-0.01
8	When the students are experiencing problems,	4.25	4.24	-0.01
5	Library personnel are trustworthy for	4.43	4.43	0.00
21	Library personnel are polite.	4.39	4.39	0.00
9	When the Library promises to take actions on	4.29	4.30	0.01
18	Library personnel are consistently courteous with students.	4.34	4.35	0.01
20	Library personnel are easily responding to students request	4.34	4.35	0.01
11	The Library personnel are well dressed and neat	4.42	4.44	0.02
6	The Library is offering services that is dependable	4.25	4.28	0.03
16	Library personnel understand students' specific needs	4.23	4.29	0.06
22	Students can trust the library personnel	4.39	4.45	0.06
2	Library personnel are willing to assist students	4.27	4.34	0.07

Table 4 shows the results of gap difference between expected and perceived service quality, as this is the criteria used to analyse the major differences between the actual and expected services. All values are arranged in descending order, i.e. from highest gap to the lowest. There are 12 items that show negative results, showing that the respondents' expectations from the library service quality are greater than their perceptions. There should be some improvements in the service quality of libraries to increase the satisfaction level of its students. There is a high gap on item no. 1 which is *the library personnel keeps the segmentation of books accurately* which got a gap score of -0.29. It is followed by item no. 13, *the books in the library are updated* which got a high gap score of -0.10

Table 5. Summary of the respondents' level of expectations and perception on each dimension

Dimension	Expectations	Perception
Tangibility	4.31	3.91
Assurance	4.30	3.95
Reliability	4.39	3.88
Empathy	4.40	3.82
Responsiveness	4.37	3.98

Table 5 reflects the summary of the respondents' level of expectations and perceptions on each dimension. On the respondents' level of expectations on the five dimensions, empathy got the highest mean score of 4.40, next is reliability with a mean score of 4.39, followed by responsiveness with a mean score of 4.37, and then tangibility and assurance with mean scores of 4.31 and 4.30, respectively. On the respondents' level of perception towards the library services, responsiveness got the highest mean score of 3.98, followed by assurance with a mean of 3.95, tangibility with a mean score of 3.91, and reliability and empathy with mean scores of 3.88 and 3.82, respectively.

Table 6. Average gap between expectation and perception for each dimension

Dimension	Gap
Tangibility	-0.40
Assurance	-0.35
Reliability	-0.51
Empathy	-0.58
Responsiveness	-0.39
Average overall gap score	-0.45

The average gap between expectation and perception for each dimension is shown in Table 6. Empathy got the largest gap score of -0.58 which means that this aspect of the service deviates the furthest from the respondents' expectations and the assurance dimension got a -0.35 gap score which is the least among the five dimensions of quality, this means that this is where the perceptions are closest to the expectations. The average overall gap score for all dimensions is -0.45 which means the overall expectations exceed the overall perceptions. In a service quality study conducted by Munhurrin, Bhiwajee, & Naidoo (2010), in the public service, they found that the largest gap existed in the reliability dimension and among the four items in the dimension, the greatest gap existed in the area of providing services at the promised time which are both exactly the same as the result of the current study. The second largest gap existed in the responsiveness dimension which is the same as the result of the current study. They differ, however, in the area under the dimension with the largest gap. The third dimension with the largest gap is also the same as the finding in the present study which is the assurance dimension but the area with the largest gap under the dimension differs from that of the present study. In their study, the dimension with the lowest gap is empathy while in the present study; the dimension with the lowest gap is tangibility.

CONCLUSION AND RECOMMENDATION

The aim of this study was to measure the perception and expectation gap of service quality of the JPL Multimedia Library in Lyceum of the Philippines–Laguna. Based on the results of study, there exists a disparity between the perceptions and expectations of respondents. The findings make it evident that it is in the empathy dimension where the customers have the highest expectations as well as the lowest perceptions.

After an analysis of the gaps between the perceptions and the expectations of the respondents, the researchers were able to pinpoint the areas where the perceptions are closest to the expectations and also where the perceptions are furthest to the expectations. It is clear that the area of assurance is where the perceptions are closest to the expectations since it is where the smallest gap exists. This means that the library is close to meeting the expectations of their library users in terms of the physical aspects of their services. Next to assurance is responsiveness which ranks next as to where the perceptions are closest to expectations. The three other dimensions which are reliability, tangibility, and empathy are closely related in terms of gap in which the perceptions can be seen falling way below the expectations.

The results of the study show that there is a need for library personnel to improve their services, primarily in the empathy dimension, coaching/mentoring the library staff which includes giving individual attention, understanding specific needs, and having the student's best interest at heart in delivering the students' information needs. Second, the library has to provide more updated books and meeting areas like the provision of discussion rooms to advance their services in the tangibility dimension. Last, the library should keep the segmentation of books accurately to mend their services in the reliability dimension. Nonetheless, maintaining their services in assurance and responsiveness dimensions which includes taking action on different problems and having trustworthy personnel is suggested. Future research could consider a library customer service training program and its effect on the empathy dimension in the service quality of the library.

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