

User Satisfaction Regarding Quality of Library Services of A.C. Joshi Library, Panjab University, Chandigarh

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ABSTRACT

The study aims to assess library service quality (LSQ) associated with user satisfaction of AC Joshi Library, Panjab University, Chandigarh, India. A modified SERVQUAL instrument was used to examine perceived LSQ and level of user satisfaction. The data was collected through questionnaire consisting items related with different library service attributes. The study considered a number of critical elements of service quality assessment. It was found that library environment and library services significantly predict the user satisfaction. The level of quality of different attributes, i.e., library environment, collection, staff, and services were significantly different across academic discipline of respondents. The study will be helpful for libraries to improve their quality of services and increase user satisfaction.

Keywords: Library service quality, AC Joshi Library, Panjab University, Chandigarh, user satisfaction, SERVQUAL

1. INTRODUCTION

University library exists to support the objectives of its parent body. It is the backbone of the research and teaching-learning process by offering variety of extensive services and access to a wide range of information resources both in print and electronic format to academic community. The basic philosophy of the library is to meet the varied information needs of the users engaged in the academic pursuit and research. Therefore, it is necessary to assess the quality of library services rendered and user satisfaction because success of any library depends upon how well a service satisfies the demands placed upon by the users. Hence, user satisfaction and library service quality (LSQ) are ultimate goals of libraries as service organisations.

Service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis¹. User satisfaction is related to matching the expectations of the users. Satisfaction of users with the services means that library as a service organisation is successful in rendering good quality services. Hence, both the concept quality service and user satisfaction are closely related and very crucial for success of any service organisation and university library is not an exception. In higher education system, a university library is an integral part and also

described as heart of university system. In the age of information revolution, university library has to play a vital role in formal education environment by providing its advance and quality services to students, researchers, and faculties. Moreover, considering the dynamic nature of library services, it is very important to know the user expectations and their satisfaction towards library services so that quality of library services can be improved and ultimate objectives of the library are met. Therefore, high level of service quality is vital for the success of organisations.

1.1 Panjab University, Chandigarh and its Library

Panjab University is one of the oldest universities in India. There are 75 teaching and research departments at the main campus located at Chandigarh. The University has been ranked number one in India as per the Times Higher Education (THE) World's Top 400 University Ranking list for the year 2013-2014.

A.C. Joshi Library, Panjab University was established in the U.S. Club, Shimla in the year 1947. Presently, the library is housed in a five storied building and has a rich collection of over 6.7 lakh documents including books, bound volumes of journals, theses/dissertations, rare books, reports, government documents, back files of newspapers, and a prized collection of 1490 manuscripts. It is

also subscribing 660 current periodicals. Library is subscribing a good number of e-resources and has access to 225 online full-text journals as part of print journals subscription. Library has also access to approximately 5000+ online full-text journals available through INDEST-consortium and UGC-INFONET Digital Library consortium. The Library is fully computerised with RFID integrated library management software 'SLIM 21'.

2. LITERATURE REVIEW

The study presents a brief overview of research literature reported on service quality and user satisfaction with academic libraries using SERVQUAL scale. Hossain & Islam² attempted to measure perceived service quality associated with user satisfaction of Dhaka University Library with the help of modified SERVQUAL instrument. It was found that the 'library hours' is the only service item, which got the exclusive acceptance and ensured highest/optimum satisfaction of the users, while other items were lower than expectation scores, indicating dissatisfaction to library users. Omehia³, *et al.*, examined the variation among academic disciplines, year of study & socio-economic background in the use of library services by students in the University of Uyo. In their survey, Simmonds & Andaleeb⁴ explored the extent to which service quality factors along with resources and user characteristics affect library usage. The study proposed a model to explain the use of academic libraries in terms of service quality factors, resources and user characteristics. Kiran Kaur⁵ carried out a survey based on SERVQUAL dimensions to examine the perception of academic staff towards quality of academic library services and impact of library services on the efficiency and effectiveness of academic work. Arshad & Ameen⁶ assessed the service quality of university's libraries in Pakistan by measuring gap between perception & expectations of users. A modified SERVQUAL questionnaire was used to explore users' desired & perceived service level on a seven point Likert Scale. The study also revealed that users' expectations were high as compared to their perceptions. The overall service quality and satisfaction of the university's Libraries was found to be somewhat good.

In his research study, Kumar⁷ evaluated the service quality and the extent of user satisfaction of University libraries of Kerala from the respondents' perspective from different user groups. The study revealed that the quality of services rendered by the university libraries is moderately good and most of the users are moderately satisfied with various services, viz., physical facilities, collection, services, staff behavior etc., except responsiveness. Shoeb⁸ investigated the overall service quality of the library system of Independent university,

Bangladesh. He revealed that perceived services were lagging behind the desired service and attributes of service quality fall short of user perception. Kassim⁹, evaluated library's performance by measuring users' satisfaction with library services, infrastructure and collection provided by a Public University Library in Malaysia. The study revealed that on the average, the respondents were only quite satisfied with the library services, infrastructure/place/space, collection/information of the library as a whole. The results also showed significant differences with Library services, infrastructure/place/space, and libraries' collection/information among the respondents of the 3 faculties. The present study is conducted to examine the quality of library services and user satisfaction with A.C. Joshi Library, Panjab University, Chandigarh.

3. AIM AND OBJECTIVES

The prime aim of the study is to assess the user satisfaction with the library services offered by the University library. Specific objectives were to:

- (a) Identify the relationship between library services and user satisfaction
- (b) Study the gap between library service quality and user satisfaction of the respondents

3.1 Hypotheses

To meet the aim and objectives of the present study, the following null hypotheses were framed:

- (a) There is no significant difference in library attributes and user satisfaction level.
- (b) There is no significant difference in library attributes and user satisfaction across academic disciplines.
- (c) There is no significant difference in library attributes and user satisfaction across status of respondents.
- (d) There is no correlation among service quality attributes.
- (e) Library attributes have no significant positive impact on user satisfaction.

4. METHODOLOGY

The population of the study consists of the students studying in various teaching department in the university campus. The students are using the library services for different reasons. The primary data was gathered using self-administered questionnaire during the month of September, 2013. Questionnaires were personally distributed to the students in the different reading areas in the library. Respondents were randomly selected sitting at the main library from different departments. Five point Likert scale was used ranging from strongly disagree to strongly agree to measure the level of quality of services and user satisfaction.

5. ANALYSIS OF DATA

Total 300 questionnaires were distributed and 220 Questionnaires were analysed with the help of SPSS software with a response rate of 73.3 % excluding 80 incomplete questionnaires. The respondents from different subjects were categorised into four major academic streams, viz., science & engineering, social sciences, arts & languages, and law & management.

Out of 220 respondents, 125 (56.8 %) were males and 95 (43.2 %) were females. Further, the respondents were categorised into 4 academic disciplines, Science & Engineering consists of 85 (38.65 %) respondents, followed by 54 (24.55 %) from Law & Management, 44 (20 %) from Social Sciences and 37 (16.8 %) were from Arts & Languages.

5.1 Frequency of Library Visit

88 respondents (i.e., 40 %) were studying in Post Graduate courses, followed by 72 (32.7 %) in Graduation and 60 respondents i.e., (27.3 %) were Research Scholars (both MPhil & PhD). 128 (58.2 %) were day scholars and rest 92 (41.8 %) were hostellers. Table 1 reveals that majority of students, i.e., 127 (57.72 %) of the total 220 respondents visit

Table1. Frequency of library visit

Frequency of library visit	Graduate (%)	Post graduate (%)	Research scholar (%)	Total (%)
Daily	43 (33.9)	60 (47.2)	24 (18.9)	127 (57.72)
Few times a week	19 (43.2)	14 (31.8)	11 (25.0)	44 (20)
Fortnightly	7 (31.8)	5 (22.7)	10 (45.5)	22 (10)
Monthly	1 (5.3)	7 (36.8)	11 (57.9)	19 (8.63)
Few times in a semester	2 (25.0)	2 (25.0)	4 (50.0)	8 (3.65)
Total	72 (32.7)	88 (40)	60 (27.3)	220 (100)

Table 2. Reasons for library visit

Reasons for library visit	Graduates (N=72)	Post graduates (N=88)	Research scholars (N=60)	Total	% of total respondents (N=220)
Study	68	81	41	190	86.36
Use of library materials	40	47	26	113	51.37
Borrow books	44	61	24	129	58.63
Use the computers/copiers	22	32	17	71	32.27
Research	14	26	45	85	38.63
Leisure reading	13	22	8	43	19.54
Reference work	6	9	26	41	18.63
Group study	17	15	17	49	22.27
Instructed by teacher	17	11	9	37	16.81
Use of audio-visual facilities	2	5	4	11	5

the library daily, followed by 44 (20 %) respondents visit the library few times in a week, 19 (8.63 %) respondents visit monthly and only 8 respondents i.e., 3.65 % of total respondents visit the library few times in a semester. Further it is found that postgraduate students are maximum in number i.e., 60 (47.2 %) out of 127 who visited library on daily basis followed by graduates 43 (33.9 %) and research scholars 24 (18.9 %) respectively.

5.2 Purpose of Library Visit

Table 2 shows that most of the respondents i.e., 190 (86.36 %) visited the library for study purposes, followed by 129 (58.63 %) to borrow books, followed by 113 (51.37 %) using different library material. Further almost all graduates & PG students i.e., 68 out of 72 and 81 out of 88 respectively visited the library for study purpose. It was also noted that use of A-V aids is the least preferred reason opted by students for library visit. Out of 60 research scholars, 45 (75 %) were among top respondents for visiting library for research purposes. Reference work was also one of the preferred reasons for research scholars for library visit.

5.3 Frequency of Assistance Asked

Table 3 depicts about the assistance asked by respondents from staff at reference/information desk

Table 3. Assistance from staff at the reference/information desk

Frequency	Graduates (%)	Post graduates (%)	Research scholars (%)	Total (%)
Once in a week	19 (26.4)	27 (30.7)	30 (50.0)	76 (34.5)
Several times a month	10 (13.9)	30 (34.1)	9 (15.0)	49 (22.3)
Few times in a semester	35 (48.6)	25 (28.4)	17 (28.3)	77 (35.0)
Never	8 (11.1)	6 (6.8)	4 (6.7)	18 (8.2)
Total	72 (100.0)	88 (100.0)	60 (100.0)	220 (100.0)

located in different sections in the library. It was observed that out of 220 respondents, 77 (35 %) respondents asked for any assistance only few times in a semester, followed by 76 (34.5 %) few times a month, followed by 49 (22.3 %) once in a week and 18 (8.2 %) respondents never asked assistance from staff at the reference/ information desk. Further respondents' status-wise it was observed that most of the graduate students consult the reference desk few times in a semester. Most of the PG students consulted reference desk frequently.

5.4 Frequency of Website Visit

The frequency to access information for their learning and research activities through library webpages on the university website is shown in Table 4. It was noted that more than half of the total respondents visit the library webpages weekly and once in a month. Only 51(23.2 %) respondents are using library web-pages daily.

Table 4. Frequency of library webpages access by respondents

Web-page visit	Graduates (%)	Post graduates (%)	Research scholars (%)	Total (%)
Daily	21(41.2)	21(41.2)	9 (17.6)	51 (23.2)
Few times a week	7 (18.4)	16 (42.1)	15 (39.5)	38 (17.8)
Weekly	15(22.1)	33(48.5)	20 (29.4)	68 (30.4)
Once in a month	29(46.0)	18(28.6)	16(25.4)	63 (28.6)
Total	72 (32.7)	88(40.0)	60(27.3)	220 (100.0)

5.5 Difference in Library Attributes and Satisfaction

One sample t-test is used for tests of the sample mean. Table 5 shows the mean score of attributes of library services and user satisfaction. One sample t-test was applied to measure significant difference in library attributes and user satisfaction measured on the Likert scale. Test value of 3 (Neutral) is considered to compare for significant difference and it was observed that all attributes were above the average satisfaction level. Further p value of 0 rejects the hypothesis that there is no significant difference in library attributes and user satisfaction level.

F test/anova is a parametric test to investigate the difference in measured values of an attribute among three or more independent groups. Here, F test was used to find the difference in library attributes and user satisfaction among respondents with different academic disciplines. The data in the Table 6 reveals the analysis of variance of library attributes and user satisfaction across academic

Table 5. One sample t test

Library services attributes	N	Mean	SD	t (Test value=3)	Significance P value
Library environment	220	3.70	0.489	21.47	0.000
Library collection	220	3.58	0.577	15.05	0.000
Library services	220	3.55	0.509	16.16	0.000
Library staff	220	3.86	0.620	20.59	0.000
User satisfaction	220	4.11	0.750	21.94	0.000

disciplines of respondents. There is difference in mean of library attributes and user satisfaction across academic disciplines and significance value is less than 0.05. Null hypothesis, which states that there is no significant difference in library attributes and user satisfaction across academic disciplines got rejected as the as the p values are >0.05.

Table 7 shows the analysis of variance of library attributes and user satisfaction across types of respondents. The F values of user satisfaction (3.655, significance = 0.027). The null hypothesis that there is no significant difference in user satisfaction got rejected as the p value is >0.05. Hence there is significant difference in means of user satisfaction. No difference was noted in library attributes as the p value is >0.05.

Correlation analysis is used to determine whether the values of 2 variables have relationship. As per the results of Table 8, the correlation coefficient values of user satisfaction and library service attributes are significant positively correlated at $p < 0.01$ level. Thus the null hypothesis that there is no correlation among service quality attributes got rejected.

Multiple regression analysis is a useful technique used to analyse the relationship between a single dependent and several independent variables. Multiple regression analysis was employed to examine the impact of independent library attributes on user satisfaction as dependent variable. It can be noted from the results of Table 9, there is a significant relationship between the four library attributes and level of user satisfaction ($F = 19.11$, significance of $F < 0.001$). Moreover, the library attributes explain a considerable proportion of the variance in the level of user satisfaction, 26.2 % as indicated by R^2 value and adjusted R^2 of 24.9 %. Library environment ($\beta = 0.501$, $p = 0.000$) and library services ($\beta = 0.367$, $p = 0.003$) were found the significant predictors of user satisfaction, while the other 2 library attributes do not impact the user satisfaction significantly. Variance inflation factor VIF values vary from 1.53 to 2.031, which is much lower than threshold of 10, indicating the lack of multicollinearity (degree at

Table 6. F-test for significant difference of mean scores of library service attributes among academic discipline

	Academic discipline	N	Mean	SD	F-value	Significance
Library environment	Science & Engineering	85	3.74	0.495	5.311	0.001
	Social Sciences	44	3.73	0.506		
	Arts & Languages	37	3.89	0.449		
	Law & Management	54	3.50	0.434		
	Total	220	3.70	0.489		
Library collection	Science & Engineering	85	3.51	0.610	3.386	0.019
	Social Sciences	44	3.67	0.594		
	Arts & Languages	37	3.81	0.495		
	Law & Management	54	3.47	0.520		
	Total	220	3.58	0.577		
Library services	Science & Engineering	85	3.54	0.452	8.618	0.000
	Social Sciences	44	3.55	0.415		
	Arts & Languages	37	3.87	0.535		
	Law & Management	54	3.35	0.548		
	Total	220	3.55	0.509		
Library staff	Science & Engineering	85	3.78	0.556	5.868	0.001
	Social Sciences	44	3.83	0.672		
	Arts & Languages	37	4.23	0.624		
	Law & Management	54	3.75	0.590		
	Total	220	3.86	0.620		
User satisfaction	Science & Engineering	85	4.07	0.691	6.390	0.000
	Social Sciences	44	4.30	0.537		
	Arts & Languages	37	4.40	0.707		
	Law & Management	54	3.80	0.898		

Table 7. F-test for difference in mean scores of library attributes among respondents status

Library services attributes	Status	N	Mean	SD	F-value	Significance
Library environment	Graduates	72	3.70	0.480	0.287	0.751
	Post Graduate	88	3.70	0.492		
	Research Scholars	60	3.66	0.503		
	Total	220	3.70	0.489		
Library collection	Graduates	72	3.60	0.601	0.242	0.785
	Post Graduate	88	3.59	0.561		
	Research Scholars	60	3.54	0.576		
	Total	220	3.58	0.577		
Library services	Graduates	72	3.52	0.541	2.023	0.135
	Post Graduate	88	3.63	0.495		
	Research Scholars	60	3.47	0.481		
	Total	220	3.55	0.509		
Library staff	Graduates	72	3.82	0.581	0.582	0.560
	Post Graduate	88	3.91	0.657		
	Research Scholars	60	3.82	0.613		
	Total	220	3.86	0.620		
User satisfaction	Graduates	72	4.06	0.758	3.655	0.027
	Post Graduate	88	4.26	0.625		
	Research Scholars	60	3.93	0.868		
	Total	220	4.11	0.750		

which a construct can explained by other construct in the regression analysis) among constructs. Thus the null hypothesis that library attributes have no significant positive impact on user satisfaction got rejected as t-value of library environment and library services attributes is significant at 0.01 level.

5.6 Helpfulness of Library Services

Table 10 indicates that majority of respondents i.e., 71.49 % were of the view that library service attributes are helpful towards their academic success whereas, only 3.64 % respondents given negative responses i.e., library service attributes are not helpful towards their academic success, rest 24.87 % respondents were not sure about helpfulness of library service attributes towards their academic success which also indicates that either they don't know much about the library service attributes or not visiting the library or are rarely visiting they library or never utilised library resources and service.

6. FINDINGS AND CONCLUSIONS

The study was an attempt to measure the effect of library service quality (LSQ) on user satisfaction of AC Joshi Library, Panjab University, Chandigarh (India). The finding of the study revealed that library environment and library services had impact on the levels of users satisfaction by 26.2 % based on the regression analysis. The level of quality of different attributes, i.e., library environment, library collection, library staff and library services were at satisfaction level. 57.7 % of user visits the library daily. Further the users visited the library primarily for reading, lending of the books, use of library material and research purpose.

About 34.5 % users consult the library staff once in week. The daily frequency of users visiting the library webpages on the university website was only 23.2 %. It was observed that there is significant difference in levels of library attributes

Table 8. Correlation coefficient between user and library attributes

	Library satisfaction	Library environment	Library collection	Library services	Library staff
User satisfaction	1	0.474**	0.265**	0.445**	0.335**
Library environment		1	0.486**	0.619**	0.567**
Library collection			1	0.489**	0.531**
Library services				1	0.629**
Library staff					1

Table 9. Multiple regression analysis

	Beta coefficients	Standard error	t-value	Significance (p value)	VIF
(Constant)	1.016	0.373	2.724	0.007	
Library environment	0.501	0.122	4.117	0.000	1.839
Library collection	-0.023	0.094	-0.243	0.808	1.530
Library services	0.367	0.123	2.990	0.003	2.031
Library staff	0.003	0.099	0.030	0.976	1.952
R^2	0.262		F-statistics	19.11	
Adjusted R^2	0.249		Significance (p value)	0.000	

Table 10. Helpfulness of library services towards academic success of respondents

Helpfulness	Helpful	Not Helpful	Not Sure	Total
• Helped to improve my reading and knowledge	194	3	23	220
• Improved my research skills	167	7	46	220
• Helped me to build confidence in my capabilities	160	6	54	220
• Taught me to use information to achieve a goal, or make a decision	158	8	54	220
• Provided assistance to complete assignments, class-work, etc.	139	14	67	220
• Helped me to understand how to cite resources/information	145	13	62	220
• Helped me to understand the difference between scholarly & popular resources	138	5	77	220
Total	1101 (71.49 %)	56 (3.64 %)	383 (24.87 %)	1540 (100 %)

across users of different streams. It was also noted that the status of students has no association with library attributes except the significant difference in their satisfaction level. It was also observed that that majority of the respondents i.e., 71.49 % of the opinion that library attributes are helpful towards their academic success.

The proposed hypotheses were based on previous research studies and evidences shown in the literature, it was not possible to explain relationships among the variables of the study. Hence, the findings of the study were not an indication for explaining relationships among variables of library service quality. Further research can be carried out across important attributes of academic community with different characteristics and including other departmental libraries in the university library system. However taking a sample large enough for significant results must be considered, when carrying out such study for a higher level of analysis.

REFERENCES

- Lewis, Robert C. & Booms, Bernard H. The marketing aspects of service quality. *Emerging Pers. Serv. Market.*, 1983, **65**(4), 99-107.
- Hossain, Muhammad Jaber & Md Anwarul Islam. Understanding perceived service quality and satisfaction: A study of Dhaka University Library, Bangladesh. *Perform. Meas. Metr.*, 2012, **13**(3), 169-82.
- Omehia, E.; Obi, Boma B. & Itohowo, Henry. Student characteristics and use of library services in the University of Uyo. *Lib. Phil. Prac.*, 2008, 173. <http://digitalcommons.unl.edu/libphilprac/173>
- Simmonds, Patience L. & Andaleeb, Syed Saad. Usage of academic libraries: Role of service. *Library Trends*, 2001, **49**(4), 626-34.
- Kiran, Kaur. Service quality and customer satisfaction in academic libraries: Perspectives from a Malaysian University. *Library Review*, 2010, **59**(4), 261-73.
- Arshad, Alia & Kanwal, Ameen. Service quality of the University of the Punjab's libraries: An exploration of users' perceptions. *Perfor. Measur. Met.*, 2010, **11**(3), 313-25.
- Kumar, P.K. User satisfaction and service quality of the university libraries in Kerala. *Inter. J. Inf. Dissemin. Technol.*, 2012, **2**(1), 24-30.
- Shoeb, Zahid Hossain. Identifying service superiority, zone of tolerance and underlying dimensions: service quality attributes in a private university library in Bangladesh. *Library Review*, 2011, **4**, 293-311.
- Kassim, Norliya Ahmad. Evaluating users' satisfaction on academic library performance. *Malaysian J. Lib. Inf. Sci.*, 2009, **14**(2), 101-15.
- Hernon, Peter; Danuta, A. Nitecki & Ellen, Altman. Service quality and customer satisfaction: An assessment and future directions. *J. Acad. Lib.*, 1999, **25**(1), 9-17.
- Mahmood, Khalid; Muhammad, Arif & Muhammad Rafiq. Are users satisfied with library services? the case of Punjab University library. *Pakistan Lib. Inf. Sci. J.*, 2009, **40**(1), 1.
- Adeniran, Pauline. User satisfaction with academic libraries services: Academic staff and students perspectives. *Intern. J. Lib. Inf. Sci.*, 2011, **3**(10), 209-16.
- Sivathaasan, N. Impact of library collections on user satisfaction: A case study. *European J. Busi. Manag.*, 2013, **5**(13), 141-46.
- Hernon, Peter & Altman, Ellen. Assessing service quality: Satisfying the expectations of library customers. ALA, Chicago, 2009.
- Parasuraman, Anantharanthan; Valarie, A.; Zeithaml & Berry, Leonard L. A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 1985, 41-50.
- Panjab University, A.C. Joshi Library. <http://library.puchd.ac.in/>(accessed on 28 September 2013).

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