

## **Using LibQual+<sup>®</sup> As a Qualitative Method: Taking One Iranian Academic Library as an Example**

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**Abstract:** The purpose of this research is to use LibQual+<sup>®</sup> as a qualitative method for improving the service quality of Islamic Azad University – Marvdasht Branch Academic Library. The study was done using printed version of LibQUAL+<sup>®</sup> survey, consisting of questions on three dimensions of the model: Affect of Service, Information Control and Library as Place. The research sample included 300 users (faculties and M.S students) of the library. Findings show that the library has offered much better services in the first dimension meanwhile; the lowest service level is in the third one. The desired expectations of users are high in all three dimensions and there is a gap between levels of expectations and perceived service performance.

**Keywords:** LibQUAL +<sup>®</sup>, [Academic libraries](#), [Quality Assessment](#), Service Levels, [Iran](#)

### **1- Introduction**

In the new era that library and information sciences are comprehensively influenced by new technology which followed by users' higher expectation; the performance evaluation of libraries become a considerable point for libraries and information centers administrators. Because the core of success for administrators is the customer orientation, therefore, during recent years, user-oriented concept turned into one of the most important factors in Iranian universities which provoke libraries to provide the highest level of services to the highest number of members. Gradually, administrators of academic libraries in Iran are attempting to assess the optimal evaluation of their services through continues quality assessment of library users' satisfaction and their expectations. The library of Marvdasht Islamic Azad University (MIAU), as an improving library with approximately 12000 members and a newly built and assigned building, could be an appropriate case to study the value of its services' quality on this paper. In this study LibQUAL+<sup>®</sup> is used for purpose of qualitative assessment of the library services. Allowing assumption of the library users to be only the faculty members and M. S. students, at this research three dimensions of the model are depicted as three levels of users' satisfactions

consisting: Minimum level, Maximum level and perceived level of services. The Minimum level describes the level in which the users are not unhappy with the services but not fully satisfied and the Maximum level, imparts full satisfaction of the users and their expectations. The Perceived level shows the present services' quality.

In this research, each dimension of this model is being evaluated within its own indicators frame. The main questions of this paper to be answered are as follows:

- 1) In which dimension of LibQUAL model has MIAU library succeeded the most?
- 2) Are there any significant differences between the Minimum level of users' expectations and the Perceived level of services provided in MIAU library?
- 3) Are there any significant differences between the Maximum level of users' expectations and the Perceived level of services provided in MIAU library?
- 4) Are there any significant differences for expectation levels of the library's services (minimum, maximum and the perceived level) among MIAU faculty members and M. S. students?

## **2- Research background**

Lots of researches have been carried out and still more are taking place all around the globe using LibQUAL. For instance Dole (2002) used the same modeling tool to evaluate the library services at Washburn University in Kansas State of the US where the respondents put in three groups of faculty board, students and graduated students of the university. Analyzing the input data indicates a general affirmative overview of the library services quality. However the weaknesses were mentioned in three sectors of printed collections, Journals' Volumes and records accuracy. Also two dimensions of the model, services influence and personal control, were evaluated as weak. The study showed that the students and faculty members, request a better building, user-friendly distance access to the catalogue of the library and databases, modern facilities and easy access to the librarians who are active and compassionate.

Empey and Murphy (2003), Adam (2004), Godwin (2005), Kyrillidou and Persson (2006), Thompson, Kyrillidou and Cook (2007), Ladhari and Morales (2008), Janice (2009) and Nadiri and Mayboudi (2010) have also used LibQUAL model as a qualitative method for evaluating library services.

During recent years, there are some such studies that have more or less been carried out in Iran where the most concentration been given to the National Universities by the researchers such as Kazempour (2006), Mirghafouri and Maki (2007), Najafgholi-Nejad (2007), Babageibi and Fattahi (2009), Hariri and Afghani (2008) and Omidifar and Mousavi (2009) who have studied and evaluated the quality of services the National Academic libraries such as Tarbiyat-Modares University, Ferdousi University and Allameh-Tabatabaei University. Moreover, Ashrafi-rizi and Kazempour and Shabani (2008) evaluated the Library Service Quality of Islamic Azad University-Shahrekord Branch via Libqual approach. The common finding of these researches conducted to substantiating a significant gap between users' anticipations and provided services. Azad University as part of the Higher Education of Iran is

one of the most improving universities in Iran therefore; there is a necessity of considering it as a case of study.

### **3-Philosophy of Research**

The statistical society of this research is all the faculty members (198 people) and masters' degree students (1027 people) of Marvdasht University. This is a preferred society because they are more compelled to use library as the main source of information for their studies than others.

Cochran formula has been used to determine the sample size. 220 questioners, based on students' portions of different subjects at graduate (higher education) level, have randomly been distributed where, 194 questioners has been done and returned to the researcher of this study.

And also, 80 people of faculty members were fortuitously assigned, using systematical random depending on the portion of subjects, to fill in the questioner where 70 of those have been returned.

In other words, in eight weeks, total of 300 questioners have been handed over and 88% of those were given back.

In this paper, LibQual questioner has been used. The provided questioner which handed to the respondents of this research is the printed copy, with minor changes, that published in LibQual official website. ([www.libqual.org](http://www.libqual.org))

For analyzing and studying the data of this research, firstly, input data were transferred to a computer and then data were analyzed by SPSS (Statistical Package for Social Science) software. The analyzing and studying data has been undertaken in two sectors of descriptive and inferential statistics. In order to describe the under-study society using descriptive statistics, the abundant tables and status and distribution indicators have been used and also using the inferential statistics, proper answers have been given the submitted questions in this paper. Considering the point of non-normal data distribution in this research, the nonparametric tastes have been used.

Freidman test and Wilcoxon test have used to answer the first question of this paper, while using Freidman test is enough to provide answers to questions number 2 and 3. Mann-Whitney U test have been used to respond question number 4.

### **4- Findings:**

#### **4-1-People's personality:**

The study shows that 54.9% of respondents are females and the rest are males however, 7 respondents have not mentioned their sex. 91.6% of the respondents are between 25 and 45 years old which form the maximum number of the participants in this survey, while 2.8% are ranged 18 to 22 yearold and 5.6% are over 45. 12 people have refused to mention their ages.73.2% of the respondents are students and the rest (26.8%) are faculty members. Among 70 people of faculty members, 80.6% are lecturers and the rest are assistant professors.

#### **4-2-Responses to the raised questions in this study**

1) In which dimension of LibQUAL model has MIAU library succeeded the most?

Deriving from the final result, Affect of Service has gained better score, in which the numerical average of one indicator has been calculated as 5.0, while the dimension of Information Control achieved the minimum average of 4.45. The result from Freidman test shows that the average rating of Affect of Service is 2.3 where the Information Control dimension is 1.8 and Library as Place is 1.9. Based on the computed Chi-Square value, on 99% of data, these results are significant and expandable to the whole statistical society. (Table1)

Dimension	Numerical average	Rating average	$\chi^2$	d.f	sig
Affect of Service	5	2.3	28.7	2	0.00
Information Control	4.45	1.8			
Library as Place	4.56	1.9			

Table1. Significance test for average differences of respondents evaluations' scores about MIAU library services within three dimensions of LibQual model.

The result from Wilcoxon test indicates significant differences between Affect of Service and the other two dimensions from the respondent's point of view. However, differences between Information control and Library as Place dimensions are not consequential.

Comparing the mean of respondents' score's average in one indicator of minimum expectation of the MIAU library service quality shows that the highest expectation is for Affect of Service(mean of 5.56) while the lowest level of expectation is about information Control. (Mean 5.03)

Based on the Freidman test results, it is appreciable that Affect of Service reaches the highest mean value of 2.16 among all the dimensions, while the same value for dimension of Information Control is 1.87. Referring to the Chi-Square value these values are significant. (Table 2)

Dimension	Numerical average	Rating average	$\chi^2$	d.f	Sig
Affect of Service	5.56	2.16	10.9	2	0.003
Information Control	5.03	1.87			
Library as Place	5.23	1.96			

Table2. Comparative averages of respondents' scores for minimum expectation's mean of an indicator pertaining to different dimensions.

2) Is there any significant difference between minimum expectation and the perceived level in MIAU library?

The result shows no significant difference between the average of the minimum expectations and the average of perceived level in Affect of service meanwhile; it is significant in two other dimensions. All in all, the average score of the minimum expectation is more than the perceived level of Library Service Quality and this difference is 99% significant (Table3).

Affect of Dimension Service	Minimum expectation	Numerical average	Rating average	$\chi^2$	d.f	Sig
	perceived level	5.03	4.45			

Information Control	Minimum expectation	45.3	1.59	7.7	1	0.006
	perceived level	40.1	1.41			
Library as Place	Minimum expectation	20.91	1.62	11.1	1	0.0009
	perceived level	16.77	1.38			
Library Service Quality	Minimum expectation	103.86	1.59	6.3	1	0.01
	perceived level	91.6	1.41			

Table3. Significance test for differences between average of users' scores for minimum expectation and perceived level in LibQual dimensions.

3) Is there any significant difference between maximum expectation and the perceived level in MIAU library?

The result shows significant difference between the average of the maximum expectations and the average of perceived level in all dimensions. The average score of the maximum expectation is more than the perceived level of Library Service Quality and this difference is 99% significant. Table 4 indicates these results.

Dimension		Numerical average	Rating average	$\chi^2$	d.f	sig
Affect of Service	Maximum expectation	50.5	1.86	112.6	1	0.000
	perceived level	35.03	1.14			
Information Control	Maximum expectation	63.57	1.85	109.7	1	0.000
	perceived level	40.1	1.15			
Library as Place	Maximum expectation	28.23	1.86	106.7	1	0.000
	perceived level	16.7	1.14			
Library Service Quality	Maximum expectation	142.14	1.88	117.6	1	0.000
	perceived level	91.6	1.12			

Table4. Significance test for differences between average of users' scores for maximum expectation and perceived level in LibQual dimensions.

4) Are there any significant differences for expectation levels of the library services (minimum, maximum and the perceived level) among MIAU faculty members and M. S. students?

The result shows that the minimum expectation level among faculty members is higher than master students. Moreover, significant difference of 99% can be elicited for the minimum expectation of the Library Service Quality where the numerical average of this indicator among faculty members is 124.7 and rating average is 169.7. The same averages for students are respectively 95.9 and 109.2. See Table 5.

Dimension	Users	Numerical average	Rating average	Z	Sig
Affect of Service	Faculty members	43.9	169.05	-4.9	0.000
	Students	35.7	117.05		
Information Control	Faculty members	55.1	170.8	-5.1	0.000
	Students	41.7	116.5		
Library as Place	Faculty members	24.6	162.7	-4.9	0.000
	Students	19.3	111.7		
Library ServiceQuality	Faculty members	124.7	169.7	-5.8	0.000
	Students	95.9	109.7		

Table5. Significance test of the minimum expectation differences among faculty members and students

The results imply the maximum expectation in all quality dimensions of the library is higher among the faculty members than the M. S. students. These differences imply the 99% signification. (Table 6).

Dimension	Users	Numerical average	Rating average	Z	sig
Affect of Service	Faculty members	54.1	162	-4.02	0.0001
	Students	49.2	119.6		
Information Control	Faculty members	70.4	164.4	-4.3	0.000
	Students	61.1	118.7		
Library as Place	Faculty members	30.7	152.2	-3.6	0.0004
	Students	27.1	115.4		
Library Service Quality	Faculty members	160.3	158.3	-4.3	0.000
	Students	136.9	113.2		

Table6. Significance test of the maximum expectation differences among faculty members and students

Despite the higher expectation of Library Service Quality among faculty members, their evaluation of perceived level is more affirmative than students. These differences are significant and expandable over the whole statistical society. (Table 7).

Dimension	Users	Numerical average	Rating average	Z	sig
Affect of Service	Faculty members	39.2	131.3	-3.02	0.003
	Students	33.5	102.2		
Information Control	Faculty members	48.8	145.4	-4.96	0.000
	Students	36.9	97.2		
Library as Place	Faculty members	19.46	127.3	-3.16	0.001
	Students	16.2	96.5		
Library	Faculty members	107.7	137.7		

ServiceQuality	Students	85.7	92.5	-4.8	0.000
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Table7. Significance test of the perceived level differences among faculty members and students

### 5- Discussion

As the results show, the MIAU library has succeeded in the Affect of Service more than Library as Place and Information Control.

Affect of Service dimension of LibQual deals with the staff quality and their developments. Staff quality includes staff behavior and their knowledge specialty. As the respondents have evaluated staff behavior better than their knowledge therefore, library officials should put more effort to increase the staff's knowledge.

MIAU library is, unfortunately, suffering from enough library and information professionals which seemingly, are common problem in Iranian libraries and probably it causes not the respondents be satisfied in this study.

Although, the most weakness of the MIAU library from the users' point of view, is in the Library as Place, the library building has recently built and newly assigned. Therefore, the officials shall carefully review exposures of different sectors because the users believe that this place is not comfortable, pleasant and attractive and it appears not to have socializing or public space for learning and studying in group or if there is any, are not satisfactory.

The study demonstrates a gap between users' maximum and minimum levels of expectation and the perceived level of library services. Therefore it shall be suggested that the library officials should try more to meet users' expectations with reviewing their policy, managements and plans. Because as smaller as this gap gets as more useful as the library becomes and gets closer to fulfill its missions' needs.

While the faculty members' expectations are more than M. S. students, they are more satisfied with the services. This finding is against what came out of Najafgholi-nejad (2007) study in which he reported more satisfaction among students than faculty members.

Students at higher education levels need a high quality library in order to perform high quality researches. In total, MIAU faculty members and M. S. students are not much satisfied with the library. Also their maximum expectation at all three dimensions are high which exhibits a high expectation from the library. Minimum level of users' expectation is a bit higher than medium level and the users' average score of the perceived level of Library Service Quality is even less than their minimum expectation. Although MIAU has always tried to improve, strengthen and expand the higher education, but these results are non-satisfactory and unpleasant because efficient higher education requires efficient library.

### 6-Research proposals

Aiming to take MIAU Library Service Quality to a higher level, the following suggestions are being made by the researcher:

- 1- According to the found outs about Library as Place, it is suggested to have some essential changes, such as interior design of the library which needs more attention, in order to become comfortable, pleasant and attractive; there are needs of guide-board installation, use of plants in appropriate spaces, appropriate arrangement of seats, tables and shelves so that not to impel users to cross the study hall in order to reach different parts of the library.
  - embed social space for group learning and studying
  - Adequate budgets should be agreed in order to take the quality and quantity of the equipment to a higher level.
- 2- According to the results About Information Control, it is suggested that:
  - The section of Audio-visual needs to be created in the library.
  - In order to facilitating and speeding the information retrieval, the number of search stations should increase.
  - Interlibrary loan plan should be highly considered in order to supply unavailable resources in the library from other libraries.
  - A priority should be given to create the abstract data base of periodicals that the library is subscribed to.
- Special workshops to be created for students in order to make them familiar with using online resources.
  - Correct informing and advertising for resources seems essential.
  - In order to be updated with users' information needs; interaction and communication with them and on-going surveys are essential.
- 3- According to the results about Affect of Service, the followings are suggested:
  - Employ more professional librarians.
  - Service training should be set up for staff and an attempt should be made to keep all them updated scientifically.
  - Staff evaluation must be carried out by library management team in a periodic and on-going manner.

In general, based on aforesaid aspects, to resolve problems and improve the library services in all LibQual model dimensions, serious attention of MIAU authorities is essentially required.

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