MEASUREMENT OF USER PERCEPTION OF LIBRARY SERVICES PROVIDED TO DR.B.R.AMBEDKAR CENTRAL LIBRARY OF ADIKAVI NANNAYA UNIVERSITY, RAJAHMUNDRY, ANDHRA PRADESH, INDIA: A LIBQUAL+™ STUDY

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Abstract - The study shows the gap between perceived and expected service quality of Adikavi Nannaya University. Data collected from undergraduate and post graduate students of College of Arts and Sciences, College of Science and Technology, College of Engineering, and College of Education. A sample of 150 students, research scholar and faculty was selected and out of that 120 was responded (80%) for data analysis. The collected 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 calculated. Findings disclose a difference between the expectations and perceptions of respondents and thus, require that the library should enhance its services; especially staff should be lean more things on user need and their expectation on library services. The results are helpful and act as strategy for the library administration in identifying their strong points and weak points.

Keywords: LibQUAL +, SERVQUAL, Central Library, Service Quality, Library, Affect of Service, Information Control, Library as a place

INTRODUCTION

Customers have proved that service quality has quantifiable impact on customer retention, market share and profitability in the commercial world. However, even in the non-commercial world, quality plays an important role. Management of Quality services is vital in academic and special libraries even though libraries seem to have a group of captive customers. Academic libraries have to provide quality service to the academic community as the same community evaluates their worth and hence the size of funding. Funding for higher education is being reduced over the years in many countries necessitating careful allocation of funds for improvement of services in the academic settings. Therefore, assessment of activities in the academic libraries is gaining more importance today than ever before. To provide for and upgrade the service quality in the libraries, it is important to first assess the quality of services presently offered. This provides an important feedback for libraries to improve the services to their users.

"A Customer is the most important visitor in our Premises.

He is not dependent on us. We are dependent on him.

He is not an interruption in our work. He is the purpose of it.

He is not an outsider on our business. He is a part of it.

We are not doing him a favour by serving him.

He is doing a favour by giving us an opportunity to do so". – M.K.Gandhi (father of the nation)

Users come to the libraries with varied expectations of services. Since it is personal to an individual's experience with a specific encounter or series of experiences, satisfaction may or may not be related to the performance of the library. One user may be satisfied, while another is not, with the same library service. Hernon & Altman (1998) point out "by inference, satisfaction levels from a number of transactions or encounters that an individual experiences with a particular organisation fuse to form an impression of service quality for that person. The collective experience of many persons creates an organisation's reputation for service quality".

QUALITY AND SATISFACTION

The concept of "Service Quality" is different from satisfaction, and has offered an alternative direction to assess library performance. Satisfaction is often a short-term measure. Service Quality evolves over time and relates to the customer's developed attitude towards a service. There is no single definition of Service Quality though it is distinguished from satisfaction by its focus on expectations. Within the library literature, reported research has adopted the concept of the Gap Theory of Service Quality, developed by the marketing research team of (Parasuraman, Zeithaml & Berry, 1985). They define the service quality in terms of reducing the gap between customers' expectations for excellent service and their perceptions of services delivered.

LIBQUAL+™ INSTRUMENT

The LibQUAL+™ survey evolved from a conceptual model based on the ServQUAL instrument, a popular tool for assessing service quality in the educational sector. The Texas A&M University (TAMU) Libraries and other libraries used modified ServQUAL instruments for several years; those applications revealed the need for a newly adapted tool that would serve the particular requirements of libraries. ARL, representing the largest research libraries in North America, partnered with Texas A&M University Libraries to develop, test and refine LibQUAL+™.

Since that first step, the LibQUAL+™ survey has become an increasingly popular tool. The instrument has been improved and refined and it is currently composed of 22 questions and comment box. Each question is answered on a scale from 1 to 7, with 7 being highest rating and 1 being lowest rating (Thompson, Cook & Kyrillidou, 2006).

The users who responded to the 22 questions are grouped to measure three dimensions of library service quality: 'Affect of Service' dimension, 'Information Control' dimension and 'Library as Place' dimension

LITERATURE REVIEW

Most of the studies have been conducted on quality of library services and satisfaction of library users but it could not likely to map out the related works on the subject, thus the attempts have been made here to review the appropriate studies based on LibQUAL+™ tool for measuring the service quality

Baada and others (2019) studied user perception of the quality of public library services in the Greater Accra Region of Ghana using the LibQUAL+ model and expressed in his view that the users of library were dissatisfied with the quality and depth of equipment and facilities (conducive environment for learning, internet connectivity and computers) and current library materials. Kumar, Anil and Mahajan, Preeti (2019) also said that the level of service quality (SQ) offered by the central library of Maharshi Dayanand University (MDU), Rohtak, (India) from users' viewpoints using LibQUAL survey reflected that the library users have highest desired expectations in Library as Place (LP) dimension among all the three dimensions and disclosed that the library performance was also described maximum in LP dimension, the users' overall perceived library service quality (LSQ) was found less when it compare to their desired level of LSQ. Prathiba Natesan & Xing Aerts (2016) express his view by measurement of LibQUAL+® of library service quality based on SERVQUAL's gap theory, measures items on three levels of service quality: minimum, perceived, and desired levels

ANUR, RAJAHMUNDRY, ANDHRA PRADESH

Adikavi Nannaya University was established on 22nd April 2006 by an Act of the Andhra Pradesh State Legislative Assembly to meet the higher education needs of East & West Godavari districts. It is an affiliating residential university with territorial jurisdiction over East & West Godavari districts of Andhra

Pradesh named after the first poet of Telugu culture, Nannaya. The university was established to fulfill the cherished dream of the people of this region, on the sacred banks of River Godavari.

The University consists of four colleges namely - University College of Arts & Commerce, University College of Engineering, University College of Education, University College of Science & Technology catering to the needs of students on campus. A dynamic semester-based courseware is created by integrating the traditional syllabus with the latest trends across disciplines to suit the current industry, employability and professional requirements. Choice Based Credit System (CBCS) is being implemented for all UG, PG and Professional Courses across the university.

DR. B. R. AMBEDKAR CENTRAL LIBRARY

Dr. B. R. Ambedkar Central Library started functioning in 2006 with a minimum collection of 100 books with open access system. The motto is to inculcate the habit of reading among the students while catering to the academic and research activities of its students, scholars and faculty members. At present the library has about 25000 text and reference books worth of around 1,00,00,000/-. It also subscribes about 50 different periodicals and 12 news papers. It also subscribes journals required for all the subjects. The library also provides competitive books so that the students can make use of them for their job opportunities.

The library is continuously making efforts to enrich its collection. TOFEL Cassettes in audio form and CDs along with GRE books are available in the reference section. Besides, a good collection of CDs for various departments are also available. The Unique facility in the library is it is having the last printed edition of Oxford English Dictionary (OED) in 20 Volumes

OBJECTIVES OF THE STUDY

The study wanted to determine the quality of the services offered by the Dr.B.R.Ambedkar Central Library of Adikavi Nannaya University, Rajahmundry, Andhra Pradesh using the LibQUAL Model. exclusively it will determine the demographic profile of the respondents in terms of college, age, sex, and position; 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 minimum, deserved and perception assessment of services according to profile variable; and in conclusion, to propose an suggestions for the improvement of library services found on the results of the study in the following areas.

1. Evaluate users' expectation and perception of library service quality on three LibQUAL+^{TM} dimensions

2. To recognize the gap between the perception and expectations of library users on different dimensions of service quality.

3. To identify the minimum, desired and perceived level of services.

METHODOLOGY

Survey and comparative methods are used for conduct of the study including selection of the sample, acquisition of the data, and methods of data analysis.

Gap analysis is an appropriate LibQUAL+^{TM} methodology for examining customer expectations of a professional service. Colleen Cook's (2001) extensive research on Service Quality and gap analysis has provided the background for this study.

SAMPLE SELECTION

A random sampling technique is being adopted based on the numbers of visitors a day and selected above 20% of visitors, the selection of the respondents from Visitors of Dr.B.R.Ambedkar Central Library of Adikavi Nannaya University, Rajahmundry of Andhra Pradesh.

LIBQUAL^{+TM} INSTRUMENT

Since that first administration, the LibQUAL^{+TM} survey has become an increasingly popular tool. The instrument has been improved and refined and it is currently composed of 22 questions and comment box. Each question is answered on a scale from 1 to 7, with 7 being highest rating and 1 being lowest rating (Thompson, Cook & Kyrillidou, 2006).

The users who responded to the 22 questions are grouped to measure three dimensions of library service quality: 'Affect of Service' dimension, 'Information Control' dimension and 'Library as Place' dimension

The 'Affect of Service' dimension is concerned with the perceptions of the customers about library staff competency and helpfulness; the 'Information Control' dimension is concerned with whether the library's collections are adequate to meet customer needs and organized in a manner that enables self-reliance for library users; and the 'Library as Place' dimension is concerned with the library facility's functionality and 'Service Adequacy' and 'Service Superiority' for academic activities.

SCORE PATTERN

"Perceived" scores on the 22 LibQUAL+® core items over the three subscales are obtained with the help of 7-point scale (where 7 being the most favorable and 1 being the least favorable). Both the gap scores for 'Service Adequacy' and 'Service Superiority' have been computed using the formulae as mentioned under.

Service Adequacy   =   Perceived Service – Minimum Service

Service Superiority   =   Perceived Service – Desired Service

Thus, a 'Service Adequacy' gap score of +1.2 on an item, subscale, or total score is better than an adequacy gap score of +1.0. A 'Service Superiority' gap score of -0.5 on an item, subscale, or total score is better than a Superiority gap score of -1.0.

Table – 1: Demographic Profile of Age, gender, Discipline, Position

Variables		Frequency n=120	Percentage (%)	Total
Gender	Male	55	45.83%	100%
	Female	65	54.17%	
Age	18-22	75	62.50%	100%
	23-30	37	30.83%	
	31-45	8	6.67%	
Position	Student	95	79.17%	100%
	Research Scholar	9	7.5%	
	Faculty	16	13.33%	
Discipline	Arts	24	20.00%	100%
	Commerce	14	11.67%	
	Science	31	25.83%	
	Management	22	18.33%	
	Mathematics	9	7.5%	
	Engineering	20	16.67%	

The above table reveals the information about the age group of respondents, out of total 120 respondents, majority (62.50%) of the respondents are in the group of 18-22, followed by (30.83%) of the respondents are in the age group of 23-30, and the rest of 6.67% of the respondents are in the age groups of 31-45.

The table clearly indicates in terms of gender variability that majority of the respondents 54.17% are females and 45.83% if the respondents are males, since, in the university majority students about 60% are female students

In terms of discipline wise respondent that majority respondents 25.83% are from Science discipline followed by 20% of the respondent are from arts discipline, 18% of the respondent are form Management, 16.67% of the respondents are form engineering and the rest 11.67% are commerce.

Demographic profile by the position describes that about 4/5th of the respondents 79.17% are student followed by 13.33% of the respondents are faculty and rest 7.5% are research scholars.

Table 2: Affect of Service Dimension – Intra Library Analysis

| SLNO	Items	N	Minimum A		Desired B		Perceived C		Service Adequacy (C-A) Mean Diff.	Paired T Value	P=	Service Superiority (C-B) Mean Diff	Paired T Value	P=
			Mean	SD	Mean	SD	Mean	SD						
AS1	Employee who instill confidence in users	120	4.92	1.261	5.66	1.226	4.74	1.569	-0.18	1.399	.164	-0.92	5.640	.000
AS2	Giving users individual attention	120	5.08	1.504	5.33	1.022	4.78	1.646	-0.3	2.358	.020	-0.55	4.047	.000
AS3	Employees who are consistently courteous	120	5.13	1.365	5.54	1.296	5.06	1.428	-0.07	0.683	.496	-0.48	4.595	.000
AS4	Readiness to respond to users' questions	120	5.40	1.547	5.67	1.386	5.52	1.353	0.12	-1.215	.227	-0.15	1.049	.296
AS5	Employees who have the knowledge to answer users questions	120	5.25	1.451	5.61	1.176	5.30	1.300	0.05	-0.464	.643	-0.31	2.401	.018
AS6	Employees who deal with users in a caring fashion	120	4.77	1.442	5.33	1.272	4.81	1.468	0.04	-0.372	.710	-0.52	3.833	.000
AS7	Employees who understand the needs of their users	120	4.88	1.496	5.32	1.45	4.82	1.566	-0.06	0.684	.495	-0.50	3.725	.000
AS8	Willingness to help users	120	5.45	1.505	5.54	1.396	5.21	1.522	-0.24	2.063	.041	-0.33	2.536	.013
AS9	Dependability in handling users' service problems	120	5.39	1.245	5.29	1.305	5.25	1.410	-0.14	1.274	.205	-0.04	0.308	.758
	N=120	120	5.14	1.42	5.48	1.28	5.05	1.47	-0.09	0.71	.330	-0.42	3.13	.120
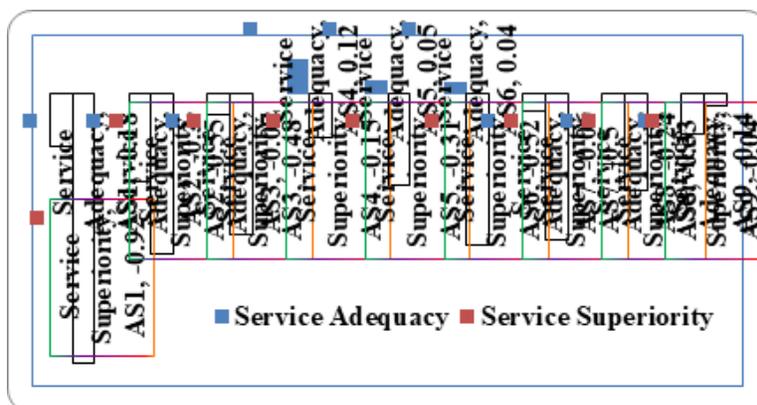
Fig.1 Service Adequacy and Service Superiority

Affect of Service Dimension – Intra Library Analysis

With regard to 'Affect of Service' dimension at Adikavi Nannaya University, there are nine parameters. Each parameter has been assessed for their 'Minimum', 'Desired' and 'Perceived' Service Performance to know 'Service Adequacy' score of each parameter have been computed.

Results in this regard presented in Table – 2 shows that on 'Minimum' services on all the indicators mentioned in column 'A', the respondents have surpassed the theoretical 'mean' score of 4.0. A similar trend is observed in case of 'Desired' service show in column 'B' and 'Perceived' services shown in column 'C' as well.

The above table described about 'Affect of Service' of LibQUAL dimension it has 9 parameters (AS1 to AS9) of 'Minimum', 'Desired' and 'Perceived' services.

The mean average of 'Minimum' is 5.14, 'Desired is 5.48 and 'Perceived' is 5.04, it is notice that the average getting service of users is less than the expected level service.

Out of nine parameters in Minimum, four are above mean average and the rest of the five are below mean average value, AS8 - Willingness to help users is the highest (5.45) mean value and AS6 - Employees

who deal with users in a caring fashion) is the least (4.77) mean value. In Desired five parameters out of nine are above mean average and the rest of four parameters are below the mean average.

When it comes to 'Perceived' service level the average is 5.05, five parameters are above the mean average and the rest four are below mean average, AS4 - Readiness to respond to users' questions is the highest (5.52) and, AS1 - Employee who instill confidence in users is the least (4.74)

With regard to 'Service Adequacy' gap, there is a wider gap on all the parameters of 'Affect of Service' dimension, the average gap score on all parameter is negative -0.09.

Out of nine parameters only three are positive gap scores and the rest six are negative gap scores. AS4 - Readiness to respond to users (0.12) is highest positive gap score and AS6 - Employees who deals with user in a caring fashion (0.04) is the least.

It shows that the users are getting adequate service and the users are getting expected level of services from the three parameters.

The rest of six parameters reflects negative gap score AS8 - Willingness to help user is highest (-0.24) negative gap score AS2 Giving users individual attention is the least (-0.03) negative score and the 'P' values are supporting it.

It is evidently shows that the users are not getting adequate service from the six parameters from the library and employees are not well aware of the users need and confidence on their service requirements, the employees are not able to handle user's service problems and the library not providing minimum level of the quality of service to its users.

With regard to 'Service Superiority' gap, there is a wider gap on all the parameters of 'Affect of Service' dimension and the average gap score on all parameters is negative -0.42.

Out of nine parameters all the parameters are negative gap score and AS9 - Dependability in handling users' service problems is least (-0.04) gap score and "AS1 Employee who instill confidence in users is highest (-0.92) gap score

'Service Superiority (-0.42)', is less in 'Affect of Service' dimension compared to the 'Service Adequacy (-0.09)'

It shows that the users are not getting 'Superiority' service from the library from the library on all the parameters of 'Affect of Service' dimension and the library is not providing expected level of the quality of service to its users in this dimension.

Table 3: Information Control Dimension – Intra Library Analysis

| SLNO	Items	N	Minimum A Mean	Minimum A SD	Desired B Mean	Desired B SD	Perceived C Mean	Perceived C SD	Service Adequacy (C-A) Mean Diff.	Paired T Value	P=	Service Superiority (C-B) Mean Diff	Paired T Value	P=
IC10	Making electronic resources accessible from my home or office	120	4.70	1.718	4.71	1.637	4.52	1.927	-0.18	1.256	.212	-0.19	1.136	.258
IC11	A Library Website enabling me to locate information on my own	120	4.31	1.900	4.74	1.761	3.82	1.832	-0.49	3.189	.002	-0.92	5.539	.000
IC12	The printed library materials I need for my work	120	4.54	1.957	4.98	1.566	4.18	2.025	-0.36	1.939	.055	-0.80	4.501	.000
IC13	The electronic information resources I need	120	4.88	1.839	5.31	1.704	4.35	1.992	-0.55	3.313	.001	-0.98	6.012	.000
IC14	Modern equipment that lets me easily access needed information	120	4.72	1.820	5.05	1.758	3.88	1.906	-0.84	4.938	.000	-1.17	6.965	.000
IC15	Easy-to-use access tools that allow me to find things on my own	120	4.88	1.783	5.13	1.550	4.67	1.871	-0.21	1.623	.107	-0.46	3.061	.003
IC16	Making information easily accessible for independent use	120	5.06	1.386	5.07	1.583	4.57	1.723	-0.49	3.644	.000	-0.50	3.697	.000
IC17	Print and/or electronic journal collection I require for my work	120	4.88	1.866	5.08	2.032	4.39	2.190	-0.49	2.968	.004	-0.69	4.498	.000
	N = 120	120	4.75	1.784	5.01	1.699	4.30	1.933	-0.45	2.859	0.048	-0.71	4.426	0.033
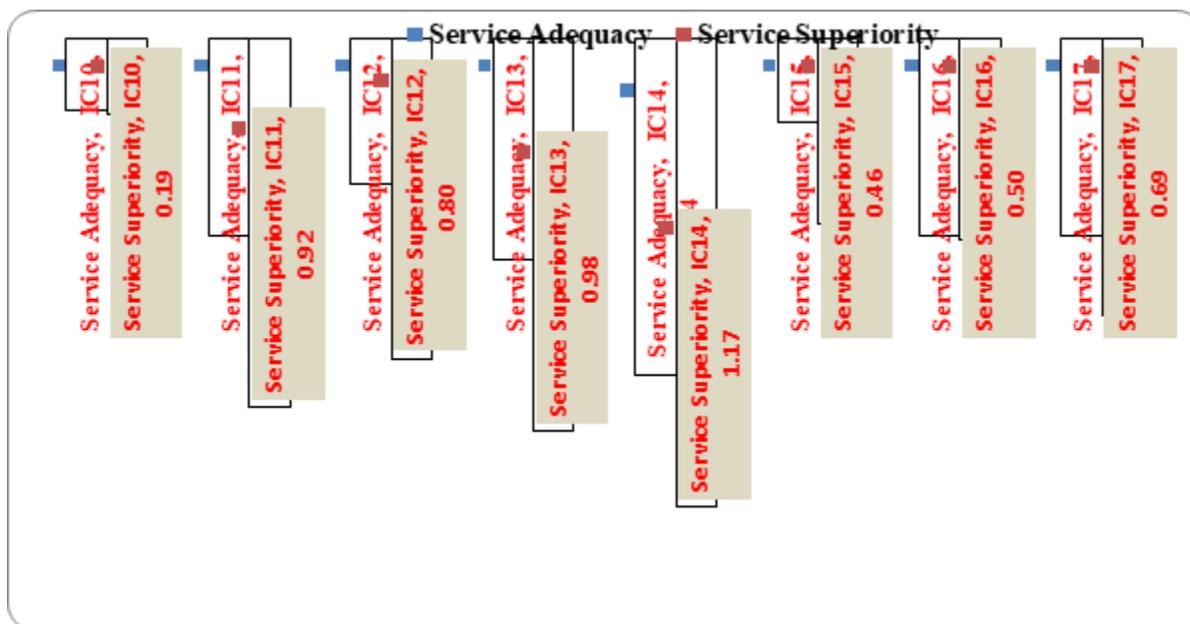
Fig.2 Service Adequacy and Service Superiority of Information Control Dimension

INFORMATION CONTROL DIMENSION – INTRA LIBRARY ANALYSIS

With regard to 'Information Control' dimension there are eight indicators. Each indicator has been assessed for their 'Minimum', 'Desired' and 'Perceived' service performance. Further, on each of them 'Service Adequacy' and 'Service Superiority' have been computed.

Results presented in Table – 3 shows that on 'Minimum' services on all the indicators mentioned in column 'A', the respondents have surpassed the theoretical 'mean' score of 4.0. A similar trend is observed in case of 'Desired' services shown in column 'B' and Perceived' services shown in column 'C'

The mean average score in terms of 'Minimum' service performance is 4.75, 'Desired' service is 5.01 and 'Perceived' is 4.30.

Each four indicators are above mean average score and below mean average in Minimum Service level, IC16 - Making information easily accessible for independent use is the highest (5.06) IC11 - A Library Website enabling me to locate information only own is the least (4.31).

When it comes to 'Desired' service performance five indicators are above mean average score and rest three are below mean average. The same trend has been observed in 'Perceived' service level. IC13 - The electronic information resources I need is the highest (5.31) and in IC10 - Making electronic resources accessible from my home or office is the least (4.71) in desired and in 'Perceived' IC15 - Easy-to-use access tools that allow the user to find things on their own) is the highest (4.67) IC11 - A Library Website enabling the user to locate information from their home or office is the least (3.82).

In view of 'Service Adequacy' is calculated the mean differences of 'Perceived' and 'Minimum' service performance, there is a wider negative gap on all the indicators of 'Information Control' dimensions and the average gap of the indicators is -0.45 IC10 - Making electronic resources accessible from my home or office is the least (-0.18) negative gap score and IC14 - Modern equipment that lets me easily access needed information is the highest (-0.84)

However, such gaps are statistically significant except three parameters IC10 (.212), IC15 (.107) and IC12 (.055) are not significant and the 'P' values are supporting it.

With regard to the 'Service Adequacy' it is clear that the users are not getting adequate service in 'Information Control' and also not satisfied with service of the library covered in this dimension.

The result also shows that all the items are in 'negative' scores. This indicates that they have to improve in this regard by providing sufficient collection of books, e-books and other e-learning materials in the library.

Pertaining to 'Service Superiority', there is a wider negative gap on all the indicators of 'Information Control' dimension. However, such gaps are statistically significant, except IC10 - Making electronic resources accessible from my home or office 'P' values are supporting it.

With reference to 'Service superiority' dimension, it is clear that the users are not getting inferior with the 'Information Control' dimension. The result also shows that all the items are in 'negative' scores. This indicates that the university has to improve in terms of Information Control' dimension by providing sufficient collection of text, reference books, e-books and e-learning materials in the library as per the requirements of the library users and their needs.

'Service Superiority (-0.71)' is less in 'Information Control' dimension compared to the 'Service Adequacy (-0.45)'.

Table 3: Library as Place Dimension – Intra Library Analysis

SlNO	Items	N	Minimum A		Desired B		Perceived C		Service Adequacy (C-A) Mean Diff.	Paired T Value	P=	Service Superiority (C-B) Mean Diff	Paired T Value	P=
			Mean	SD	Mean	SD	Mean	SD						
LS18	Library space that inspires study and learning	120	5.78	1.445	5.83	1.440	5.49	1.566	-0.29	2.877	.005	-0.34	2.734	.007
LS19	Quiet space for individual activities	120	5.15	1.596	5.48	1.582	5.14	1.652	-0.01	.093	.926	-0.34	2.557	.012
LS20	A comfortable and inviting location	120	5.59	1.481	5.57	1.510	5.23	1.542	-0.36	4.523	.000	-0.34	2.762	.007
LS21	A gateway for study, learning or research	120	5.43	1.413	5.76	1.328	5.07	1.570	-0.36	3.362	.001	-0.69	4.188	.000
LS22	Community space for group learning and group study	120	5.13	1.969	5.71	1.525	5.19	1.844	0.06	-.515	.608	-0.52	3.507	.001
	N = 120	120	5.42	1.581	5.67	1.477	5.22	1.634	-0.19	2.068	.308	-0.45	3.150	.005
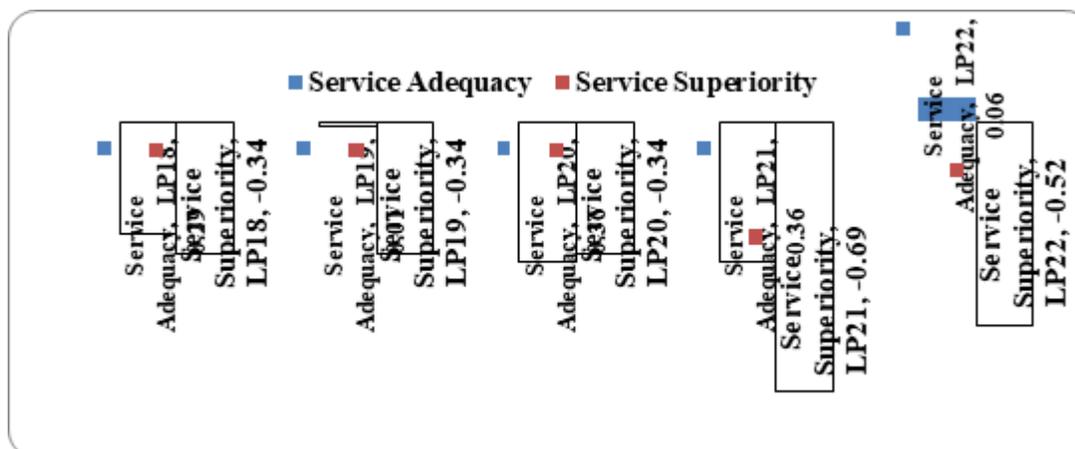
Fig.3: Service Adequacy and Service Superiority of Library as Place Dimension

LIBRARY AS PLACE DIMENSION – INTRA LIBRARY ANALYSIS
With regard to 'Library as Place' dimension of Adikavi Nannaya University, there are five indicators. Each indicator has been assessed for their 'Minimum', 'Desired' and 'Perceived' service performance'. Further, on each of them 'Service Adequacy' and 'Service Superiority' scores have been computed.

Results in this regard presented in Table – 4 shows that on 'Minimum' services on all the indicators mentioned in column 'A', the respondents have surpassed the theoretical 'Mean' score of 4.0. A similar trend is observed in case of 'Desired' and 'Perceived' services shown in column 'C' as well.

The average score of 'Minimum' is 5.42, 'Desired'is 5.67 'Perceived' is 5.22 service level in the 'Library as Place' Dimension. "LS18 - Library space that inspires study and learning" is the highest (5.78), mean score and "LS22 - Community space for group learning and group study" is the least 5.13 mean score.

With reference to 'Desired' service level "LS18 - Library space that inspires study and learning" is the highest (5.83) mean value and "LS19 Quiet space for individual activities" is the least (5.48) mean score.

When it comes to 'Perceived' service level in the 'Library as Place' Dimension "LS18 -Library space that inspires study and learning" is the highest (5.49) and "LS21 - A gateway for study, learning or research" is the least (5.07) mean score

In respect to "Service Adequacy" when compare with the means gap of the 'Perceived' and 'Minimum' the mean average difference is the negative (-0.19), gap of 'Library as Place' dimension, all of the indicators were rated 'inferior' by the respondents, except the LS22 - Community space for group learning and group study is superior (0.06). LS20 - A comfortable and inviting location and LS21 - A gateway for study, learning or research are the highest (-0.36) 'inferior' and LS19- Quiet space for individual activities is the least (-0.01) 'inferior'

With regard to 'Service Superiority' gap of 'Library as Place' dimension compare with the means of the 'Desired' and 'Perceived' the mean average difference is -0.45 and a wider service gap on all the five indicators, LS21 - A gateway for study, learning or research is the highest (-0.69) negative score and statistically significant, the 'P' values are also supporting it.

It is found that the 'Service Superiority (-0.45)' is less on 'Library as Place' dimension compared to the 'Service Adequacy (-0.19)'.

FINDINGS

1. In 'Affect of service' dimension of LibQUAL^{+TM} 'Service Adequacy' gap, there is a wider gap on all indicators, average gap score is negative -0.09, it shows the user are not getting 'adequate' service from the library.

2. In 'Affect of Service' Dimension of LibQUAL^{+TM}, out of nine parameters from three parameters the users are getting 'adequate' service, AS4 - Readiness to respond to users' questions (0.12) is the highest followed by AS5 - Employees who have the knowledge to answer users questions (0.05), AS6 - Employees who deals with user in a caring fashion (0.04) and from the 6 parameter the user are not getting 'adequate' service, AS8 - Willingness to help user (-0.24) is the least AS2 - Giving users individual attention (-0.03) is the highest.

3. It evidently shows that Dr.B.R.Ambedkar Central Library users are not getting adequate service from the library and employees are not well aware of the users need and confidence on their service requirements, the employees are not able to handle user's service problems. The library not providing minimum level of the quality of service to its users.

4. 'Service Superiority' the users getting 'inferior' service from the all the parameters of the 'Affect of Service' dimension, because a wider gap on all the indicators of 'Affect of Service' dimension and the average gap is negative -0.42.

5. Out of nine parameters in 'Service Superiority', five are above mean gap and rest three are below mean gap of 'Affect of Service', AS9 - Dependability in handling users' service problems is the highest (-0.04) and AS1 - Employee who instill confidence in users is the least (-0.92)

6. 'Service Superiority (-0.42)', is less in 'Affect of Service' dimension compared to the 'Service Adequacy (-0.09)'

7. Users are not getting superior and expected service from the library on all the parameters of 'Affect of Service' dimension and employees are not confidence in users and not giving individual attention, and the library is not providing expected level of the quality of service to its users.

8. In relation to 'Information Control' dimension of LibQUAL⁺ᵀᴹ, the mean average of 'Minimum' service performance of all indicators is 4.75, 'Desired' is 5.01 and 'Perceived' is 4.30.

9. When it comes to 'Service Adequacy' the users are not getting 'adequate' services from the all parameters of 'Information Control' dimension, because there is a wider negative gap on all the indicators of this dimensions and the average gap of the indicators is -0.45, IC10- Making electronic resources accessible from my home or office is the highest (-0.18) and IC14 - Modern equipment that lets me easily access needed information is the least (-0.84) gap score and such gaps are statistically significant except three (IC10 IC15 and IC12) parameters are not significant and the 'P' values are supporting it.

10. On 'Service Adequacy', it is clear that the users are not satisfied with the 'Information Control' dimension. The result also shows that all the items are in 'negative' scores. This indicates that they have to improve in this regard by providing sufficient collection of books, e-books, e-learning materials in the library.

11. 'Service Superiority' the users are getting 'inferior' service from the all the parameter of the 'Information Control' dimension because of a wider negative gap on all the indicators of 'this dimension, the average 'Service Superiority' is -0.71, IC10 - Making electronic resources accessible from my home or office is the least (-0.19) and the highest is IC14 Modern equipment that lets me easily access needed information is the least (-1.17). However, such gaps are statistically significant, except IC10 - Making electronic resources accessible from my home or office 'P' values are supporting it.

12. The results clear that the users are not satisfied with the 'Information Control' dimension since the user are getting neither 'adequate' service nor 'superior' service and 'Service Superiority (-0.71)', is less in 'Information Control' dimension compared to the 'Service Adequacy (-0.45)'

13. It shows that the users are not getting adequate, superior and expected service from the library on all the parameters of 'Information Control' dimension and the library is not providing expected level of the quality of service to its users in this dimension

14. Average score of 'Minimum' service level in the 'Library as Place' Dimension is 5.42, 'Desired' is 5.67, and 'Perceived' service level is 5.22, 'Service Adequacy' is (-0.19) and 'Service Superiority' gap of 'Library as Place' dimension the mean average difference is -0.45

15. 'Service Adequacy' is (-0.19) gap of 'Library as Place' dimension, the users are not getting 'adequate' service from the library and when it comes to 'Service Superiority' the users are getting 'inferior' service from the library as noted by the respondents.

16. With regard to 'Service Superiority' gap of 'Library as Place' dimension the mean difference average is -0.45 and a wider service gap on all the five indicators, LS21 - A gateway for study, learning or research is the highest (-0.69) negative value and three parameters i.e. LP18 - Library space that inspires study and learning, LP19 - Quiet space for individual activities, LP20 - A comfortable and inviting location are least -0.34 each respectively and it is statistically significant, the 'P' values are also supporting it.

17. 'Service Superiority (-0.45)' is less on 'Library as Place' dimension compared to the 'Service Adequacy (-0.19)'

18. When we compare overall performance of the three dimensions of LibQUAL⁺ᵀᴹ 'Affect of Service' dimension is high (-0.09) in 'Service Adequacy' and 'Library as Place' Dimension is high (-0.25) in 'Service Superiority'

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