

Measuring Service Quality in the Central Library of Jawaharlal Nehru University: A Study

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Abstract

The present study aims to assess the service quality of the Central Library of Jawaharlal Nehru University. The major objective of the study is to investigate the quality management system in the proposed library and how far it has been succeeded in delivering service quality. Questionnaire method (closed-ended and open-ended) has been used for data collection. A modified *SERVQUAL* instrument developed by Parasuraman, *et al.* (1988) has been used in the questionnaire to measure the outcome performance and perceptions of quality services through users. The questionnaire contains six dimensions of quality services, i.e., reliability, responsiveness, assurance, access, communications and tangibles. The closed-ended questionnaire was designed to assess responses of users on a five point Likert scale for both types of respondents (Faculty Members and Research Scholars) to measure perception of service quality.

Keywords: Quality management, Service quality, Jawaharlal Nehru University (JNU), Central Library, *SERVEQUAL* instrument, Service quality attributes.

Introduction

Amidst drastic and dramatic changes in global information environment, libraries and information centers have become very complex systems. The libraries have transformed drastically from mere storehouses of books and journals to the powerhouses of knowledge and information. The advent of information and communication technology is responsible for this revolution. The very existence of libraries depends on users' satisfaction and users are getting satisfied when the library is able to rise up to his or her expectations or meet the actual needs. A quality service is said to be one, which satisfy the users' expectation resulting a good experience. Throughout the history, libraries were mainly concerned with collection development and processing. The library professions were less concern to quality in product and services and hence never checked whether the users were satisfied or not. However, the increasing expectations of users have challenged libraries to improve their quality of services. With constraint budget, librarians, today, feel more pressure to fully exploit the available resources. Therefore, several libraries and information services have adopted quality management practices in recent years.

About the Central Library

The library of JNU truly is one of the outstanding libraries with the modern infrastructures and a huge collection of rare books, journals, research papers which are of immense use for the

research scholars, teachers, students, etc. JNUL is truly the reigning king in India by catering to the infinite demands of the students by its huge repository of books, periodicals, journals, research papers etc.

The Central library has approx. 6 lacs of books, more than 1 lac of bound volume periodicals, 18000 thesis and dissertations, and 1,18,701 Newsclippings. The library also subscribes 711 current periodicals. Apart from that the library also subscribes large number of e-journals and databases.

Objective of the Study

The objective of the study is primarily to investigate the quality management in the Central Library of JNU and to measure the perception of users as they relate to quality of information products and services. The study also reveals how far the library has succeeded in delivering the quality services to the users.

Tools used for the Study

Questionnaire, observation and interview method have been used for the study.

Questionnaire Design

The questionnaire were designed for the investigation of quality service perceptions among faculty members and research scholars which contained the modified SERVQUAL instrument developed by Parasuraman (1988), to measure the outcome performance and perceptions of quality services. It includes 38 questions (open-ended and closed-ended) referring to different aspects of service quality of the university library. The closed-ended questions were designed to solicit responses on a five-point Likert scale for both types of respondents (faculty members and research scholars) to measure the perception of service quality. The questionnaire contains six dimensions of quality services, which are as follows:

Reliability: This service quality dimension consists of five attributes (questions), which refers to the delivery of services as it relates to dependability and accuracy, such as;

1. Giving correct answers to reference questions,
2. Making relevant information available,
3. Consistency of cataloguing and classification of Library materials,
4. Reliability of databases in providing information,
5. Making sure that overdue and fine notices are accurate.

Responsiveness: This service quality dimension consists of six attributes (questions), which measures the readiness of library staff in providing services, such as;

1. Making latest information available,
2. Timeliness delivery of information,
3. Re-Shelving of books,
4. Effective Inter Library Loan (ILL) System),
5. Familiarity with OPAC,
6. Recency of Periodicals.

Assurance: This service quality dimension consists of five attributes (questions), which measures the knowledge and courtesy of the library staff and their ability to convey confidence, such as;

1. Appearance of staff,

2. Thorough understanding of the collections,
3. Familiarity of CD-ROM System,
4. Providing individual attention to users,
5. Recognizing the regular users by the library staff.

Access: This service quality dimension consists of five attributes (questions), which measures the ability to reach out for something and getting and finding it as and when it is needed, such as;

1. Availability of staff at reference desk,
2. Availability of photocopy facility,
3. Availability of computer terminals,
4. Library opening hours,
5. Time spent at circulation desk,

Communication: This service quality dimension consists of six attributes (questions), which measures the ability to keep clients informed in a language they understand and the ability to listen to them, such as;

1. Awareness of library facilities and services,
2. Provision of user education,
3. Effectiveness of library website,
4. Availability and easiness in the use of OPAC user manual,
5. Availability and easiness in the use of CD-ROM user manual,
6. Assuring users that his/her problems will be handled.

Tangibles: This service quality dimension consists of four attributes (questions), which measures the maintenance of physical facilities, such as;

1. Library furniture,
2. Temperature setting in the library,
3. Proper lighting in the library,
4. Maintenance of silence in the reading room.

Sample and Population Design

450 questionnaires were distributed among the users community, i.e., Faculty members (100) and research scholars (350) in the central library of Jawaharlal Nehru University, of which 282 (62.66%) were received back. 50 (50%) responses were received from the faculty members and 232 (66.28%) responses were received from the research scholars. The investigator selected all the questionnaires for the analysis.

Name of the Library	Sampling			Response			Response %			Questionnaire Analyzed		
	Faculty Members	Research Scholars	Total	Faculty Members	Research Scholars	Total	Faculty Members	Research Scholars	Total	Used	Rejected	Fit to be Used
JN U	100	350	450	50	232	282	50	66.28	62.66	282	None	All

Methodology

A questionnaire was designed to assess responses of users. The data collected through questionnaires and informal interviews were organized and tabulated by using statistical methods, tables and percentage, mean and average mean. For analyzing the users perception score each item were calculated on a five point Likert scale for both types of users in the form of mean, and average mean.

Data Analysis, Interpretation and Findings

The investigator used six quality dimensions, i.e., reliability, responsiveness, assurance, access, communication and tangibles to measure the quality management in the central library of JNU. Each dimension posses certain set of attributes, dependable enough to measure the qualitative aspect. Responses indicated in questionnaire as 1 represented 'strongly agree', 2 'agree', 3 'disagree', 4 'strongly disagree' and 5 'not sure'. The option 1 & 2 indicated 'Positive' response, option 3 & 4 is 'Negative' response and option 5 represented 'Not Sure'.

Quality Dimension: Reliability

Table 1.1 Responses (Quality Dimension: Reliability)

Responses	Q7	Q8	Q9	Q10	Q11	Total	%age
Positive	199	149	218	232	220	1018	72.19
Negative	75	126	38	32	39	310	21.98
Not Sure	8	7	14	18	23	70	4.96

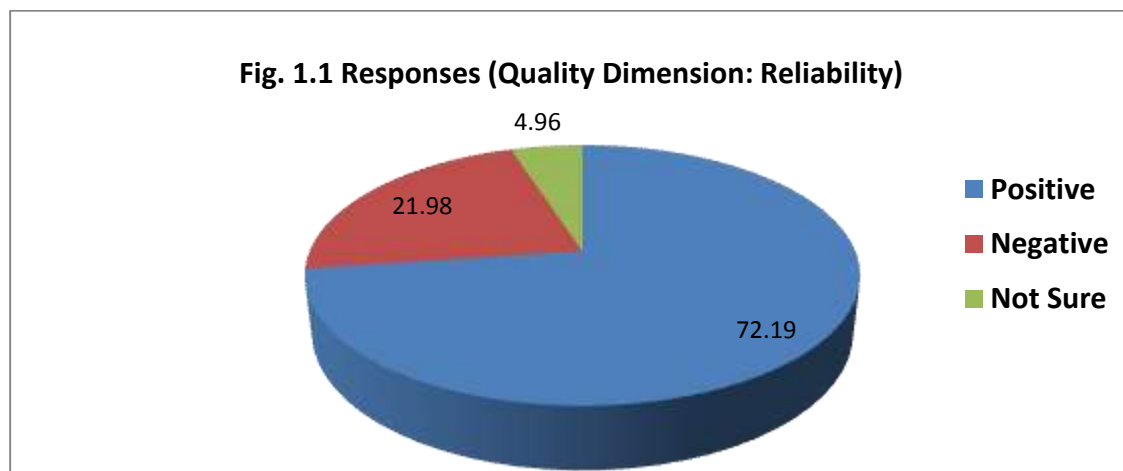


Table 1.1 indicates that 72.19% respondents of the total population (Faculty Members and Research Scholars) asserts positive response and satisfied with the aspect of service quality 'reliability'. Whereas 21.98% population given their negative responses towards these factors. However, 4.96% population is not sure about this service quality.

Table 1.2 Mean Score (Quality Dimension: Reliability)

Attributes	Faculty Members	Research Scholars	Mean Score
Giving Correct answers to reference questions	3.78	3.78	3.78
Making relevant information available	3.64	3.50	3.57
Consistency of cataloguing and classification of Library materials	3.96	3.63	3.79
Reliability of databases in providing information	3.98	3.87	3.92
Making sure that overdue and fine notices are accurate	3.86	3.73	3.79
Total	19.22	18.51	18.86
Average Mean	3.84	3.70	3.77

Fig. 1.2 (a) Item Wise Mean Score (Quality Dimension: Reliability)

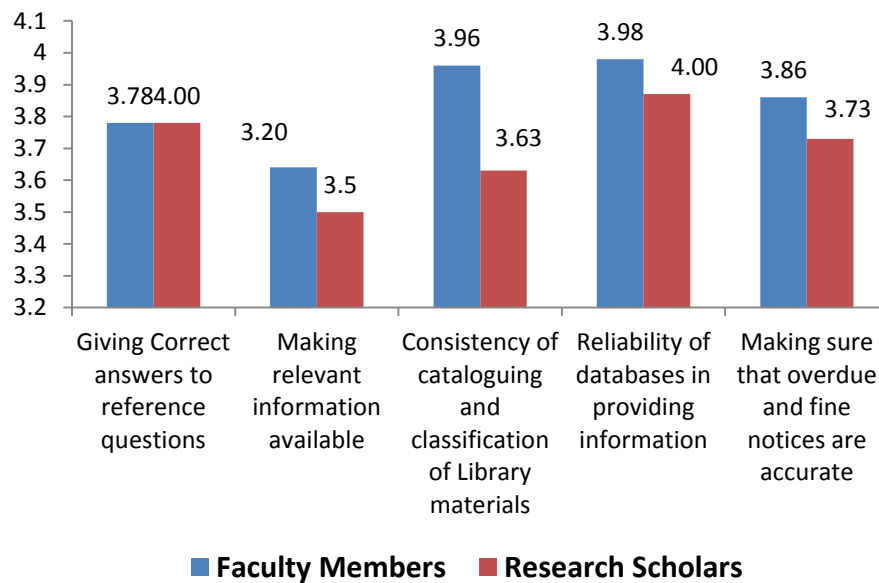


Fig. 1.2 (b) Average Mean (Quality Dimension: Reliability)

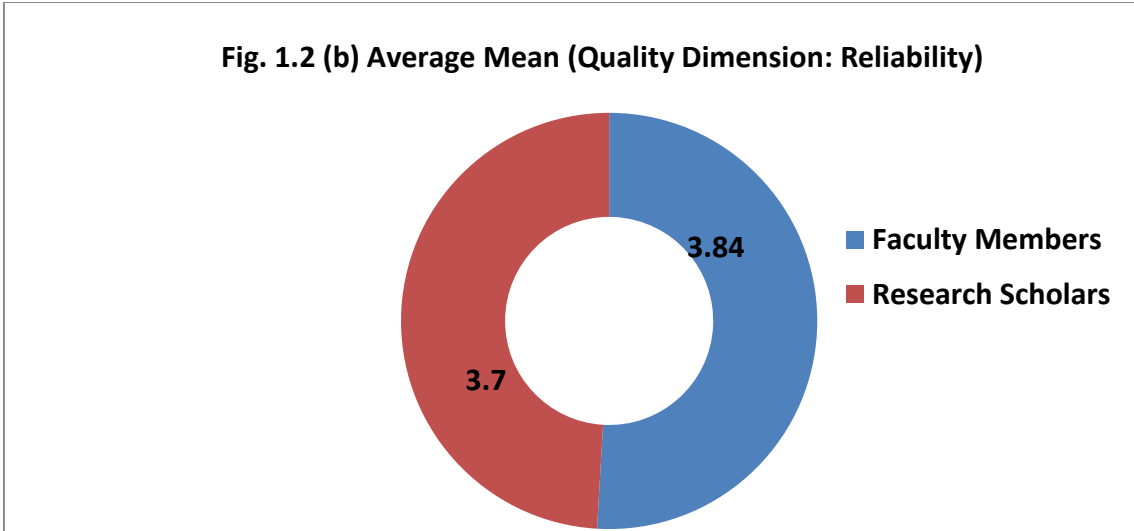


Table 1.2 reveals that ‘Reliability of databases in providing information’ scored the highest mean for both types of user groups (3.92), followed by ‘Consistency of cataloguing and classification of library materials’ as well as ‘Making sure that overdue and fine notices are accurate’ which scored (3.79). Whereas ‘Giving correct answers to reference questions’ scored (3.78), followed by ‘Making relevant information available’ (3.57), which is the lowest mean score of the respondents.

It can also be observed that the user group of faculty members scored higher average mean, i.e., (3.84) than the average mean of research scholars, i.e., (3.70). The overall average mean of user groups for Reliability dimension is (3.77), which clearly depicts that only one area, i.e., ‘Making relevant information available’ (3.57) scored lower than the overall average mean.

Quality Dimension: Responsiveness

Table 2.1 Responses (Quality Dimension: Responsiveness)

Responses	Q12	Q13	Q14	Q15	Q16	Q17	Total	%age
Positive	204	181	151	215	263	248	1262	74.58
Negative	76	37	39	36	17	27	232	13.71
Not Sure	2	62	92	59	2	7	224	13.23

Fig. 2.1 Responses (Quality Dimension: Responsiveness)

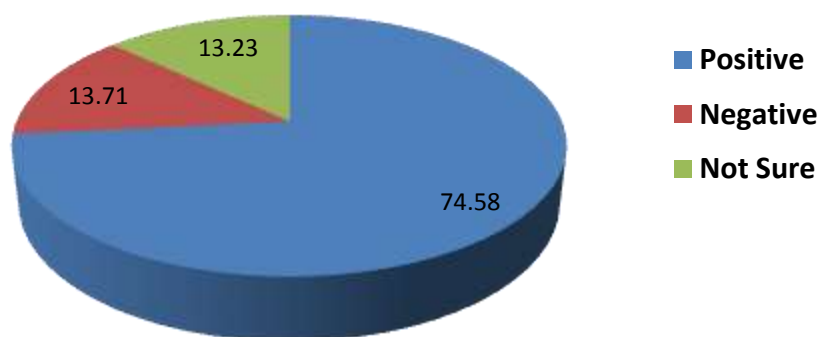


Table 2.1 indicates that 74.58% respondents of the total population asserts positive response and satisfied with the aspect of service quality ‘responsiveness’. Whereas 13.71% population given their negative responses towards these factors. However, 13.23% population is not sure about this service quality.

Table 2.2 Mean Score (Quality Dimension: Responsiveness)

Attributes	Faculty Members	Research Scholars	Mean Score
Making latest information available	3.92	3.80	3.86
Timeliness delivery of information	3.42	3.39	3.40
Promptness in re-shelving of books	3.28	2.80	3.04
Effective Inter Library Loan (ILL) System	3.70	3.84	3.77
Familiarity with OPAC	4.22	4.18	4.20
Recency of Periodicals	4.12	4.13	4.12
Total	22.66	22.14	22.40
Average Mean	3.77	3.69	3.73

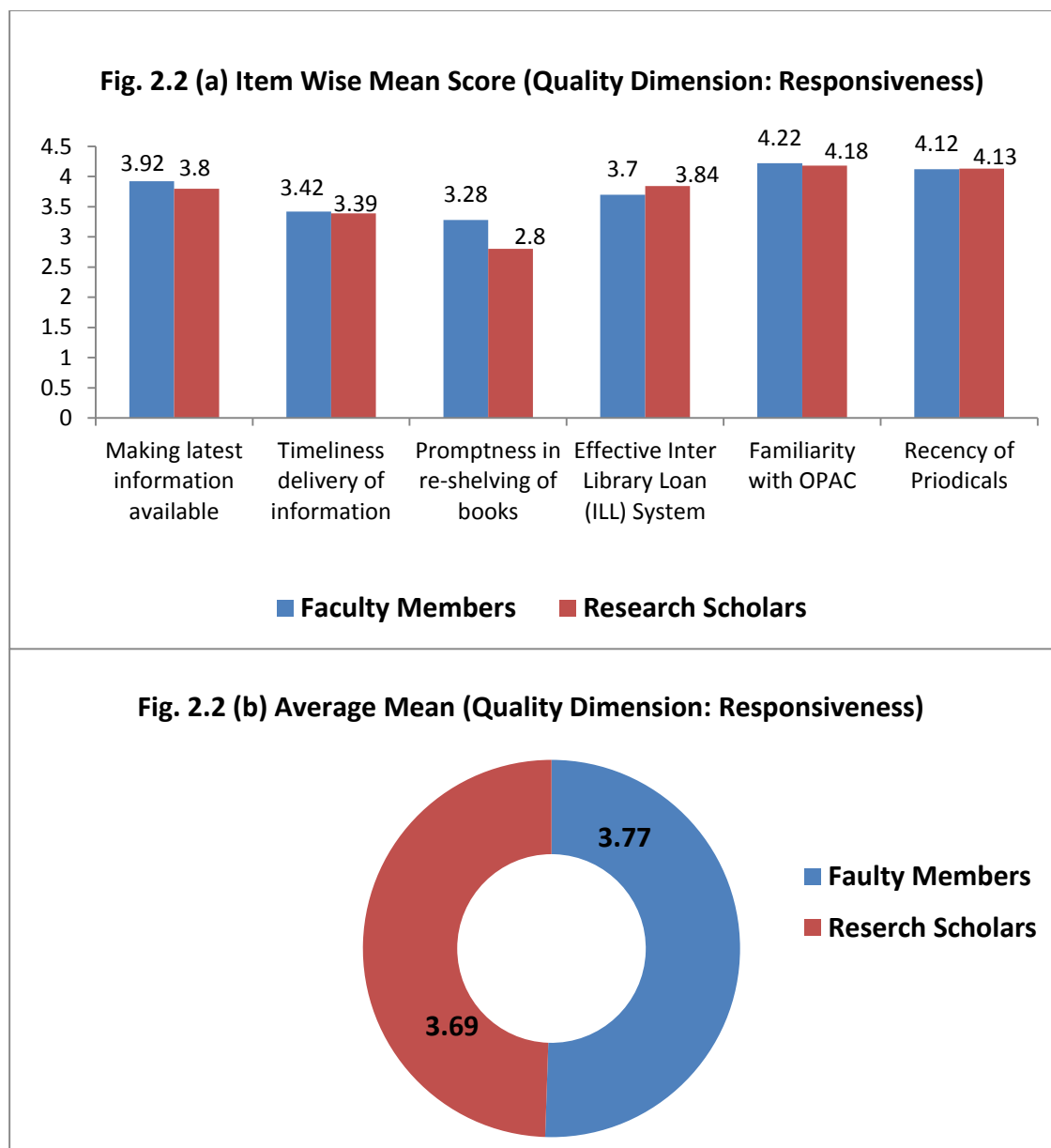


Table 2.2 reveals that ‘Familiarity with OPAC’ scored the highest mean for both types of user groups (4.20), followed by ‘Recency of Periodicals’ (4.12), and ‘Making latest information available’ (3.86), whereas ‘Effective Inter Library Loan (ILL) System’ scored (3.77), ‘Timeliness delivery of information’ (3.40) and ‘Promptness in re-shelving of books’ (3.04), which is the lowest mean score of the respondents.

Further analysis revealed that the user group of faculty members scored higher average mean, i.e., (3.77) than the average mean of research scholars, i.e., (3.69). The overall average mean of user groups for Responsiveness dimension is (3.73), which clearly depicts that only two areas, i.e., ‘Timeliness delivery of information’ (3.40) and ‘Promptness in re-shelving of books’ (3.04) scored lower than the overall average mean.

Quality Dimension: Assurance

Table 3.1 Responses (Quality Dimension: Assurance)

Responses	Q18	Q19	Q20	Q21	Q22	Total	%age
Positive	240	249	180	204	223	1096	77.73
Negative	31	26	40	69	27	194	13.75
Not Sure	11	7	62	9	32	121	8.58

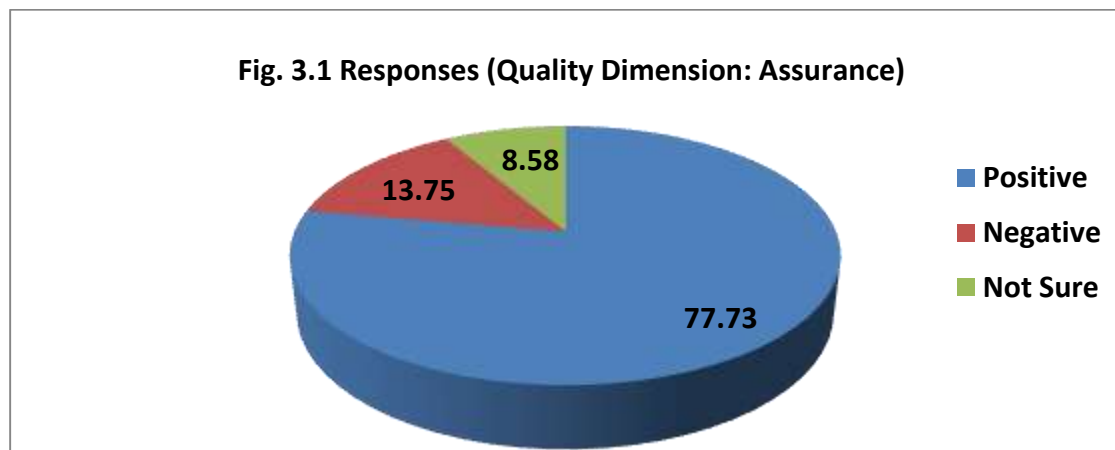


Table 3.1 indicates that 77.73% respondents of the total population asserts positive response and satisfied with the aspect of service quality ‘assurance’. Whereas 13.75% population given their negative responses towards these factors. However, 8.58% population is not sure about this service quality.

Table 3.2 Mean Score (Quality Dimension: Assurance)

Attributes	Faculty Members	Research Scholars	Mean Score
Appearance of staff	4.16	4.12	4.14
Thorough understanding of the collections	4.06	4.03	4.04
Familiarity of CD-ROM System	3.42	3.31	3.36
Providing individual attention to users	3.90	3.80	3.85
Recognizing the regular users by the library staff	3.88	3.75	3.81
Total	19.42	19.01	19.21
Average Mean	3.88	3.80	3.84

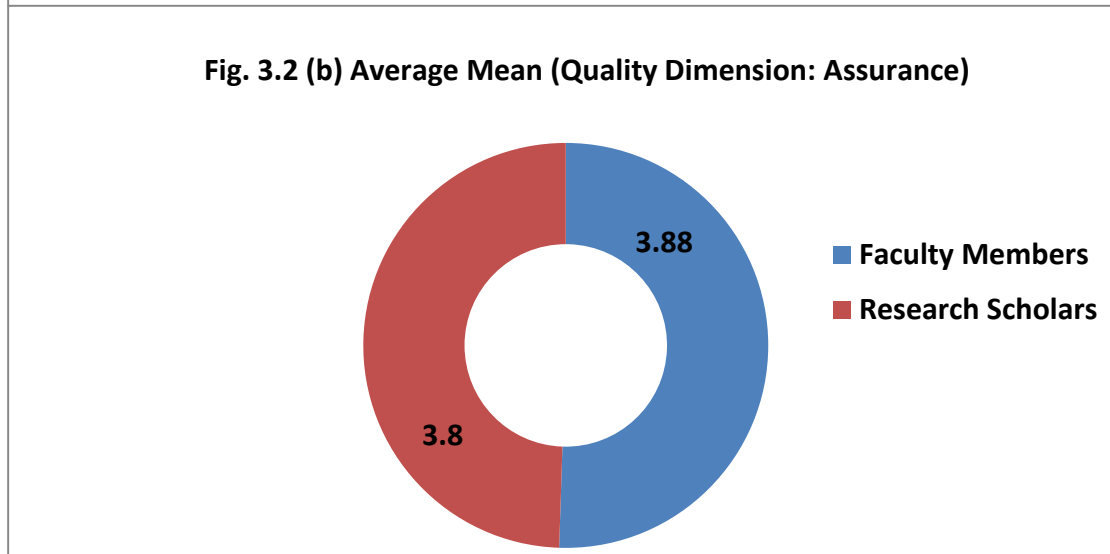
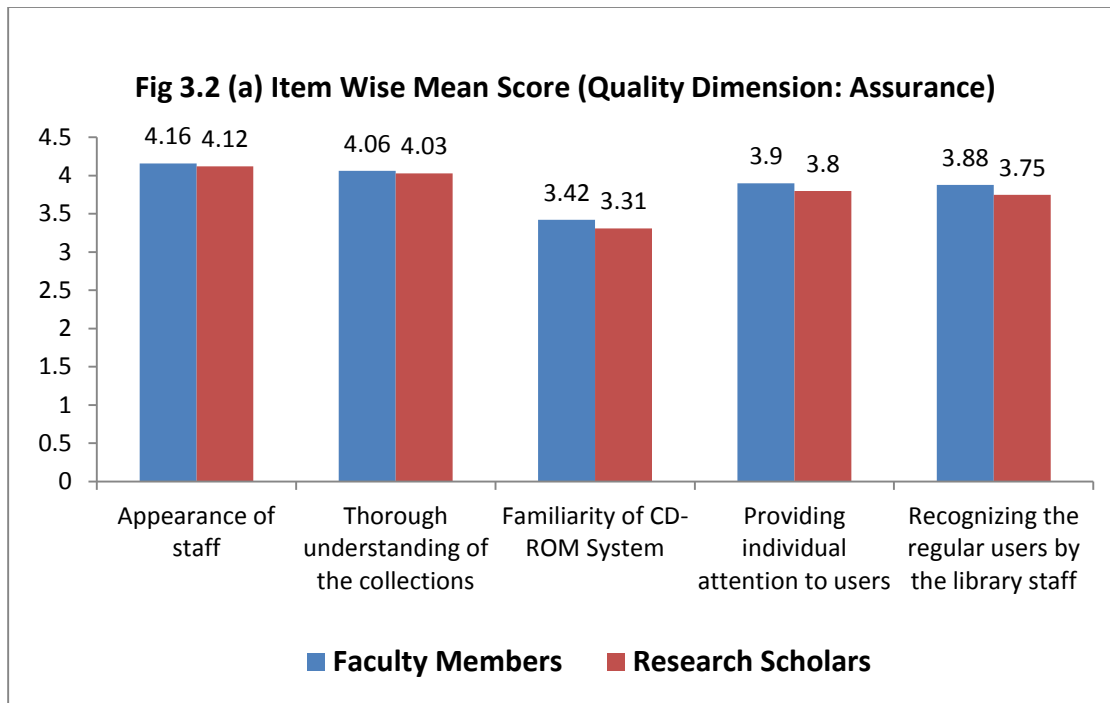


Table 3.2 reveals that ‘Appearance of staff’ scored the highest mean for both types of user groups (4.14), followed by ‘Thorough understanding of the collections’ (4.04), whereas ‘Providing individual attention to users’ scored (3.85), followed by ‘Recognizing the regular users by the library staff’ (3.81), and ‘Familiarity of CD-ROM System’ scored (3.36), which is the lowest mean score of the respondents.

It can be noted that the user group of faculty members scored higher average mean, i.e., (3.88) than the average mean of research scholars, i.e., (3.80). The overall average mean of user groups for Assurance dimension is (3.84), which clearly depicts that only two areas, i.e., ‘Familiarity of

CD-ROM System' (3.36) and 'Recognizing the regular users by the library staff' (3.81) scored lower than the overall average mean.

Quality Dimension: Access

Table 4.1 Responses (Quality Dimension: Access)

Responses	Q23	Q24	Q25	Q26	Q27	Total	%age
Positive	220	182	221	241	168	1032	73.19
Negative	55	98	54	36	93	336	23.82
Not Sure	7	2	7	5	21	42	2.97

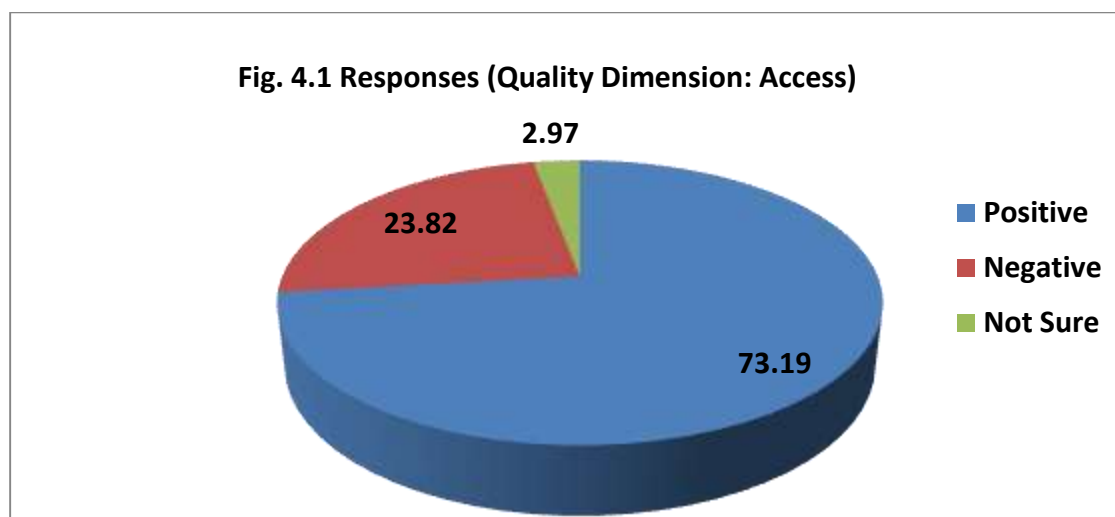


Table 4.1 indicates that 73.19% respondents of the total population asserts positive response and satisfied with the aspect of service quality 'access'. Whereas 23.82% population given their negative responses towards these factors. However, 2.97% population is not sure about this service quality.

Table 4.2 Mean Score (Quality Dimension: Access)

Attributes	Faculty Members	Research Scholars	Mean Score
Availability of staff at reference desk	4.06	4.00	4.03
Availability of photocopy facility	3.92	3.67	3.79
Availability of computer terminals	3.98	3.88	3.93
Library opening hours	4.10	4.12	4.11
Time spent at circulation desk	3.16	3.04	3.10
Total	19.22	18.71	18.96
Average Mean	3.84	3.74	3.79

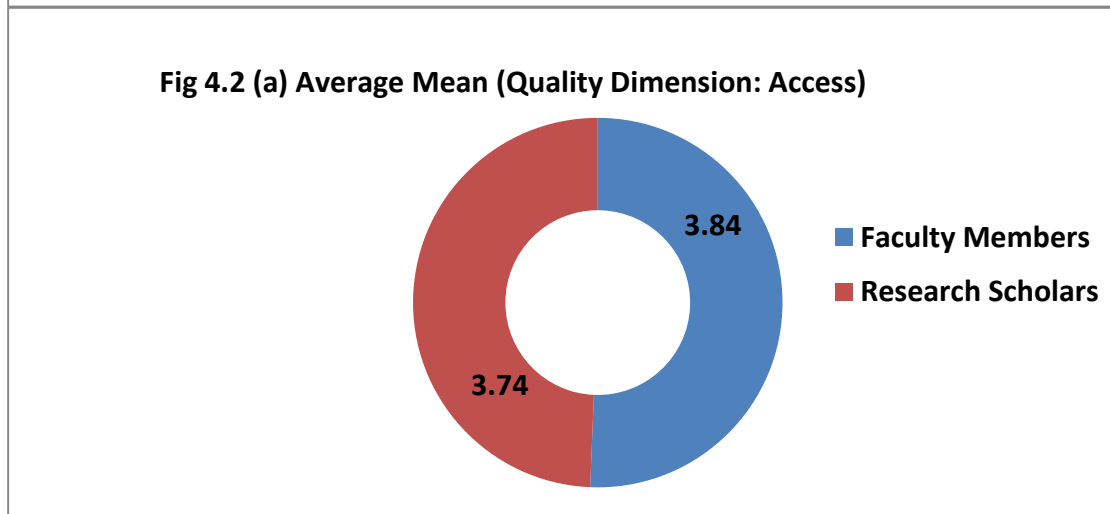
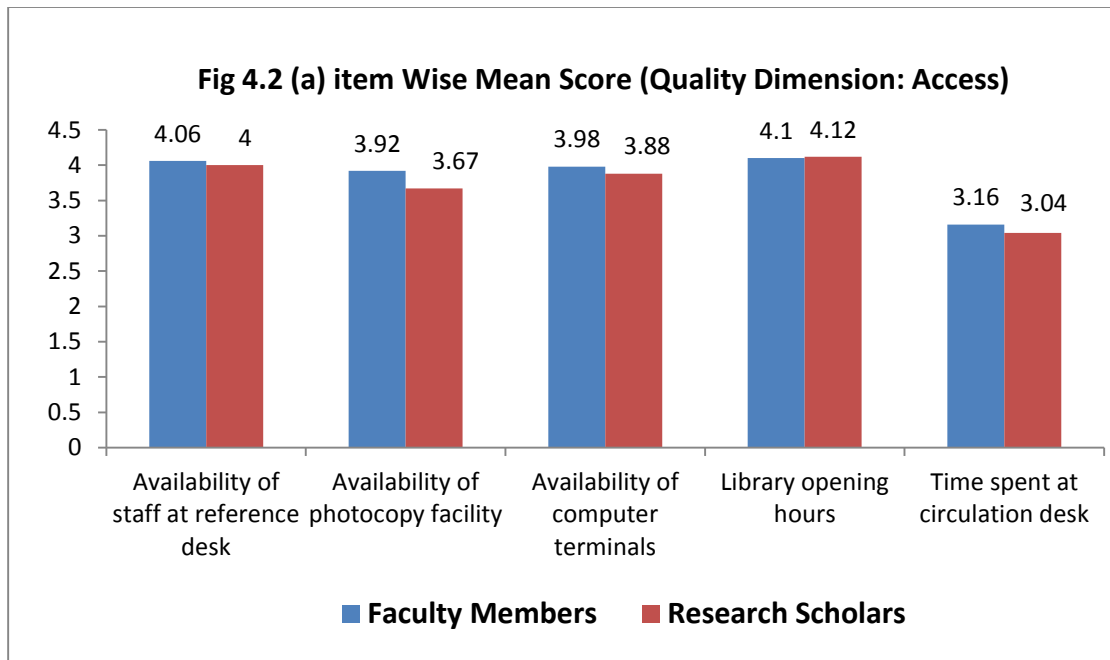


Table 4.2 reveals that ‘Library opening hours’ scored the highest mean for both types of user groups (4.11), followed by ‘Availability of staff at reference desk’ (4.03), ‘Availability of computer terminals’ (3.93) and ‘Availability of photocopy facility’ scored (3.79), whereas ‘Time spent at circulation desk’ scored (3.10), which is the lowest mean score of the respondents.

It can be noted that the user group of faculty members scored higher average mean, i.e., (3.84) than the average mean of research scholars, i.e., (3.74). The overall average mean of user groups for Access dimension is (3.79), which clearly depicts that only one area, i.e., ‘Time spent at circulation desk’ (3.10) scored lower than the overall average mean.

Quality Dimension: Communications

Table 5.1 Responses (Quality Dimension: Communications)

Responses	Q28	Q29	Q30	Q31	Q32	Q33	Total	%age
Positive	218	143	247	251	184	228	1271	75.11
Negative	54	89	19	22	69	45	298	17.61
Not Sure	10	50	16	9	29	9	123	7.26

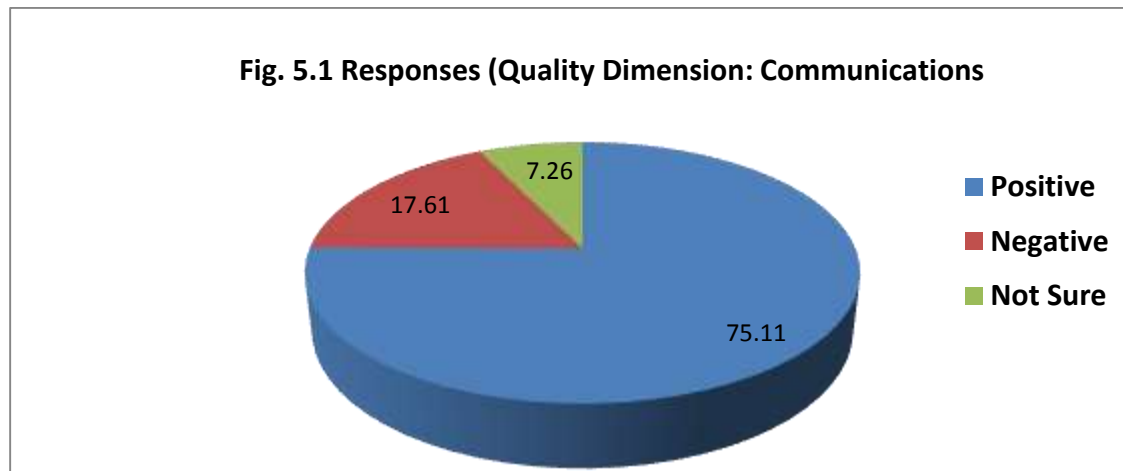


Table 5.1 indicates that 75.11% respondents of the total population asserts positive response and satisfied with the aspect of service quality ‘communications’. Whereas 17.61% population given their negative responses towards these factors. However, 7.26% population is not sure about this service quality.

Table 5.2 Mean Score (Quality Dimension: Communications)

Attributes	Faculty Members	Research Scholars	Mean Score
Awareness of library facilities and services	3.88	3.87	3.87
Provision of user education	3.28	3.36	3.32
Effectiveness of library website	4.06	3.99	4.02
Availability and easiness in the use of OPAC user manual	4.14	4.05	4.09
Availability and easiness in the use of CD-ROM user manual	3.66	3.60	3.63
Assuring the users that his/her problem will be handled	3.96	3.90	3.93
Total	22.98	22.77	22.87
Average Mean	3.83	3.79	3.81

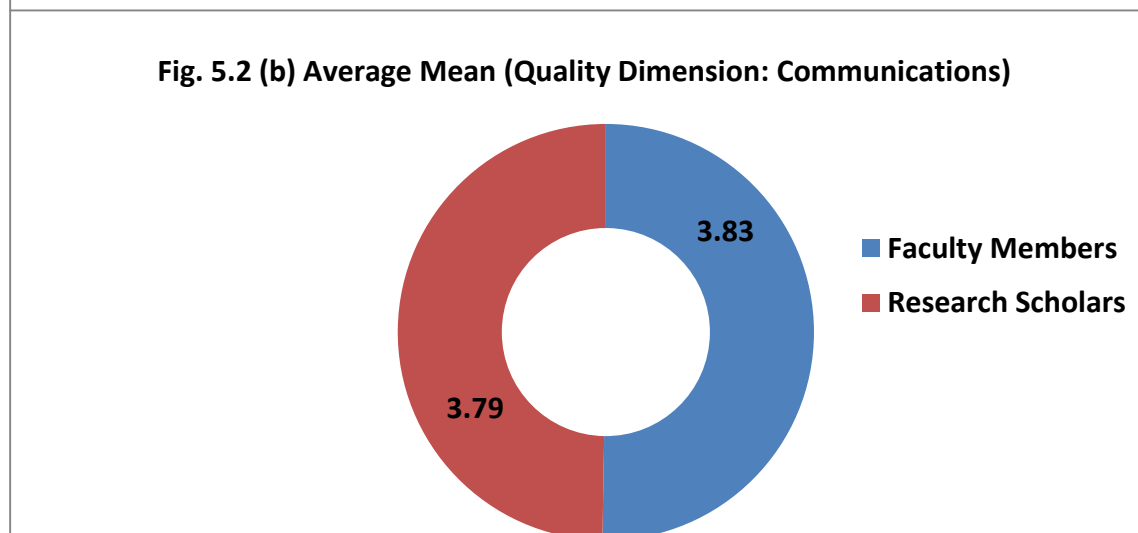
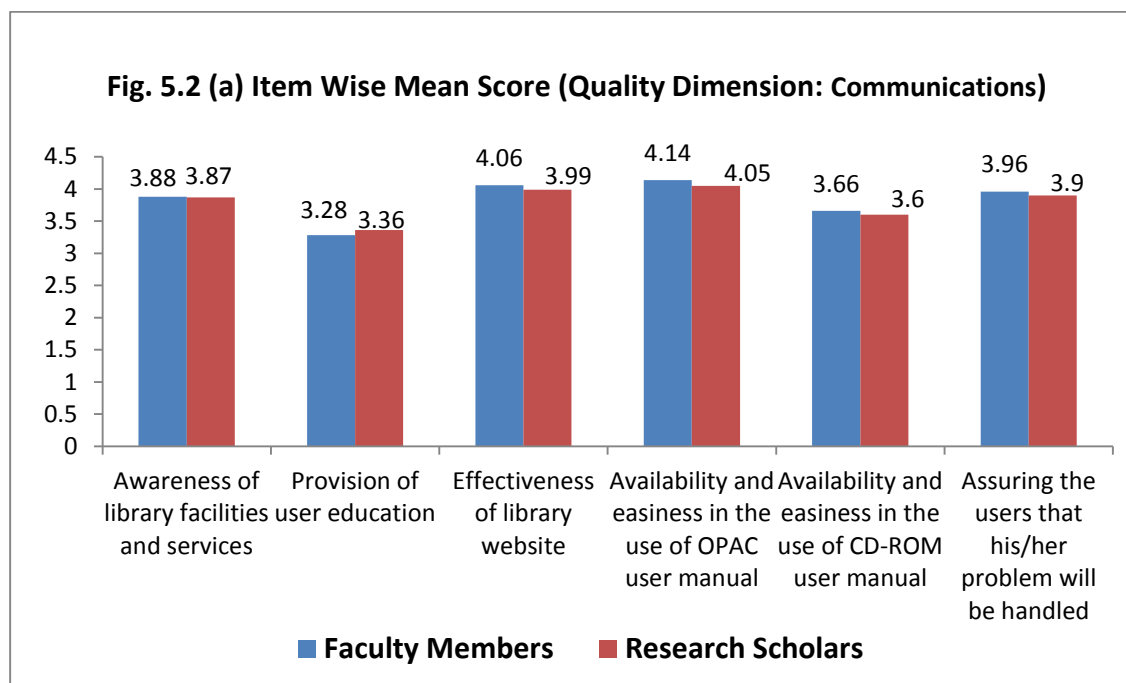


Table 5.2 reveals that ‘Availability and easiness in the use of OPAC user manual’ scored the highest mean for both types of user groups (4.09), followed by ‘Effectiveness of library website’ (4.02), ‘Assuring the users that his/her problem will be handled’ (3.93), and ‘Awareness of library facilities and services’ (3.87). Whereas ‘Availability and easiness in the use of CD-ROM user manual’ scored (3.63) and ‘Provision of user education’ scored (3.32) which is the lowest mean score of the respondents.

It can be noted that the user group of faculty members scored higher average mean, i.e., (3.83) than the average mean of research scholars, i.e., (3.79). The overall average mean of user groups for Communications dimension is (3.81), which clearly depicts that only two areas, i.e.,

‘Provision of user education’ (3.32), and ‘Availability and easiness in the use of CD-ROM user manual’ (3.63) scored lower than the overall average mean.

Quality Dimension: Tangibles

Table 6.1 Responses (Quality Dimension: Tangibles)

Responses	Q34	Q35	Q36	Q37	Total	%age
Positive	263	249	266	263	1041	92.28
Negative	14	21	11	17	63	5.58
Not Sure	5	12	5	2	24	2.12

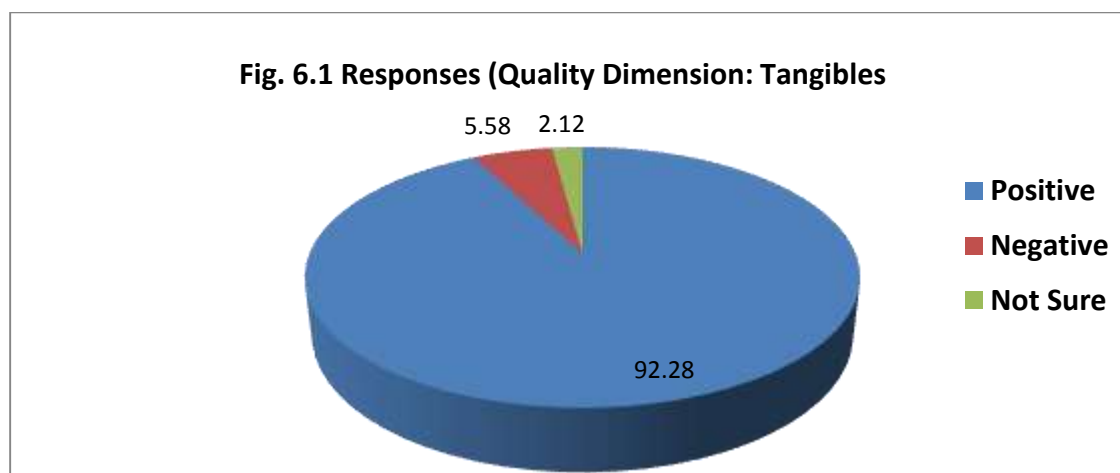


Table 6.1 indicates that 92.28% respondents of the total population asserts positive response and satisfied with the aspect of service quality ‘tangibles’. Whereas 5.58% population given their negative responses towards these factors. However, 2.12% population is not sure about this service quality.

Table 6.2 Mean Score (Quality Dimension: Tangibles)

Attributes	Faculty Members	Research Scholars	Mean Score
Library furniture	4.18	4.18	4.18
Temperature setting in library	4.02	3.94	3.98
Proper lighting in library	4.16	4.16	4.16
Maintenance of silence in the reading room	4.24	4.24	4.24
Total	16.6	16.52	16.56
Average Mean	4.15	4.13	4.14

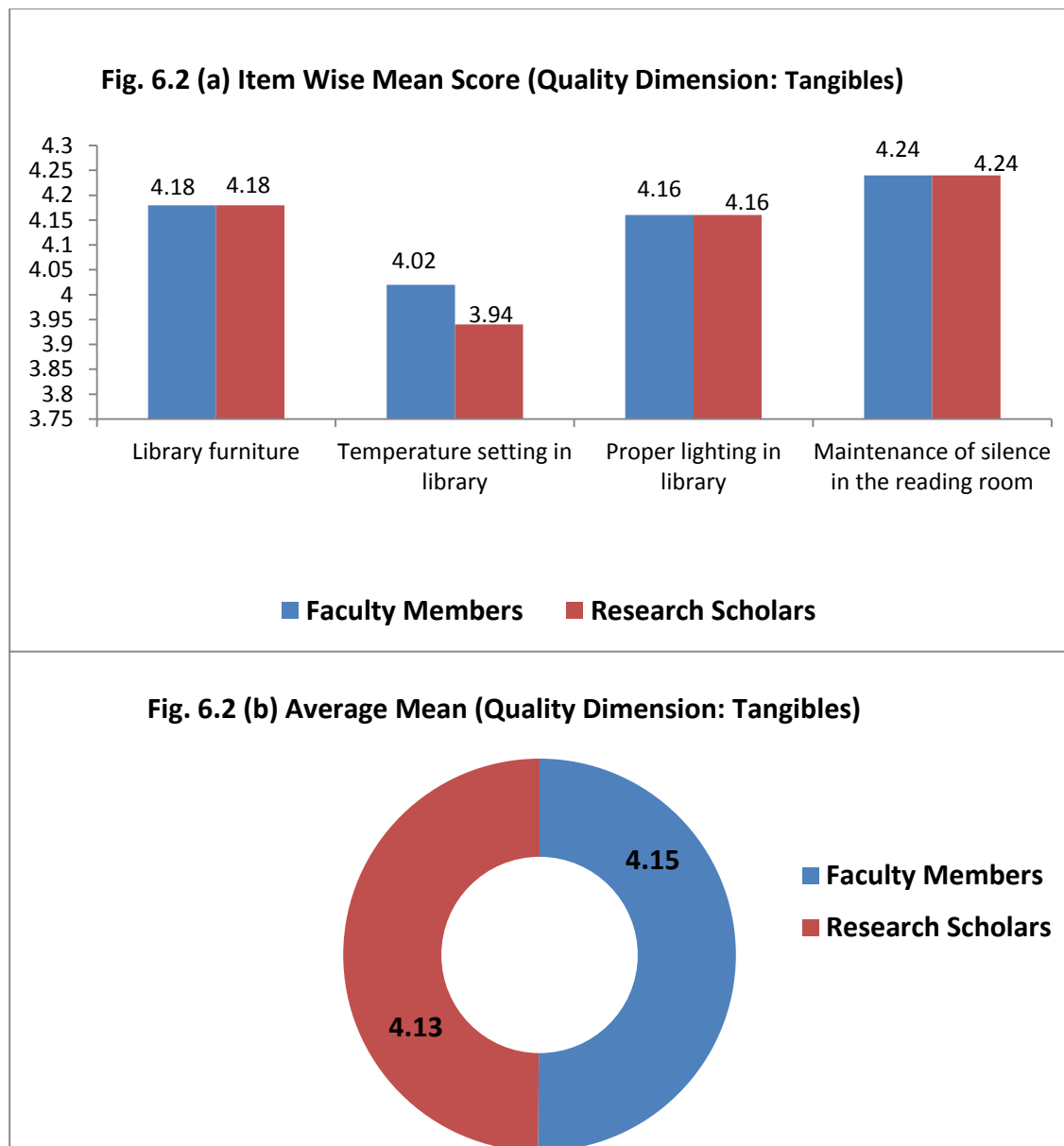


Table 6.2 reveals that ‘Maintenance of silence in the reading room’ scored the highest mean for both types of user groups (4.24), followed by ‘Library furniture’ (4.18) and ‘Proper lighting in library’ (4.16) whereas ‘Temperature setting in library’ scored (3.98) which is the lowest mean score of the respondents.

It can be noted that the user group of faculty members scored higher average mean, i.e., (4.15) than the average mean of research scholars, i.e., (4.13). The overall average mean of user groups for Tangibles dimension is (4.14), which clearly depicts that only one area, i.e., ‘Temperature setting in library’ (3.98) scored lower than the overall average mean.

Comparative Analysis of Dimensions

Table 7.1 (Dimension Wise Analysis of Response %)

Service Quality Dimension	Positive	Rank	Negative	Rank	Not Sure	Rank
Reliability	72.19	6	21.98	2	4.96	4
Responsiveness	74.58	4	13.71	5	13.23	1
Assurance	77.73	2	13.75	4	8.58	2
Access	73.19	5	23.82	1	2.97	5
Communications	75.11	3	17.61	3	7.26	3
Tangibles	92.28	1	5.58	6	2.12	6

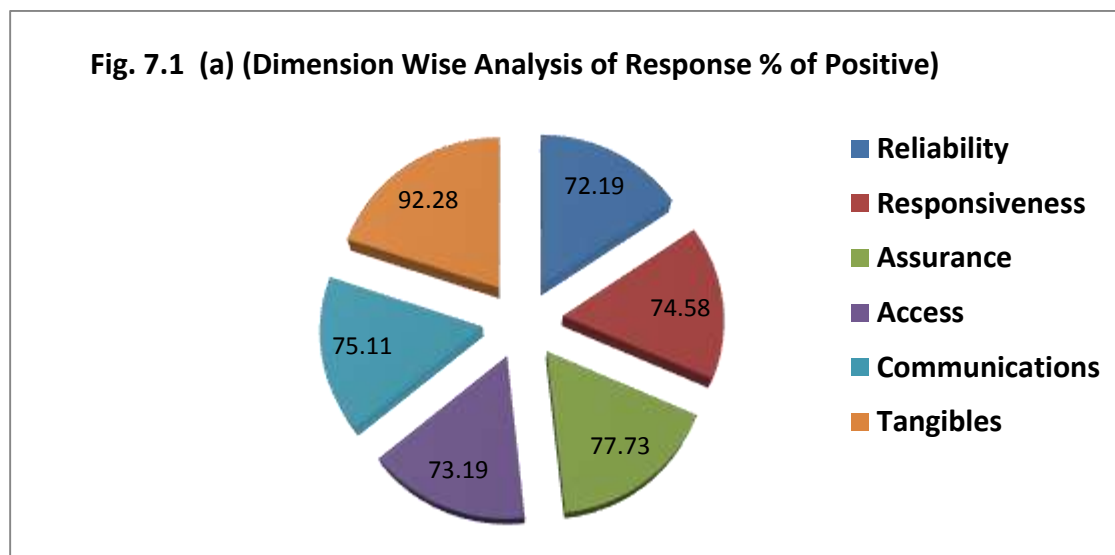
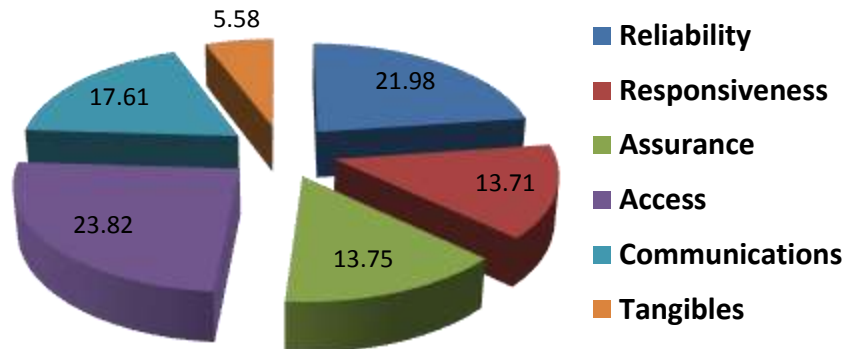


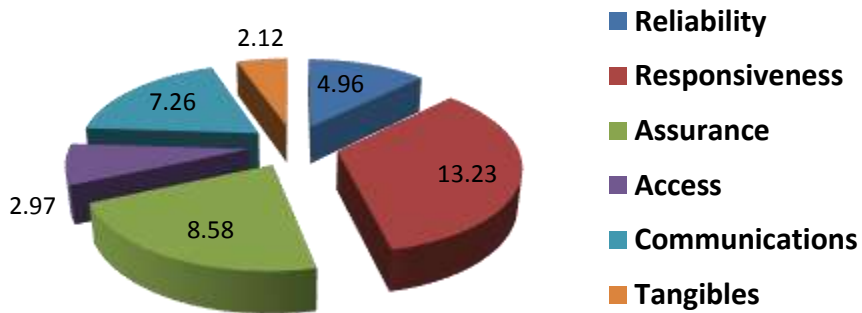
Table 7.1 reveals that the quality dimension ‘tangibles’ scored the highest positive response (92.28%), followed by ‘Assurance’ (77.73%), ‘Communications’ (75.11%), ‘Responsiveness’ (74.58%), ‘Access’ (73.19%) and ‘Reliability’ (72.19%), which is the lowest positive response.

Fig. 7.1 (b) (Dimension Wise Analysis of Response % of Negative)



Similarly 'Access' scored the highest negative response (23.82%), followed by 'Reliability' (21.98%), 'Communications' (17.61%), 'Assurance' (13.75%), 'Responsiveness' (13.71%), and 'Tangibles' (5.58%) which is the lowest negative response.

Fig. 7.1 (c) (Dimension Wise Analysis of Response % of Not Sure)



Similarly, 'Responsiveness' scored the highest response (13.23%) of 'Not Sure', followed by 'Assurance' (8.58%), 'Communications' (7.26%), 'Reliability' (4.96%), 'Access' (2.97) and 'Tangibles' (2.12%) which is the lowest response of 'Not Sure'.

Table 7.2 (Dimension wise analysis of average mean)

Service quality dimension	Average Mean	Rank
Reliability	3.77	5
Responsiveness	3.73	6
Assurance	3.84	2
Access	3.79	4
Communications	3.81	3
Tangibles	4.14	1

Fig. 7.2 (Dimension wise analysis of average mean)

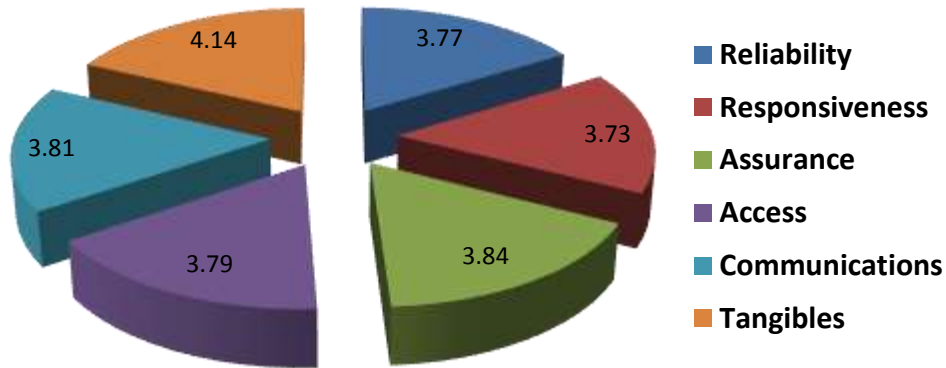


Table 7.2 depicts the comparative analysis of six dimensions of library services, which were collected from the users of library. The overall average mean of each dimension analysis shows that ‘Tangibles’ received the highest score (4.14), followed by ‘Assurance’ (3.84), ‘Communications’ (3.81), ‘Access’ (3.79), ‘Reliability’ (3.77) and ‘Responsiveness’ (3.73) which scored the lowest mean score.

Conclusion

The study reveals that the Central Library of Jawaharlal Nehru University is not lacking quality services and its users are largely satisfied with various aspects of service quality dimensions of quality management. However, there is always a scope of improvement and in the case of JNU central library also the library needs a little more improvement, particularly in the areas of ‘Responsiveness’, ‘Reliability’ and ‘Access’ dimensions of service quality.

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