*Full Length Research Paper*

# Information resources and services of national science library India, New Delhi: A user study

## Devendra Kumar[1]* and Rajkumar Singh[2]

[1]Department of Library and Information Science, CCS University, Meerut, UP, India.
[2]Govt. Mahila Degree College, Aurai, Sant Ravidas Nagar, Bhadohi, (U. P), India.

**The study examines the use of services by the users of National Science Library (NSL), New Delhi, India. A well structured questionnaire was used to identify the impressions of NSL users towards the various aspects. 120 questionnaires were distributed among the NSL users and 108 filed were received back. The questionnaires were checked and 108 (90%) questionnaires were found fit for analysis and out of which 12(10%) were considered unusable. The present study demonstrates and elaborates a various aspects of NSL collections uses within the available resources, frequency and purposes of visit, user satisfaction within NSL services and information about documents. Further attempt has also been made to highlights the findings of the study and a few suggestions have been given based on the analysis of data.**

**Key words:** Information sources and services, national science library, New Delhi, India, user study.

## INTRODUCTION

Information means the communication of knowledge about an event or given condition or the spread of knowledge derived from observation, study, experience, or instruction. Information may be stored in different ways such as language, graphs, printed document, photographs, diagrams, formulas, factual and statistical data records, magnetic tapes, punch cards etc. Today, information is considered a basic resource. Every bit of information is as essential as minerals and other natural resources. Indeed, such a resource needs to be used and utilized on global level if our total reservoir of scientific and technological knowledge can be made accessible to developing countries. Its intelligent use may bridge the gap separating developing countries form developed ones.

Libraries and information centres are maintained for use. To make the library and information services effective, an adequate knowledge about the users, their needs, wants, and demands is necessary. It is imperative for information scientists to know:

- Who among the potential users make use of the library and information services;

- What services are being used.
- What is the frequency of their use.
- For what purpose these services are being used.

Equally important for the librarians or the information scientists to know are as to how the non-users of the library can be transformed into regular users. Still more important for them to know is how far their library fits into the total system of information communication.
For planning library and information services, or for their improvement, or for maximizing the impact of these services, it is necessary to find out about the users and their information requirements as also their habits.

The information needs of different categories of readers are not the same in nature, they differ qualitatively, quantitatively and geographically. It results from the recognition of some perceived need by the user who in turn place demand on the information centre or some person in order to satisfy the perceived needs.

Thus the area of information needs and use pattern assumes special significance. This is an area of active interest among the librarians and information scientists. Efforts are being made to analyze the information requirements of different categories of users.

*Corresponding author. E-mail: dkdeobhu@gmail.com.

**Table 1.** Category of user have responded questionnaire.

| S/N. | Category of user | No. of questionnaire distributed | No. of questionnaire received | (%) |
|---|---|---|---|---|
| 1. | Research scholar | 25 | 24 | 96 |
| 2. | PG Student | 50 | 48 | 96 |
| 3. | Institute member | 10 | 9 | 90 |
| 4. | Faculty | 10 | 6 | 60 |
| 5. | Professional | 25 | 21 | 84 |
| 6. | Total | 120 | 108 | 90 |

User is the supreme in any information system. The benefits of information revolution are centered on the user and his convenience. The study has been designed to provide an empirical approach which needs the analytical aspect in order to explore the results in more elaborate manner. Hence, the following discussion gives an analytical approach to the data collected from the users of the National Science Library (NSL) and results found out from the investigations.

National Science Library (NSL) that has a comprehensive collection of S and T publications in the country and is offering services on a national scale. NSL also acts as a referral centre and clearing house for the best utilization of the existing collection in the country. Thus, it extends its base of operation to the national scale. NSL was set up in 1964 in order to provide a wide range of S and T documentation and information services.

## OBJECTIVE OF THE STUDY

The purpose of library survey may briefly be stated as follows:

- To identify the category of users.
- To know the frequency of user's visit.
- To know the time spent in the library.
- To find out opinion about satisfaction with the library hours.
- To identify purpose of user's visit to the library.
- To find out view about the general layout of the library.
- To find out general opinion about the reading materials available in the library
- To find out Opinion about journals mostly used by the user's.
- To identify the use of reading materials (print/non-print collection).
- To know the arrangement of the materials on the shelves.
- To find out opinion related to library staff encourages the use of library material?
- To find out Opinion about quality of reference materials.
- To find out Opinion about charges of reprography service.
- To find out Opinion about the usefulness of library catalogue.

## METHODOLOGY

Keeping in view the objectives of the study, method of survey has been chosen using questionnaire as a tool to collect the required data. This was supported by personal interviews. Though the questionnaire was structured, few of the questions were open ended. Questionnaires were collected after allowing proper time. No. of questionnaire distributed were 120 out of which 108 responded with a response rate of 90%. Care was taken to collect questionnaires to get good sample of 108. Personal Interviews were also conducted with some of the sample to get clear picture of data.

## ANALYSIS AND INTERPRETATION OF DATA

The Problem for the present study is "Information resources and services of National Science Library India, New Delhi: A User Study". The collected data are organized and tabulated by using statistical method, tables, and percentage. The chapter focuses on the analysis and interpretation of the data collected through questionnaire and personal interview method has been followed for the purpose. The total numbers of users categories wise with their sample population are given in the following table. The total numbers of users are 800 approximately according 120 questionnaire are distribute, out of which 108 filed questionnaire were returned by the users. Out of which there were five main categories of users, which are as follows:

1. Research Scholar.
2. PG Students
3. Institute Members
4. Faculty
5. Professionals.

All category users have responded questionnaire, the numbers of questionnaire responded by different category of users are as follows:

**Comment:** Table 1 indicates that total response from different categories is 90% which is quite a good response for the study.
General characteristics of users like type, nature, gender, age etc is missing which is a must for this kind of study

**Comments**: Table 2 shows that maximum number of users comes to know about his library by their institute (40 users out of 108 users). The percentage of professor is on second number (34 out of 108 users). It shows that the institute is aware of library importance. But the thing to be noted is that maximum students come to know about this library by professors who plays a vital role in their life.

**Comments:** Data in Table 3 reveals that, among average percentage of users, about 42(27.91%) visit the library several times in a week, while 21(20%) users visit the library rarely, 18(16.13%) users

**Table 2.** How you come to know about this library.

| Opinion | No. of user | (%) |
|---|---|---|
| By Friends | 20 | 16.49 |
| By Institute | 40 | 38.69 |
| By Professor | 34 | 33.33 |
| Others | 14 | 11.49 |
| Total | 108 | 100 |

**Table 3.** Frequency of visit to the library.

| Frequency | No. of users | % |
|---|---|---|
| Daily | 18 | 16.13 |
| Several time in a week | 42 | 27.91 |
| Once in a week | 15 | 21.07 |
| Rarely | 21 | 20 |
| Other comment | 12 | 14.89 |
| Total | 108 | 100 |

**Table 4.** Opinion about time spent in the library.

| How much time You spend in the library | No. of users | % |
|---|---|---|
| Less than one hour | - | - |
| One hour | - | - |
| Two to three hours | 60 | 61.79 |
| More than three hours | 42 | 32.5 |
| Any other comments | 6 | 5.71 |
| Total | 108 | 100 |

**Table 5.** Opinion about satisfaction with the library hours.

| Satisfied with library hours | No. of users | % |
|---|---|---|
| Yes | 75 | 70.06 |
| No | 27 | 26.19 |
| No opinion | 6 | 3.75 |
| Total | 108 | 100 |

visit the library daily and 15(21.07%) users visit the library once in a week.

**Comments:** Data in Table 4 reveals that, among average percentage of users, about 60(61.79%) users spend two to three hours in the library, while 42(32.50%) users spend more than three hours in the library.

**Comments:** Data in Table 5 reveals that, among average percentage of users, about 75(70.06%) are satisfied with library hours, while 27(26.19%) users are not satisfied with library hours and 6(3.75%) users have no opinion.

**Comments:** In Table 6, the study revealed purposes of visit to the library. That 69(63.88%) users came for consult reference mate-

**Table 6.** Opinion about purpose of visit to the library.

| Purpose for visit to the library | No. of users | % |
|---|---|---|
| Lending service | 14 | 12.96 |
| To pursue individual research guidance | 26 | 24.07 |
| To consult reference materials | 69 | 63.88 |
| To consult referral service | 12 | 11.11 |
| To use print journals | 53 | 49.07 |
| To access online journals | 59 | 54.62 |
| To consult thesis/dissertations | 18 | 16.66 |
| Patent service | 6 | 5.55 |
| Translation service | 6 | 5.55 |
| CAS/SDI | 27 | 25 |
| User counseling | 19 | 17.59 |
| To use technical report, proceedings of conferences/ seminars/symposia | 5 | 4.62 |
| Reprography service | 39 | 36.11 |
| To consult CD-ROM Databases | 15 | 13.88 |
| To access online Databases | 61 | 56.48 |
| Others | 24 | 22.22 |

*Multiple responses allowed.

**Table 7.** Opinion about the general layout of the library.

| Opinion | No. of users | % |
|---|---|---|
| Easy to follow | 90 | 85.48 |
| Difficult to follow | 6 | 2.5 |
| Inconvenient | 12 | 12.02 |
| Total | 108 | 100 |

materials, 61(56.48%) came to access online databases, 59(54.62%) users came for access online journals, 53(49.07%) users came for uses print journals, 39(36.11%) users came for reprographic service, 27(25%) users came for CAS/SDI services, 26(24.07%) came to pursue individual research guidance, 24(22.22%) came to consult thesis/dissertations, 14(12.96%) came for lending service, 12(11.11%) came for consult referral service, 6(5.55%) users came for patents service, and same also came 6(5.55%) for translation service, 5(4.62%) came for to use technical report, proceedings of conferences/seminars/symposia and 24(22.22%) users aims to others. It seems that users have a tendency to come to the library, the aim may be different.

**Comments:** Table number 7 shows the number of users who find it "easy to follow" to be more comparative with others (90 out of 108 users). It is because most of the users are using library from a long time. The users who find it difficult may be the fresher.

**Comments:** Table 8 shows that a number of users finds the collection satisfactory more than others, while the user who finds it unsatisfactory also have a good number So we can say library has good collection.

**Comments:** Table 9 shows that the number of users who uses the Indian journals is more than foreign journals and others.

**Table 8.** Opinion about the reading materials available in the library.

| Opinion | No. of users | % |
|---|---|---|
| Satisfactory | 69 | 65.95 |
| Unsatisfactory | 24 | 25.30 |
| Can not say | 15 | 8.75 |
| Total | 108 | 100 |

**Table 9.** Opinion about journals mostly you consider.

| Opinion | No. of users | % |
|---|---|---|
| Foreign journal | 39 | 49.34 |
| Indian journal | 51 | 37.86 |
| Any other | 18 | 12.80 |
| Total | 108 | 100 |

**Table 10.** Opinion about use of reading materials (print/non-print collection).

| Opinion | No. of users | % |
|---|---|---|
| Print collection | 81 | 80.18 |
| Non-print collection | 27 | 19.82 |
| Total | 108 | 100 |

**Table 11.** Opinion about find the arrangement of the materials on the shelves.

| Opinion | No. of users | % |
|---|---|---|
| Ordered | 75 | 73.51 |
| Disordered | 27 | 21.13 |
| Can not say | 6 | 5.36 |
| Total | 108 | 100 |

**Table 12.** Opinion about reference staff.

| Opinion | No. of users | % |
|---|---|---|
| Always ready to help | 93 | 90.54 |
| Helpful but seldom | 6 | 2.5 |
| Not very helpful | 3 | 1.25 |
| No opinion | 6 | 5.71 |
| Total | 108 | 100 |

**Comments:** Table 10 shows that the maximum number of users who uses 'print collection' is more than others.

**Comments:** From Table 11, after the analysis of this data we can make a collection that most of the user's find the collection in ordered, which is a good sign for the library, it means that staff is giving proper attention towards the arrangement of books on shelves. The percentage of users who finds books in disorder is also good. So we can say that the arrangement of books on shel-

**Table 13.** Does library staff encourage the use of library material.

| Opinion | No. of users | % |
|---|---|---|
| Yes | 90 | 88.04 |
| No | 18 | 11.96 |
| Total | 108 | 100 |

**Table 14.** Opinion about quality of reference materials.

| Opinion | No. of users | % |
|---|---|---|
| Accurate | 90 | 86.43 |
| Not accurate | 6 | 5.36 |
| Any other | 12 | 8.21 |
| Total | 108 | 100 |

**Table 15.** Opinion about charges of reprography service.

| Opinion | No. of users | % |
|---|---|---|
| Very high | 61 | 49.47 |
| Affordable | 28 | 31.01 |
| Can not say | 19 | 19.52 |
| Total | 108 | 100 |

ves in a systematic way needs to be improved.

**Comments:** By studying Table 12, we can say that the library staff of NSL is very good and always ready to help the users in getting their desired book and in other activities. Some of the users have given negative comment about the library staff. But never mind. So it is good sign for NSL to have such type of library staff.

**Comments:** By studying Table 13, most of the users (90 out of 108) say that the reference staff encourages the use of library material. 18 users out of 108 say that the reference staff do not encourages the use of library materials.

**Comments:** 86.43% of users (90 out of the 108) say that the reference staff of NSL is very accurate, 5.36% users (6 out 108) says that they are not accurate. By the study of this Table (14) we can say that the reference staff of NSL is very accurate to provide various types of information to the users. It is a good sign for the NSL, India.

**Comments:** From Table 15, we can say that a maximum number of users find the charges 'very high' but some users cannot afford it. In NSL, charges of reprography are 1 Rs/Page, but out of library is 50 Paisa/Page.

**Comments:** Table 16 shows that 71% users were satisfied with library catalogue and 21.29% users were partially satisfied. 7.40% users have no opinion about the catalogue.

## SUGGESTIONS FROM THE USERS

- Reading materials should be arranged in the proper sequences on the shelves.

**Table16.** Opinion about the usefulness of library catalogue.

| Opinion | No. of users | % |
|---|---|---|
| Fully satisfied | 77 | 71.29 |
| Partially satisfied | 23 | 21.29 |
| Not at all | 8 | 7.40 |
| Total | 108 | 100 |

- The timing of the library services should be extended to round the clock.
- Library authority should be provided with refresher course to users seeking information and introduced with new aspects of information technology. This proper orientation courses should be made available to enable users to use the traditional as well as digital library in a better way. The training program should be organized for users to seek their desired information from the library. Personal computer should be provided to seek the desired information from the library.
- The library collection should be increase.
- Most of the users suggested that library should reduced reprography charges.

## Conclusion

The conceptual and characteristics changes in natural/applied science research demands support from the library or information canters, since sorting are not so satisfactory. Hence the following suggestions, if consider-ed, may help to bring a face-lift to the present position of the library.

There are a number of problems which create barriers in providing information services to users such as user education, lack of professional and non-professional staff, policy matters, lack of autonomy for the library professsional etc. Hence the urgent attention of the authority is invited in this regard.

It is very difficult to make available all the desired docu-ments to users but it can be managed to some extent, by keeping views of user's demand while purchasing new books, periodicals, and other print and non-print infor-mation materials. Thus more books, periodicals, and other print and non-print information materials should be added in the library so meet the requirements of the use community. A suitable policy should be formulated and implemented in order to improve the quality of the library collection.

Library, as an entity, has a bearing on organizational development. Hence the parent organization is requested to recognize the contribution of their library and support the library in their activities.

To cater for the needs of the country, library service are absolutely essential to achieve development goals.

Certainly library improves the quality of life and makes known the country's rich scientific and cultural heritage in multiple forms. It also acts as an intellectual catalyst for the growth of the society and to acquire information and education as well as recreation.

The management of parent organization is requested to encourage user surveys at regular intervals in order to increase the response rate for any user survey and to implement the recommendations that emerge after the survey.

For improving the quality of services, NSL should offer continuous training to library personnel in the use of latest techniques in an ongoing manner.

The library should offer services like abstracting, index-ing, bibliographical, CAS, SDI, translation, etc at the local, state and national levels regularly. Further user orientation service should be introduces immediately.

To establish a good rapport between the user com-munity and library personnel, a proper paradigm for same should be developed.

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