

GRADUATE STUDENT'S INFORMATION SEEKING BEHAVIOUR AND THEIR USE OF INFORMATION TO SUPPORT THEIR PROCESS OF INQUIRY AND SCHOLARLY ACTIVATES: A CASE STUDY OF P.G. GOVERNMENT COLLEGE UNA, DISTT. UNA (HIMACHAL PRADESH)

Dr. Payare Lal

University Librarian

Desh Bhagat University, Mandi Gobindgarh (Pb.)

Abstract

Information seeking behavior is the purposive seeking of information as a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with manual information systems such as a newspaper or a library, or with computer-based systems such as the Web. The study is explored the graduate student's information seeking behaviour and their use of information to support their process of inquiry and scholarly activates. While evaluating the library and information services at the disposal of graduates,

In this study an attempt has been made to cover all the aspects of library services such as library hours, collection personnel's organization of library collections, physical conditions, circulation and reader's services and to know, how the students are seeking information and enhance their skill to get information in the changing scenario?

INTRODUCTION

Information seeking is a basic activity indulged in by all people and manifested through a particular way of behavior. It is also an aspect of scholarly work most interesting to an academic librarians who strive to develop collections, services, and organizational structures that facilitate seeking of information. There is a universal assumption that man was born innocent and should actively seek knowledge. "Information seeking is thus a natural and necessary mechanism of human existence".

Information seeking behavior involves personal reasons for seeking information, the kinds of information which are being sought, and the ways and sources with which needed information is being sought. Information seeking behavior is expressed in various forms, from reading printed material to research and experimentation. Scholars, students and faculty actively seek current information from the various media available in

libraries, e.g. encyclopedias, journals and more currently, electronic media. Abels (2004) mentioned that the frequency of use of the internet in 1998-2000 had greatly increased. At the same time, expenditure on monographs showed steady increase.

The library, therefore, is the most widely used source of information available to literate societies. The librarian should be aware of what kind of information is being sought, and how it can be obtained. Due to the rapidly escalating cost of purchasing and archiving printed scholarly journals and electronic media, the library has the duty to provide and maintain efficient services. The library has been becoming the soul of education and research. For quality study and research, the reader & the researcher became dependent on libraries.

INFORMATION

Information is something which consists of facts about them. Human being is social animals and needs to communicate their ideas, beliefs; faith etc. to their fellow human beings. Language is most powerful tool for communication.

Information is playing vital role in modern era is like the basic need of human being as like as food, shelter and cloths. The social – economical development of any country depends upon not only information but also on how to utilize the information and more important that contribution of creative people those use the information. Rananthan[1967] defines research as “It is critical and exhaustive investigation to discover new facts, to interpret them in the light of known ideas-laws and theories to revise to current laws and theories in the light of newly discoverable facts, and to apply the conclusions to some practical purpose.

According to Oxford Dictionary (2001) information as what is told new knowledge data evidence facts intelligence statistics.

According to Oxford Dictionary of quotation and proverbs “information can tell us everything. It has all the answers but they are answer to question we have not asked and which doubtless don’t even arise”

INFORMATION SEEKING BEHAVIOUR

Various studies have been undertaken by the researchers to access the information seeking behaviour of professionals of different areas. There is a lot of information available in electronic format. Information seeking behaviour of various subjects expertise, researchers and students of differ from each other according to their subjects. Scientists have different information seeking behaviour as compared to social scientist.

COLLEGE EDUCATION & LIBRARIES

Every college library plays an important role in order to fulfillment the objectives before their parent institute. College library is an integral part of higher education and libraries

are the primary source for learning process. College library has been mainly concerned with their use by the undergraduates in connection with prescribed reading.

SCOPE OF STUDY

The scope of present study was confined to the graduate students at Government College Una Distt. Una (Himachal Pradesh). There are total of 500 students of B.A. out of 30 chosen to respond, out of total number of 300, B.Sc. students, 45 chosen to respond and in case of B.Com. the total strength was 300 and collected response was from 25 of them.

OBJECTIVES OF THE STUDY

1. To Investigate if the availability of information resources affects the information Seeking patterns of communication of academics and to what extent
2. To find the status of library and information services rendered to graduate students
3. To examine how to students seek and obtain information and what are the related issues
4. What information resources do graduate students value, and where do they find them
5. What role do people have in graduate students' information seeking
6. What other factors influence graduate students' information seeking behaviour
7. To investigate the different practices and method used by academic students in retrieving information from sources
8. To examine what role do people have in graduate students information seeking
9. To identify the types, range of electronic information resources used currently by academic & determine the level and spread of their use
10. To determine whether or not different kinds of information needs lead to a different information seeking behaviour communication channel
11. To examine impact of these system on communication & exchange of professional knowledge among graduate students
12. To examine if it is possible to identify the factors which trigger the information need and association of ideas which leads to a particular information seeking behavior

REVIEW OF LITERATURE:

2005 The Information Seeking Habits of graduate Student Researchers in the Humanities by Andy Barrett The researcher summarizes an exploratory research study on the Information Seeking habit graduate student researchers in the humanities. In-depth interviews with a small sample of humanities graduate Student were used to explore to

what extent humanities graduate Student might constitute a user group distinct from faculty and undergraduate model.

- ❖ 2006 Scholarly use of information: graduate students' information seeking behaviour by [Carole George](#), [Alice Bright](#), [Terry Hurlbert](#), [Erika C. Linke](#), [Gloriana St. Clair](#) and [Joan Stein](#) In this study explored graduate students' information behaviour related to their process of inquiry and scholarly activities
- ❖ 2001 Pettigrew define information behaviour as the study of how people need, seek, give and use information in different contexts, including the workplace and everyday living. In the context of this study, we use information behaviour as it applies to graduate students as they seek, search for, and use information to support their scholarly endeavors, focusing primarily on their research process. Our large sample will enable us to explore and compare the differences among disciplines. A multi-disciplinary, qualitative study that focuses on graduate students as they conduct their research and process of inquiry is lacking in previous studies.
- ❖ Barrett (2005) made an explanatory research on the information seeking habits of graduate student researchers in the humanities, by conducting in-depth interviews with small sample of humanities graduate students, were used to explore to what extent humanities graduate students might constitute a user group distinct from faculty and undergraduate models.
- ❖ 2006 A comparative analytical study of library automation in northern Indian Universities A –users survey (unpublished by ram Kumar research student, Delhi)
- ❖ 2006 Information seeking behaviour of Historians at Gurukul University,Haridwar-A user survey (unpublished by Wilson Kumar research student, Karaikudi)
- ❖ 2007 Use of electronic information resources by researcher/postgraduate students of science and social science in Panjab University Chandigarh-A user survey (Unpublished by Vishal Sharma research scholar student,Karaikudi)
- ❖ 2009 Information seeking behaviour of graduate students at Guru Teg Bahadur khalsa college Anandpur sahib (unpublished by Harvinder Kaur research student, IGNOU)

METHODOLOGY ADOPTED FOR THE PRESENT STUDY

The investigator has selected Government College Una, Distt Una for the study of information seeking behaviour of graduate students.

The investigator used the questionnaire approach to collect data for the present study. For data collection two types of questionnaire were prepared one for library survey & other for user survey. The data was collected through both the library questionnaire and users questionnaire. After obtaining the data, Data was manually analyzed, tabulated and presented in the form of table and figure.

POPULATION AND SAMPLE

The sample was drawn from the population of graduate students enrolled at the Govt. College Una. Our goal was to select a sample of students that represented graduate students, from three departments Arts, commerce and science of the college. With guidance from the college Center for Excellence, we decided on a sample of one hundred graduate students. We would be able to represent every department with at least forty and we would have an easy number to work with. We used a random sample of the population of graduate students. The sample included primarily science students (65%) with the exception of commerce (10%) and arts student (25%).

TABLE : GRADUATE STUDENTS SAMPLES

Discipline	Male	Female	Total
Arts	10	15	25
Science	25	40	65
Commerce	5	5	10
Total Student	40	60	100

BRIEF INTRODUCTION ABOUT THE COLLEGE

Govt. College Una embarked on its evolution in 1968 from a rented building of local DAV school. In 1993 the college shifted to its own building on Una-Nangal road. The college has completed 43 glorious years and The campus now is spread over on area of several acres, in sylvan surroundings, that bless it with an unmatched serenity and augment the academic atmosphere. There are four blocks, including one built with the generous help of PTA and local citizens, that cater to the need of 3000 students and 7 Professors, 10 Associate Professor and 16 Assistant Professors in different streams. The college has been accredited with B+ grade by NAAC. Another feather in the cap of the college was added when UGC listed this college with the rare distinction of being the first college in the state to be a College with Potential for Excellence.

COLLEGE LIBRARY

Government college library has 18000 general books and having 5000 syllabus books college library collects 50 magazines every month of their users.

Library Membership

Library memberships consist of family members, post graduate students, graduate students and non teaching staff.

Library Timing

The stipulated time of library for a period of 7 hours on all working days i.e. from Monday to Saturday on vacation only half vacation library is kept open.

Library Budget

The data collected by the research regarding library budget indicates that library budget has been fluctuated over the period under consideration i.e. from the year 2002-2012. The library budget is given from Himachal Pradesh Govt. & UGC for purchasing books and purchase of equipments for five years.

TABLE : Allocation of Library Funds

Items	Year	Amount
Purchase of books	2007-2012	2,75,000/-
Purchase of equipments	2007-2012	5,43,000/-

The main funding agency of college library is the Himachal Pradesh Govt. which contributes 95% of library budget and other sources of library budget, university grant commission, Student funds, Amalgamated funds, PTA etc

Library personnel:

Library consists of total number of 3 personnel's in all

TABLE : Distribution of Library Personnel

Category of Staff	Total Number
Librarian	01
Assistant Librarian	01
Peon	01

TABULATION AND ANALYSIS

As is generally expected that experts of any area served through special type of library & information services in case of college library system this objective is attained through joint effort of college library and college management.

The present study looks into the success with which the college library system at Govt. College Una have been able to come the graduates with help of analyzing their information seeking received by them. So the study performed their function of analyzing information seeking behaviour of graduates at Govt. College Una and secondly finding

out the status of library and information services received by them. The total users in case of present study stood 2500 in all out of which 100 choose to respond to the researcher and more used as sample. There respondents included the graduate student from the three department of college i.e. Arts, Commerce & Science.

The data collected through various tools, such as questionnaire, interview, observation and documentary records/sources have been duly tabulated and analyzed in order to reach conclusion.

TABLE -1

Discipline-Wise Distribution of Respondents

Sample N=100 (85% Random sample, 15% Purposive sample)

Department of users	Boys	Girls	Total
B.A.	10	20	30
B.Com.	10	15	25
B.Sc.	20	25	45
Grand Total			100

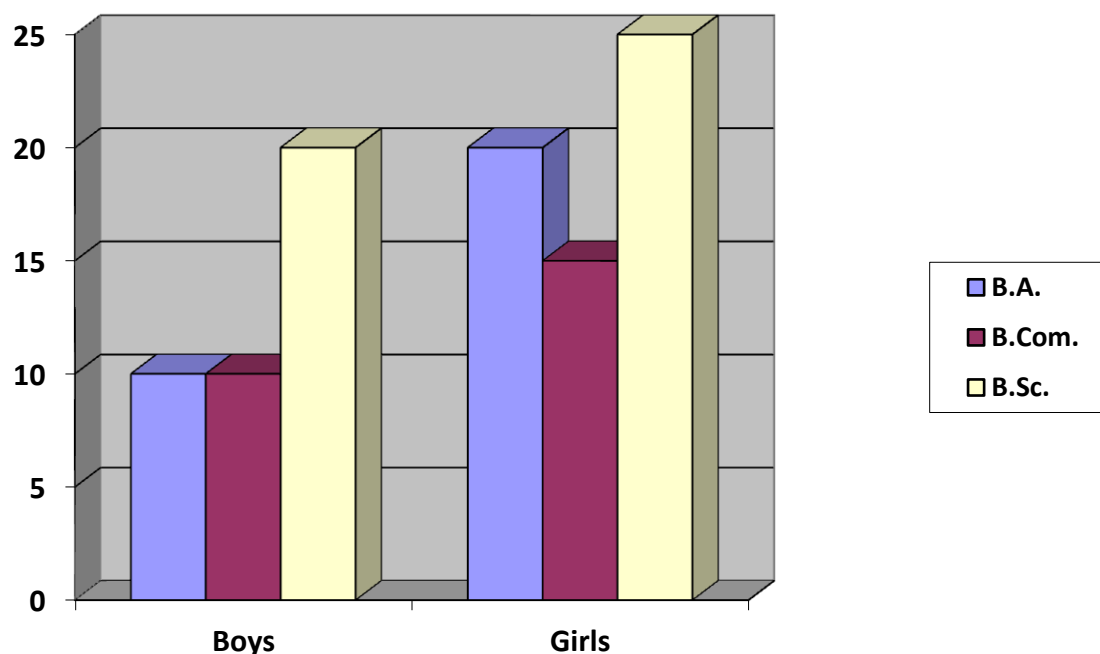


Figure :1 Discipline-Wise Distribution of Respondents

Figure 1 shows the distribution status of respondents from the tabulated data by researcher reveals the maximum(45%) number of respondents fall under category or department of science, 35% by Commerce followed by some (10%) of them are Arts students.

TABLE-2
FREQUENCY OF LIBRARY USE MADE BY
RESPONDENTS N=100

Frequency of Library Use	Number	%
Everyday	55	55%
Alternate day	25	25%
Once in a week	13	13%
Occasionally	5	5%
Do not use library	2	2%



Figure :2 Frequency of Library Use Made By

Library and Information Centre is a knowledge bank considered to be the heart of the institution enriched with variety of information sources and services in print and electronic format to support learning, teaching and research. Attempts were made to understand the habit of using the library by the Graduate students in a college. It is clear from the Table 5B that, all the respondents of the study i.e. Graduate students of college in the habit of using the library. Among them, about 55% of respondents visit the library

everyday, 25 % of respondents visit the library every alternate day, 13% of respondents visit once in a week, 5 % of respondents visit the library occasionally and a very negligible portion opine that they do not use library. It is found in table that only 9% respondents visit library rarely, moreover a large number i.e. 56% of respondents visit library frequently, while 35% respondents make use of library services sometimes.

TABLE _3
Purpose of using Library N=100

Purpose to visit Library	Number	%
To Issue/Return Books	62	62%
To read their own Books	28	28%
To consult the collection maintained by library	7	7%
General Reading	3	3%

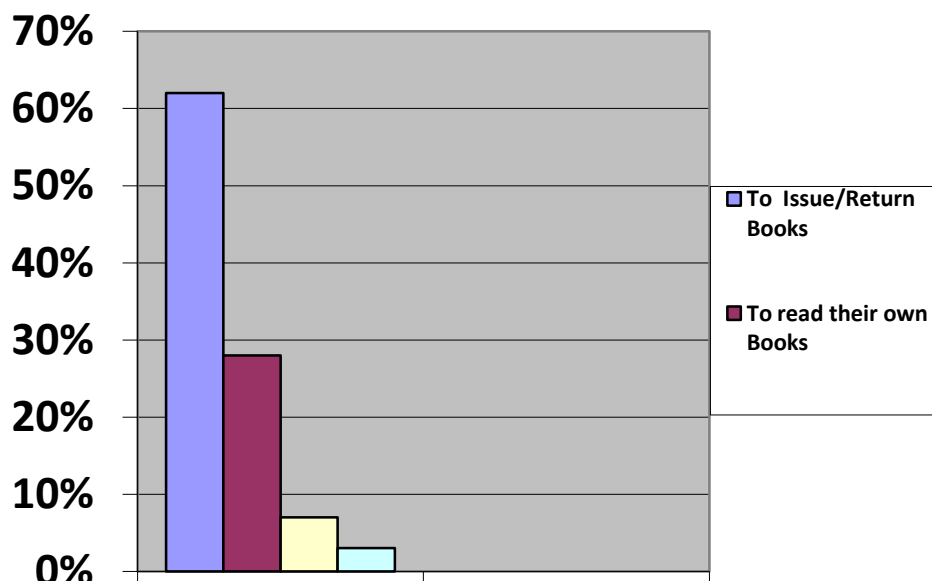


Figure:3
Shows the purpose of seeking information by the respondents of the study.

It is noted that about 62 % of respondents' purpose of visiting the library is preparing for issue and return books. This is followed by respondents using the library to prepare for read their own books (28%). Least of the respondents are visit to consult the collection maintained by library (3%) and general reading (3%). Thus general tendency for visiting the library by the Graduate students is to prepare for general examinations and prepare for competitive examinations.

TABLE -4

NUMBER OF HOURS SPENT IN LIBRARY N=100

Number of Hours	Number	%
1-2hrs	44	44%
2-5hrs	47	47%
5-10hrs	9	9%
10-15hrs	-----	-----

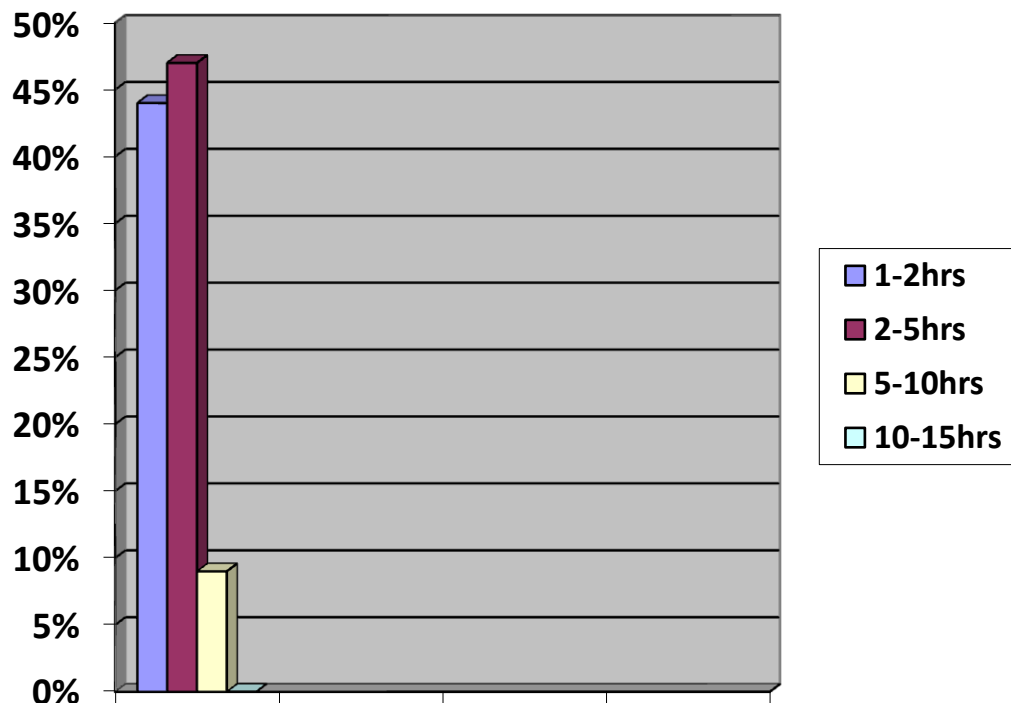


Figure:4 Numbers of Hours Spent In Library

Figure 4 shows that a considerable number of users spend 2-5 hrs at library while nearly one third respondents spend 1-2hrs stay at libraries.

TABLE- 5
USERS SATISFACTION REGARDING LIBRARY TIMING N=100

Level of Satisfaction	Number	%
Yes	90	90%
No	10	10%

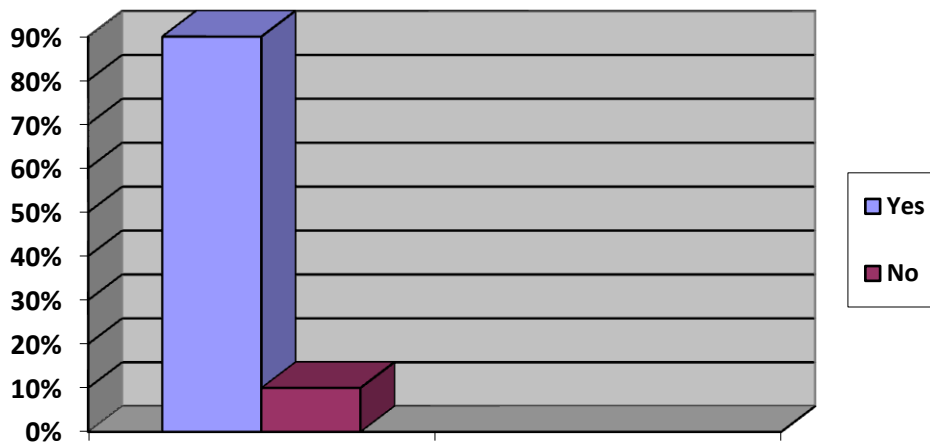


Figure 5 Users Satisfaction Regarding Library Timing

As shown in figure an overwhelming large no.(90%) of respondents showed satisfaction with the existing library timing but a very minute number (10%) were not satisfied with same.

TABLE-6

**SUGGESTION MADE BY RESPONDENTS TO IMPROVE LIBRARY TIMING
N=28**

Suggestion	Number	%
Library open on Sunday	8	28.58%
Library open 8a.m.-11p.m.	4	14.28%
Library open 24hrs	16	57.14%

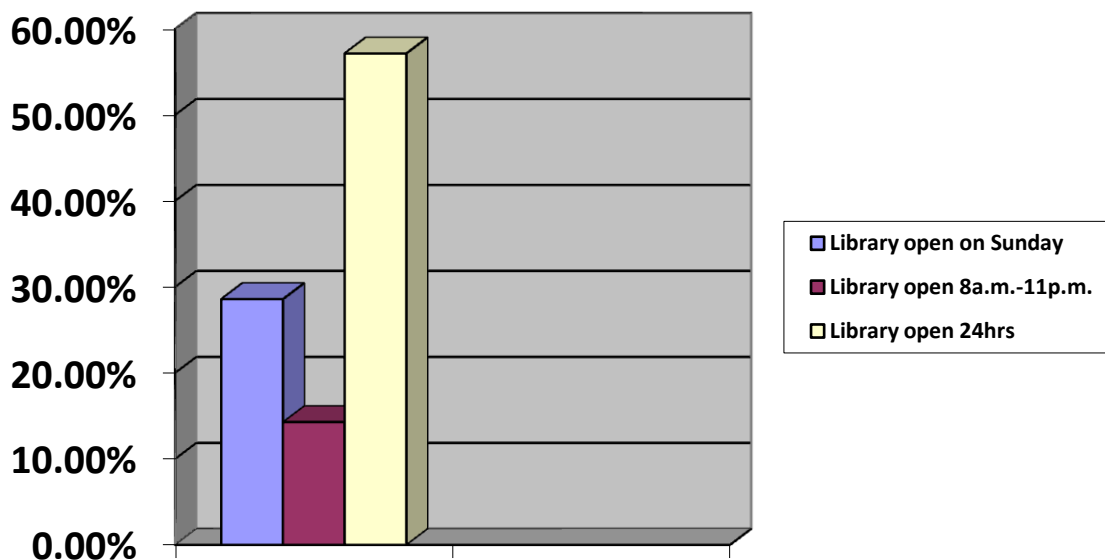


Figure 6 Suggestion Made By Respondents to Improve Library Timing

Figure 6 shows that more than half of the respondents were an opinion the library should kept open round the clock while approximately one fourth of then felt that library should be kept open on Sunday holidays also.

TABLE -7
RATING OF LIBRARY STAFF N=100

Library Staff	Number	%
Well trained	48	48%
Up-to-date	11	11%
Efficient	11	11%
Needs Improvement	30	30%

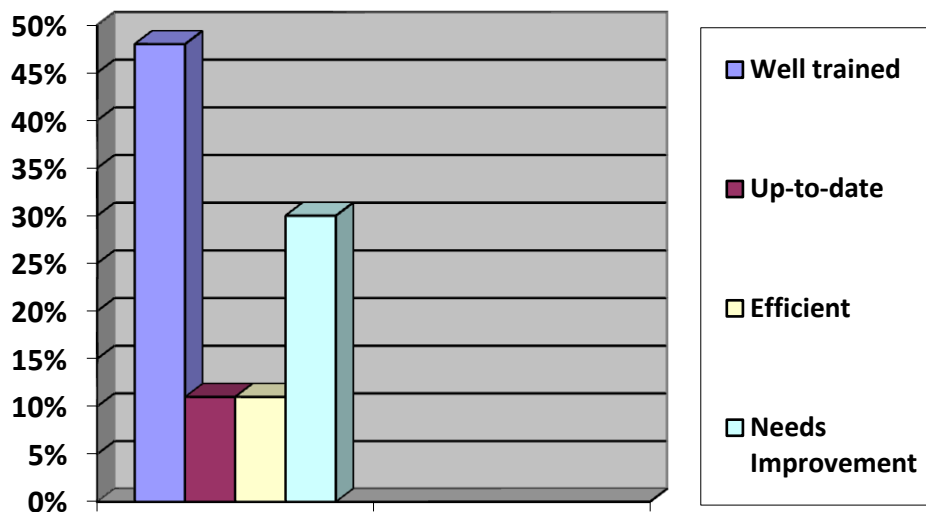


Figure:7 Rating Of Library Staff

Figure 7 shows that about the half (49%) of the respondents have rated the library staff as well as trained while 30% respondents who feel library staff needs to be improvement. Moreover 11% respondents have to be efficient & up-to-date.

TABLE -8

Attitude of Library staff towards users (N=100)

Attitude of library staff	Number	%
Very Helpful	48	48%
Helpful	42	42%
Indifferent	10	10%

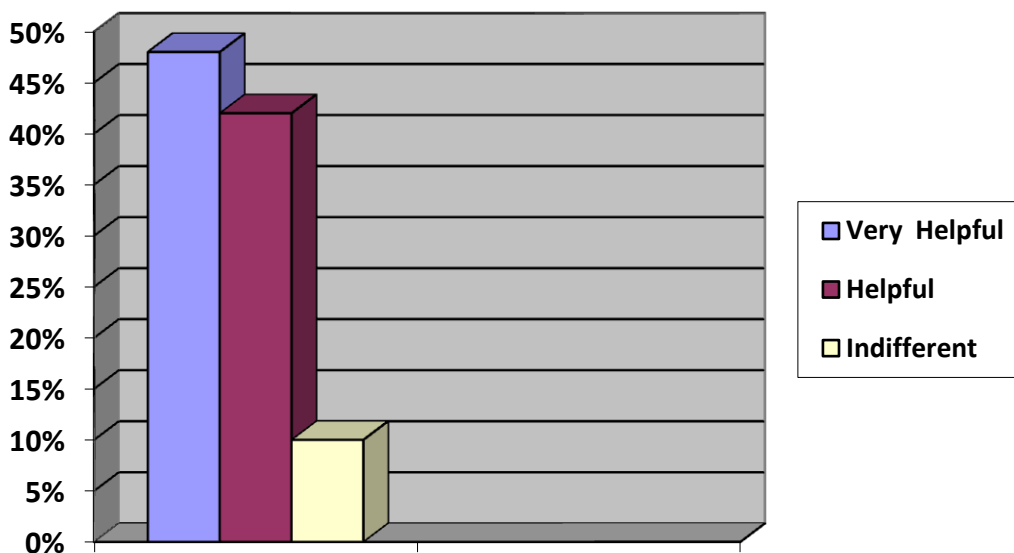


Figure :8 Attitude of Library staff towards users

As shown in figure 5H that the attitude of the library staffs towards library users the concerned maximums (48%) of respondent find then very helpful (42%).The attitude is indifferent of about 10% only.

TABLE-9

PHYSICAL FACILITIES AT THE LIBRARY (N=100)

Physical Facilities & Library Building	Number	%
Well planned & Designed	28	28%
Well ventilated	21	21%
Well furnished	19	19%
Well equipped	10	10%
Needs improvement	42	42%

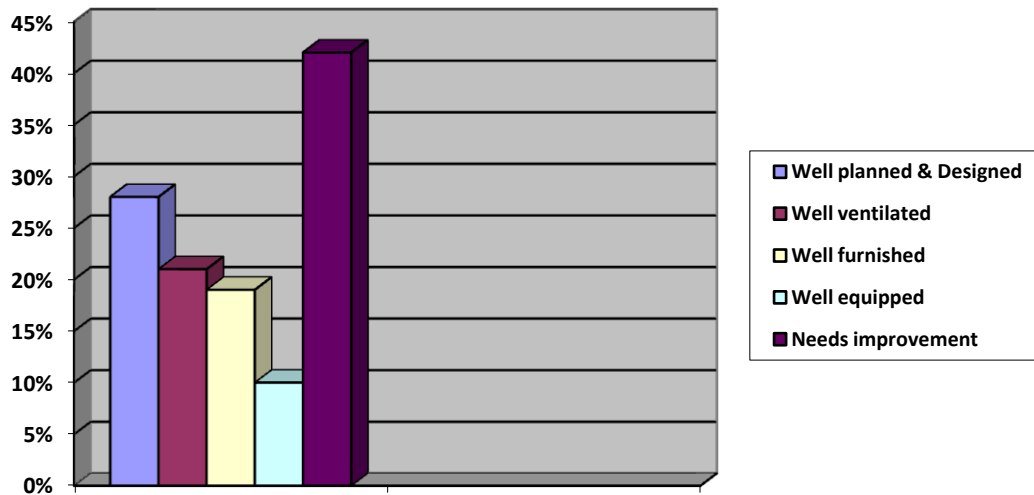


Figure :9 Physical Facilities At The Library

Figure 9 shows that the statistical data shows that maximum number of respondent have opinion that library building needs improvements while approximately one fourth of respondents find the library building well planned and designed.

TABLE-10

USERS PARTICIPATION IN THE SELECTION OF DOCUMENTS N=100

PARTICIPATION	Number	%
Yes	65	65%
No	35	35%

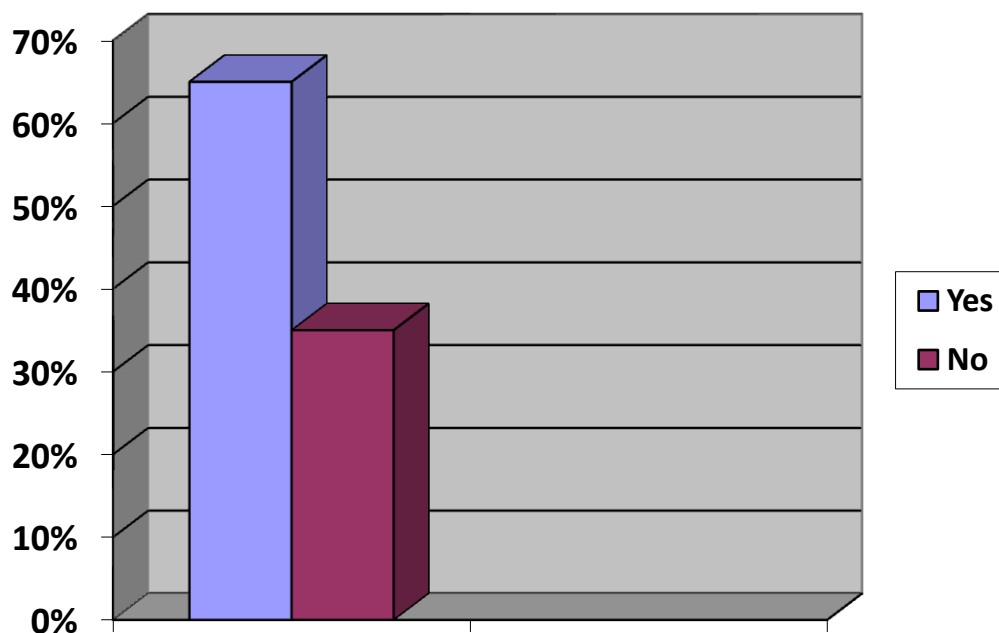


Figure:10 Users Participation in the Selection of Documents

As for user participation in selection of the library document is concerned the data collects shows that enclose that more than half (65%) do participate in the selection procedure while rest (35%) of the respondents quite large in numbers indicated that they do not participate in selection process.

TABLE-11
METHOD ADOPTED BY USERS TO PARTICIPATE
LIBRARY COLLECTION (N=75)

Method of participation	Number	%
Through Suggestion Box	45	60.00%
Through Suggestion Register	20	26.66%
Through verbal communication to ReferenceLibrarian	10	13.33%

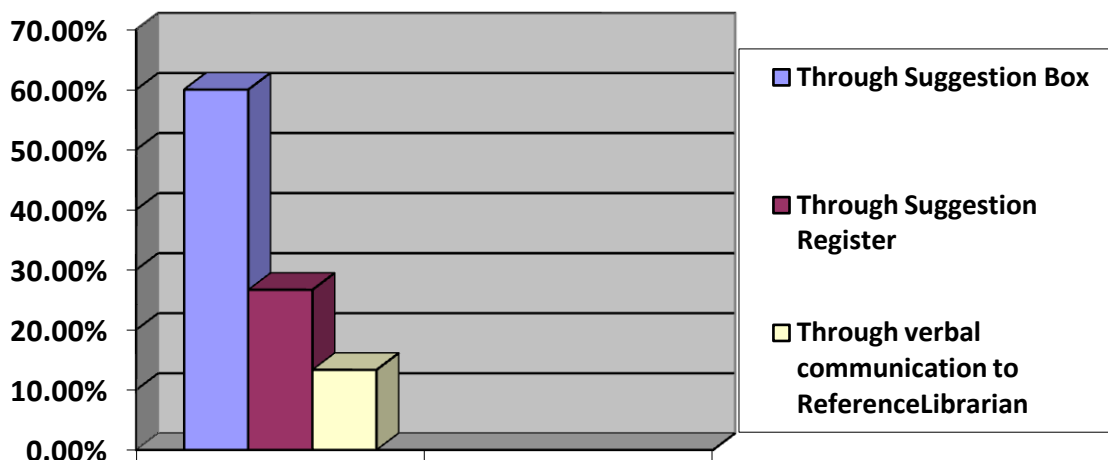


Figure:11 Method Adopted By Users To Participate Library Collection

Figure 11 shows that the query pertaining to method used for participation in the selection of process but available data shows the majority of respondents communicate their suggestion via box while one fourth (26.66%) of communicate their views through register and rest of peoples through verbal communication to reference librarian.

TABLE -12
RATING LIBRARYCOLLECTION (N=100)

Library Collection	Number	%
Balanced	28	28%
Up-to-date	12	12%
Well maintained	19	19%
Needs improvement	31	31%

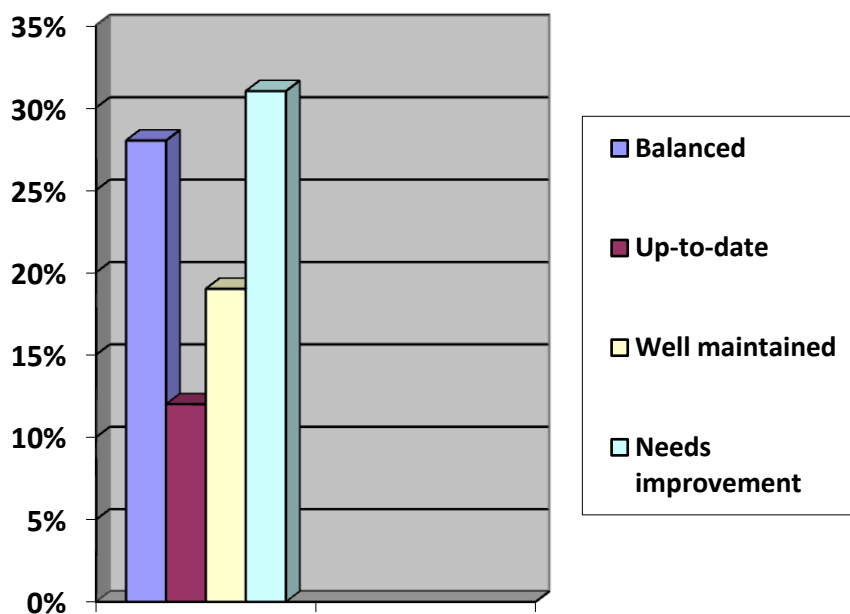


Figure :12 Rating Library collection

The recorded data shows that maximum (31%) number of respondent have beliefs that library needs for improvements in library collection, while 28% respondents have asked to feel that library collection is balanced one.

TABLE-13

USERS SATISFACTION REGARDING CIRCULATION FACILITIES N=100

Land of satisfaction	Number	%
Yes	85	85%
No	15	15%

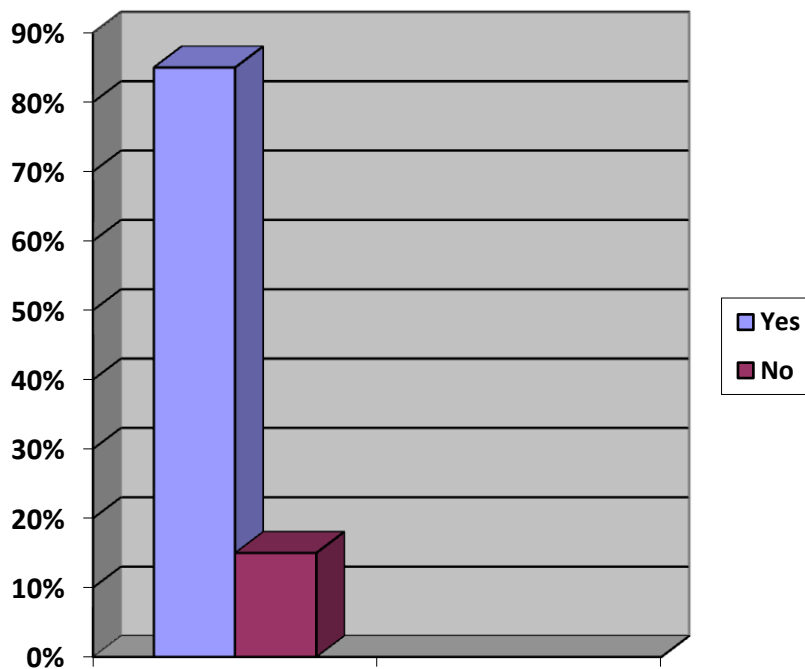
**Figure:13 Users Satisfaction Regarding Circulation Facilities**

Figure 13 shows that a large number(85%) of library use one satisfied with the circulation facilities being extended by the library while approximately (15%) of them do not find circulation facilities satisfactory.

TABLE -14
REASON OF DISSATISFACTION REGARDING CIRCULATION PROCEDURE
 (N=90)

Reason for dissatisfaction	Number	%
Books are issued for little duration	60	66.66%
Books are not good shape	17	19.44%
Collection maintained by library obsolete	12	13.88%

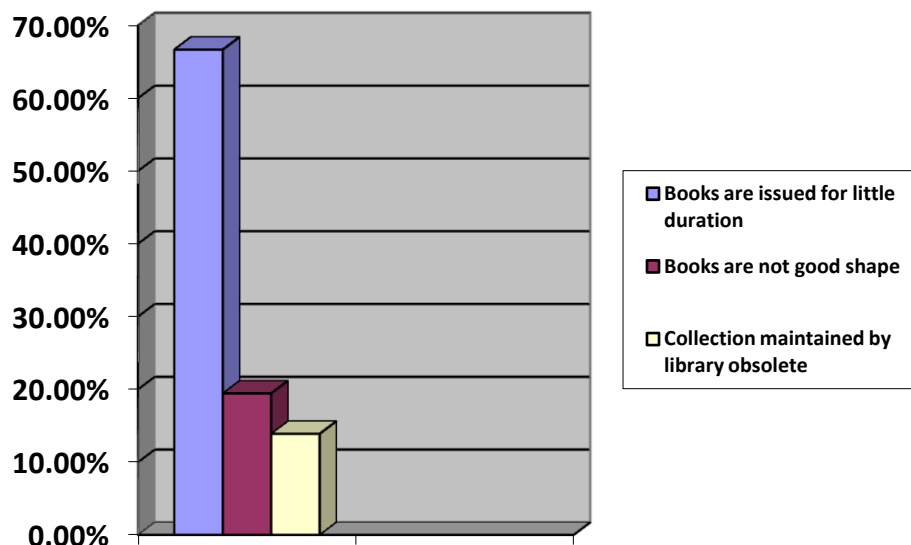


Figure:14 Reason of Dissatisfaction Regarding Circulation Procedure

As for the penalization dissatisfaction regarding circulation facilities, more than half of (66.66%) of the respondents it is due to time duration for which books are issued besides books are not in good shape i.e. 19.44% as shown in figure 5N.

TABLE-15
USE OF RESOURCES IN STUDY (N=100)

Use of Resources in Study	Number	%
Very useful	90	90%
Useful	10	10%
Not at all useful	0	0%
Somewhat useful	0	0%

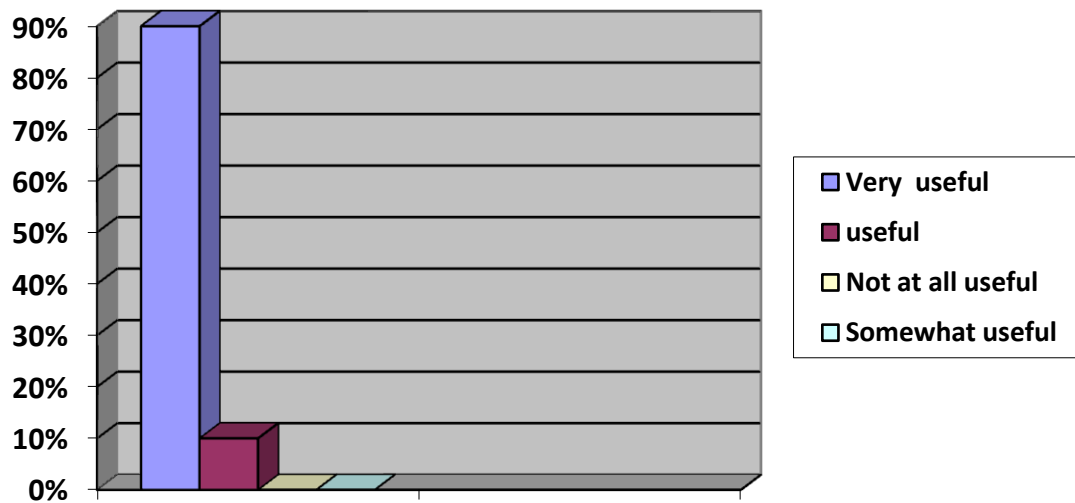


Figure : 15 Use of Resources in Study

Figure 15 shows that an overwhelmingly change number (90%) of library user find resources very useful their studies while about (10%)of them find useful in their studies.

TABLE-16
SOURCES OF INFORMATION WHICH ARE GENERALLY CONSULT BY
USERS (N=100)

SOURCES	Number	%
Internet	90	90%
Books	10	10%
CD-ROM	0	0%
Periodical Journals	0	0%
E-resources	-----	-----
Indexing Abstracting	-----	-----
Review critical	-----	-----

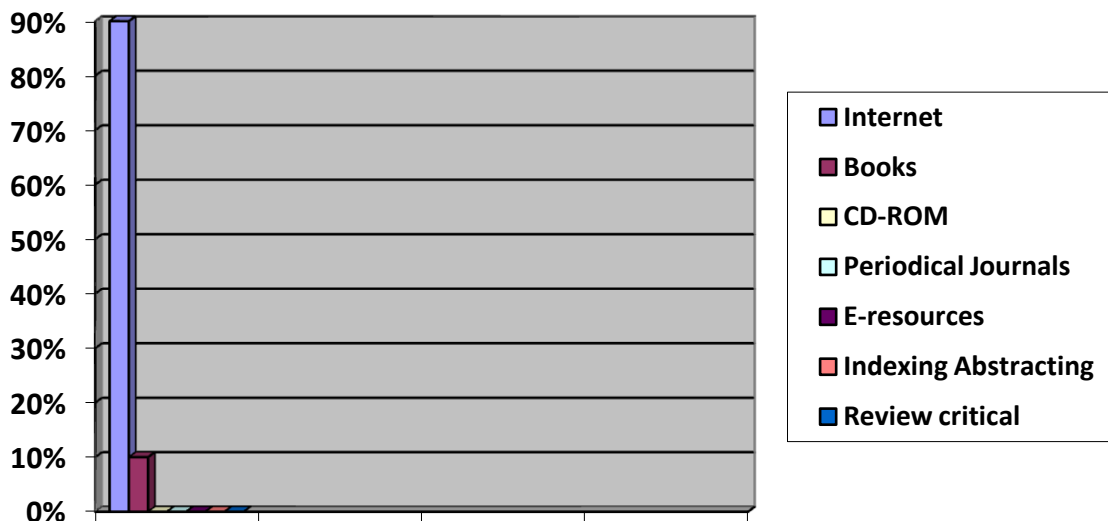


Figure:16 Sources of Information Which Are Generally Consult By Users

Most of the students visit library to just consult books rather than to use other resources while

10% students use only internet facilities and 5% use periodical journals as shown in figure 5P

TABLE -17
IMPACT OF USE OF SOURCES IN STUDY (N=100)

Impact of Use of sources In Study	Number	%
Positively	100	100%
Negatively	-----	0%

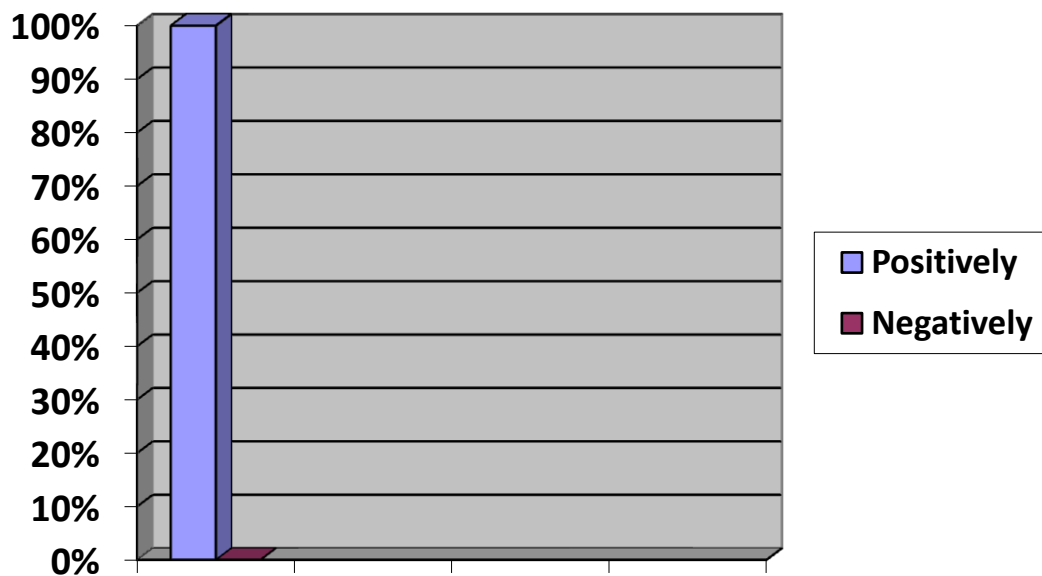


Figure : 17 Impact of Use of Sources in Study

In Figure 17 shows that the impacted of use of sources in study, all the user (100%) think that use of resources impacted their positively.

CONCLUSION

The main goal of the present study has been analyze the information behaviour and information services offered to them through the college library of Government College Una.

RECOMMENDATION

The study mainly focused on the graduate students through which curriculum board education is imparted at any college so in order library user proper arrangement of curriculum based library material should be made by the library.

1. It is always advisable and acceptable to make provision of library and information services as for the caliber of the library member. These bold steps become benefit to the all library communities.
2. The frequency of use of any library indicates the success rate of library and information services offered by any library. Though more number of respondents use the library frequently, but there is presence of 10% of them who rarely use the library services, educating that library services have been unsuccessful in attracting their library users which they should have the provision of best possible library services after knowing their respective information needs.
3. Apart from whole arrangement and other services the most preferred by the respondents are the circulation facilities which shows that they do not stimulated to use rest of the library services. One more aspect of library from the users come into light, was to read their provision books and again points towards week collection maintained by library. So in order to creates interest among library users to use the various library services and library information services in all should be strengthened with special emphasis on collection as indicated by the respondents.
4. The main library should be open for 12 hrs on an average, but the departmental library are attached with normal office hrs i.e. 9AM to 5PM with which library users are definitely dissatisfied in order of execute dissatisfaction among library user regarding timing the library user regarding timings the library need to be extend their timing. If it is not possible to keep the library open beyond this time due to shortage of staff than the responsibility of library should be given to the central student council of association CSCA or senior students of the department turn by turn, instance research scholars services can be utilizes so the library can be kept open till late in the evening if not for 24 hrs and on Sunday and holidays as per users suggestion.
5. The library staff are judged by the users, in case of present study quite a large number of respondents rates the personal at the library as well trained but there are certain areas where library staff needs improvements since the present study does not reveals precisely the kind of improvement denied in the library staff. A separate study can help these aspects to bring upon improvements in the existing library personnel.
6. Library building is not a store house but to enhance the success and thus effects of library and information services. In case of present study library is well planned and designed needs to be more modern.

7. The collections in any library is maintained keeping a view the requirements of library clients. In some points their dissatisfaction with the collection maintained ask for the library authorities to identify the areas where improvements are required.

8. The bad condition of the library collection so it is suggested that books be mended and repaired in order to make them usable and to keep strict vigilance on the library users to avoid further limitation of library documents.

CONCLUSION

Information seeking is widely used in information sciences to encompass the entire process from recognizing the need for information to finding and using it. It focuses on interaction between the information seeker and information resources. There is a need to organize user-workshops in educating and training regarding the various information sources available that includes primary, secondary and tertiary information sources both print and e-format.

Using new technological devices merely for copy-pasting information is simply not enough. Instead, a new pedagogical culture, which is supported by technology, has to be carefully designed and put to use for developing students' information skills. In addition, it is important that new pedagogical models, which emphasize higher order information seeking activities, do not become an unmanageable additional cognitive load.

The library plays a significant role in promoting the better use of information sources and services, but at the same time, the teacher plays an important role in coordinating and scaffolding students' learning activities towards a comprehensive inquiry process. But the starting point for effective information seeking with technological support is thus embedded in a sound theoretical understanding of the information seeking process, as it is intertwined with meaningful pedagogical practices

BIBLIOGRAPHY

Abels, E. (2004). Information seekers' perspectives of libraries and librarians. *Advances in Librarianship* vol. 28 p.151-170.

Prabhavathi,D. (2011). Information seeking behavior of post graduate Students of spmvv, tirupati (ap): a study. *International journal of digital library services* vol.1,Issue 1, p.34-48

Barrett, Andy.(2005). The Information seeking habits of graduate student researchers in the humanities. *Journal of Academic Librarianship* vol.31 No.4 p.324-331.

Drnek, James Michael.(1998). Student Learning Style, Satisfaction, Perception, Emotions and Internet use at a Large South western University, Faculty of Education, Ph.D. Association of Research Libraries (n.d.). ARL Supplementary statistics 1999-2000. Retrieved 2December, 2005 from <http://www.arl.org/stats/sup/sup00.pdf>.

Fulton, Crystal, Kerins, Gillian and Madden, Ronan. 2004. "Information seeking and students studying for professional careers: the cases of engineering and law students in Ireland". Information Research Vol.10, No.1,p.47-52.

Hanson, C.W. (1964). Research on user needs: Where it is getting us?. Aslib Proceeding, Vol. 16, No.2, p.64-78.

Hartmann, E. (2001).Understanding of Information literacy: the perception of first year undergraduate students at the university of Ballarat. Australian Academic and Research Libraries Vol. 32 ,No.2, p.35-43.

Kenny, I. 1966. "Implications of needs of users for design of a catalogue: A survey at ILO". Journal of Documentation Vol.22, No.3,p.200.

Osiobe, Stephen A. (1988). Information-seeking behavior". International Library Review,Vol. 20, No.3,p337-346.

Shenton, Andrew K.(2004). Research into young people's information seeking: perspectives and methods. Aslib Proceeding "A comparative study on information seeking behaviors of domestic and international business students". Research Strategies Vol.20 No.1-2,p. 23-34.

Wiberley, S.E. and Jones, W.G. (1995). Patterns of Information seeking in the humanities. College & Research Libraries vol.50 No.6, p.638-645.

Dervin, B. (1983). An overview of sense-making research: concepts, methods, and results to date. Paper presented at the annual meeting of the International Communications Association, Dallas,

Ellis, D. (1989). A behavioural approach to information retrieval system design. Journal of Documentation, Vol. 45, No. 3, p.171-212.

Fidzani, B. T. (1998). Information needs and information seeking behavior of graduate students at the University of Botswana. Library Review, Vol. 47, No.7 p. 329-340.

Foster, A. (2004). A nonlinear model of information seeking behavior. Journal of the American

Hirsh, S. & Dinkelacker J. (2004). Seeking information in order to produce information: An empirical study at Hewlett Packard Labs. Journal of the American Society for Information Science andTechnology, Vol. 55, No.9 p.807-817.

Bharadwaj, A.(1990) “A study of High creative and low creative students in relation to certain psychological variables” M.Phil Dissertation, Jammu University, Jammu.

Das, Binod Bihari and Basak, Nanda Dulal(1991).On information seeking behaviour and related concepts. Librarian V.4,Jodhpur University, p.12-15

Kaur Harvinder (2009).Information seeking behaviour of graduate students at Guru Teg Bahadur khalsa college Anandpur sahib. M .Lib. Dissertation, IGNOU New Delhi

Kuhlthau, C. C. (1988b). Longitudinal case studies of the information search process of users in libraries. Library and Information Science Research, vol. 10 No.3 p.257-304.

Kuhlthau, C. C. (1991). Inside the search process: Information seeking from the user’s perspective. Journal of American Society for Information Science, Vol.42, No.5 p. 361-371.

Klas, Claus-Peter (2007). An implemented model for information seeking and searching for digital libraries”, unpublished

Kuhlthau, C.C. (1994), “Seeking meaning: A process approach to library and information services. Norwood: Ablex publishing

Laloo, Bikika Tariang (2002).Information needs information seeking behaviour and users. New Delhi: Ess Ess Pub. p.78

Prasad, H.N. “Information needs and users” Varanasi Indian Bibliographic centre, p.29

Yang, H.W.(1998).Information seeking behaviour of the scientists. Bulletin of library & inf sci. V.25, p.24-43