

INFORMATION USE PATTERNS BY RESEARCHER OF CENTRAL LIBRARY IN KURUKSHETRA UNIVERSITY, KURUKSHETRA

Surender Kumar*, Suresh Kumar Kagra**, Seema Saini***

Abstract Information usage pattern by researchers are like part of library professionals from presently to identify the dynamic usage of information e-resources available in their University library Kurukshetra. Conducted with study, well written questionnaire has been prepared and 150 questionnaires were distributed and 142 questionnaires accepted from the researchers in order to ascertain the information use pattern. The researcher purpose of visit to the library, use of information resources such as e-journals, preferred file formats, databases use pattern and role of library in promoting information resources. The result of the study would put shows on the important data and insight into the current state of practices of researcher information use pattern.

Keywords: Use Pattern, E-Resources, Researchers, Databases, University Library Kurukshetra

INTRODUCTION

The era of globalisation information technology has made a whole world information centre. According to researcher and information scientists the e-resources are increasing day by day in Indian university libraries. It e-resources form such as e-journals, e-books, full text document, reference database, e-thesis, indexing and abstracting databases, statistical database, multimedia products, e-standards/ e-patents and e-magazines/e-newspaper etc. were available in university library Kurukshetra. The librarian has to give the relevant information to the researcher; for this purpose he to consult different e-resources in the library. In the library context, all e-resources are not acquired by librarian, so the librarian has to decide which sources are going to be more useful the researcher of that library. The request for providing the important information for researcher is on library information science professionals. Extending concept, university libraries, information centre, research institutes, have been playing an important role in dissemination of vary important information to the researcher through their various programmes such as training programmes, demonstrations, campaigns, study tour. During this university process the information scientists, researcher, teachers and library professionals are seeking information from various e-resources.

RELATED STUDIES

- Naick and Rao (2018) analysed the article to express the role of Web-based information services of Civil and Mechanical Engineering faculty of University College of Engineering Autonomous Jawaharlal Nehru Technological University. In the further analysis of article, Kakinada the Researcher was used the survey method to collect data from the University College of Engineering Autonomous faculty Regular Library Researchers and the faculty were processed technically and tabulated as to the variables of the carefully topic of online resources.
- Arun Kumar and Anjaiah (2018) conducted the study Information Communication Technology (ICT) has changed the face of academic libraries in general and engineering colleges in particular and its helps libraries in creating database of their collections and creation them accessible for networks easy access to users. In the continuous process, study mainly focused on use Pattern of e-resources by the faculty, research scholars and professional students of University College of Engineering, Osmania University, Hyderabad. And further, Out of 200 questionnaires 165 (82.50%) filled questionnaires were received, in this 35 (70.00%) were faculty members, 42 (84.00%) were research scholars,

* Librarian, Nirankari Baba Gurbachan Singh Memorial College, Gurugram, Haryana, India. Email: surenderkumar20009@gmail.com

** Library and Information Science, Kurukshetra University, Kurukshetra, Haryana, India. Email: suresh13kagra@gmail.com

*** Librarian, S M S Khalsa Labana Girls College, Barara, Ambala, Haryana, India. Email: sainiseema1987@gmail.com

88 (88.00%) were post-graduates (M. Tech.) students. A large majority 90.90% of users expressed that they were using e-resource and a majority of the users 78.18% preferred e-journals.

- Manhas and others (2017) this study was conducted with the aim to determine the information use pattern among the teachers and the students of Punjab University Regional Centre, Sri Muktsar Sahib. In the study investigated the frequency of library visit and to identify various purposes of library use by the academic community of regional centre. Therefore, the include finding usage and awareness of users about digital information resources and services available and a well questionnaire was designed to collect the data from the respondents includes teachers, M.Phil. (Punjabi), L.L.B. and M.C.A. were students. In the paper analysis, total 147 questionnaires were distributed all the academic community and 107 questionnaires were received back filled in with response rate of 72.78%. Further results that a majority of the respondents 58.87% were using libraries on daily and the respondents use the library for research purposes with 53.27% responses.
- Jara and others (2017) analysed the paper explores the patterns of use of print materials and digital resources in an undergraduate library in a Chilean university, by the students' discipline and year of study and a quantitative analysis was carried out, including descriptive analysis of contingency tables, chi-squared tests, t-tests, and multiple linear regressions. In the study results show that the use of the library by undergraduate students did not follow a common pattern and instead varied across disciplines. Therefore, research was important because it provides academic libraries new insights into how students use academic resources. The study findings shows particularly relevant when academic libraries experience increasing pressure to justify and be accountable for the funds received and such pressure is particularly the case in developing countries as Chile. In the concludes, few questions still remain unsolved and should be considered for future studies, one particular issue would be to explore why students from some disciplines, such as natural sciences, medical sciences, and science and technology, borrow fewer print materials while other disciplines, such as the humanities and social sciences, present an inverse pattern.
- In 2016, Sonfada and Musa indicates this study was to investigate the information use pattern of final year undergraduate students in North-Central Nigeria and specifically, five purposes and research questions guided the study. Therefore, a descriptive survey design and had a population of 3365 registered undergraduate final year student library users from three selected

federal universities. In the study analysis, from the above population two hundred (200) questionnaires were distributed with one hundred and eighty five (185) returned; representing a return rate of was 93%. Further, the findings of the study revealed that: final year undergraduate student uses graphical, research, bibliographical, product, patent information among others in their university libraries; both personal, environmental, professional, social and technological factors affects the patterns upon which they use their information; and provision of adequate information, systematic planning time schedule were for use of information.

- Naganna and Kumbar (2014) focuses Information usage studies are to identify the effective usage of information resources available in their libraries. Therefore this study investigates the information use pattern by the students of Agricultural Science Colleges in Karnataka and well-structured questionnaire has been formulated and distributed among the students. After that total 2176 questionnaires were distributed the students of 16 agricultural colleges of Karnataka and 1793 filled in questionnaires were received back. In the study finding, 026 (57.22%) of students are male and 611 (34.08%) of students are below the age of 22-23 years. In the library context, 1754 (97.82%) of students visit the library for the purpose of browsing books and 808 (45.06%) visit library for accessing Internet/e-resources, 798 (44.51%) of students use information resources and 536 (41.17%) of students use e-journals very rarely and 1116 students most prefer PDF file format with total mean value 3.55 and Standard deviation value 0.80 and 401 students use FAO database fortnightly with Standard deviation value 1.17 and rank 1.
- Naick (2013) studied the role of the libraries in the information needs of the students in their needs and academic point of view but some of the students want to learn subject and some of the students want to use for research purpose. In the study, the main aim was conduct a survey to evaluate the role of the library in information needs of the students in engineering colleges. And the result of study includes the response rate of the students was 94.25%, 100% response from the Ph.D. students, No B. Tech student has age more than 25 years, Highest response rate from ECE (20.69%), MECH (20.69%), least response rate from CIVIL (18.57%), In M. Tech, 55.06% 2nd year students were responded, 44.94% of the 1st year students were responded, We have 84.88% of the students, PhD's was highest percentage of 98% and least percentage for B. Tech (81.93%).
- Gurdev Singh and Arora (2013) described that study was confined to the information needs of faculty members in the area of political science at college

libraries of Delhi University. Further, a questionnaire was prepared and used as a tool in collection of data regarding the purpose of information search; in extend of work, use of information sources by faculty members, assistance provided by the library staff, difficulties faced by the faculty members and faculty members in the area of political science at various colleges of University of Delhi. In the further analysis, total out of 90 questionnaires, 75 questionnaires were received back and collected data was analyzed and presented in the tabular form. In the end of study, shows that frequency with which the respondents were visiting the library; maximum percentage 40 (53.3%) of Faculty Members visits the library 2 to 4 times a week, for preparing class lecture etc; it was daily 26.6% and occasionally 13.3% whereas 6.6% visit the library once in fortnight. Only 26.6% of faculty members visit the library daily.

- In 2011, Mishra indicates proper and adequate information is indispensable for scientific and economic progress of a nation. A scientist in the broadest sense refers to any person and that are linked to schools of thought or philosophy. Continuous scientists are who use the scientific method in acquiring information and organize, analyze, and implement it in the area of research. In the study, NEIST, Jorhat comprises 175 Science & Technology staff, 16 Junior Research Fellow/Senior Research Fellow/Research Associates, and 34 Project Assistants, a total of 225 and this laboratory five major disciplines, including chemistry, biology, engineering, materials science, and geo-science. In further analysis, the present study is not limited to any specific discipline the monthly statistics of Users in Journal section of KRC, NEIST from 4th August 2005 to 10th July 2008. It reflects that the highest numbers of users in the library were in the 2006.
- Biradar, Dharani Kumbar and Mahesh (2009) carried out the survey of 101 (84.16%) students belonging to Agriculture Science College, Shimoga to study the frequency, purpose of visit to the library of agriculture science periodicals reveals that 77.22% of respondents every day. In the study, 88% students visit library to read journals and magazines followed by visits to borrow books (87.12%) and in the continuous the Indian Journal of Agriculture Science (62.92%) and Karnataka Journal of Agriculture Science (60.67%) were the most useful journals. The result shows that emphasis needs to be given for subscribing online periodicals through consortia.

Objectives of the Study

- To describe of information resources and services available in the university library.

- To describe the purpose of use of library resources by the researchers.
- To describe the database use pattern by the researchers.
- To describe the preferred file format for using e-resources by the researchers.
- To describe the role of university library in promoting information resources.

METHODOLOGY

The present study to collect the necessary primary data was used for questionnaire method keeping in view the objectives of the study. Its total 150 questionnaires were distributed the researcher of central library in Kurukshetra university, Kurukshetra and 142 filled in questionnaires were received back. In the further study, rate of researcher responses was 94.67% and before to questionnaire method, interview schedule method are used to collect relevant information to justified the data which are use given for analysis and interpretation.

Analysis of Data and Interpretation

Table 1: According to Gender of the Researchers

Gender	Teachers N (%age)	Ph D. Scholars N (%age)	Total N (%age)
Male	24 (75.00)	81 (73.64)	105 (73.94)
Female	8 (25.00)	29 (26.36)	37 (26.06)
Total	32 (100)	110 (100)	142 (100)

Table 1 shows the gender of the researchers (Teacher and Ph D. Scholars) of central library in Kurukshetra University, Kurukshetra. Out of 32 teachers, 24 (75.00%) were male and 8 (25.00%) were female. And out of 110 Ph D. Scholars, 81 (73.64%) were male and 29 (26.36%) were female. In the both total number of 105 (73.94%) researcher were male and 37 (26.06%) were female.

Table 2: According to Age Group of the Researchers

Age	Teachers N (%age)	Ph D. Scholars N (%age)	Total N (%age)
Up to 25	-----	81 (73.64)	81 (57.04)
26-35	18 (56.25)	20 (18.18)	38 (26.76)
36-45	6 (18.75)	9 (8.18)	15 (10.56)
46-55	5 (15.63)	-----	5 (3.52)
56- above	3 (9.37)	-----	3 (2.12)
Total	32 (100)	110 (100)	142 (100)

Table 2 described that of 81 (57.04%) of Ph D. Scholars were age of Up to 25 years, followed by 38 (26.76%) were of Teachers and Ph D. Scholars in the age group of 26-35 years and others 15 (10.56%) were of researcher's age group of 36-45 years, 5 (3.52%) were of Teachers age group below 46-55 years and 3 (2.12%) Teachers were of belonging to age group of 56- above years.

Table 3: According to the Researcher Purpose of Visit to the Library

Purpose	Teachers N (%age)	Ph D. Scholars N (%age)	Total N (%age)
Books	9 (28.12)	61 (55.45)	70 (49.30)
Journals	3 (9.38)	20 (18.18)	23 (16.20)
Reference	7 (21.88)	7 (6.36)	14 (9.86)
Internet/e-resources	12 (37.50)	12 (10.91)	24 (16.90)
Friends/discuss	-----	2(1.82)	2 (1.41)
Photocopy	-----	4(3.64)	4 (2.82)
Newspapers/ Magazines	-----	3(2.73)	3 (2.11)
Others	1 (3.12)	1(0.91)	2 (1.40)
Total	32 (100)	110 (100)	142 (100)

Table 3 indicates that out of 142 researcher, 70 (49.30%) of researcher visit the library for the purpose of books followed by 23 (16.20%) for use of Journals. Further 14 (9.86%) for reference, 24 (16.90%) for Internet/e-resources, 2 (1.41%) of Ph D. Scholars for Friends/discuss, 4 (2.82%) for Photocopy and 3 (2.11%) of Ph D. Scholars visit library for purposes of Newspapers/Magazines, etc.

Table 4: According to the Researcher's Purpose of Use of Information Sources

Purpose	Teachers N (%age)	Ph D. Scholars N (%age)	Total N (%age)
Research work	8 (25.00)	64 (58.19)	72 (50.70)
Research Paper writing	3 (9.38)	21 (19.09)	24 (16.90)
Seminars	6 (18.75)	7 (6.36)	13 (9.15)
For the document consulting	12 (37.50)	11 (10.00)	23 (16.20)
Examinations	3 (9.37)	7(6.36)	10 (7.05)
Total	32 (100)	110 (100)	142 (100)

Table 4 carried out of highest number 72 (50.70%) of researchers (Teacher and Ph D. Scholars) use information resources for the purpose of for their research work, followed

by 24 (16.90%) for preparing to the writing research papers. In the continuous process, 13 (9.15%) of researcher's use information resources for seminars, 23 (16.20%) of for the document consulting and 10 (7.05%) of for the purposes for examinations etc.

Table 5: According to the Researcher Accessibility and Use of E-Resources

Use of E-Resources	Teachers N (%age)	Ph D. Scholars N (%age)	Total N (%age)
E-Journals	8 (25.00)	51 (46.36)	59 (41.55)
E-Books	3 (9.37)	20 (18.18)	23 (16.20)
Full text document	5 (15.63)	7 (6.36)	12 (8.45)
Reference database	4 (12.50)	8 (7.27)	12 (8.45)
E-Thesis	6 (18.75)	12 (10.91)	18 (12.68)
Indexing and Abstracting Databases	2 (6.25)	4 (3.64)	6 (4.23)
Statistical database	2 (6.25)	3 (2.73)	5 (3.52)
Multimedia products	-----	-----	-----
E-Standards/ E-Patents	2 (6.25)	-----	2 (1.40)
E-Magazines/ E-Newspaper/ E-Clipping	-----	5 (4.55)	5 (3.52)
Total	32 (100)	110 (100)	142 (100)

Table 5 shows that highest number 59 (41.55%) of researcher (Teacher and Ph D. Scholars) use access information resources in university library for the purpose of for their e-journals, followed by 23 (16.20%) for the e-books. Further in the study, others 12 (8.45%) of researcher's use access information resources for full text document and reference database, 18 (12.68%) with e-thesis, 6 (4.23%) with indexing and abstracting databases, 5 (3.52%) with the statistical database, 2 (1.40%) with e-standards/e-patents and 5 (3.52%) with e-magazines/e-newspaper/e-clipping etc.

Table 6: According to the Researchers of Frequency Use of E-Resources

Frequency	Teachers N (%age)	Ph D. Scholars N (%age)	Total N (%age)
Daily	16 (50.00)	60 (54.55)	76 (53.52)
Once in a week	9 (28.13)	25 (22.72)	34 (23.94)
Fortnightly	3 (9.38)	8 (7.27)	11 (7.75)
Once in a month	2 (6.25)	10 (9.09)	12 (8.45)
Once in a six months	1(3.12)	5 (4.55)	6 (4.23)

Frequency	Teachers N (%age)	Ph D. Scholars N (%age)	Total N (%age)
Very rarely	1(3.12)	2 (1.82)	3 (2.11)
Total	32 (100)	110 (100)	142 (100)

Table 6 depicts that 76 (53.52%) of researchers (Teacher and Ph D. Scholars) in University library use e-journals daily, followed by 34 (23.94%) of researcher’s use e-books once in a week. After that 11 (7.75%) of researcher’s use full text document and reference database fortnightly, 12 (8.45%) e-thesis/indexing and abstracting databases once in a month, 6 (4.23%) statistical database/multimedia products once a six months and 3 (2.11%) researcher’s use e-standards/e-patents/e-magazines/e-newspaper/e-clipping very rarely.

Table 7: According to the Researchers of Preferred File Format Ranking

Types	Most Use N (%age)	More use N (%age)	Sometimes N (%age)	Least Use N (%age)	Rank
MS Word	76 (53.52)	-----	-----	-----	1
PDF	-----	34 (23.94)	-----	-----	2
HTML	-----	-----	12 (8.45)	-----	3
SGML	-----	-----	-----	11 (7.75)	4
ASCII	-----	-----	-----	9 (6.34)	5

The Table 7 analysed the number of 76 (53.52%) researcher (Teacher and Ph D. Scholars) in University library most Use prefer MS Word file format with rank1, and 34 (23.94%) researcher’s More use PDF file format with rank 2. In paper described, 12 (8.45%) researcher’s Sometimes prefer to HTML file format with rank 3, and others 11 (7.75%) researcher’s Least prefer SGML file format with rank 4. In extending the views, 9 (6.34%) researcher least prefer ASCII file format with rank 5.

Table 8: According to the Researchers of Database Use Pattern Ranking

Databases	Daily N (%age)	Weekly N (%age)	Fortnightly N (%age)	Monthly N (%age)	Rank
Full text database	76 2 (50.70)	-----	-----	-----	1
Bibliographic	-----	30 0 (21.13)	-----	-----	2

Databases	Daily N (%age)	Weekly N (%age)	Fortnightly N (%age)	Monthly N (%age)	Rank
Numerical data-base	-----	-----	12 2 (8.45)	-----	3
Internal database	-----	-----	9 (6.34)	-----	4
Research in progress database	-----	-----	-----	8 (5.63)	5
External database	-----	-----	-----	6 (4.23)	6
Factual database	-----	-----	-----	5 (3.52)	7

Table 8 indicates that 72 (50.70%) researchers use full text database daily with rank 1, followed by 30 (21.13%) researchers use bibliographic weekly with rank 2. The continuous, 21 (14.79%) researcher ranks 3 and 4 numerical database and internal database used fortnightly. Further 8 (5.63%) researcher with 5 rank, 6 (4.23%) researcher with 6 rank and 5 (3.52%) researcher with 7 rank used research in progress database, external database and factual database monthly.

Table 9: According to the Role of Researchers in Library Promoting Information Resources

Input	Most Useful N (%age)	More Useful N (%age)	Moderately N (%age)	Less Useful N (%age)	Rank
Well organized of information resources	80 (56.34)	-----	-----	-----	1
Home page of library with link to e-resources	-----	30 (21.13)	-----	-----	2
Library training or orientation	-----	-----	20 (14.08)	-----	3
Help from library staff in get information resources	-----	-----	-----	12 (8.45)	4

Table 9 study shows that 80 (56.34%) researchers (Teacher and Ph D. Scholars) most useful with well organized of Information resources with rank1. After that 30 (21.13%) researchers more use Home page of library with link to e-resources with rank 2. While 20 (14.08%) researchers moderately use library training and orientation with rank

3. In the continuous analysis, 12 (8.45%) researchers less used help from library staff in get information resources with rank 4.

CONCLUSION

The study described that the university library Kurukshetra researchers, Teacher and Ph D. Scholars seek diverse information from varied sources for different purposes thus making it difficult to maintain support for the idea of a single mode of formal information channel. In the views of librarian it has always been a challenge for researchers to get complete information on pin-pointed topic in academic research work. After that with the increasing popularity of web-based access of library e-resources, librarian which are the main facilitators in the scholarly communication system. Also in view of above, it may be results that the research work are the personal needs information, getting the importance placed it, the available for facilities it, the knowledge about facilities, the judgment of value, the probability of getting what is wanted, are the factors that may affect information.

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