
SKILLS TO USE OF THE UNIVERSITY LIBRARY DIGITAL SOURCES BY THE RESEARCHERS AND FACULTY MEMBERS IN COIMBATORE DISTRICT: A STUDY

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ABSTRACT

This paper examines with an objective to ascertain as to what extent e-resources are being used by Researchers and Faculty members in Coimbatore based universities. The study finds that the Researchers and Faculty members used e-resources mainly for research and Academic purposes. The study shows that majority of the users were used e-Journals and between the age group of 30 years included M. Phil/PhD scholars in Coimbatore universities.

Keywords: Use Pattern, Digital Sources, e-journals, Databases, Internet

INTRODUCTION

Traditional libraries were dominated by print publications and the access mechanisms were also by-and-large manual. The paradigm shift from stand-alone libraries to library and information networks, available via the Internet, can provide end-users with a seamless connection to Internet-based services. The development of new technology makes direct access to information easier for users, and, while information skills are required to collect and present that information, in the future there is likely to be less of a role for information workers as intermediaries between users and information sources. In fact, there is a paradigm shift from a parent-child relationship between information provider and user to an "adult-adult" relationship. While new formats and mechanisms are being developed to cope with this rapidly changing environment, the existing gap between the generation and use of information is further widening in the present situation. The major aim of user education is therefore to widen the use of a range of library resources, which will enable academics to improve their teaching and research, and students to learn more and achieve better results in their work. In this context, training and retraining the end-users in the use of IT-based resources and services, such as e-mail, ftp, telnet, www, browsers, search engines, OPACs, databases, system software, application software, electronic journals, computer conferences, scholarly discussion lists, mailing lists, Usenet newsgroups, websites, CDs, and DVDs are becoming an integral part of a library's user education program. This is where strategic planning comes in, in order to develop a comprehensive user-education and training program at the national level.

REVIEW OF LITERATURE

Joteen Singh *et al.* (2009)¹ conducted a survey “Use of Internet Base e-resources at Manipur University”. The survey describes on the use of the electronic information focusing on the Internet services by the users of Manipur University Library. It also examines the utilization, purpose, difficulties and satisfaction level of users about Internet based e-resource services provided by the library. Finds that low speed internet access, erratic power supply and lack of required full text journals are problems with regard to the use of internet based e-resources. Although it is well known that internet is very useful source of information, adequate steps need to be taken to provide the requisite basic infrastructure for fast internet access followed by resource availability and training.

Asemi (2005)² surveyed the search habits of Internet users at Isfahan University of Medical Sciences (MUI) in Iran, and found that training would help them obtain useful and relevant information.

Rehman and Ramzy (2004)³ conducted a study on the Internet use by health professionals at the health sciences centre (HSC) of Kuwait University. The study showed that 92.1 percent of the respondents accessed Internet from their office, while 73.2 percent also accessed it from home. Another 28.3 percent also used the HSC Library for accessing the Internet. The study indicated that 80.3 percent of the respondents used Internet daily, 15 percent used it once a week and 2.5 percent used it once a month. While 88.2 percent of the respondents felt that the Internet provide better access to health sciences information, 77.2 percent indicated that through the Internet they had better professional contacts, and 57.5 percent stated that with the use of Internet they were able to use different channels of communication for their patient care and research.

Dong (2003)⁴ emphasized the evaluation of the Internet. He reported the examination of the using the Internet resources and the evaluation of their usefulness from the Chinese students' and academics' point of view. Osorio (2001)⁵ showed that in general the current design of home pages for science-engineering libraries contain many of the elements found in home pages of academic libraries. Among the characteristics found are images, screen lengths, colours, number and types of links, and link headings. The content of these websites was also analysed and summarized.

Hölscherl and Strube (2000)⁶ conducted a study about Web search behavior of Internet experts and newbies. They found the differential and combined effects of both Web experience and domain knowledge. Ormes Sarha and Dempsey Lorcan (1995)⁷ identified that 93 percent of all authorities using the Internet use the common internet information access tools like www, and Gopher (91 per cent) use e-mail. Reference staff are the most users of Internet services, followed by IT staff, and senior management. And the actual network behaviour most heavily reported was exploration and experimentation, followed by reference work.

Bane and Melheim (1995)⁸ investigated the use of Internet by academics. A questionnaire was sent through the Internet to 231 randomly selected discussion groups. A total of 15,361 questionnaires were returned through e-mail. Results of the survey disclosed that personal e-mail was utilized extremely often, more than once a week by nearly 90 percent of the respondents. Discussion groups were accessed more than once a week by 75 percent of the respondents. Electronic journals were accessed far less frequently more than once a week by 23 percent of the respondents. The survey also disclosed that many academics were still not

fully aware of available Internet resources and their applications. Many studies in developing countries have also confirmed these findings. They noted that most of the libraries in Malaysia have yet to utilize the full potential of the Internet, although it has been available for the last several years.

OBJECTIVES

The changing information needs of the users and the facilities and services provided by the university libraries necessitates the researcher to assess the information needs and access pattern of the researchers in various universities of Coimbatore city. By keeping this view, the following objectives are framed:

1. Aims at identifying the prevailing scholarly e-resources information in the digital environment in the universities of Coimbatore.
2. To identify the library use and level of expertise in information technology and library service.
3. To identify methods of acquiring knowledge of information.
4. To find out the internet application for searching information.

METHODOLOGY

The type of research is descriptive is latest and normality survey used simple random sampling method. A structured questionnaire was designed for the survey which was randomly distributed among 800 users of the library comprising of research scholars pursuing their Ph.D., M.Phil degree and faculty members of seven Universities situated in Coimbatore city of Tamil Nadu State, India and 548 (68%) completed questionnaires were received. The questionnaire has been used to obtain the needed data covering the objectives of the study. The researcher also has used interview schedule for librarians of the Universities surveyed and also observed the environment by personal visit to collect the data.

LIMITATION

The study covers only the full time scholars and the faculty members working in the departments of the universities that are surveyed located in Coimbatore city only.

STUDY UNIVERSITIES

Table 1 Details of the universities under study

Name of the University	Type of the University	Management	Year of Establishment
Amirtha university	Deemed	Private	1994
Anna university of Technology	Affiliating	Government	2007
Avinashilingam university	Deemed	Aided	1975
Bharathiar university	Affiliating	Government	1982
Karpagam university	Deemed	Private	1995
Karunya university	Deemed	Private	1980
Tamil Nadu Agricultural University (TNAU)	Affiliating	Government	1907

It is found from the above table that the Bharathiar University, Anna University of Technology and Tamil Nadu Agricultural Universities are affiliating Universities. Four Universities viz., Amirtha, Avinashilingam, Karpagam and Karunya are the Deemed Universities. Among the universities, Karunya University is the only residential university under study. Three Universities Amirtha, Karpagam and Karunya are under the control of private management. Three Universities viz Bharathiar (UGC), Anna (AICTE) and TNAU (ICAR) are under the control of Government of Tamil Nadu. Among the Universities under study, TNAU is the very oldest university established in the year 1907. Next to this, Avinashilingam University was established in the year 1975. Recently in the year 2007 Anna University, Coimbatore was established.

Table 2
Digital Information resources in the universities

Collection	Amirtha	Anna	Avinashilingam	Bharathiar	Karpaga m	Karunya	TNAU
E-Books	10000	-	100	5000	Delnet	5000	5000
E-Journals	200	-	1000	5000	70	5000	1000
CD/DVD	300	1000	3000	1000	1517	1000	1000

Collection development digital information resources of the institutions under study are identified and tabulated. From the Table 2, 10000 is the maximum collection at Amirtha University and it is 5000 each at Bharathiar, Karunya and TNAU libraries. Regarding the collection of e-Journals, a maximum of 5000 e-journals are available at Bharathiar and Karunya Universities. With regard to the CDs/DVDs collection, it is 3000 at Avinashilingam University and 1000 each at Anna, Bharathiar, Karunya and Tamil Nadu Agricultural Universities.

It is inferred from the table that all the surveyed universities are maintaining the e-resources except Anna University and Karpagam University as they are possessing only CDs/DVDs. It is quite interesting to note that the Amirtha University is possessing 10000 e-books while Bharathiar, Karunya and Tamil Nadu Agricultural Universities were providing access to 5000 e-books each. It is also found that the surveyed universities are subscribing good number of scholarly e-Journals, particularly Bharathiar and Karunya with 5000 e-journals each.

Study Sample:

Table 3
University-wise distribution of respondents and their disciplines

Name of the University	Number of Respondents	Percentage
University-wise distribution of respondents		
Amirtha	82	14.96
Anna	45	8.21
Avinashilingam	58	10.58
Bharathiar	192	35.10
Karpagam	70	12.73
Karunya	41	7.48
TNAU	60	10.94
Discipline-wise distribution of respondents		
Humanities	116	20.95
Social Sciences	138	25.32
Science and technology	294	53.73
Total	548	

It is found from the above table, that the maximum of 192 (35.10%) responses were received from the Bharathiar University. Next to this 82 (14.96%) from Amirtha University and 70 (12.73%) from Karpagam University. 45 (8.21%) responses were received from Anna University and 41 (7.48%) from Karunya University.

It is inferred from the analysis that, among the responses, the majority are from Bharathiar University (35.10%) while the remaining universities consist less than 15 percent of the respondents. Karunya University is having the minimum number of respondents.

Subject wise distribution of responses shows that 20.95%, 25.32% and 53.73% of the respondents from humanities, social science, and science & technology disciplines respectively. However, the responses received from science & technology discipline were more as compared to humanities and social science disciplines.

Table 4
Gender and Age-wise distribution of the respondents

	Faculty	Ph.D	M.Phil	Total
Gender-wise Distribution				
Male	48 (16.22)	78(26.35)	170(57.40)	296(54.01)
Female	18(6.08)	86(34.13)	148(58.73)	252(45.99)
Age-wise distribution				
Below 30	8 (2.00)	90(22.50)	302 (75.50)	400 (72.99)
30-50	50 (35.71)	74 (52.86)	16 (11.43)	140 (25.55)
Above 50	8 (100)	0	0	8 (1.46)
Total	66(12.04)	164(29.33)	318(58.03)	548

As they are the direct consumers of services rendered, this contributory part of the study has been confined on users of the 548 users under consideration, 296 (54.01%) are male researchers while the remaining 252 (45.99%) are female. As stated above the users' community comprising of both male and female users includes of 66 faculty members (12.04%), 164 (29.93%) PhD researchers and 318 M.Phil scholars (58.03%). It is inferred

from the analysis that majority of the respondents are M.Phil scholars.

Regarding the age factors, majority of the users are found to be below 30 years *i.e.* 400 respondents (72.99%) while, 25.5 percent (140) are belong to the age group of 30-50 years. Only 8 (1.46%) of the faculty members are above 50 years. It is inferred that the negligible group of elders are under the age group of above 50 years.

Table 5
Respondents library use and level of expertise on IT and library services

Library use

Dependency on the usability of Library

Responses	No. of	percentage
To go through the Printed Version of Books and Journals	412	75.18
For research and teaching	367	66.97
Library as Gateway for locating Information	285	52.01
To develop information literacy on e- resources	175	31.93
for academic jr/books and database	136	24.82

Level of Expertise on IT and Library Services

Complete Novice	312	56.93
Something	78	14.23
Better	161	29.38

Browser Used for e- resources

Internet Explorer	323	58.94
Mozilla Firefox	112	20.44
Netscape Navigator	56	10.22
Opera	30	5.47
Others	17	3.10

Search Engines frequently used

Google	365	66.61
Yahoo	250	45.62
Blogs	186	33.94
Lycos	175	31.93
Federated Search Engines	170	31.02
AltaVista	82	14.96
Hot Bot	77	14.05
Ask.com	60	10.94

Table 5 expresses the respondents' library use with different purposes. According to the usability, the purpose will be satisfied. It is found from the above table that 75.18 percent of the users are depending upon the library to go through the printed version of journals and

books. Next to this, 367 respondents (66.97%) are using the library for research and teaching preparation work. 52 percent of the respondents are of the opinion that they are visiting the library for locating information.

The above table explains the various components related to e-resource access pattern of the respondents. While enquiring about the level of expertise on using systems for accessing the e-resources, majority of the respondents (56.93 percent) are of the opinion that they are new to the environment to use the e-resources. 29.38% of them are having expertise in accessing the resources.

It is found from the above table that majority of the respondents (58.94 percent) is using the Internet Explorer. Next to this, Mozilla Firefox by 20.44 percent of the respondents and 10.22 percent of the respondents are using Netscape Navigator as the browser for their interest searching.

Regarding the search engines, 66.61 percent of the respondents are using Google and 45.62 percent of the respondents are using the Yahoo. 33.94 percent of the respondents use the blogs, 31.93 percent of the respondents are using Lycos and 31.02 percent of them are using Federated Search Engines.

Table 6
Methods acquiring knowledge of e-resources, Access pattern and place of accessing

Methods of acquiring knowledge of e-resources		
1. Trial and Error method	180	32.85
2. Formal Training	136	24.82
3. From Colleague	215	39.23
4. Training at Workshop	165	30.11
5. Attending workshop	126	22.99
Access Pattern of e-resources		
1. Daily	391	71.35
2. Once a week	291	53.10
3. Thrice a week	125	22.81
4. Once a month	60	10.95
5. Occasionally	31	5.66
6. Not at all	10	1.82
Place of Accessing e-resources		
1. Department	413	75.36
2. University Library	225	41.06
3. Home	140	25.55
4. Internet Café	175	31.93
5. Others	30	5.47

It is found that 32.85 percent of them are doing trial and error method for accessing the e-resources. 24.82% of the researchers are getting knowledge by attending formal training and 39.23% of them from their colleagues. 30.11 percent of the respondents acquired the knowledge of e-resources through training in their work place. 22.99 percent of the respondents are getting their e-resources themselves by workshops arranged by the

departments with collaboration of library.

The above table shows that 71.35 percent of the respondents are accessing the e-resources daily. 53.10 percent of the respondents using the resources once in a week. 22.81 percent of them are using the resources thrice a week. A maximum of 75.36 percent of the respondents are using their department for browsing. 41.06 percent of them are using the library for internet surfing centre. 31.93 percent of the respondents are using the internet café centre for accessing the e-resources.

FINDINGS

1. All the universities have collected electronic resources. Except the newly established university.
2. Bharathiar and Karuniya universities are subscribing the scholarly electronic journals.
3. Science and technology resources are more than the Humanities and Social Science journals.
4. Nearly 60% of the research scholars below 30 years. Only 8 faculty members' age is above 50. Age is not a criteria for carrying research work.
5. 75% of the researchers use the library for the purpose of go through the printed books and journals. 66.97% of them use library for their research and teaching purpose.
6. More than 50% of them use the library as a gateway of information.
7. Majority of the respondents (56.93%) of them new to use the e-resources. However, 29.4% of the respondents have better skill to use of electronic sources.
8. Internet explorer is the most frequently (58.9%) used internet browser than other browsers..
9. Among the search engines, Google is one the most frequently (66.61%) used search engine. Similarly 45.62% of them used the yahoo.
10. Three fourth of the researchers (75%) do not have any formal training for access of e-resources.
11. Above 70% of the study samples use the e-resources daily.
12. 75% of the respondents access the resources in their research departments itself.

CONCLUSION

E-resources are playing a vital role in the present Academic Research activities of higher educational sectors. It is an essential duty of the educational institution authorities to provide relevant & concerned e-resources for the development of academic community. This study includes the user pattern of e-resources for Coimbatore universities.

REFERENCES

1. Joteen Singh, R.K., Th. Madhuri Devi and Arup Raychaudhury. "Use of Internet Based e-Resources at Manipur University: A Survey." *Annals of Library and Information Studies* 56 (2009):52-57.
2. Asemi, A. Information searching habits of Internet users: A case study of the Medical Sciences University of Isfahan, Iran. (2005). *Webology* 2 (1) Available: <http://www.webology.ir/2007/v2n1/a10.html> accessed on Dec 2009
3. Rehman Sajjad Ur. and Vivian Ramzy Internet use by health professionals at the Health Science Centre of Kuwait University. *Online Inform. Rev.* Vol.28, No:1,

(2004): 53-60.

4. Dong, X. "Searching information and evaluation of Internet: a Chinese academic user survey" *International Information and Library Review*, Vol.35, No:2-4, (2003): 163-187.
5. Osorio, N. L. *Websites of science-engineering libraries: An analysis of content and design: Issues in science and technology librarianship*. (2001). (<http://www.library.ucsb.edu/istl/01-winter/referred>. accessed on Dec 2009
6. Hölscherl, C. and Strube G. "Web search behavior of Internet experts and newbies" *Computer Networks*, 33 (1-6), (2000): 337-346.
7. Ormes Sarha and Dempsey Lorcan. *Library and Information Commission Policy Library Internet Survey. First Public report*. (1995): <http://ukoln.bath.ac.uk/public/lic.html>. accessed on Dec 2009.
8. Bane, A.F. and Milheim, W.D. *Internet insights: How academics are using the Internet*. *Computers in Libraries*, Vol.15, No:2, (1995): 32-36.

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