
Information Use Pattern by Research Scholars in Electronic Environment: A Study at Select Universities in Tamil Nadu

M.Ambika

Research Scholar
Dept.of Library and Information Science
Kalasalingam University, Anand Nagar
Krishnan koil

K. Kannan

Assistant Librarian
Manonmaniam Sundaranar University
Tirunelveli

Abstract

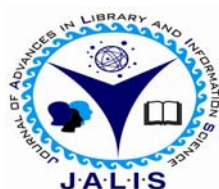
The paper focuses on the information use pattern by research scholars in electronic environment: A study at select universities in Tamil Nadu. The purpose of the study is to explore the use of electronic information by the research scholars of Tamil Nadu universities for seeking information and particularly to know awareness, time spent, level of satisfaction, problem facing while accessing E-Resources. Questionnaires were circulated to 875 respondents and 718 filled in questionnaires were returned. The response rate is 82.05%. 52.79% of the respondents are in the age category of 24- 28 years, most of the research scholars are aware about E-Journal than other kind of E-Resources, 48.19% of them agree on satisfaction in the quality of E-Resources provided by University libraries.

Keywords

E-Resources; Information Access; Search Pattern; University Libraries.

Electronic access

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INTRODUCTION

Information becomes necessary, like that of food, shelter and clothes, in day to day environment. Information seeking and needs differ from person to person. Naturally, seeking and utilizing information varying depending on the requirements. There have been significant differences in seeking of information for higher education or research oriented purpose than looking of information for definite purpose. There are enormous information resources available as on today especially in the digital environment. Information seeking behaviour and information needs are the fundamental areas of research in the digital environment. In higher education systems, there is a provision for making use of these resources available through library. It is necessary for the libraries to move towards digital resources which are more helpful for easy access.

The information produced in the world before 1990's was available only in the printed form and a part of information availability was in the non-printed form such as audio, visual sources, microfilm, etc., and are considered as non-book materials. The information world has witnessed a transition from print to electronic form. A change would not happen, all of a sudden, but it happens gradually. When a medium of publication changes it requires time. It took around ten years and still it needs a couple of years more. Now people predict that in next few years most published information will be available only in electronic form. Hence we need to understand and use the electronic media to the maximum extent.

LITERATURE REVIEW

Dhanavandanet al. (2008) found there is no significant relationship between the use of e-mail and Internet and gender or between age (below or above 40) and the use of ICT, although there is some variation. Devendra Kumar (2010) conducted an analytical study of information seeking-behaviour among agricultural scientists in Sardar Vallabhbhai Patel University of Agriculture and Technology. Their preferences regarding various formats of information sources (formal, informal and electronic information sources) have been explored through quantitative survey. Archita Nanda (2012) found only 28% respondents were Skillful in using Software programs. There was a mixed response regarding use of different Assistive technology and devices for the students with disabilities.

Most of the respondents refer text books, reference books, newspapers, magazines, and dictionaries to meet their information needs. Kumar and Shukla (2013) found that both the groups of researchers have some similarities and some dissimilarity in information seeking. Even in this electronic era some research scholars of art discipline depend on print form of publications for their information needs. Acheampong and Dzandu (2015) revealed that the crop research scientists used information centers/libraries for research purposes and prefer to use journals articles (both print/electronic) but preferred electronic format to other types of materials. The study recommended that scientific information centers/libraries should subscribe to current print/electronic journals and also train the crop research scientists in information searching and retrieval skills. Prasad, C. et al.(2015) conducted the study results from the study shows that lack of funding, lack of ICT integration and lack of connectivity were found to be most critical barriers to the use of ICT in secondary schools. Three barrier-factors were extracted: lack of support, lack of ICT infrastructure and lack of motivation and self belief from factor analysis.

OBJECTIVES

1. To identify the awareness on E-Resources by research scholars.
2. To study the time spent on E-Resources for research work.
3. To study the difficulties obtaining information from online search

METHODOLOGY

This study attempts to report the findings of information use pattern by research scholars in electronic environment: a study at select universities in Tamil Nadu. The primary data was collected through questionnaires from the respondents.

Totally 875 questionnaires were distributed to the Research Scholars in the three major disciplines such as Science, Social Science and Humanities at seven Universities in Tamil Nadu Based on stratified sampling method. Seven universities name as follows: Alagappa University, Bharathiar University, Bharathidasan University, Madurai Kamaraj University, ManonmaniamSundaranar University, Mother Teresa Women's University and Periyar University. Based on stratified sampling method the questionnaires were distributed to the available research scholars at

the time of data collection. Among research scholars 875 questionnaires were distributed and 718 received after duly filled. The response rate is 82.05%.

The collected data was made the analyses with help of "Statistical Package for Social Sciences" (SPSS) Software.

LIMITATIONS OF THE STUDY

The researcher is limited only seven selected Arts and Science state Government Universities located in Tamil Nadu and remaining Universities and other educational institutions will not be considered due to convenience.

DATA ANALYSIS AND INTERPRETATION

Table 1: University Wise Response Rate of the Research Scholars

S.No.	University	Questionnaires Distributed	Questionnaires received	%
1.	MKU	125	121	16.85
2.	BDU	125	115	16.02
3.	AU	125	109	15.18
4.	BU	125	102	14.21
5.	PU	125	97	13.51
6.	MSU	125	89	12.40
7.	MTWU	125	85	11.84
	Total	875	718	82.06

Note: MKU = Madurai Kamaraj University, BDU = Bharathidasan University, AU = Alagappa University, BU = Bharathiyar University, PU= Periyar University, MSU = ManonmaniamSundaranar University, MTWU = Mother Teresa Women's University.

The table 1 reveals the university wise response rate of the research scholars. Among the 718 respondents 16.85 per cent of the respondents were from Madurai Kamaraj University. 16.02 per cent of the respondents were from Bharathidasan University. 15.18 per cent of the respondents were from Alagappa University. 14.21 per cent of the respondents were from Bharathiar University. 13.51 per cent of the respondents were from Periyar University, 12.40 per cent of the respondents were from ManonmaniamSundaranar University and 11.84 per cent of the respondents were from Mother Teresa Women's University. It is pointed out that the maximum respondents from Madurai Kamaraj University when comparing to other universities.

Table 2: Demographic Details of the Research Scholars

S. No.	Age	MKU	BDU	AU	BU	PU	MSU	MTWU	Total
Age									
1.	Below 24 Years	38 (31.40%)	29 (25.22%)	26 (23.85%)	29 (28.43%)	19 (19.59%)	14 (15.73%)	26 (30.59%)	181 (25.21%)
2.	24 – 28 Years	56 (46.28%)	47 (40.87%)	63 (57.80%)	52 (50.98%)	50 (51.55%)	68 (76.40%)	43 (50.59%)	379 (52.79%)
3.	Above 28 years	27 (22.32%)	39 (33.91%)	20 (18.35%)	21 (20.59%)	28 (28.87%)	7 (7.87%)	16 (18.82%)	158 (22.00%)
Gender									
1.	Male	55 (45.45%)	75 (65.22%)	60 (55.05%)	73 (71.57%)	59 (60.82%)	62 (69.66%)	0 (0%)	384 (53.48%)
2.	Female	66 (54.55%)	40 (34.78%)	49 (44.95%)	29 (28.43%)	38 (39.18%)	27 (30.34%)	85 (100%)	334 (46.52%)
Marital Status									
1.	Married	30 (13.82%)	35 (16.12%)	27 (12.44%)	36 (16.58%)	37 (17.05%)	26 (11.98%)	26 (11.98%)	217 (30.22%)
2.	Unmarried	91 (18.16%)	80 (15.96%)	82 (16.36%)	66 (13.17%)	60 (11.97%)	63 (12.57%)	59 (11.77%)	501 (69.78%)
Residing Sector									
1.	Urban	37 (13.81%)	53 (19.78%)	34 (12.69%)	49 (18.28%)	45 (16.79%)	23 (8.58%)	27 (10.07%)	268 (37.32%)
2.	Rural	84 (18.67%)	62 (3.78%)	75 (6.67%)	53 (11.78%)	52 (11.56%)	66 (14.67%)	58 (12.89%)	450 (62.67%)
Academic Status									
1.	M.Phil	74 (17.41%)	54 (12.71%)	67 (15.76%)	63 (14.82%)	59 (13.88%)	60 (14.12%)	48 (11.29%)	425 (59.19%)
2.	Ph.D	47 (16.04%)	61 (20.82%)	42 (14.33%)	39 (13.31%)	38 (12.97%)	29 (9.90%)	37 (12.63%)	293 (40.80%)
	Total	121 (16.85%)	115 (16.02%)	109 (15.18%)	102 (14.21%)	97 (13.51%)	89 (12.40%)	85 (11.84%)	718 (100%)

Table 2 shows that the most of the respondents are belong to the age category of 24 - 28 years (52.79%). 384 respondents (53.48 per cent) were belong to the category of male and 46.5 per cent of the respondents were belong to the category of female, majority of the respondents belong to the category of

Unmarried (69.78%), most of the respondents belong to rural area (62.67). In the case of academic status wise distribution of respondents, 425 (59.19 per cent) of the respondents are belong to M.Phil and remaining 293 (40.81 per cent) of them belong to PhD

Table 3: Level of awareness on e-resources wise by research scholars

S. No.	Level of Awareness On E- Resources	Fully Aware		Partially Aware		Not at All Aware		WAM	Rank
		No. of Respondents	%	No. of Respondents	%	No. of Respondents	%		
1.	E-Journal	320	44.57%	386	53.76%	12	1.67%	2.43	1
2.	E-Books	299	41.64%	419	58.36%	0	0.00%	2.42	2
3.	E-Thesis and Dissertation	265	36.91%	406	56.55%	47	6.55%	2.30	4

4.	Bibliographic databases	135	18.80%	498	69.36%	85	11.84%	2.07	6
5.	Open access Literature	78	10.86%	502	69.92%	138	19.22%	1.92	7
6.	Online databases	67	9.33%	545	75.91%	106	14.76%	1.95	6
7.	E-Project	262	36.49%	451	62.81%	5	0.70%	2.36	3
8.	Research report	103	14.35%	413	57.52%	202	28.13%	1.86	8
9.	Web directories	23	3.20%	389	54.18%	306	42.62%	1.61	9
10.	Conference proceedings	264	36.77%	356	49.58%	98	13.65%	2.23	5

Table 3 shows the rank given by research scholars for level of awareness on E-Resources. Rank given with the help of weighted arithmetic mean, 1 rank for E-Journal, second for E-Book followed by E-Project, E-

Thesis and Dissertation, conference proceeding, Bibliographic databases, online database, open access literature, research report and web directories respectively.

Table 4: Chi-Square Analysis Time Spent on the E – Resources Per Day by Gender Wise

S. No.	Gender	Time spent on E-Resources				Total
		1 Hour	2 Hours	3 Hours	More than 3 Hours	
1.	Male	31 (8.07%)	102 (26.56%)	205 (53.39%)	46 (11.98%)	384 (53.48%)
2.	Female	13 (3.89%)	80 (23.95%)	221 (66.17%)	20 (5.99%)	334 (46.52%)
	Total	44 (6.13%)	182 (25.35%)	426 (59.33%)	66 (9.19%)	718 (100%)

The table 4 depicts that time spent on the E - Resources by male and female respondents, 59.33% of the research scholars using e-resources more than 3 hours per day. In the case of male respondents, 8.07 per cent of the respondents use an hour, 26.56 per cent of the respondents use 2 hours, 53.39 per cent of the respondents use E- Resources3 hours and

11.98 per cent of the respondents use more than 3 hours. In the case of female respondents, 3.89 per cent of the respondents use an hour, 23.95 per cent of the respondents use 2 hours, 66.17 per cent of the respondents use E- Resources 3 hours and 5.99 per cent of the respondents use more than 3 hours.

Chi-Square Summary Result

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	565.825(a)	3	.000
Likelihood Ratio	717.550	3	.000
Linear-by-Linear Association	388.686	1	.000
N of Valid Cases	718		

a0 cells (.0%) have expected count less than 5. The minimum expected count is 20.47. From the table of Chi-Square statistic calculated value of χ^2 is 565.825 and the assumption significance level is .000. It is lower than the alpha value (.000 < 0.05).

Therefore the null hypothesis is rejected, the Alternative hypothesis is accepted. It is concluded that there is an association between the gender of the respondents and their time spent on the E – Resources.

Table 5:Difficulties in Obtaining Information from Online Search

S. No.	Difficulties in online search	MKU	BDU	AU	BU	PU	MSU	MTWU	Total
1.	Lack of sufficient computer	6 (4.96%)	5 (4.35%)	10 (9.17%)	3 (2.94)	6 (6.19%)	9 (10.11%)	14 (16.47%)	53 (7.38%)
2.	Unfamiliarity with search methods	16 (13.22%)	13 (11.3%)	12 (11.01%)	9 (8.82)	12 (12.37%)	7 (7.87%)	6 (7.06%)	75 (10.45%)
3.	Too much information available	12 (9.92%)	9 (7.83%)	16 (14.68%)	10 (9.8%)	3 (3.09)	11 (12.36%)	5 (5.88%)	66 (9.19%)
4.	Very few online resources only available in my field	9 (7.44%)	5 (4.35%)	4 (3.67%)	5 (4.9%)	19 (19.59)	12 (13.48%)	9 (10.59%)	63 (8.77%)
5.	Lack of time for searching	10 (8.26%)	7 (6.09%)	5 (4.59%)	8 (7.84%)	8 (8.25%)	9 (10.11%)	6 (7.06%)	53 (7.38%)
6.	Non relevant resources	13 (10.74%)	14 (12.17%)	4 (3.67%)	15 (14.71%)	8 (8.25%)	5 (5.62%)	11 (12.94%)	70 (9.75%)
7.	Restriction of some resource access/ no full text	24 (19.83%)	20 (17.39%)	21 (19.27%)	25 (24.51%)	14 (14.43%)	13 (14.61%)	10 (11.76%)	127 (17.69%)
8.	Lack of guidance and training	13 (10.74%)	16 (13.91%)	17 (15.6%)	11 (10.78%)	9 (9.28%)	4 (4.49%)	4 (4.71%)	74 (10.31%)
9.	Server down/ Network Problem	14 (11.57%)	19 (16.52%)	14 (12.84%)	12 (11.76%)	13 (13.4%)	16 (17.98%)	15 (17.65%)	103 (14.35%)
10.	Lack of support from library staff	4 (3.31%)	7 (6.09%)	6 (5.5%)	4 (3.92%)	5 (5.15%)	3 (3.37%)	5 (5.88%)	34 (4.74%)
	Total	121 (100%)	115 (100%)	109 (100%)	102 (100%)	97 (100%)	89 (100%)	85 (100%)	718 (100%)

The table 5 shows the difficulties in obtaining information from online search. It is found that, 7.38 per cent of them responded for Lack of sufficient computer, 10.45 per cent of them responded for unfamiliarity with search methods, 9.19 per cent of them responded for too much information available, 8.77 of them responded for very few online resources only available in their field, 7.38 per cent of them responded for Lack of time for searching, 9.75 per cent of them responded for non relevant resources, 17.69 percent of respondents felt that main difficulty is restriction of some resource access/ no full text, 10.31 of them felt the difficulty of Lack of guidance and training,14.35 per cent of them mentioned the problem is server down /network problem,and4.74

per cent of them responded for lack of support from library staff respectively.

CONCLUSION

The academic staff should encourage the use of electronic information sources for study and research. The librarians should provide proper training in the use of online information sources. Therefore, there is a need to provide proper guidance and training to the scientific community in the use of electronic information resources. The present study concluded that the research scholars in the Universities need proper training in the use of electronic information resources and information search tools.

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