USE OF OPEN ACCESS SCHOLARLY LITERATURE BY THE RESEARCH SCHOLARS IN UNIVERSITY ENVIRONMENT

Corresponding Author: Mr. Rushmansaab Gurikar

Mr. Rushmansaab Gurikar

Research Scholar Department of Library and Information Science Karnatak University, Dharwad – 580 003, Karnataka, INDIA Email: rrgurikar@gmail.com

And

Dr. Gururaj S. Hadagali

Assistant Professor Department of Library and Information Science Karnatak University, Dharwad – 580 003, Karnataka, INDIA Email: gururajhadagali123@gmail.com

The present study deals with the use of Open Access Scholarly literature by the research scholars of Karnatak University, Dharwad. The Survey method was employed and questionnaire tool to collect the data from the respondents. A total of hundred questionnaires were distributed, out of which 85 questionnaires were received back with duly filled in questionnaires with a response rate of 85.00 %. The outcomes of the study: 89.14% respondents are aware of the Open Access resources; majority of the respondents are having positive attitudes towards the Open Access resources; the respondents felt that there is a need to conduct training / orientation programme on the effective use of Open Access resources.

Keywords: Karnatak University, Open Access, OA Databases, OA Journals, OA Repositories, OA Resources, Open Access Scholarly Literature, Research Scholars and User Study.

INTRODUCTION

The present day libraries are facing financial crunch. Because of this reason libraries are facing problems while delivering effective library services to their clientele. However, the Open Access resources have come into a rescue for such libraries which are deprived of financial deficit. The Open Access (OA) literature is a digital information available over the Internet without any restriction. The publishers are also making their resources available on the Internet through an open access mode. An ease of access to OA resources is the main reason for its popularity among the academic community. Therefore, OA publishing is gaining prominence among the scholarly persons.

It is evident from the study of Laaksho et al. (2011) that there is a rapid growth of open access publishing during 1991-2009. During the period, 1,91,000 articles were published in 4769 journals. The study also reveals that since 2000 the average annual growth rate has increased by 18 % and 30 % for journal articles respectively. The increase in the research on OA resources has improved the awareness among the research community

(Moorhead et al. 2015; and Pandey, 2010). Therefore, the present study deals with the use of open access scholarly literature among the research scholars of the Karnatak University,

REVIEW OF LITERATURE

Togia and Korobili (2014) discuss that OA resources have more advantages over its traditional model of publications. Further, the authors focus on the issues like author pay model, journals impact factor and peer-review process. Creaser et al. (2010) opine that the authors have good understanding ethics of open access in general. However, the opinion on open access resources differs from scholars of different disciplines. Dhanavandan and Tamizhchelvam (2013) study reveals that more than 95 % of the faculty members agreed that they were benefited from the OA publications. Veena (2016) in her study found that 47.36 % of the respondents frequently used OA resources and most of the users are aware of OA resources. Dulle and Minishi-Majanja (2009) found that majority of the research scholars used open access resources and supports publishing on OA mode. But Sellan and Sornam's (2017) study reveals that the faculty members are partially aware of OA. Nagaraj and Bhandi's (2016) study reveals that 91 % of the research scholars of physics discipline are aware of OA resources and arXiv is the most preferred OA repository.

Sahu and Arya (2013) found in their study that only few researchers are aware of OA and published papers in OA journals, whereas, Das's (2013) study indicates that 58 % researchers are aware of OA resources, 26 % of the researchers published their papers in OA journals and 12 % of the researchers archived their publications in OA repositories. Ashraf and Haneefa's (2017) study reveals that the researchers are aware of OA resources like Shodh Ganga, Google Scholar and were the most preferred resources. Majority of the researchers are willing to publish their works in OA mode. Gul et al. (2010) study reveals that journals (83.33%) and books are the most preferred OA resources by

the researchers belonging to science discipline. Hegde (2017) found that 67 % of the respondents are interested in publishing in OA journals. Prince and Saravanam (2015) suggested that training programme will enhance the familiarity towards the use of OA resources.

OBJECTIVES OF THE STUDY

The main aim of the present survey is to study the use of open access scholarly literature by the research scholars of the Karnatak University, Dharwad. The specific objectives of the study are to;

1. know the awareness of information resources available over Internet by the research scholars of Karnatak University, Dharwad;
2. study the awareness and use of open access resources by the research scholars;
3. determine the advantages of open access resources over commercial resources; and
4. identify the problems faced by the research scholars while accessing open access resources.

SCOPE AND METHODOLOGY

The present survey is restricted to the research scholars of Science discipline (Physical, Chemical, Life and Earth Sciences) of the Karnatak University, Dharwad. The questionnaire tool was used to collect the data from the research scholars. A total of one hundred questionnaires were distributed randomly (Lottery Method) to the respondents, out of which, 91 questionnaires were received back. Out of 91 questionnaires, 6 questionnaires were incomplete and as such were dropped from the study. Therefore, remaining 85 duly filled in questionnaires were used for the study. The data collected then was fed into MS-Excel for further analysis.

DATA ANALYSIS AND INTERPRETA-TION

Access to Information Sources over Internet

The respondents were asked a question on the awareness of information sources over Internet. The table 1 reveals that 80 (94.11%) respondents access the information through search engines like Google, Yahoo, followed by, 68 (80.00%) respondents who access information through Wikipedia, whereas, 67 (78.82%) respondents used open access resources to search information. The other sources like e-resources, Academic Social Networking Sites, Web Directories and Institutional Repositories were given less preference by the respondents.

Table 1: Access to Information Sources over Internet

Sources of Information	Male	Female	Total
Search Engines [Like Google & Yahoo]	43	37	80 (94.11)
Wikipedia	38	30	68 (80.00)
Open Access Resources	35	32	67 (78.82)
E-Resources Subscribed by Library	29	23	52 (61.17)
Academic Social Networking Sites	24	22	46 (54.11)
Web Directories	18	7	25 (29.41)
Institutional Repositories [IRs]	15	8	23 (27.05)
Blogs	11	12	23 (27.05)
Subject Gateways	11	10	21 (24.70)

Figures in the parenthesis indicate percentage

Awareness of Open Access resources

The respondents were asked a question on the awareness of Open Access resources. It is observed from the study that 76 (89.41%) respondents were of Open Access resources available in their respective subjects, whereas, only 9 (10.58%) were not aware of OA resources.

Table 2: Awareness of Open Access resources

Awareness of OA resources	Male	Female	Total
Yes	42	34	76 (89.41%)
No	03	06	09 (10.58%)
Total	**45**	**40**	**85 (100.00%)**

Figures in parenthesis indicate percentage / OA – Open Access

Awareness of different Open Access Resources

The table 3 depicts the awareness of selected Open Access resources like OA Journals, Databases, Books, Repositories, Educational Resources and Search Tools. Out of 76, majority of the respondents, i.e. 43 respondents used Springer Open and Wiley Open Access respectively, followed by 41 respondents used Elsevier Journals. Some of the commercial publishers making their resources available online with free of cost. PubMed Central database is the highly used OA database and quite a good number of respondents were aware and used Directory of Open Access scholarly resources. Among the OA Repositories, Shodha Ganga was the most preferred repository, whereas, few respondents were aware of ROAR, re3data.org etc. E-Pathashala and E-Gynakosha were moderately aware among the educational resources. Among the search tools, 55 respondents used Google Scholar and 25 respondents used Free Full PDF Search. The research scholars were also aware of the other search tools like Semantic Scholar, CiteSeerX, Microsoft Academic and Bielefeld Academic Search Engine (BASE).

Table 3: Awareness of different Open Access Resources

Awareness of Selected OA Resources	Not Aware	Aware	Using
OA Journals			
Directory of Open Access Journals (DOAJ)	41	21	14
Open J-Gate	38	22	16
NISCAIR Online Periodicals	57	16	03
Indian Academy of Sciences Journals	27	29	20
Public Library of Science (PLoS) Journals	31	24	21
Springer Open	15	18	43
Bioline International	48	22	6
BioMed Central	30	22	24
Wiley Open Access	15	18	43
Open Science	Elsevier Journals	09	26	41
OA Databases			
PubMed Central	25	18	33
Directory of Open Access scholarly Resources (ROAD)	51	21	04
OAIster	55	19	02
OA E-Books			
Directory of Open Access Books (DOAB)	51	13	12
OAPEN Library	56	15	05
OA Repositories			
Shodha Ganga	13	17	46
Directory of Open Access Repositories (OpenDOAR)	56	15	05
Registry of Open Access Repositories (ROAR)	56	19	01
arXiv.org	57	15	04
re3data.org	60	16	00
OA Educational Resources			
E-Pathashala	48	19	09
E-Gynakosha	52	20	04
OA Search Tools			
Google Scholar	4	17	55
Semantic Scholar	54	16	06
FreeFullPDF Search	16	35	25
CiteSeerX	51	17	08
Microsoft Academic	44	21	11
Bielefeld Academic Search Engine (BASE)	55	18	03

4	OA journals have a larger readership	13	22	25	7	9
5	OA journals have faster publication	10	19	32	5	10
6	OA offers higher visibility	15	30	17	7	7
7	OA offers wider circulation	19	34	14	5	4

Disadvantages of OA resources

The table 5 presents the opinion of the respondents on disadvantages of OA resources over traditional resources. The study reveals that the opinion of the respondents are uncertain for all the statements, i.e. 'Undermines the peer review process (45, 59.21 %), 'OA journals have poor quality' (35, 46.05 %), 'no fundamental benefits (30, 39.47%) and 'loss of money for research (28, 36.84 %), whereas, 25 (32.89 %) respondents disagree about the statement, 'no fundamental benefits'. The other details are presented in table 5.

Table 5: Disadvantages of OA resources

Sl. No.	Advantage	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	Undermines the peer review process	6	8	45	14	3
2	Loss of money for research	5	13	28	21	9
3	No fundamental benefits	2	9	30	25	10
4	OA journals have poor quality	7	13	35	13	8

Problems faced while using OA resources

The table 6 presents the problems faced by the respondents while using OA resources. It indicates that 'lack of training on OA resources' is the major problem (33, 51.32 %) faced by the respondents, followed by 33 (43.42 %) respondents were unaware of OA resources, 32 (42.10 %) respondents received spam mails from journal publishers (32, 42.10 %) and 24 (31.57 %) respondents faced problem of low internet bandwidth. Some of the respondents were uncertain about the statements such as, 'predatory online journals' (38, 50.00 %), 'Bogus Impact Factor' (35, 46.05 %) and 'lack of ICT facilities (32, 42.10 %) respectively. Whereas, 31 (40.79 %) respondents were disagree about the statement i.e. 'lack of time to search OA resources (31, 40/79 %). The other details are presented in table 6.

Table 6: Problems faced while using OA resources

Sl. No.	Advantage	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	Spam mails from journal publishers	12	32	21	6	5
2	Bogus Impact Factor	17	19	35	1	4
3	Predatory Online Journals	8	22	38	5	3
4	Lack of time to search OA resources	5	14	16	31	10
5	Low Internet bandwidth	8	24	23	16	5
6	Lack of ICT facilities	14	26	32	2	2
7	Lack of training on OA resources	12	39	16	5	4
8	Unaware of OA resources	11	33	8	17	7

DISCUSSIONS AND CONCLUSION

It is observed from the study that most of the respondents access the information using search engines (80, 94.11%). It is interesting to mention that a few respondents use Blogs and Subject Gateways to access information over Internet. Out of 85 respondents 76 (89.41%) respondents are aware of Open Access resources. Majority of the respondents are unaware of some of the important Open Access resources mentioned in the study. Majority of the respondents opined that OA resources are not that much good as compared to the traditional / commercial journals but still provide useful information to the researchers. However, most of the commercial publishers are converting their resources to be available from commercial mode to open access mode. To mention a few like Springer, Wiley and Sons, Elsevier journals etc. Interestingly, the respondents are even unaware of OA Educational Resources like E-Pathashala and E-Gyankosh. Among the OA search tools, Google Scholar is the only search tool which is heavily used by the respondents.

The respondents are unaware of most of the popular and important OA search tools like Semantic Scholar, CiteSeerX, BASE, Microsoft Academic etc.

It is also evident from the study that majority of the respondents come to know about OA resources while browsing Internet and through friends. The opinion in this regard by the respondents towards library staff is not satisfactory. The main aim of any library is to provide right information to the right users at the right time at the right place. To achieve this, the librarians have to be proactive in catering to the needs of the users' community. Hence, the library staff has to create awareness among the research scholars by conducting orientation or training programme. It is also noticed from the study that majority of the respondents are aware of OA resources but seem to have ambiguity with regard to their use. OA publications give wider circulation, more visibility, cited frequently and moreover removes financial barrier. But spam mails from journal publishers, lack of training and online predatory journals are the major

barriers. The respondents opined that some of the OA resources are worth to refer but most of the resources will not provide quality material. In the 21st century plethora of information is available over Internet. Selective elimination of information is the need of the hour rather than selective dissemination of information. The users need to strengthen their information search skills and develop skills on the use of effective search techniques and search strategies in finding relevant information. In this regard, the implementation of the open access policy for publishing in OA journal / repositories is the need of the hour. The European University Association (EUA) set a Roadmap on OA to Research publications for the association during its Council meeting on January 2016 which insists the European Universities to promote open access activities and assists to implement the OA policies. Such activities have to be initiated in the developing country like India to promote the Open Access.

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