

Use of Scholarly Online Journals: A Study of Faculty of Science at the University of Allahabad

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Abstract

The study investigates the use of scholarly online journals at the Faculty of Science, University of Allahabad. A questionnaire was distributed among the Faculty Members, Research Scholars and M.Sc. students to collect desired data. A total of 108 questionnaires were distributed to the selected sample; 80 valid samples were collected. The result showed a growing interest in the use of online journals among the users. Online journals were mostly used for research needs and PDF was the most preferred format. Title search and simple field search was observed as the most preferred search technique. There are many factors that may affect the use of scholarly online journals.

Keywords: Online Journals, Electronic Journals,

1. Introduction

The recent advancements in Information and Communication Technology have great impact on the library system of the universities and other academic institutions. Libraries are turning into a hub of digital information. Most of the important resources and services are now available in electronic or digital formats. Online journals are considered the note chord of any library's collection and have become indispensable for research in any field. Many online journals available in the form of databases as well as they directly access through the Internet. The quantity of online journals is growing larger and has become a quite visible entity in serial publication. Today most of the online journals appear as parallel version of its print counterparts and more publishers are making their journals available in electronic format. Many libraries in India are facing challenges due to budget cuts, reduced staff, steep hike in conversion of foreign currencies, and escalation in cost of publication. Due to these factors the libraries are finding it difficult to subscribe to scholarly online journals and databases. There are many scholarly online journals are available in open access. Subscription of online journals and databases through the consortium(s) are much economic for the libraries. It should be noted that "online journals" in this study refers to "scholarly online journals".

2. Faculty of Science, University of Allahabad

University of Allahabad was founded in 1887, making it the fourth modern university established in India. In 2005 the university started functioning as a central university by the University of Allahabad Act 2005. The university has five faculties namely Arts, Commerce, Law, Medicine and Science. Faculty of Science includes 12 departments- Botany, Physics, Chemistry, Mathematics, Statistics, Zoology, Defense & Strategic Studies, Earth & Planetary Science, Electronics & Communication, Home Science, Biochemistry and Photography. At

present, Faculty of Science, University of Allahabad has more than 6000 students, 200 teaching staff and 1500 non-teaching staff.

The university library consists of more than 6 lacs books, 15,000 theses, 500 bound volume journals and more than 12000 full text online journals facilitated through self subscription and UGC-Infonet Consortium published by many commercial and society publishers like Elsevier, Springer, Oxford University Press, Wiley-Blackwell, Taylor and Francis, Cambridge University Press, American Chemical Society, Royal Society of Chemistry, Annual Reviews, American Institute of Physics, American Physical Society, etc have been made available to patrons of Central Library of University of Allahabad. About 10 bibliographic and citation databases, including Web of Science, MathSciNet, and JCCC@UGC-INFONET, etc facilitate searching literature across journals published by different publishers. All e-resources have been made accessible to the genuine users viz. students, research scholars and faculty members of University of Allahabad through campus wide access.

3. Objectives of the study

The main objective of the study is to examine the use of scholarly online journals and databases by the M. Sc. Students, Research Scholars and Faculty members of the Faculty of Science, University of Allahabad, Allahabad. It aimed to identify users' opinion of different features of online journals, their awareness of the online journals services, awareness about user awareness programmes, their use of different publishers, the purpose of use, the components of use, needs of training, preferred formats and more.

4. Methodology

A survey method based on a questionnaire was used for this study. The questionnaire was constructed around the following elements: user profile, awareness about online journals, frequency of use, reasons for use and non-use of online journals, and other issues faced in use of online journals. The questionnaire was administrated during July- August 2015 to the 108 users of the Faculty of Science, University of Allahabad. Out of 108 questionnaires distributed, 80 responses were received (74%) till the November 2015, which were considered to be highly satisfactory and encouraging.

5. Results

5.1 Population Study

User profile section of the questionnaire provides information regarding the gender and different academic status as can be seen from Table-1a and 1b. It is shown in table-1a, 63.75% of the populations studied were males and only 36.25% of total were females.

Table – 1a

Gender	Number	
	Distribute (108)	Receive (80)
Male	72 (66.67%)	51 (63.75%)
Female	36 (33.33%)	29 (36.25%)

Table – 1b shows that 48.75% of the respondents were M. Tech. Students, 35% Research Scholars and only 16.25% were faculty members.

Table – 1b

Academic Status	Number (80)	Percentage
M. Sc. Students	39	48.75%
Research Scholars	28	35%
Faculty Members	13	16.25%

5.2 Awareness of Online Journals and Databases

Table – 2 shows the awareness of online journals and databases among the respondents available through the library. 90.2% of the male users were aware about the online journals whereas only 86.2% of female respondents were aware about the availability of online journals. It can be seen that male respondents are more aware about online journals and databases than females.

Table – 2

Gender	Aware	Not Aware
Male	46 (90.2%)	5 (9.8%)
Female	25 (86.2%)	4 (13.8%)

5.3 Preference Level of Using Online Journals

The result reveals that 60% of respondents want to access only online version of journals whereas only 21.25% users want to read from printed journals but 18.75% respondents want to use both online and printed journals.

Table – 3

Type	Number	Percentage
Online	48	60%
Print	17	21.25%
Both	15	18.75%

5.4 Use of Online Journals and Databases

When respondents asked whether they use online journals and databases or not, majority of respondents replied 'yes'. Table – 4 shows that 92.16% males were using online journals whereas only 89.65% of females were use online journals for the different purposes.

Table – 4

Gender	Use	Not Use
Male	47 (92.16%)	4 (7.84%)
Female	26 (89.65%)	3 (10.35%)

5.5 Mostly Used and Useful Online Journals and Databases

Table – 5 shows that Science Direct with 65% is the most used and useful for the Faculty of Science and online journals of Royal Society of Chemistry recorded the lowest usage rate

with a mere 12.5%. The literature study also showed that Science Direct was most used at the Max Planck Society in Germany (Rusch-Feja and Siebeky, 1999). Web of Science with 40% is another most used online journal. Usefulness of another online journals and databases has shown in the table – 5.

Table - 5

Online Journals/ Databases	No. of Respondents	Percentage
Science Direct	52	65%
Proquest	23	28.75%
Springer link	18	22.5%
SciFinder	16	20%
JCCC	21	26.25%
Scopus	27	33.75%
Web of Science	32	40%
Oxford University Press	20	25%
Cambridge University Press	18	22.5%
Taylor & Francis	22	27.5%
Royal Society of Chemistry	10	12.5%
Wiley Blackwell	21	26.25%

5.6 Purpose of Using Online Journals and Databases

From the table – 6, it is clear that most of the respondents i.e.51.25% use online journals and databases for their research work. 48.75% of respondents use it for studying their course work. 40% of respondents use online journals for update subject knowledge and 27.5% respondents use for writing papers. 26.25% of users using online journals and databases for teaching and only 21.25% respondents use for other works like competitive exams, etc.

Table – 6

Purpose	Number	Percentage
For Studying Course Work	39	48.75%
For Update Subject Knowledge	32	40%
For Teaching	21	26.25%
For Research Work	41	51.25%
For Writing Papers	22	27.5%
Any Other Works	17	21.25%

Note: Because of multiple choice options the percentage is exceeds more than 100.

5.7 Frequency of Using Online Journals

It is observed from the analysis that 32.5% of respondents access online journals everyday, 28.75% of respondents access 2 – 4 times a week, about 26.25% respondents use once a week. About 12.5% of respondents use online journals occasionally.

Table – 7

Frequency	Number	Percentage
Everyday	26	32.5%
2 – 4 times a Week	23	28.75%
Once a Week	21	26.25%
Occasionally	10	12.5%

5.8 Linking Pattern of Online Journals

Many of the respondents search online journals through linking facility available on the library website as well as many through the search engines. Some of them also link through the publishers' website and through the online journals website. Table – 8 shows how respondents search online journals.

Table – 8

Linking	Number	Percentage
Links through library website	49	61.25%
Links through publisher's website	20	25%
Links through Search Engines	52	65%
Links through Online Journals website	18	22.5%

Note: Because of multiple choice options the percentage is exceeds more than 100.

5.9 Search Techniques Used to Access Online Journals

Table - 9 depicts the various search techniques used to access online journals. 95% respondents replied that they search online journals by title. 88.75% respondents expressed that they search online journals in simple field search. 8.75% respondents stated that they search online journals on wild cards. 65% respondents stated that they use Boolean operators for search online journals. 8.75% respondents are using truncation. Finally a very small segment of respondents (5%) use proximity search to search online journals.

Table - 9

Linking	Number	Percentage
Title	76	95.0%
Simple field search	71	88.75%
Wild cards	7	8.75%
Boolean operators	52	65%
Truncation	7	8.75%
Proximity search	04	5.0%

5.10 Using Pattern of Online Journals

Respondents were asked to indicate how they use the content of online journals? It was observed from analysis that majority 63.75% of respondents take printout before using online journals. 58.75% download the content in storage devices and 30% of respondents use on the computer screen.

Table – 10

Use Pattern	Number	Percentage
On Computer Screen	24	30%
Download in Storage Devices	47	58.75%
Take Printout	51	63.75%

Note: Because of multiple choice options the percentage is exceeds more than 100.

5.11 Formats of Online Journals

Online Journals are available in two major formats PDF and HTML. From table - 11, it was observed that 65% (52 of 80) of respondents preferred PDF format for using online journals, whereas 12.5% (10 of 80) of respondents preferred HTML format. 22.5% (18 of 80) having no preference.

Table - 11

Formats	Number	Percentage
HTML	10	12.5%
PDF	52	65%
No preference	18	22.5%

5.12 Difficulties of Accessing Online Journals

Through online journals have become a common source among the academic and research communities, the majority of users (67.5%) stated (table – 12a) that they have difficulties to use online journals. The specific problems faced by the users are given in table – 12b. It was observed that majority of respondents are not satisfied with availability of enough journals in their respective subject.

Table – 12a

Problem Faced	Yes	No
No. of Respondents	54 (67.5%)	26 (32.5%)

Table – 12b

Reasons	Number	Percentage
Not many Online Journals available in my subject	26	48.15%
Coverage on OJ is not suited to my research area	19	35.19%
No assistance provide by the Information Professionals	12	22.22%
Lack of training	9	16.67%
Time Consuming	6	7.5%

Note: Table – 12b is a supporting of Table - 12a. Hence data has been calculated only by the option “Yes” (i.e. total no is 54) of the same.

5.13 Satisfaction Level about Infrastructure provided by the Library for Accessing Online Journals

A question was asked to know the satisfaction level of infrastructure among the users for accessing online journals. It was observed that majority (71.25%) of respondents are satisfied with the infrastructure provided by the library for accessing online journals at different levels whereas only 28.75% of respondents are not satisfied with the same.

Table – 13

Level	Number	Percentage
Highly Satisfied	7	8.75%
Satisfied	21	26.25%
Average	29	36.25%
Not Satisfied	23	28.75%

5.14 Need of Orientation/ Training Program

To a further question as to whether they would like to receive orientation/ training programme to use online journals. 35% respondents said that they do not want any training whereas majority 65% of respondents replied in the affirmative. The results obtained were given in table – 14.

Table – 14

Need of Orientation/ Training Programme	Yes	No
No of Respondents	52 (65%)	28 (35%)

6. Discussion and Conclusion

The result of the survey reflects a growing interest in online journals among users at the Faculty of Science, University of Allahabad. This study reveals that mostly users are aware about the availability of online journals and databases through the library and they can make maximum use of it for various purposes. The analysis of online journals shows that Science Direct (65%) is the most popular among users while online journals of Royal Society of Chemistry ranked lowest (12.5%). The other online journals and databases in decreasing order of popularity were:

- Web of Science (40%);
- Scopus (33.75%);
- Proquest (28.75%);
- Wiley Blackwell (25.25%);
- JCCC (26.25%);
- Oxford University Press (25%);
- Taylor & Francis (27.5%).

Online journals are mostly used for “research work”, followed by “studying course work” and “update subject knowledge”. They are least used for “teaching” and “writing papers”. Majority of respondents stated that coverage of online journals is not sufficient for their subject area and they need more subscription of online journals in their respective field. The result of the study also showed that there is a significant association between the time spent on reading online/ offline and the frequency of use of online journals. The study revealed that majority of users take printout of online journals before read.

This study has shown that PDF is the most preferred format for online journals. Very less users wanted to use it in HTML format. It is noted that the PDF and HTML formats are common formats for online journals, in which the full texts are available. For the linking of online journals, mostly users prefer to link through the various search engines and also from the linking facility provided through the library website.

Title Search with 95% and simple Filed Search with 88.75% were considered as the most favored search techniques for search available online journal articles. Boolean Operators with 65% was third in the list. The level of satisfaction among the respondents regarding the infrastructure provided by the library for accessing online journals and databases indicates that majority of users (71.25%) are satisfied at the various levels whereas, only 28.75% are not satisfied with the same.

The result of this study in general suggests that the library network with the availability of significant number of online journals and databases at the University of Allahabad has been successful but in these sequence users wants more subscription of online journals and databases. The results suggest that 24-hour free access to online resources at the user's desktop leads to increase acceptance and use of scholarly online journals. This service needs to be maintained and continued in future.

References

1. Anjaiah, Mothukuri (2014). Access and effective use of UGC-Infonet e-journals by the faculty members & research scholars at University Library, Annamalai University: a case study. *International Journal of Digital Library Services*, 4(2), 30-43.
2. De Groote, S.L. and Dorsch, J.L. (2003). Measuring use patterns of online journals and databases. *Journal of the Medical Library Association*, 91(2), 231-241.
3. Krishna, K. M. and Adwani, N. (2010). Digital information access and its impact on reading habit of users. *SRELS Journal of Information Management*, 47(3), 289-295.
4. Moghaddam, G.G. and Talawara, V.G. (2007). The use of scholarly electronic journals at the Indian Institute of Science: a case study in India. *Interlending and Document Supply*, 36(1), 15-29.
5. Roger, S. A. (2001). Electronic journals usage at Ohio State University. *College and Research Libraries*, 62(1), 25-34.
6. Rusch-Feja, D. and Siebeky, U. (1999). Evaluation of usage and acceptance of electronic journals: results of an electronic survey of Max Planck Society researchers including usage statistics from Elsevier, Springer, and Academic Press. *D-Lib Magazine*, 5(10), 21-29.
7. Singh, P. K. (2015). User Awareness and use of E-resources by the Faculty Members of Chhatrapati Sahu Ji Maharaj University, Kanpur. *Library Waves*, 1 (2), 87-94.
8. Singh, P. K. (2010). Awareness and use of online journals at Jamia Millia Islamia University Library. *IASLIC Bulletin*, 54 (4), 210-218.
9. Tenopir, C. and King, D.W. (2002). Reading behavior and electronic journals. *Learned Publishing*, 15(4), 259-265.
10. Tenopir, C., King, D.W. and Bush, A. (2004). Medical faculty's use of print and electronic journals: changes over time and in comparison with scientists. *Journal of the Medical Library Association*, 92(2), 233-241.
11. University of Allahabad Home page. Available at <http://www.allduniv.ac.in> (Visited April, 2016).

