

ASSESSING PRINT AND ELECTRONIC JOURNALS USE AT THE MAIN LIBRARY OF UNIVERSITY OF COLOMBO

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Abstract

Scholarly journals are the most costly resources in an academic library and play an important role in scholarly communication irrespective of its format whether print or electronic. This study was carried out at the Main Library of University of Colombo to investigate the user's opinion on the print and electronic journals (e-journals) usage. A questionnaire based survey method was used to gather information on print and e-journals usage from 278 undergraduates of three faculties, who use the Main Library periodical division. Most of respondents use either print or e-journals and some use both formats monthly. Students identified 'original source' and 'ease of use' as the most appealing features and 'difficult in access', 'outdated information' and 'lack of context' as features they dislike in print journals. The most appealing features of e-journals were 'easily searchable' and speed while dislike features were 'insufficient workstations' and 'difficult in reading on the computer screen'. The respondents have equal preference to use both type of journals that is print and electronic for their studies.

Keywords: Journal usage, Print journals, E-journals, Sri Lanka

Introduction

Scholarly journals are instruments for dissemination of various aspects of information and knowledge. According to Bence and Oppenheim (2004), journals are vehicles of scholarly communication where the latest thinking and research can be disseminated, discussed and reviewed by others in the same field. The importance of journals in any discipline as information source is hinged to the fact that journal reports carry research development and they are peer-reviewed to ensure that they contain new research findings. Ogundipe (2005), emphasized that journals contain and provide current and latest expository thoughts on any chosen aspect of knowledge. Further the content of a journal is comprehensive in its focus or chosen topic, providing basic, deep or standard knowledge through which conclusions could be modified and repeated in parts (Ogundipe, 2005).

With the development of digital publishing technologies and the internet, scholarly journals have undergone many changes. According to Ali and Nisha (2011), digital technology has given birth to the electronic form of the journal, the e-journal. A journal can be called an e-journal if its contents are produced and stored in electronic form; if these contents can be scanned in a database and retrieved online, it can be called an online journal (Ali & Nisha, 2011). University libraries have played an important part in scholarly

communication, gradually migrating from periodical subscriptions of hard copies to digital copies or parallel provision of printed and digital resources in electronic access.

Being a leading university library, the library system of University of Colombo provides access to print and online journals supporting learning, teaching and research activities for seven faculties. The library subscribes to 72 foreign and local print periodicals annually and received nearly 150 titles through gifts and exchange programs (Library Annual Report, 2013). Annual subscription is basically done based on faculty recommendations and spends nearly eight million Sri Lankan Rupees to cover six faculties.

The periodical division of the Main Library is housed in the fourth floor and the collection contains current periodicals of three faculties (Arts, Education and Management). Faculty of Science, Medical and Graduate Studies maintain their own collections in faculty libraries while Law journals are kept in the second floor (Law Collection) of the Main Library. Current journals of Faculty of Arts, Education and Management and Finance are arranged broadly by subject and within subject alphabetically. Bound volumes of journals are arranged alphabetically and housed in fifth floor of the Main Library.

Apart from print journals Main Library subscribes to two reputed online journal databases; JSTOR and Hein Online for several years covering over 1500 full text journals.

Apart from these two, from 2014, Colombo university users are accessible to five databases through National Digital Library Consortium under University Grants Commission (UGC) of Sri Lanka. Among these five databases four are journal databases which include Emerald, Oxford journals, Taylor and Francis and Wiley Online Library. Further, users have access to Ebscohost and Hinary through American Center library and World Health Organization respectively. Most of the databases are IP authenticated and users access them in the university premises while Ebscohost and Hinary can be accessed remotely via username and passwords.

One of the common problems that librarians face during the process of acquisition of library material is the high price of scholarly journals. Further, price of a print journal increases minimum by 5% every year. Normally journal prices are increasing at a much higher rate than most library budgets in recent years, resulting in the inability to maintain existing journal subscriptions. With the advent of online access to full-text journals, many academic libraries find themselves in the position of offering both print and electronic access to journals. Within such an environment, Main Library of University of Colombo also provides access to both print and electronic journals to its' users. Though university administration and the library are in the process of providing access to quality information, usage of these materials are not up to a satisfactory level, as evidenced by user statistics of the periodical division of the Main Library. The increased expenditure on periodical

subscription, change in the periodical format and unsatisfactory usage has heightened interest to identify the users' opinion on print and e-journals use in the Main Library.

Objectives of the study

1. To determine the frequency of using print and e-journals
2. To find out reasons for using scholarly journals.
3. To identify the features of print and e-journals that users like and dislike
4. To identify the opinion of users on print journals over e-journals.

Literature review

Journal-use studies have traditionally been a way to monitor use of academic libraries' most costly resources, scholarly journals. Blecic (1999), conducted a study on measurement of journals use in three ways and found out the correlation between those. The study was conducted at the University of Illinois at Chicago. Three key measures were in-house use, circulation and citation by faculty. The study showed that a significant correlation exists between three types of measures. These results suggest that if constraints prevent the collection of all types of data, one type of use data can be used with the knowledge that it significantly correlates with other types of use data.

Rusch-Feja and Siebeky (1999), carried out a survey to investigate researchers' use acceptance of electronic journals. The results of this study showed a significantly high acceptance of e-journals over print journals. The researchers also rated the advantages and disadvantages of e-journals related to various aspects like currency or timelines, ease of access, up-to-date information and additional search facilities etc. A similar study was conducted by Morse and **Clintworth (2000)**, to compare the usage of print and online periodicals available for users at Norris Medical Library. The study revealed that journal volumes subjected to the study have been accessed electronically more than ten times when compared to the print versions during the six month study period. Further, **Punchihewa and Jayasuriya (2008)**, studied user attitudes towards online resources at the main library of University of Moratuwa and found that users prefer to use both online and printed journals for their research purposes.

Use pattern of print and electronic journals were examined by **Gupta (2011)** at the Kurukshetra University of India. Main purpose of this study was to analyse the use of electronic journals from the INFONET consortium by faculty and research scholars. The study was based on a survey method using a questionnaire. The main findings were that the respondents are more attracted towards e-journals than printed journals. The study also identified the need of training in using e-resources and retrieving information. A similar study was conducted by **Ali and Nisha (2011)**, at Central library, University of Delhi to

investigate use of e-journals among research scholars. A survey was designed to collect basic information about the level of use of e-journals as well as other factors contributing to and associated with their use. The results clearly revealed that more than 60 per cent of users are using e-journals weekly for research purposes. Further, keyword is the most popular search method for searching e-journals among research scholars, whereas the date of publication carries the least percentage among all the options. However, it was found that slow downloading of PDF files is the major problem that would discourage users while using e-journals.

Methodology

A questionnaire based survey method was adopted to gather information on opinion of the print and e-journals usage from undergraduates of three faculties (Arts, Education and Management) who use the main library periodical division. The total population include 2789 undergraduates who registered to the library in 2013. The first year students were excluded from the sampling frame, since they are new comers. Generally they have less awareness on periodicals. Questionnaire was developed based on the literature review. Stratified Random Sampling Method was used as the sampling technique. Ten percent of the population was taken as the sample which includes 127 Arts, 41 Education and 110 Management undergraduates. Questionnaires were distributed randomly among students who

visit the library. Their faculty and the year of study were considered before handover the questionnaire.

Data analysis and interpretation

Out of 278 questionnaires, 169 were received and response rate was 59%. When compared faculties, highest response rate was received from the Faculty of Arts.

The data collected were analysed and interpreted and presented here in tables.

Use of print and e-journals

It is essential to know whether students are using print and/or e-journals, since it will be the pivotal point around which all the responses will be analysed. Out of 169 respondents, 135 (79.9%) use print journals and 122 (72.2%) use e-journals. In faculty wise analysis, percentage of print journal usage (88.9%) by Arts students is higher than e-journal usage (58.1%). In contrast with arts students, management students use e-journals (96.8%) than print journals (66.7%).

Table No. 01 Use of print and e-journals

Faculty	Print journals				e-Journals			
	Yes		No		Yes		No	
	n	%	n	%	n	%	n	%
Arts	72	88.9	9	11.1	47	58.1	34	41.9
Education	21	84.0	4	16.0	14	56.0	11	44.0
Management	42	66.7	21	33.3	61	96.8	2	3.2
Total	135	79.9	34	20.1	122	72.2	47	27.8

Frequency of using print and e- journals

When enquiring about the frequency of using print and e-journals, none claimed to use them daily. Majority use print and e-journals monthly and the percentages are 59.3% and 45.9% respectively. Compared to print journals, e-journals are used weekly by all the respondents (see Table 2 and Table 3). There are few (11.1% and 10.7%) use print and e-journals occasionally.

Table No. 02 Frequency of using print journals

Faculty	Daily		Weekly		Monthly		Occasionally	
	n	%	n	%	n	%	n	%
Arts	-	-	22	30.5	40	55.5	10	14.0
Education	-	-	3	14.3	16	76.2	2	9.5
Management	-	-	15	35.7	24	57.1	3	7.2
Total	-	-	40	29.6	80	59.3	15	11.1

Table No. 03 Frequency of using e-journals

Faculty	Daily		Weekly		Monthly		Occasionally	
	n	%	n	%	n	%	n	%
Arts	-	-	21	44.7	20	42.5	6	12.8
Education	-	-	6	42.8	6	42.8	2	14.4
Management	-	-	26	42.6	30	49.2	5	8.2
Total	-	-	53	43.4	56	45.9	13	10.7

Purpose of using journals (print and electronic)

Scholarly journals are being used by all users for variety of purposes like, research, publishing articles, to update information on related subjects, to find related information on their subjects and to complete assignments and presentations as shown in table 4. The results clearly reveal that most of the students (81.6%) use journals for completion of assignments and presentations. In total 49.7 per cent of students use journals for finding related information on their subjects and 49.1 per cent use journals for their research respectively. Only 25.4 per cent of students use journals to update their knowledge while very few (1.7%) use to publish articles. The results reveal the real scenario because undergraduates are hardly published their own work. They might be using journals to complete day to day assignments and presentations.

Table No. 04 Purpose of using journals

Faculty	Research		Publishing Articles		Update information		Finding related information		Assignments & presentations	
	N	%	n	%	n	%	n	%	n	%
Arts	38	46.9	2	2.5	22	27.2	47	58.0	71	87.6
Education	14	56.0	-	-	3	12.0	10	40.0	17	68.0
Management	31	49.2	1	1.6	18	28.6	27	42.8	50	79.4
Total	83	49.1	3	1.7	43	25.4	84	49.7	138	81.6

Features of print journals that appeal users

Table No. 05 Features of print journals that appeal users

Faculty	Easy to use		Original source		Authenticity		Timeliness		Frequency of publishing	
	n	%	n	%	n	%	n	%	n	%
Arts	31	38.3	35	43.2	21	25.9	-	-	-	-
Education	11	44.0	12	48.0	2	8.0	-	-	-	-
Management	17	26.9	21	33.3	5	7.9	-	-	-	-
Total	59	34.9	68	40.2	28	16.5	-	-	-	-

Print journals are still attracting users due to features such as ease of use, original source and authenticity. As shown in table 5, 40.2 per cent students like print journals since they are original in source followed by 34.9 per cent students happy to use print journals due to ease of use. No user likes the features timeliness and frequency of publishing of print journals.

Features of e-journals that appeal users

The users like features such as easily searchable and speed in e-journals compared to features like link to other databases and multiuser. Table 6 reveals that 52.7% users like the feature easily searchable and 48.5% like the speed of e-journals. No one identifies publishing time as a preferred feature.

Table No. 06 Features of e-journals that appeal users

Faculty	Speed		Easily searchable		Link to other databases		Multiuser		Less time in publishing	
	n	%	n	%	n	%	n	%	n	%
Arts	25	30.9	36	44.4	11	13.6	21	25.9	-	
Education	10	40.0	12	48.0	4	16.0	3	12.0	-	
Management	47	74.6	41	65.1	16	25.3	21	33.3	-	
Total	82	48.5	89	52.7	31	18.3	45	26.6	-	

Features of print journals that users dislike

Users were also asked about features that they dislike in print journals and majority (65.1%) stated that it is difficult in access (Table 7). The main reason for this result may be because they have to come to the library in order to access to the print journals. Outdated information and lack of context also stated as dislike features in related with print journals. According to the results 27.2% stated that they dislike the feature of delay in publication and 20.1% stated that a print journal can be used by a single user at a time hence it is a disadvantage.

Table No. 07 Features of print journals that users dislike

Faculty	Outdated information		Lack of context		Delay in publication		Single user		Difficult to access	
	n	%	n	%	n	%	n	%	n	%
Arts	16	19.7	23	28.4	15	18.5	17	20.9	43	53.1
Education	11	44.0	9	36.0	-	-	-	-	21	84.0
Management	40	63.5	32	50.7	31	49.2	17	26.9	47	74.6
Total	67	39.6	64	37.9	46	27.2	34	20.1	110	65.1

Features of e-journals that users dislike

Though e-journals are considered to be with all types of user friendly features, students still have dislikes on e-journals also. According to the table 8 insufficient workstations (55.6%) is the main dislike feature followed by difficult in reading on the computer screen (45.6%). Low network capacity and authenticity are also identified as dislike features when using e-journals.

Table No. 08 Features of e-journals that users dislike

Faculty	Difficult in reading on the screen		Network capacity		Authenticity		Insufficient workstations		Copyright issue	
	n	%	n	%	n	%	n	%	n	%
Arts	31	38.3	27	33.3	9	11.1	42	51.8	-	-
Education	9	36.0	5	20.0	4	16.0	17	68.0	1	4.0
Management	37	58.7	21	33.3	13	20.6	35	55.5	2	3.0
Total	77	45.6	53	31.4	26	15.4	94	55.6	3	1.7

Preferences of e-journals over print journals

An attempt was made to determine the format of journals that users preferred to use, such as print only, electronic only or both. Results reveals that 58.6% prefer to use both formats while 21.3% prefer print only and 20.1 prefer e-only. It can be discerned that students are equally interested in using print and e-journals. It is also important to note that students of the Faculties of Arts and Education prefer to use print format compared to electronic where students of the Faculty of Management prefer electronic format than print (Table No. 09).

Table No. 09 Preferences of e-journals over print journals

Faculty	e-journals only		Printed journals only		Both equally	
	n	%	n	%	n	%
Arts	9	11.1	18	22.2	54	66.7
Education	3	12.0	6	24.0	16	64.0
Management	22	34.9	12	19.0	29	46.1
Total	34	20.1	36	21.3	99	58.6

5.10. Problems encountered in using print and e-journals

Students were asked to give their views on problems and difficulties they face when using print and e-journals. The common view and the biggest problem in using print journals is difficult in locating relevant articles. They have to go through several journals in order to find a relevant article. Majority were stated that they have to spend quite a lot of time in searching articles in print journals. Some of the students were not happy about the organization of print journals. Language problem and less number of print journals are also identified as problems in relating to use of print journals.

One of the biggest difficulties in using e-journals is language problem. According to students, English language is a barrier to use e-journals. Students also face problems in using e-journals due to lack of knowledge in searching and browsing strategies. Some students stated that they are not comfortable in searching information and navigation through e-journal databases. According to the students availability of e-journals for certain subjects such as Education, Geography, International Relations, Languages etc. are not enough and available e-resources do not match with the users information needs.

Conclusions and Recommendations

The Main Library of the University of Colombo provides access to print and e-journals to the undergraduates of three faculties; Arts, Education and Management. Majority of undergraduates use either print or electronic journals or both. It is important to notice that Arts and Education students are more preferred to use print journals while Management students are more preferred on e-journals.

Most of the undergraduates use print and e-journals monthly and considerable amount of users read e-journals weekly. These scholarly journals are used for variety of purposes such as completion of assignments and presentations, finding related information for their studies and research purposes.

Students identified 'original source' and 'ease of use' as the most appealing features of print journals and 'difficult in access', 'outdated information', 'lack of context' as features they dislike in print journals. The most appealing features of e-journals are 'easily searchable' and speed. Majority of users do not like the features such as 'insufficient workstations' and 'difficult in reading on the computer screen' in regarding with e-journals.

The respondents have equal preference to use both type of journals that is print and electronic for their studies. However, preference for print and e journals varies among the

faculties. The majority of Arts students preferred to have print while Management students preferred to have e-journals. According to users incomplete indexing, poor organization and lack of bibliographic tools in locating articles are the main problems in using print journals. Language problem, insufficient content, lack of knowledge in searching and browsing are among the problems in relating to use of e-journals.

Following recommendations can be made in regarding with the collection development of the library and to overcome the problems in relation with the use of print and e-journals among undergraduates.

The Main Library should continue in subscribing both formats of journals for the use of undergraduates. Since the annual periodical allocation is inadequate to increase the number of print subscriptions, limited number of print journals covering all the departments of a faculty will be continually subscribe every year.

Stay as a member in the National Digital Library Consortium under UGC of Sri Lanka in order to get more e-journals where an individual institution could not get.

Since most of the students are more familiar with their own language and English language is a barrier to them it is important to have more and more local journals in the collection.

Though there is an article searching facility in the library catalogue, the database is not complete. Therefore action should be taken to update the article indexing and abstract uploading. Displaying content pagers of subscribed print journals on the library web page should be continuing as a promoting service.

More and more training and awareness programs should be organized with the collaboration of the faculties in order to improve student's information literacy skills.

Since accessibility and internet connectivity play a significant role in e-journals, the university authority should consider improving the university network with more bandwidth or wireless connections hence ensure an uninterrupted internet facility.

Through the introduction of strategic planning, policies and negotiation skills, the library should develop a better relationship with publishers and suppliers thereby handling the proper acquisition, renewing, preserving and dissemination of journals.

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