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AWARENESS OF ELECTRONIC RESOURCES: THE CASE OF UNIVERSITY LIBRARIES OF BANGLADESH

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ABSTRACT

Electronic resources are converting libraries into access points. These resources are gaining popularity because of their useful nature. Considering the value of these resources, libraries are acting accordingly and spending money on increasing electronic resources. However, these paid-for resources are invisible items; stakeholders should know of the presence of these resources. Thus, a sample survey was conducted among selected universities in Bangladesh to understand the awareness thereof. From 11 universities, 257 participants responded to two questions. All participating universities held subscriptions to electronic resources. Most respondents (84.9%) were aware of the electronic resources subscribed to or procured by their university libraries. However, less than a third of the respondents knew about Research4Life. This study did not investigate the causes of awareness or the lack thereof; therefore, further research is needed to ascertain the causes.

Keywords: Electronic Resources, Consortia, Awareness, Libraries, Universities, Bangladesh

INTRODUCTION

Libraries have been acquiring electronic resources since the 1990s. These electronic resources are gradually replacing print materials in libraries worldwide, and Bangladesh is not far behind in this trend. Academic libraries, particularly universities and leading research libraries in Bangladesh, have already introduced electronic resources into their regular services. In the beginning, i.e., in the 1990s, libraries started to access electronic resources through the Internet and subscriptions to their print journals. Within a decade, the providers developed several models of accessing electronic resources.

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Especially, a model, i.e., subscription to bundle electronic resources, attracted libraries. Because, in this model, per title cost is significantly low. Even then, subscriptions to the bundles were not within the purchase limit of the many libraries of the developing countries. Considering the budget constraints of the developing countries, several United Nations (UN) agencies have taken several initiatives. At the beginning of the millennium, World Health Organisation (WHO) adopted an initiative for supporting research, especially in biomedical and related areas, in developing countries (HINARI, 2014). This allows developing countries to have free access to a considerable number of peer-reviewed publications. Bangladesh is one of the beneficiary countries, and this provision helps libraries of this country access quite a good number of electronic resources. In 2002, WHO launched its program, i.e., the Health Inter-Network Access to Research Initiative (HINARI), which is primarily devoted to resources related to the health sciences (HINARI, 2018). Gradually, HINARI was followed by further initiatives from other organizations of UN. The Food and Agriculture Organisation created Access to Global Online Research in Agriculture (AGORA) in 2003 (AGORA, 2018); the United Nations Environment Programme created Online Access to Research on Environment (OARE) in 2006 (Partnerships for the SDGs, 2018) and the World Intellectual Property Organisation (WIPO) created Access to Research for Development and Innovation (ARDI) in 2009 (WIPO, n.d). All the resources above are currently available under one umbrella entity known as Research4Life (R4L). The number '4' indicates the four databases: HINARI, AGORA, OARE, and ARDI. Recently (6 March 2018), an additional database on legal issues was launched, i.e., Global Online Access to Legal Information (GOALI), which is managed by the International Labour Organisation (Research4Life, 2018). It is also accessible through R4L. As a developing country, Bangladesh enjoyed full and free access to a huge number of electronic resources through all the databases of R4L. Additionally, some libraries of Bangladesh began taking paid subscriptions to databases such as JSTOR and Emerald at the beginning of the current millennium. In the middle of the first decade of this millennium, a consortium was established under the leadership of the Bangladesh Academy of Sciences. At the beginning of the 2010s, another consortium was launched under the Higher Education Quality Enhancement Project (HEQEP) of Bangladesh University Grants Commission with the financial support of the World Bank. However, the extent to which library users in Bangladesh are aware of these invisible resources, i.e., ones that occupy no shelf space, needs to be understood for future planning. This paper aims to present the level of awareness regarding electronic resources among the users of university libraries in Bangladesh.

OBJECTIVE OF THE STUDY

The author conducted a study on the institutional repositories of university libraries in Bangladesh. To understand the extent of library resources, librarians were asked about the availability of electronic resources. In addition, users were requested to respond to two questions related to electronic resources. Librarians often face questions from authorities concerning the usage of electronic resources and users' awareness of them. The latter is the single most important issue in making electronic resources useful because they are invisible. Since this issue of awareness was reflected in these two questions, the paper focused on bringing it to the attention of others, especially library practitioners in Bangladesh and the library authorities therein. The recent initiative of the Bangladesh University Grants Commission (UGC) opens an opportunity, particularly for universities, to obtain access to a good number of publishers' electronic resources. The purpose of collecting data on electronic resources was to identify the relationship between the resources, including the awareness of them among users and the position of institutional repositories. However, this paper did not consider institutional repositories; it focused on users' awareness of electronic resources. Library heads' responses to electronic resources were also presented to ensure the reliability of users' responses. It is assumed that the results regarding awareness will motivate other libraries to add more electronic resources.

SCOPE OF THE STUDY

The term 'electronic resources' denotes soft learning resources that are procured, subscribed to, or registered by the libraries to support the study and research of their clients or users. Therefore, the term is used throughout this paper for learning resources, including databases of books, journals, reports, documents, etc., in electronic form.

LITERATURE REVIEW

Many studies have discussed users' awareness of libraries' electronic resources; many produced substantially positive findings, whereas others have indicated the unawareness of the users. Unfortunately, there are considerably few works concerning users' awareness of the libraries' electronic resources in Bangladesh. Searching Google Scholar, ProQuest, Emerald, and EbscoHost, the author found only one document on this issue of Bangladesh, which was

authored by Ahmed (2013). He surveyed eight public universities of Bangladesh and found that while most of the faculty members were aware of the electronic resources, they reported that resources were inadequate for their needs. Ahmed's study did not include private universities, although they pioneered the introduction of subscribed electronic databases in Bangladesh. He mainly investigated the satisfaction of the faculty members in various public universities and their need for electronic resources and attempted to establish a correlation between the opinions of male and female faculty members and their academic ranks. He finally analyzed the pattern of subscribed electronic resources to determine the existing constraints in accessing required resources.

Several studies were found on the awareness of electronic resources, either directly or as a part of other issues. These studies came from various parts of the world.

Africa

Kwadzo (2015) found that over 90% of the students of the University of Ghana were aware of the electronic databases of their library and that most of them had learned about the databases from their lecturers.

Aina (2014) investigated the awareness of electronic resources at Babcock University Business School and found that some electronic databases had good use, but many databases were underused.

Egberongbe (2011) also found substantially high levels of awareness and usage of electronic resources among the lecturers and research scholars of the University of Lagos, Nigeria. Over 80% of her respondents were aware of such resources, but most of them used e-journals. The use of e-books comprised a third of e-journal usage: only 20% of researchers and 28% of lecturers used e-books.

Okello-Obura (2010) emphasized addressing problems that hinder access to library e-resources at all levels to ensure a meaningful collection building of e-resources in academic libraries after assessing e-resources at Makerere University, Uganda.

Dadzie (2005) conducted a survey at Ashesi University College of Ghana, a university that could access around 7,000 online journal titles through the services of the Programme for the Enhancement of Research Information (PERI) which is a program of the International Network for the Availability of

Scientific Publications (INASP). The university could access 10 databases, including Academic Search Premier and Business Source Premier (EBSCOhost); Academic ASAP, Health and Wellness (GALE); Blackwell Synergy; Emerald and Oxford University Press. These scholarly databases suffered from considerably poor usage. Dadzie found that only 5% of library users used them regularly, 14% used them often, and 58% rarely or never used them. The three most popular databases, she found, were Emerald (18%), Academic Search Premier (14%), and Blackwell Synergy (12%).

Asia

Anaraki and Babalhavaeji (2013) investigated the awareness of medical students from three universities (Tehran University of Medical Science, Iran University of Medical Science, and Shahid Beheshti Medical University) of the Integrated Digital Library of Iran (IDLI). They found that the use of IDLI was not satisfactory and was notably low. The authors identified 'the lack of awareness about the IDL' as the main problem and cause of such low usage.

Nisha and Ali (2012) collected data from the Indian Institute of Technology (IIT) Delhi and Delhi University to understand their library users' awareness of e-journals. Users who participated in their survey were aware of e-journals; however, the users at IIT Delhi were more aware compared to Delhi University users. Around 40% of participants from Delhi University were unaware of e-journals. The authors' analysis suggested that e-journal awareness needed to be enhanced at Delhi University.

Swain and Panda (2009) tried to elicit the opinions of the librarians of business schools in Odisha, a state in India, on the use of electronic resources. The surveyed librarians opined that considerably few users searched databases such as EBSCO (11.36%), Emerald (11.36%), and ProQuest (4.54%). One reason identified by Swain and Panda for the low usage of such popular databases was a lack of subscriptions to them in their libraries.

Asemi and Riyahiniya (2007) found a better result. In their investigation of Isfahan University of Medical Sciences students, around 70% of the respondents were aware of electronic resources.

Shuling (2007) investigated the electronic resources of Shaanxi University of Science and Technology and found that many teachers at the university were unaware of e-books; as a result, the teachers were not making use of them.

Europe

Rowlands, Nicholas, Jamali and Huntington (2007) surveyed all the staff members and students of University College London, a major research-oriented academic institution in the UK, in 2006. He found that the students were more aware of e-books than the academic and research staff members. Users from the Faculty of Engineering Sciences used e-books the most (41%), and the least usage (20%) was by the staff members and students of the Faculty of Mathematical and Physical Sciences.

Togia and Tsigilis (2010) revealed that the students of the Aristotle University of Thessaloniki mostly (74.1%) did not use the electronic resources that their university subscribed to because of unawareness. Although the respondents were affiliated with four departments of Education, namely, the Department of Physical Education, Department of Early Childhood Education, Department of Philosophy and Pedagogy and Department of Primary Education, 43.4% of them were not aware of Education Resources Information Centre or ERIC, the database most relevant to their subject.

North America

Waldman (2003) surveyed a class of students taking 'Introduction to Psychology at Baruch College, the City University of New York, in the fall semester of 2001. He revealed that only 24% of this class, which comprised around 500 students, had experience in using electronic resources.

Weingart and Anderson (2000) reported a survey on the faculty members of Utah State University (USU) of the USA. The library of USU tried to understand the awareness of their 55 databases. The response rate was 49.8%. Among the respondents, i.e., the faculty members, less than 50% recommended at least one database to their students. The authors found that three resources were not recommended to students: American Business Disc, OnPoint, and Trademarks Registered. Over 50% of the respondents were not even aware of prominent databases such as ABI/Inform and EBSCOhost. USU had four gateways to access electronic resources: Library Gateway, CD-ROM network, World Wide Web subscriptions, and stand-alone CDs. The authors suggested developing a one-stop service instead of the four gateways to make databases popular.

DATA COLLECTION METHOD

Data were collected from the library users of 11 universities, six of the public and five private, through a questionnaire in the second half of 2016. One more private university was selected for the survey to balance the number of public and private universities, but they did not return the questionnaire. Representative library personnel, usually the head of the library, selected participants from their library users randomly. In total, 310 copies of the questionnaire were distributed to the users of the selected 12 universities, and each head of the library received a further copy of the questionnaire. Initially, 25 copies of the questionnaire were given to each university for distribution to their respective users. Later, some universities received more copies of the questionnaire. Users were asked only two questions on electronic library resources: one on R4L and another on subscribed electronic resources. The library heads were also asked about the availability of those resources in their libraries.

FINDINGS

Finally, 11 universities returned the questionnaire. In total, there were 257 respondents who, among library users, indicated their affiliation to broad disciplines. The distribution of user respondents between public and private universities were almost equal, i.e., around 51% and 49%, respectively (Figure 1).

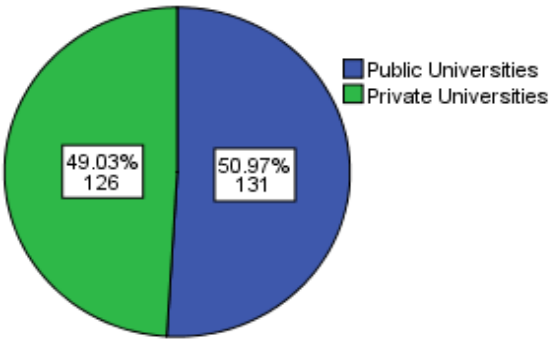


Figure 1: Respondents Ratio

Eleven more questionnaires, which were designed for library heads, were also received from the libraries. Before presenting the users' awareness, the position of the libraries on electronic resources is discussed below for the convenience of the readers.

Position of Libraries on Electronic Resources

Except for one, all library heads reported that they were using R4L resources. At the time of conducting this survey, GOALI had not been launched. All four other resources were registered for use by six universities. Two universities were registered for three databases, and one university had registration for one. HINARI was the most popular database among the R4L resources. *Table I* shows the position of the four databases of R4L in the universities. Note that Total N in *Table I* indicates 11 libraries.

Table I: *Research4Life Resources Registered for Use in University Libraries*

	HINARI	AGORA	OARE	ARDI
Count	9	8	8	7
Missing	2	3	3	4
Total N %	81.8%	72.7%	72.7%	63.6%

Ten libraries were connected with the two local consortia, namely, UGC Digital Library and Bangladesh-INASP-PERI (renamed as LiCOB, which stands for Library Consortium of Bangladesh). Only one library was not a member of LiCOB.

Table II: *Libraries Connected with Local Consortia*

	Yes		No		Total	
	Count	Total N %	Count	Total N %	Count	Total N %
Subscription to electronic resources provided by the UGC Digital Library	11	100.0%	0	0.0%	11	100.0%
Member of Bangladesh-INASP-PERI consortium/LiCoB	10	90.9%	1	9.1%	11	100.0%

Users' Awareness of Electronic Resources

Users' awareness is discussed through two dimensions: one based on their study or work areas and another according to their age group.

Study/Work Area of the Respondents and Awareness

Responses were from a variety of disciplines. The most responses (63) were from the Business Studies (BS) discipline. Responses from Engineering and Technology (ET), Arts and Humanities (AH), and Social Sciences (SS) were also numerous, and their positions were second, third, and fourth, respectively. The least number of responses were from the Health and Medicine (HM) discipline. Positions of the disciplines in private universities were almost similar to the total, but the position of BS in the public university category came after ET (which had the most responses from public universities) and AH. Twelve respondents of the 'Others' category did not specify their subject areas.

Table III: *Distribution of Respondents According to Disciplines*

		Types of Universities					
		Public		Private		Total	
		Count	Total N %	Count	Total N %	Count	Total N %
Respondents belong to	Business Studies	20	7.7%	43	16.6%	63	24.3%
	Engineering and Technology	26	10.0%	30	11.6%	56	21.6%
	Arts/Humanities	23	8.9%	17	6.6%	40	15.4%
	Social Science	17	6.6%	10	3.9%	27	10.4%
	Biological Science	14	5.4%	6	2.3%	20	7.7%
	Agriculture	15	5.8%	0	0.0%	15	5.8%
	Others	4	1.5%	8	3.1%	12	4.6%
	Science	8	3.1%	4	1.5%	12	4.6%
	Information Technology	3	1.2%	4	1.5%	7	2.7%
	Health and Medicine	1	0.4%	4	1.5%	5	1.9%
	Total	131	51.0%	126	49.0%	257	100.0%

The questions 'Do you use literature from R4L' and 'Does your university library subscribe to e-journals?' received 244 and 245 responses, respectively. It is considerably exciting that most of the respondents (84.9%) were aware of their subscribed electronic journals. However, not even one-third of the

respondents knew about R4L despite their respective librarians having assured the author that they were registered for several R4L services.

Most of the respondents (85%) from BS were not aware of R4L. Over 80% of respondents from the ET and Agriculture groups were also not aware of this service. Moreover, 75% of Science, 71.4% of Information Technology, and 65% of Biological Science respondents were not acquainted with R4L services. By percentage, the best-informed group was from HM. *Table IV* shows the discipline-wise responses to both the questions.

Table IV: *Awareness of Electronic Resources of Libraries According to Respondents' Field of Work/Study*

		Faculty/School of the Respondents										
		AH Count	SS Count	BS Count	ET Count	HM Count	IT Count	Sc Count	BSc Count	Ag Count	Ot Count	Total Count
Do you use literature from Research4Life?	Yes	23	16	9	9	4	2	3	7	3	4	80
	No	16	9	51	42	1	5	9	13	12	6	164
	Total	39	25	60	51	5	7	12	20	15	10	244
Does your university library subscribe to e-journals?	Yes	40	26	51	44	4	6	10	15	13	9	218
	No	0	1	9	7	0	1	2	5	1	1	27
	Total	40	27	60	51	4	7	12	20	14	10	245

AH: Arts and Humanities; SS: Social Sciences; BS: Business Studies; ET: Engineering and Technology; HM: Health and Medicine; IT: Information Technology; Sc: Science; BSc: Biological Science; Ag: Agriculture; Ot: Others.

Awareness Based on Age Group

The results also indicate that the seniors, namely, those aged 50 or older, were more aware of the electronic resources than younger age groups. However, the number of responses among the seniors was poor. A sharp focus on the effect of age distribution on the awareness of libraries' electronic resources is presented below in *Tables V* and *VI*. Table *V* shows the distribution of the respondents by age. There were only eight respondents over the age of 50, i.e., 3.1% of the total respondents.

Table V: *Distribution of Respondents According to Age Group*

		Type of University					
		Public University		Private University		Total	
		Count	Column N %	Count	Column N %	Count	Column N %
Age Group	Under 30	75	57.3%	66	52.4%	141	54.9%
	30–39	34	26.0%	35	27.8%	69	26.8%
	40–49	21	16.0%	18	14.3%	39	15.2%
	50–59	1	0.8%	5	4.0%	6	2.3%
	60 and over	0	0.0%	2	1.6%	2	0.8%
	Missing	0	0.0%	0	0.0%	0	0.0%
	Total	131	100.0%	126	100.0%	257	100.0%

All of the seniors were aware of their university libraries' subscribed electronic resources (*Table VI*). Although not all of them were aware of R4L resources, they were still comparatively more aware than other groups, i.e., those aged below 50. *Table VI* helps us generalize that the more senior an individual is, the more aware they are. Such trend is possibly expected in any organization, and it was found in the universities surveyed herein, at least with respect to the issue of electronic resources. Furthermore, younger users are typically assumed to prefer electronic resources more than older users, but the results did not reflect this.

Table VI: *Awareness on Electronic Resources of Libraries According to Respondents' Age Group*

		Age Group					
		Under 30	30–39	40–49	50–59	60 and above	Total
		Column N %	Column N %	Column N %	Column N %	Column N %	Column N %
Do you use literature from Research4Life?	Yes	20.0%	35.8%	62.2%	66.7%	50.0%	32.2%
	No	80.0%	64.2%	37.8%	33.3%	50.0%	67.8%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Does your university library subscribe to e-journals?	Yes	81.5%	98.6%	94.4%	100.0%	100.0%	88.9%
	No	18.5%	1.4%	5.6%	0.0%	0.0%	11.1%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

CONCLUSION

Electronic information sources are important library resources. E-journals and e-books are facts of life in today's world. They represent a noteworthy and growing part of the academic library's services. Access to resources is now considered more important than building print collections; however, access in perpetuity is also a part of collection building, as it entails that electronic materials are purchased forever. E-resources allow libraries to obtain the benefits of many resources at an affordable cost and provide prompt service with those resources without any time wastage. However, these resources are invisible; thus, users' awareness is the most important factor in making them usable and maximizing their use. Electronic resources require promotion, and librarians usually develop their own mechanisms to promote their resources. As this research has shown, the users of university libraries in Bangladesh are mostly aware of subscribed resources; however, two-thirds of these users were unaware of R4L resources, and these users were mostly young. This indicates that R4L resources were not marketed sufficiently by the libraries. Many other factors may also influence the usage of electronic resources, such as a lack of appropriate and adequate resources, the unavailability of remote access, slow internet speed, inadequate knowledge of databases, short library timing, insufficient participation by faculty members in making students aware, a lack of information and communications technology infrastructure and an absence of appropriate marketing techniques. These factors should be studied further to make better use of library resources.

REFERENCES

AGORA. (2018). Background. Retrieved March 22, 2019, from http://www.fao.org/agora/background/en/

Ahmed, S. M. Z. (2013). Use of electronic resources by the faculty members in diverse public universities in Bangladesh. The Electronic Library, 31(3), 290-312.

Aina, R. F. (2014). Awareness, accessibility and use of electronic databases among academic staff of Babcock University Business School. Kuwait Chapter of the Arabian Journal of Business and Management Review, 3(6), 40-47.

Anaraki, L. N., & Babalhavaeji, F. (2013). Investigating the awareness and ability of medical students in using electronic resources of the integrated digital library portal of Iran : a comparative study. The Electronic Library, 31(1), 70-83.

Asemi, A., & Riyahiniya, N. (2007). Awareness and use of digital resources in the libraries of Isfahan University of Medical Sciences, Iran. The Electronic Library, 25(3), 316-327.

Dadzie, P. S. (2005). Electronic resources : access and usage at Ashesi University College. Campus-Wide Information Systems, 22(5), 290-297.

Deng, H. (2010). Emerging patterns and trends in utilizing electronic resources in a higher education environment : An empirical analysis. New Library World, 111(3/4), 87-103.

Egberongbe, H. S. (2011). The use and impact of electronic resources at the University of Lagos. Library Philosophy and Practice (e-journal), Paper 472. Retrieved from http://digitalcommons.unl.edu/libphilprac/472

HINARI. (2014). HINARI impact survey. Retrieved March 22, 2019, from https://www.research4life.org/news/hinari-impact-survey/

HINARI. (2018). About HINARI. Retrieved March 22, 2019, from http://www.who.int/hinari/about/en/

Keng, K. A., Kwon, J., & Wirtz, J. (2003). Segmentation of library visitors in Singapore : Learning and reading related lifestyles. [Electronic version]. Library Management, 24(1/2), 20-33.

Kwadzo Mrs, G. (2015). Awareness and Usage of Electronic Databases by Geography and Resource Development Information Studies graduate dtudents in the University Of GhanaLibrary Philosophy and Practice. Retrieved from ugspace.ug.edu.gh/handle/123456789/6935

Nisha, F., & Ali, P. M. N. (2012). Use of e-journals by IIT Delhi and Delhi University library users. [Electronic version]. International Journal of Digital Library Services, *2*(3), 23-42.

Okello-Obura, C. (2010). Assessment of the problems LIS postgraduate students face in accessing e-resources in Makerere University, Uganda. [Electronic version]. Collection Building, 29(3), 98-105.

Partnerships for the SDGs. (2018). Online Access to Research in the Environment (OARE). Retrieved March 22, 2019, from https://sustainabledevelopment.un.org/partnership/?p=1591

Research4Life. (2018). Learn what is and how you can access Research4Life programme - GOALI. Retrieved May 7, 2019, from http://www.research4life.org/learn-can-access-new-research4life-programme-goali/

Rowlands, I., Nicholas, D., Jamali, H. R., & Huntington, P. (2007). What do faculty and students really think about e-books? [Electronic version]. Aslib Proceedings, 59(6), 489-511.

Shuling, W. (2007). Investigation and analysis of current use of electronic resources in university libraries. [Electronic version]. Library Management, 28 (1/2), 72-88.

Swain, D. K., & Panda, K. C. (2009). Use of electronic resources in business school libraries of an Indian state: A study of librarians' opinion. The Electronic Library, 27(1), 74-85.

Togia, A., & Tsigilis, N. (2010). Awareness and use of electronic information resources by education graduate students: Preliminary results from the Aristotle University of Thessaloniki. In A. Katsirikou, (ed). Qualitative And Quantitative Methods In Libraries : Theory and Applications, (pp. 464-472). Singapore: World Scientific.

Waldman, M. (2003). Freshmen's use of library electronic resources and self-efficacy. [Electronic version]. Information Research, 8(2), 1-26.

Weingart, S. J., & Anderson, J. A. (2000). When questions are answers: using a survey to achieve faculty awareness of the library's electronic resources. [Electronic version]. College & Research Libraries, 61(2), 127-134.

WIPO. (n.d). About ARDI. Retrieved March 27, 2019, from http://www.wipo.int/ardi/en/about.html.