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## Access and Use of Electronic Journals by the Faculty of Christian Service University College

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### Abstract

The introduction of e-journals is on the rise, but its usage in most Universities in Ghana lags behind. This study assessed the awareness, accessibility and use of e-journals by the faculty of Christian Service University College, Kumasi. Structured questionnaires were sent to senior staff (97), out of which 92 were returned and found useful for descriptive analysis. The results indicated that levels of awareness and use of e-journals were relatively high (56.5%) while accessibility (48.9) was somewhat low. Factors such as slow network, regular power-cuts and unstable network were found to hinder access to and use of e-journals. The implication of the study for management is the need to translate awareness into accessibility.

**Keywords:** electronic journals, electronic resources, awareness, accessibility, Christian Service University College.

### Introduction

The need for academic libraries in using electronic resources (e-resources) to meet the objective of the parent institution is a necessity (Omosekejimi et al., 2015). Electronic information resources are invaluable tools for study, learning and research (Togia & Tsigilis, 2009). The survival of any academic library in the information age depends on adopting information and communication technologies (ICTs), irrespective of its collection size (Omosekejimi et al., 2015). Electronic resources began with the development of computers in the 1950s which facilitated information generation and dissemination. E-resources are regularly updated, and they help users to access current services on time (Adeniji et al., 2015). Millar (2009) defined e-resources as “information resources that are created, generated, sent,

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communicated, received, or stored by electronic means". They include electronic journals, electronic databases, electronic books, electronic theses, electronic data archives, electronic manuscripts, electronic maps, electronic magazines, electronic newspaper, electronic research reports, electronic bibliographic database, world wide web (www), search engines, and others. However, Bakar and Araffin (2013) have indicated that electronic journals (e-journals) are the most commonly used by lecturers and researchers. E-journals are publications, issued in successive order, that are available in digital format (Boakye et al., 2015). The access to electronic journals in academic libraries by academics is rapidly growing as a result of the massive adoption of ICTs. Electronic journals help libraries in their quest to support the teaching and learning process at the university level and in offering quality services to library patrons.

As a developing field, e-journals have facilitated research requirements of academic staff by fulfilling their day to day, up-to-date and relevant information needs (Kumar et al., 2011). The two major types of e-journals are the online and web-based journals. The online ones are digitised print journals made available on the internet while the web-based e-journals are produced, processed, edited, stored, reviewed and distributed to subscribers electronically without print versions (Boakye, 2015). Electronic journals provide searching capabilities, timely access, links to related items, reference linking and so on. Some electronic journals are freely accessible while others incur subscription costs (Hassan, 2010). The subscribers who pay are allowed to browse full-text of the articles with downloadable capability. E-journals are available from some sites which offer freely only the table of contents (Kumar & Reddy, 2014). In the context of this study, academic staff refers to the teaching staff or faculty who need and use e-journals for academic work.

E-journals are useful tools for research, study and learning (Togia & Tsigilis, 2009). However, their acceptance and diffusion in University libraries in Ghana are low compared to developed information societies (Okite-Amughor et al., 2014). Universities invest in e-journals so that faculty members would have access to databases of publishers and vendors, but the e-journals may not be used on the same scale for which they are acquired (Weiner, 2003). This study determined the awareness, access and use of electronic journals by the faculty members of Christian Service University College. It sought to provide a contextual understanding of the introduction

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of e-learning resources and its usage by faculty, and its implications for management implementation.

## **Conceptual Background**

### **Electronic Journals**

The past decades have witnessed latest advances in computer applications with radical changes in information generation, storage, organisation, access, retrieval and use (Kumar & Reddy, 2014). As a result, scholarly publications have changed from print format to electronic format. Therefore, contemporary libraries provide access to many resources which include full-text articles and complete journals (Boakye et al., 2015). A journal is the principal medium of scholarly communication. However, an electronic journal is one that is produced, edited, sent and used electronically with the help of computers and other communication technologies. Normally, the contents of both print and electronic journals are original research. At the moment, libraries provide access to e-journals by paying money. Accessibility of e-journals varies from sites, which deliver table of contents only, to those that provide the full text of every issue (Kumar & Reddy, 2014). The first e-journal to be circulated was Electronics Letters online by IEEE (Institution of Electrical Engineers) (Pettenati, 2001). Thanuskodi (2011) stated that due to the prospective benefits provided by e-journals, many academic libraries have accepted e-journals and stopped subscription to print format journals. At the moment, access and use of e-journals are attracting much attention among faculty members all over the world compared to print format journals. For instance, e-journals have become necessary tools for research and learning because they contain good quality and relevant scientific information to scholars. E-journals also provide access to timely and current information to help faculty members update their lecture notes and avoid duplication of efforts (Madhusudhan, 2010).

In University libraries in Ghana, lack of finance and other resources pose challenges for academics' access to information. The International Federation of Library Associations and Institutions (IFLA), and the Danish International Development Agency (DANIDA) jointly supported a pilot project on e-resources in Ghana in the 1990s. The programme started with five (5) academic libraries, that is, University of Ghana, Accra, Kwame Nkrumah University of Science and Technology, Kumasi, University of Cape Coast,

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University for Development Studies, Tamale and Institute for Technological Information (INSTI). Through Programme for Enhancement of Research Information (PERI), DANIDA funded and provided access to about eight (8) online databases with CD-ROMs for some of the institutions. The support from DANIDA ended in 2004, and that brought about the establishment of the Consortium of Academic and Research Libraries in Ghana (CARLIGH) to sustain the use of electronic journals (Asamoah-Hassan, 2010).

### **Awareness of Electronic Journals**

Bentil (2011) stated that services which otherwise would not have been utilised could be patronised if users or the target group of people are aware of them. Malemia (2014) also posited that where awareness levels are high, and training is provided usage of e-journals is enhanced. Waldman (2003) asserts that informed library users know that libraries have resources that are more comprehensive and scholarly than most websites, as Libraries provide access to scholarly literature that, as a rule, is not freely available on the Web, or may not be online at all. The findings of a study conducted by Ansari (2010) revealed that most of the faculty members did not know much about the e-journals available at the University of Karachi. He concluded that lack of awareness was one of the reasons for the non-use of e-journals. When users are aware of e-resources, some of them see the advantages of using them. Asefe and Nosrat (2007), however, suggest that awareness does not necessarily guarantee the use of electronic resources. Awareness, therefore, is a factor for access and usage of e-journals, even though there are contrasting views in previous reports about its contributions.

### **Accessibility of Electronic Journals**

In the context of developing countries, Okello-Obura and Magara (2008) carried out a study on electronic information access and utilisation at the East African School of Library and Information Science, Makerere University, Uganda. They found that users gained many benefits from electronic resources such as gaining access to information and improved academic performance, as a result of access to quality information. Not only are computers and internet connection needed for effective access to e-journals but creating a user-friendly interface is also important (Uzuegbu et al., 2012). In their study on the development of effective electronic resources in Nigerian universities, Ani and co-workers (2008) argue that the interface of a

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computer database helps access and retrieval of information. Therefore, a URL link is an interface that can aid users to overcome the number of challenges in accessing online databases, passwords, username, and inputting error.

Due to access initiatives and partnerships between libraries and international organisations including International Network for the Availability of Scientific Publications (INASP), Electronic Information for Libraries (eIFL) and United Nations, academics across the continent have access to a range of high-quality peer-reviewed electronic journals which are useful for research, teaching and learning. Although connectivity is steadily beginning to improve, reliable high-speed connections are still not assured in all countries, and it is difficult to influence a change in attitude and behaviours on technology access and the uses to which it is put (Harle, 2010). Accessibility of e-journals is the surest way of boosting people's interest in patronising their usage.

### **Use of Electronic Journals**

Earlier studies conducted in the 1990s stated that e-journals were here to stay (Malemia, 2014). Harle (2010) posited that it is not enough to provide access to e-journals; libraries should also team up with other academic departments like the Information Technology (IT) department to influence the behaviour and attitude of users. Electronic resources are underused in Universities (Abdul & Ahmed, 2009; Anaraki & Bablhavaeji, 2013; Ansari, 2010; Dilek-Kayaoglu, 2008).

### **Problems with Access and Use of Electronic Resources**

Some studies have identified problems encountered by faculty members in accessing and using electronic journals which include lack of computers, limitations of connectivity, searching skills, unfriendly interfaces, lack of time and limited publicity (Chirra & Madhusudhan, 2009; Gathoni et al. 2011; Siddique & Ali, 2010). Considerable barriers to e-journal access and use include a lack of research culture and heavy teaching load, interconnectivity and intermittent power supply, (Harle, 2010; Hepworth & Duvigneau, 2012). Bandwidth and connectivity problems mean that real access and download of e-journal articles are also not always possible (Malemia, 2014; Musoke & Kinengyere, 2008).

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Kwafoa et al. (2014) reported lack of searching skills, slow internet speed and lack of awareness of e-resources as problems faced by faculty in their access and use of e-resources at the University of Cape Coast. Poor internet access implies that students and faculty are compelled to use private internet cafes in many cases (Willinsky, 2005). It is more convenient and effective for faculty to work outside the office environment because many hours of the day are spent on student and administrative matters with relatively little time for research. However, access to online journal databases tends to be restricted to the campuses of many Universities in Ghana, and this prevents faculty members from accessing them beyond the University.

## **Method**

The study was descriptive and questionnaires were administered to the faculty members of the Christian Service University College (CSUC) who constituted the population for the study. The study was conducted in 2015, and the total number of faculty members at CSUC was 97 and, therefore, generalisations are likely to reflect the population (Saunders, Lewis & Thornhill, 2009). Out of 97 questionnaires distributed to respondents, 92 were returned and found useful for analysis. This figure represents a response rate of 95%. Descriptive statistics such as frequency and percentage tables were used for the analysis and interpretation of data.

## **Results and discussion**

Majority of the respondents were aware of e-journals at the library as shown in Table 1. It is important that awareness of a service be created to promote the patronage of such a service for the targeted audience (Boakye, et al., 2015). Most respondents learnt to access e-journals by trial and error, and others through guidance from colleagues and library staff, as they had not been given any training on e-journals or were not sure of any such training whatsoever (Table 1). E-journal usage is important and is the means of justifying the resources invested, especially financing the acquisition and maintenance of e-journals, since library budgets keep on dwindling. Most faculty members used scholarly electronic journals provided by the library. Awareness of e-journals among faculty members of CSUC was high.

Table 1: Awareness, Access, Training and use of e-journals by faculty of CSUC

	<b>n=92</b>	<b>%</b>
<i>Awareness</i>		
Yes	52	56.5
No	40	43.5
Total	92	100
<i>Access of Electronic Journals by Respondents</i>		
Trial and error	45	48.9
Guidance from library staff	22	24.0
Guidance from colleagues	25	27.1
Total	92	100
<i>Frequency of training</i>		
Once a while	7	7.6
Not at all	62	67.4
Not sure	23	25.0
Total	92	100
<i>Usage of electronic journals</i>		
Yes	57	62.0
No	35	38.0
Total	92	100

Table 2: Problems in using E-journals

Limitations	n	%
Information overload	46	13.7
Lack of searching skills	34	10.1
Lack of time for searching	28	8.3
Inadequate networked computers	22	6.5
Power cuts	58	17.3
Non-availability of required information	22	6.5
Slow network	68	20.3
Unstable network	57	17.0

This finding concurred with that of Singh and Nagah (2014) who also found that respondents were relatively aware (54.0%) of the availability of e-journals in the library at IIT Ropar, India. Most faculty members used “trial and error” to access the journals, and this is a clear indication that training on access and use of e-journals was lacking. Singh and Nhung (2012) made a similar observation at Vietnam National University. The findings are similar to that reported by Merugu (2014), who indicated that the use of e-resources was not maximised because of inadequate training programmes.

### **Problems Associated with Accessing and Using Electronic Journals**

There are always problems with access and use of e-journals. The major problems encountered by faculty members of CSUC in using e-journals were the slow network, power cuts and unstable network (Table 2). The main problems hindering effective access and efficient use of e-journals were slow network, power cuts and unstable network. These have also been identified in previous studies (Nisha and Ali (2012), Sahu (2013), and Kwafoa et al., 2014). The current study, from the Ghanaian context, highlights and adds on to observations about technology, infrastructure needs and use of e-resources in developing economies. The report corroborates other studies in emerging economies such as India, Bangladesh and Iran (Ahmed, 2013; Ansari, 2010; Bakar & Ariffin, 2013; Sahu et al., 2013; Thanuskodi, 2011) (2013).



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The study has implications for management. There is the need to adopt measures to translate awareness into access and use of electronic journals available from the library to justify the amount of money invested in their acquisition. Towards this end, training of faculty members is a prerequisite

## Conclusion

There is awareness of access to e-journals at the CSUC library, but usage is low, and this is due to power and network instability and inadequate training of faculty.

## References

- Abdul, M. K., & Ahmad, N. (2009). Use of e-journals by research scholars at Aligarh Muslim University and Banaras Hindu University. *The Electronic Library*, 27(4), 708- 17.
- Adeniji, M., Babalola G., & Ajayi, S. (2015). Awareness and utilization of electronic resources by librarians of the Olabisi Onabanjo University Ogun State, Nigeria. *Information and Knowledge Management*, 5(2), 57-62.
- 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, *Electronic Library*, 31(1), 70 – 83.
- Ani, Okon E. & Ahiauzu, B. (2008). Towards effective development of electronic information resources in Nigerian University Libraries. *Library Management* 29(6/7): 504 -514.
- Ansari, M. N. (2010). Use of electronic resources among academics at the University of Karachi. *Library Philosophy and Practice*. (e-journal) Paper 385. Accessed on 14/11/15 from: <http://digitalcommons.unl.edu/libphilprac/385>
- Asamoah-Hassan, H. (2010). The Consortium of Academic and Research Libraries in Ghana (CARLIGH): The journey so far. Accessed on 12/12/14 from: [dspace.knust.edu.gh](http://dspace.knust.edu.gh).
- Asefe, A., & Nosrat, R. (2007). Awareness and use of digital resources in the libraries of Isfahan University of Medical Sciences, Iran. *The Electronic Library*, 25(3), 316-327.
- Bakar, A. B. A., & Ariffin, M. Y. M. (2013). The usage of e-journal amongst

- 
- lecturers at a public University in Malaysia. Accessed on 08/11/2015 from:  
<http://www.tojet.net/results.asp?volume=12&issue=2&year=2013>
- Bayugo, S. S., & Agbeko, K. S. (2007). Information seeking behaviour of health sciences faculty at the College of Health Sciences, University of Ghana. *Information Development*, 23(1), 63-70.
- Bentil, W. (2011). *The Use of Electronic Resources in Ghanaian Universities: a comparative study of the University of Cape Coast and the Central University College*. (Unpublished M.Phil thesis). Department of Information Studies, University of Ghana, Legon.
- Boakye, E. (2015). *Accessibility and utilization of scholarly electronic journals by the academic staff of Garden City University College, Kumasi and Christian Service University College, Kumasi*. (Unpublished M.Phil thesis). Department of Information Studies, University of Ghana, Legon.
- Boakye, E. Martin-Yeboah, E., & Fynn, K. P. (2015). Access and use of electronic journals by the academic staff of Garden City University College, Kumasi. A paper presented at a *Seminar and Annual General Meeting (AGM) of the Ghana Library Association (GLA)*, November 2015, La-Accra: Ghana International Trade Fair Centre.
- Chirra, R., & Madhusudhan, M. (2009). Use of electronic journals by doctoral research scholars of Goa University, India. *Library Hi Tech News*, 26(10), 12 – 15.
- Christian Service University College. (2013). Annual Report 2013. Retrieved 8/10/14 from: [www.csuc.edu.gh](http://www.csuc.edu.gh).
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches*, (2nd ed.). Sage Publications: Thousand Oaks, California.
- Harle, J. (2010) Growing knowledge: access to research in east and southern African universities. *ACU Spotlight*, No. 1. Accessed on 28/11/15 from:  
[http://www.acu.ac.uk/Arcadia\\_Growing\\_Knowledge.pdf](http://www.acu.ac.uk/Arcadia_Growing_Knowledge.pdf).
- Dilek-Kayaoglu, H. (2008). Use of electronic journals by faculty at Istanbul University, Turkey: The results of a survey. *Journal of Academic Librarianship*, 34, 239-247.
- Gathoni, N. et.al. (2011) Monitoring and evaluation of electronic resources in academic and research institutions in Kenya: A summary report. *INASP* [online]. Accessed on 28/11/15

- 
- from:<http://www.inasp.info/file/145da69d42e89201b2a1280c64ca0571/me-of-e-resourcesin-kenya.html>.
- Hassan, A. (2010). *Accessibility and utilization of scholarly electronic journals by members of the academic of Kwame Nkrumah University of Science and Technology*. (Unpublished M. A. Dissertation). Department of Information Studies, University of Ghana, Legon.
- Hepworth, M. & Duvigneau, S. (2012). *Building research capacity: Enabling critical thinking through information literacy in higher education in Africa*. Brighton: Institute of Development Studies.
- Islam, S., Alam, S., & Sultana, S. (2011). Access and usage of electronic journals in Dhaka University Library (DUL): An empirical study. *Journal of the Bangladesh Association of Young Researchers (JBAYR)*, 1( 2), 30-47.
- Khan, A. M., Zaidi, S. M., & Bharati, M. S. Z. (2009). Use of on-line databases by faculty members and research scholars of Jawaharlal Nehru University (JNU) and Jamia Millia Islamia (JMI), New Delhi (India): A survey. *The International Information and Library Review*, 41(1), 71-78.
- Kumar, M. A., & Reddy, V. P. (2014). Use of e-journals by research scholars in university libraries in Andhra Pradesh. *Library Philosophy and Practice (e- journal)*. Paper 1086. Retrieved on 13/03/15 from: <http://digitalcommons.unl.edu/libphilprac/1086>
- Kumar, M., Gauri, S., & Bimal, K. (2011). Usage of electronic resources available under UGCINFONET Digital Library Consortium by Assam University Library Users. Proceedings of 8th International CALIBER. Goa University: March 02-04.
- Kwafoa, P. N. Y., Imoro, O., & Afful-Arthur, P. (2014). Assessment of the use of electronic resources among administrators and faculty in the University of Cape Coast. *Library Philosophy and Practice (e-journal)*. Paper 1094. Accessed on 15/03/15 from: <http://digitalcommons.unl.edu/libphilprac/1094>
- Madhusudhan, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. *The Electronic Library*, 28(4), 492-506.
- Malemia, L. (2014). The use of electronic journal articles by academics at Mzuzu University, Malawi. *Library Philosophy and Practice (e-journal)*. Paper 1097. Retrieved on 02/03/15 from: <http://digitalcommons.unl.edu/libphilprac/1097>

- 
- Merugu, Ravi Kumar (2014). Electronic resource management and services for a new learning curve: a study on Kakatiya University Library, Warangal, A.P. *VSRD International Journal of Technical & Non-Technical Research*, 5 (3).
- Millar, L. (ed) (2009). *Understanding the context of electronic records management: Module 1*. London: International Records Management Trust.
- Musoke, G. N. M., & Kinengyere, A. A. (2008). *Changing the strategies to enhance the use of electronic resources among the academic community in Uganda with particular reference to the Makerere University* In: Rosenberg, D., ed. (2008). *Evaluating electronic resource programmes and revision: Case studies of Africa and Asia*. Oxford: INASP.
- Okello-Obura, C. & Magara, E. (2008). Electronic Information access and utilization by Makerere University in Uganda. Accessed on 08/11/2015 from: <http://creativecommons.org/licenses/by/2-0>.
- Okite-Amughor, F. A., Makgahlela, L., & Bopape, S. (2014). The use of electronic information resources for academic research by postgraduate students at Delta State University, Abraka, Nigeria. *SA Jnl Libs & Info Sci*, 80(2).
- Omosekejimi, A. F., Eghworo, O. R., & Ogo, E. P. (2015). Usage of electronic information resources (EIRs) by undergraduate students of Federal University of Petroleum Resources Effurun. *Information and Knowledge Management*, 5(4), 94-103.
- Pettenati, C. (2001). Electronic Publishing at the end of 2001. Submitted to World Scientific on December 4, 1-9.
- Sahu, G., Kumar, P. B., & Mahapatra, R. (2013). Use of e-resources by the research scholars of Utkal University and Sambalpur University, Odisha: A comparative study. *VSRD International Journal of Technical & Non-Technical Research*, 4(1), 1-8.
- Sangowusi, F.O. (2003) Problems of accessing scholarly publications by Nigerian scientists: a study of the University of Ibadan. *Journal of Information Science*, 29 (2), 127-134.

- 
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*, (5<sup>th</sup>ed.). Harlow: Prentice Hall/Financial Times.
- Siddique, M.A. & Ali, A. (2010) Online journals in the Jawaharlal Nehru University (JNU): A user survey. *Trends in Information Management*, 6 (1), 41- 50.
- Singh, G., & Nagah, P. (2014). User oriented approach towards e- resources: A case study of IIT Ropar. *International Research: Journal of Library & Information Science*, 4 (1), 104-120.
- Sinh, N. H., & Nhung, H. T. H. (2012). Users' searching behavior in using online databases at Vietnam National University, Ho Chi Minh City. *Library Management*, 33(8/9), 458 - 468.
- Thanuskodi, S. (2011). User awareness and use of online journals among faculty members in Combatore District: A survey. *J Communication*, 2(1), 23-32.
- Togia, A., & Tsigilis, N. (2009). Awareness and the use of electronic information resources by education graduate students: Preliminary results from the Aristotle Thessaloniki. *Qualitative and Quantitative Methods in Libraries (QQML) International Conference*, Chania Crete Greece. May 26-29, 2009.
- Uzuegbu, C. P., Chukwu, O. C. and Ibegwam, A. (2012), "Creating universal resource locator links on library computers desktop: a panacea for students' underutilization of subscribed electronic databases in academic institutions in Nigeria", *Annals of Library and Information Studies*, Vol. 59, pp. 97-105.
- Waldman, M. (2003). *Freshman's use of library electronic resources and self-efficacy*. Information Research, 8(2). Accessed on 2/12/15 from: <http://informationr.net/ir/8-2/paper150html>.
- Weiner, S. G. (2003). Resistance to change in libraries: Application of communication theories. *Portal: Libraries and Academy*, 3(1), 69-78.

---

Willinsky, J. (2005) *Access to Research in Cameroonian Universities*. In: Harle, J.,(2010). Access to research in east and southern African universities. *ACU Spotlight*, No. 1. Accessed on 28/11/15 from: [http://www.acu.ac.uk/Arcadia\\_Growing\\_Knowledge.pdf](http://www.acu.ac.uk/Arcadia_Growing_Knowledge.pdf).