



RESEARCH ARTICLE

AVAILABILITY AND USE OF LIBRARY DIGITAL INFORMATION RESOURCES BY POSTGRADUATES STUDENTS OF UNIVERSITY OF ABUJA

¹Dr. Nwachukwu, V. N. and ²Dr. Faga, Asom

¹Department of Library and Information Science University of Nigeria Nsukka

²University Library Federal University Lafia P.O. Box 146 Lafia, Nasarawa State

ARTICLE INFO

Article History:

Received 02nd March, 2017
Received in revised form
14th April, 2017
Accepted 07th May, 2017
Published online 16th June, 2017

Key Words:

Availability, Use, Library,
Digital Information Resources,
Postgraduate Students,
University of Abuja.

ABSTRACT

The growing supply of digital information resources in libraries has facilitated effective searching for the material needed by scholars. This study investigated availability and use of library digital information resources for research by postgraduate students of University of Abuja. Descriptive survey design was used for the study. The population of the study was 2323 postgraduate students of the University of Abuja. Using the Taro Yemen's (1964) statistical formula, a sample size of 64 respondents was considered for the study. The instrument for data collection was questionnaire. To maximize return rate, the 64 questionnaires were distributed, filled and returned on the spot. Percentages, mean scores and standard deviation were used in analyzing the data. The findings revealed that the following resources were available: OPAC (Online Public Access Catalogue), online databases, e-journals, CD-ROMs, e-news paper and e-thesis. In addition, findings showed that the respondents were highly aware of all the digital information resources identified by the researcher. The findings further discovered that the identified resources were also used to a great extent by the respondents. However, some challenges such as server slowness, high cost of 'air time' for browsing, lack of skill to access digital information resources in local and foreign databases among others were identified as militating factors to effective use of the resources. The study therefore recommended that government should show more commitment to the development of an ICT base in the country by making available ICT grants to our universities and libraries in particular on annual basis among others.

Copyright©2017, Nwachukwu and Faga, Asom. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Libraries have long been crowned knowledge institutions as they provide the public with the resources and spaces for information and learning. The Library according to Aina (2014) is regarded as an agency through which sources of information of accumulated knowledge and experiences are selected, acquired, organized, preserved and disseminated to those who need them. Generally, libraries are grouped into different types including public, special, private and academic libraries among others. Academic libraries ideally should be living organs that are fully responsive to the needs of the patrons. Academic libraries are defined by Oyedun (2007), to mean those libraries that are mainly found in tertiary institutions. They are established to support learning, teaching and research processes. Examples of academic libraries are libraries situated in universities, polytechnics, colleges of Education, Agriculture and Aviation among others.

Hence, Reitz (2004) sees University library as a library or library system established, administered, and funded by a university to meet the information, research, and curriculum needs of its students and faculty staff. Ifidon in Egberongbe and Okiki, (2006) outlined some major objectives of the University Library to include: Provision of materials in support of learning and teaching, provision of materials to meet the requirements of faculty specialists and postgraduate students who are doing research, provision of materials to assist the library user in his own personal self development, cooperation with other university libraries, with a view to developing a network of academic library resources which are at the disposal of all students and teaching faculties and meeting the specialized information needs of the regions within which the universities are situated. To achieve these goals, the library has to acquire different kinds of information resources including digital information resources. The growing supply of digital information resources in libraries has facilitated effective searching for the material needed by scholars. These digital materials have rapidly increased the scholars' exposure to a wider range of literature than would

*Corresponding author: Dr. Nwachukwu, V. N.

Department of Library and Information Science University of Nigeria Nsukka

otherwise be available. The resources have the potential for enhancing researcher's learning, as they provide researchers with vast quantities of information in easily accessible non-sequential format. The types of information available to users in digital form have continued to grow. Omekwu (2010) affirms that availability and accessibility of information has increased remarkably due to the digitization of information. Digital Information Resources (DIRs) provide access to information that might be restricted to the user because of geographical location or finances. They also provide access to current information as these are often updated frequently. These resources include Online Public Access Catalogue (OPAC), Compact Disk Read Only Memory (CD-ROMs), Online- Databases, E-journals, E-books. They also often include sound animated graphics, pictures and movies. With the digital technology, information in various formats- text, audio, video and electronic can be created, stored, organized, accessed and transmitted with relative ease, and in forms that we could not have thought of earlier. The attributes of these resources have made it imperative tool when conducting research. This therefore calls for the need to appraise the availability and use of DIRs by postgraduate students of University of Abuja.

Statement of the Problem

When quality digital information resources such as CD ROM databases, Online Public Access Catalogues and Internet browsing among others are available and researchers are aware of their existence and put them to effective use, their work can improve. The resources provide researchers with access to a very large information collection(s) among other advantages. In spite of the enormous benefits offered by the use of digital resources at improving research work, the researcher's interaction with some PG students of University of Abuja indicates that, the quality of their research still appears to be low. This may be as a result of their inability to have access to the desired DIRs that can enhance the quality of their research. This scenario if not urgently addressed may have far reaching negative effect on both the university and the postgraduate students. These therefore call for the appraisal of availability and use of library digital information resources for research by postgraduate students of University of Abuja.

Purpose of the Study

The purpose of this study is to determine availability and use of library digital information resources by postgraduate students of University of Abuja, specifically the study:

- Found out the kinds of digital information resources available to PG students in University of Abuja library.
- Ascertained the level of awareness of postgraduate students on the availability of digital information resources.
- Examined the extent of use of digital information resources by postgraduate students of the University.
- Found out the challenges associated with PG students' access and use to digital information resources.

METHODOLOGY

This study investigated availability and use of library digital information resources by postgraduate students of University

of Abuja. The general purpose of the study was to determine the postgraduate students' access and use of digital information resources for research in University of Abuja. A descriptive survey design was used for the study. The population of the study was 2323 postgraduate students of the University of Abuja. Using the Taro Yemen's (1964) statistical formula, a sample size of 64 was considered for the study. The instrument for data collection was questionnaire. The questionnaire was developed by the researcher. The 64 questionnaires were distributed, filled and returned. Percentages, mean scores and standard deviation were used in analyzing the data.

Results and Discussion of Findings

The results and findings are presented under the following headings:

Research Question 1.

- What are the kinds of digital information resources available to PG students in University Abuja library?
- To provide answers to the above question, the relevant data are presented in Table 1.

Table 1. Digital Information Resources Available in the University of Abuja Library

S/N	DIRs	A	NA
1	Multimedia Products	√	
2	E-Thesis	√	
3	E-Magazines	√	
4	E-Newspaper	√	
5	CD-ROMs	√	
6	E-Books	√	
7	E-Journals	√	
8	Online Databases	√	
9	OPAC (Online Public Access Catalogue)	√	

Key: A = Available, NA = Not Available

The result presented in Table 1 shows that all the kinds of digital information resources identified by the researcher are available to PG students of University of Abuja

Research Question 2

- What is the level of awareness of PG students of Universities of Abuja on availability of digital information resources?
- To provide answers to the above question, the relevant data are presented in Table 2.

Table 2. Mean Ratings of PG Students of University of Abuja on the Extent of Awareness of the Availability of Digital Information Resources

S/N	DIRs	Mean	Sd	Decission
1	E-journals	2.85	1.13	Ha
2	CD-ROMs	2.99	1.20	Ha
3	E-Newspaper	2.91	1.07	Ha
4	E-Magazines	3.02	.97	Ha
5	Multimedia products	2.90	.95	Ha
6	E-books	2.78	1.07	Ha
7	Online Databases	2.69	1.04	Ha
8	OPAC	2.40	.94	Ha
9	E-Thesis	3.00	.97	Ha

Table 2 above shows the mean ratings of the respondents on the level of awareness of PG students of Universities of Abuja

on availability of digital information resources. Using the principle of real limit of number, the table depict that the respondents were highly aware of all the nine (9) digital information resources listed in the table. The overall mean showed that e-magazines (mean = 3.00) was ranked highest, while OPAC (Mean = 2.40) was ranked lowest in term of the level of awareness of PG students of University of Abuja on availability of digital information resources.

Research Question 3

- To what extent are digital information resources used by PG students of University of Abuja?
- To provide answers to the above question, the relevant data are presented in Table 3.

Table 3. Mean Ratings of PG Students of University of Abuja on the Extent of Use of Digital Information Resources

S/N	DIRs	MEAN	SD	DECISION
1	E-books	3.08	.95	GE
2	E-Newspaper	3.14	1.01	GE
3	CD-ROMs	3.20	.90	GE
4	E-journals	3.13	.94	GE
5	E-Magazines	3.12	.93	GE
6	E-Thesis	3.08	.82	GE
7	Multimedia products	2.74	.94	GE
8	OPAC	2.42	1.07	LE
9	Online Databases	2.51	.84	GE

Key: SD = Standard Deviation, GE = Great Extent, LE = Less Extent

Table 3 above shows the mean rating of the respondents on the extent to which digital information resources are used by PG students of Universities of Abuja. Using the principle of real limit of number, the table shows that eight (8) out of the nine (9) resources listed were used to a great extent, while OPAC was used to a less extent. The overall mean showed that E-books (mean = 3.08) was ranked highest, online databases (Mean = 2.51) was ranked lowest as the extent to which digital information resources are used by PG students of Universities of Abuja.

Research Question 4.

- What are the challenges associated with the PG students' use of digital information resources?
- To provide answers to the above question, the relevant data are presented in Table 4.

Table 4. Mean Ratings of PG Students of University of Abuja on Challenges that Inhibit the Use of Digital Information Resources

S/N	Challenges	Mean	SD	Decision
1	Inadequate number of computers to access digital information resources	3.26	.91	A
2	Network problems	3.34	.80	A
3	Inadequate Bandwidth	3.25	.95	A
4	Non-availability of online database	3.25	.92	A
5	Epileptic power supply	3.10	.85	A
6	Lack of skill to access digital information resources in local and foreign databases	2.59	1.13	A
7	High cost of 'air time' for browsing	2.67	1.13	A
8	Server slowness	2.61	1.15	A
9	Lack of formal training on internet use	2.59	1.15	A

Key: SD = Standard Deviation, A = Accepted

Table 4 above shows the mean ratings of the respondents on challenges that inhibit the use of digital information resources.

Using the criterion mean of 2.50, the results of the data analysis revealed that the respondents accepted that the entire nine (9) items listed were linked to factors which inhibit the use of digital information resources. This is so because the mean values were all above the cut off mean of 2.50 on a four point scale. However, the overall mean showed that lack of formal training on internet use (mean = 3.38) was ranked highest, while inadequate number of computers to access digital information resources (Mean = 2.55) was ranked lowest among the challenges associated with the use of digital information resources by the PG students.

DISCUSSION

Kinds of digital information resources and services available to PG students

The findings of the study from table one showed that, University of Abuja had all the nine (100%) digital information resources identified by the researcher. This is in line with Okiki (2013) who affirmed that availability of digital information resources varied with universities. This also corresponds with the earlier views of the researcher that federal government owned universities are likely to have more digital resources and services available than their states counterpart because of the imbalance in the financial allocation that favours the federal universities than the state's universities in Nigeria.

Extent of awareness of availability of digital information resources

The findings of the study indicate that, the PG students of the university under study were highly aware of all the nine (9) digital information resources identified by the researcher. These resources include e-theses, e-journals, CD-ROMs, e-newspapers, e-magazines, multimedia products, e-books, online databases, and OPAC. The overall mean showed that e-thesis ranked highest, while OPAC ranked lowest in terms of the level of awareness of PG students of the University of Abuja regarding digital information resources. The findings are in agreement with those of Pauline (2013) who discovered that majority of the students in Redeemer's University are aware of the available electronic resources in their library such as CD ROMs, e- books , online data bases, e-journals among others. Similarly, Sunil (2011), Baljinder and Rama (2009) in their separate works observed that, users are aware of the availability of digital resources in their libraries particularly, electronic journals.

Extent of use of digital information resources by PG students of Universities of Abuja

Findings shows that, out of the nine resources listed, eight of them, that is e-books, e-news paper, CD-ROMs, e-journals, e-magazines, e- theses, multimedia products, and online databases were used to a great extent while OPAC was used to less extent by the PG students. However, the overall mean showed that e-books was ranked highest, online databases was ranked lowest as the extent to which digital information resources were used by PG students of University of Abuja. This findings relate with the findings of Lucky, Leka and Michael (2015) that students used e- Journals; e-Reference materials; e-Seminar papers; e-Books; and e- thesis to a high extent. Komolafe-Opadeji (2011) also discovered that

postgraduate students regularly accessed the Internet. Just as Ozoemelem (2009) noted in his study that there was a high level of usage of electronic resources by postgraduate students.

Challenges associated with the PG students' access and use of digital information resources and services

Despite the fact that PG students are aware and use digital information resources for research, some problems were still discovered from the study to be militating against the effective use of these resources among the PG students. The findings of the study revealed lack of formal training on Internet use, server slowness, high cost of air time for browsing, inadequate skills to access digital information resources in local and foreign data bases, epileptic power supply, slow bandwidth, inadequate online data bases, network problems and inadequate numbers of computers. This findings are in line with those of Lucky (2015), Ibrahim (2004) , Imo and Igbo (2011), Owoye and Oguntuase (2008), Abdul (2011) who in their separate studies identified epileptic power supply; non-availability of online databases; inadequate number of computers to access digital information resources; inadequate bandwidth; network problems; lack of skill to access digital information resources in local and foreign databases; lack of formal training on internet use; server slowness and frequent breakdown of digital resources as constraints to students effective use of digital information resources in university libraries. In consonance with this findings also are studies by Ejibuwa (2005), Pauline (2013), who found out that the absence of basic infrastructure like constant electricity necessary for ICT growth, lack of facilitation for network resources sharing, inadequate professionals with requisite ICT skills, download delay, inadequate or lack of search skills, high cost of access, inaccessibility of some electronic resources, difficulties in navigating through electronic resource among others.

Recommendations

The following recommendations have been made based on the findings of the study:

- Government should show more commitment to the development of an ICT based in the country by making available ICT grants to our universities and libraries in particular on annual basis.
- The universities should also meet the ICT training needs of the students and library staff through organising workshops, seminars, conferences, orientations; and attendance should be made compulsory for all the students and staff.
- Government should support and provide more stable power supply and university authorities to supplement this power supply by providing stand-by generating sets to all departments in the universities.

Conclusion

Digital information resources and services have shown a great impact on research activities in our institutions of learning. It has brought a lot of innovations and revolutions into the way research is conducted. This study confirms this.

It is therefore pertinent for the relevant stake holders in educational sector to close rank and to show more commitment towards enhancing the sustainability of the resources in our institutions of learning.

REFERENCES

- Abdul M. 2013. Utilization of CD-Rom databases by the users' of Indian institute of technology-Kharagpur: A survey. *International journal of digital library services*. 1(1)
- Aina, R.F., 2014. Awareness, accessibility and use of electronic databases among academic staff of Babcock University Business School(BUBS). *Kuwait Chapter of Arabian Journal of Business and Management Review*,6 (3), 40-47
- Baljinder K. and Rama V. 2009. Use of electronic information resources: A case study of Thapar University *DESIDOC Journal of Library & Information Technology*, 29(2): 67-73
- Egberongbe, H.S. & Okiki, C O. 2006. A Survey of the extent of utilization of services of University of Lagos library. *Journal of Library & information science*. 3(2): 77 - 156 Retrieved from: <http://works.bepress.com/chrisokiki/8> on April 21, 2014
- Ibrahim, A. E. 2014. Use and user perception of electronic resources in the United Arab Emirates University (UAEU). *Libri* 54 (1): 18 - 29
- Imo N.T. and Igbo H.U., 2011. Challenge of digitalizing information resources in Nigeria university libraries. *A paper presented at the 49th NLA National Conference/ AGM 10th- 15th July. Awka.*
- Komolafe-Opadeji, H. O. 2011. Use of internet and electronic resources amongst postgraduate students of a Nigerian private university. Retrieved March 16, 2015, from <http://ir.library.ui.edu.ng/handle/123456789/457> [05/12/2014]
- Lucky O. U., 2015. Factors militating against the use of digital information resources by undergraduates in Delta and Edo States, Nigeria. *International Journal of Academic Library and Information Science*. 3(1), 1-6,
- Lucky O. U., Ifeka .E. O. & Michael. C. N. 2015. Extent of digital information resources usage by undergraduates of selected higher institutions in Delta and Edo States, Nigeria. *Research on Humanities and Social Sciences*.5, (14): 110 – 117. Retrieved March 16, 2015, from <http://www.iiste.org>
- Omekwu O. C., 2010. The digital economy and knowledge professionals: from fact to the future. *In scholarly communication and information: Mentoring, mastering and modernization: Proceedings of second professional submit on information science technology* (Pp. 1-15). Nsukka: Nnamdi Azikewe library.
- Owoeye & Oguntuase, 2008. Digitalization of library information resources as solution to preservation and conservation problem in libraries. *Owena Journal of Library and Information Science*. 3(1), 20-27.
- Reitz, J. M. 2004. *Dictionary for library and information science*. London, Library Unlimited.
- Sunil Tyagi, 2011. Use and awareness of electronic information sources at IIT Roorkee, India: A Case Study. *Journal of library and information science*. 2 (1): 1 – 12.