Provision of open access web links for postgraduate students by private university libraries in Nigeria

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Abstract

The purpose of this study was to examine the provision of open access web links for postgraduate students by private university libraries in Nigeria. A descriptive survey research design was used for the study. A total of 150 postgraduate students from three selected private universities participated in the study. A questionnaire entitled: "Availability of Open Access Website Links Questionnaire (POAWLQ)" and an observation checklist was used to collect data for the study. A total of 150 copies of the questionnaire were distributed to respondents, out of which 143 copies were returned and found to be correctly filled. This gave a response rate of 94.2%. The data collected were analyzed using mean x and standa d deviation to answer the research questions. The major findings of the study were that the overall availability of open access linkages in the libraries was poor. Also, the general utilization of the limited available open access web links in the library was low. Based on the findings, it was recommended that libraries should endeavour to provide links to various open access websites on their library webpage, the library should often o ganize semina s and wo kshops on the availability of open access links on their lib a y"s webpage, among others.

Keywords: Private universities, Postgraduate students, University libraries, Open access resources

Introduction

A private university could either be faith based (religion affiliation) or secular based, but whatever the inclination is, the concept of private university connotes different meaning to different authors. For instance, according to Gabriel (2013), a private university is one established and is managed by entities other than a state or federal government which may include those run by faith-based organizations, individuals, and development community associations, among others. Gabriel further stressed that in Nigeria, faith organizations, group of individuals and individuals largely constitute proprietorship of private universities.

Postgraduate education, in the submission of Asogwa, Wombo and Ugwuoke (2014), involves learning and studying for degrees, professional or academic certificates or other qualifications fo which a fi st o Bachelo "s deg ee generally is required and it is normally considered to be part of higher education. Pertinently, those involved in postgraduate education, as the name implies, should also be postgraduate students.

Nevertheless, a university library is an intellectual power house where these students a e expected to be "baked" and it houses all sorts of materials including books and non-book materials. It is also an

important agent in the pursuit of academic excellence in higher institutions. Its main goal is to support the objective of the host institution, which has to do with learning, teaching, research and other services. A unive sity lib a y is also called an "academic lib a y". This is why Susan and Skinner (2009) put it that an academic library which also is a university library is attached to a higher educational institution which serves two complementary purposes to support the school's curriculum, and to support the research of the university faculty and students.

However, free exchange and use of information especially research information forms the basis for economic, cultural, social and scientific development, yet this has been compromised by restricted access model of publishers and the dependency of researchers on research works published in qualitative but restricted access journals (Canada, 2009). Canada further opined that Open Access is capable of fostering information and knowledge sharing within research, educational and scientific communities especially traditionally or economically disadvantaged open regions. Therefore, access knowledge has become essential for a count educational, socio-cultural, y"s scientific development. Since the emergence of Open Access initiative, the concept has been defined in different ways by numerous autho s. In 2012, Swan"s study of open access showed that the concept of Open Access was first defined globally by Budapest Open Access Initiative (BOAI). The study also stated the definition of Open Access as a free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or

technical barriers other than those inseparable from gaining access to the Internet itself (Swan, 2012).

Besides, accepting and implementing open access initiative, while putting into cognizance its numerous benefits, would be of great advantage to libraries of private universities especially in this time of recession where information resources such as foreign journals and books have skyrocketed. The usual inadequate funding of Nigerian university libraries especially libraries of private universities that solely depend on internally generated revenue like school fees has not helped matters. This inadequacy is evident in their limited collection development and has negatively affected use s" pat onage, students" performance in both internal and external examinations, and even poor theses/research produced by these students, works particularly postgraduate students.

Therefore, it is worthy of note that most of these challenges mentioned can be minimized or even eradicated completely if information custodians and library managements can take advantage of open access initiative. Thus, the provision or availability of open access web links in the lib a y via the lib a y"s webpage fo easy accessibility and utilization of free scholarly publications by lib a y pat ons" especially postgraduate students who are potential scholars and researchers and are presume to constitute the major users of open access resources for their research and academic work, cannot be over emphasized.

Statement of the problem

Some literature revealed that collection development in libraries especially libraries of private universities which depends solely on school fees and Internally Generated Revenue (IGR), have been hampered by shortage or grossly inadequate funding and this has adversely affected resource

provision which in turn has led to so many of the private university libraries failing NUC accreditation exercise in many subject areas because of limited or inadequate collection of information resources.

In the same vein, a basic problem that affects the academia via the library is the rising price of scholarly publications especially the ones published in current International academic journals. This could put students" personal and individual search for knowledge and understanding at stake and this could also result to poor academic performance of these students in both internal and external professional examinations due to shallow knowledgelevel. Hence, this prompted this work, to examine the provision of open access web links in libraries of private universities especially for postgraduate students who are assumed to be potential academicians and are the major users of academic publications for their research works, teaching and learning.

Objectives of the study

The main objective of this study was to examine the provision of open access web links for postgraduate students by private university libraries in Nigeria. Specifically, the study sought to:

- 1. Investigate the open access website links provided by private universities;
- 2. Investigate respondents awareness of the open access website links provided in libraries of private universities for postgraduate students in Nigeria;
- 3. examine the accessibility of these open access resources to postgraduate students in Nigeria;
- 4. identify the challenges associated with the use of these resources in libraries of private universities in Nigeria;

Review of literature

It is no gainsaying to provide tailored information especially free scholarly ones to different constituencies like students, authors, researchers, and even managers and administrators.

The library website is an important advocacy tool for providing up-to-date information about open access. As opposed to more general open access websites, the library can tailor and contextualize the information for researchers and point to specific resources of relevance (Swan and Chan, 2009). When this is done, it saves the use s" p ecious time in t ying to b owse the web in search of articles from free scholarly websites. In the same vein, Swan and Chan further stressed that, a study on how library websites are helping to promote open access found that many library websites did not make open access a prominent feature, necessitating a long search around the finding website before the relevant information. They also recommended that a library website should flag up open access prominently and provide interested readers with clear routes to both authoritative information about open access and the repository which should itself be supported by a set or resources on open access and its benefit.

However, there is the need for the custodians of knowledge (librarians) to also have a full grasp of open access initiative and how to access them online because "you can only give what you have". In the same light, Arosanyin and Ajibili (2014) in a study "open access awa eness and use in lib a ies in Nige ia" ecommended among others that, the library should organize training and retraining of its librarians who will in turn assist library users explore open access resources online. Mohammed and Garba (2013) further buttressed that libraries should organize training on interval bases for both staff and students especially

postgraduate students on the importance of open access publications. They further stressed that faculties should guide and encourage their students on the need for publishing in Open Access Journals. This was further stressed by Ajibili and Emmanuel (2017) when they said that the library should often organize seminars and workshops on open access for both students and other library stakeholders to create the awareness on the availability, nature and benefits of these invaluable resources.

Sube "s, and Bailey"s explanations (as cited in Ajibili, 2017) agreed that the role of a digital librarian in open access to knowledge is more than having ICT skills. Their works suggest that the role of a digital librarian in open access knowledge can be accomplished through two complementary st ategies. One is "self-a chiving" and the othe is open access jou nal" which the digital librarian must as a matter of duty enlighten his users. Therefore, it is obligatory for librarians to advocate and market open access and also take advantage of the numerous benefits open access initiative stands to offer.

Therefore, from the literatures reviewed above, it is obvious that the library has a great role to play in this technology age if use s" info mation needs would be met amidst stringent limited budget using open access initiative as a tool for

augmenting inadequate information resources in information centres like the library. This will not only handle the area of insufficient library holdings during academic accreditation exercises but will similarly improve the quality of research works amongst students, researchers and academicians.

Methods

A descriptive survey research design was used for the study. This study was carried out in libraries of three private universities

(Madonna University, Okija Igbinedion Pan-African University, Okada and University, Lagos; one each respectively from South-East, South-South and South-West zones) in Southern Nigeria. However, one university was purposefully selected per zone to give a good representation of the universities in that zone. A total sample size of 150 respondents was selected using sampling technique. Multi-stage researcher developed a questionnaire titled "P ovision of Open Access Website Links Ouestionnai e" **POAWLQ** and observation checklist, which were used to collect data for the study. A total of 150 copies of the questionnaire were distributed to respondents, out of which 143 copies were returned and found to be correctly filled. This gave a response rate of 94.2%. The data collected were analyzed using Mean (x) and Standard Deviations to answer the research questions.

Results and discussion

The analyses of the responses to the research questions and the interpretation of the findings are presented in this section.

Research question one: What type of open access web links are provided in libraries of private universities in Nigeria?

The data in Table 1 are used to answer this research question.

Table 1 shows the percentage distribution of respondents on provision of open access web links. The overall ranking showed that Journal Storage/JSTOR had a response rate of 71.7% and was ranked highest among the open access web link provided in the library while Bentham Science Publishing which had a response rate of 6.2% was ranked lowest among the open access web link provided in the libraries studied. From the results gathered, the table showed that the respondents

decisively indicated that only 5 items (Directory of Open Access Journals/DOAJ, Directory of Open Access Books/DOAB, Journal Storage/JSTOR, African Journals Online/AJOL and Health InterNetwork Access to Research Initiative/HINARI) out of the twelve items listed were provided in their libraries.

Research question two: What is the extent of respondents awareness of open access website links provided in libraries of private universities for postgraduate students in Nigeria?

The data in Table 2 are used to answer this research question.

Table 2 shows the Mean ratings of respondents on the extent of awareness of provision of open accessweb links in their libraries. The overall Mean showed that Directory of Open Access Journals (Mean = 3.09) was ranked highest while Online

Access to Research in the Environment/OARE (Mean = 2.25) was ranked lowest among the respondents level of awareness of open access web links provided. Also, using the principle of real limit of numbers, the table shows that the respondents were aware of the provision of open access web links to a great extent on items 1-7, while on the other hand, aware to a low extent on items 8-12.

Research question three: What is the extent of accessibility of open access resources to postgraduate students?

The data in Table 3 are used to answer this research question.

Table 3 shows the Mean ratings of the respondents on the extent of accessibility of open access resources to postgraduate students. The overall Mean showed that accessing open access resources via the Internet in the library (Mean = 3.20) was ranked highest, while publishing of work in open access journals (Mean = 1.42) was ranked lowest as extent of accessibility of open access resources in the library. Also, using the principles of real limit of numbers, the table shows that open access resources were accessed to a great extent as revealed in items 1-4 (i do access open access resources from the Internet in the library, i do read articles on open access resources from the Internet in the library, i do cite articles of open access resources from the Internet in the library, and i do reference articles of open access resources from the Internet in the library), whereas utilized to a low extent on item 5 and utilized to no extent on item 6 (i do publish my work in open access journals) respectively.

Finally, the overall standard deviations ranged between 0.56-0.90. This shows that there was no wide variation in the standard deviations of the responses of the postgraduate students on the above Mean ratings.

Research question three: What are the challenges associated with the accessibility of open access resources?

The data in Table 4 are used to answer this research question.

Table 1: Percentage distribution of respondents on provision of open access web links

S/N		percenta ge	Name of University										
	Open Access Sources (OAS)	2. %	PAU		MU		IU		Overall				
	Sources (OAS)		NA	\mathbf{AV}	NA	\mathbf{AV}	NA	\mathbf{AV}	NA	\mathbf{AV}	D R		
1	Directory of Open Access Journals	Freq %	19 48.7%	20 51.3%	26 68.4%	12 31.6%	2 5.6%	34 94.4%	48 42.5%	65 57.5%	AV 3 rd		
2	Directory of Open Access Books	Freq %	20 51.3%	19 48.7%	26 68.4%	12 31.6%	2 5.6%	34 94.4%	48 42.5%	65 57.5%	AV 3 rd		
3	Journal Storage	Freq %	30 76.9%	9 23.1%	0 .0%	38 100.0%	2 5.6%	34 97.2%	32 28.3%	81 71.7%	AV 1 st		
4	Bentham Science Publishing	Freq %	34 87.2%	5 12.8%	36 94.7%	2 5.3%	36 100.0%	0 .0%	106 93.8%	7 6.2%	NA 9 th		
5	Hindawi Open Access Journals	Freq %	31 79.5%	8 20.5%	36 94.7%	2 5.3%	36 100.0%	0 .0%	80 70.8%	33 29.2%	NA 6 th		
6	BioMed Central	Freq %	34 87.2%	5 12.8%	36 94.7%	2 5.3%	33 91.7%	3 8.3%	73 64.6%	40 35.4%	NA 5 th		
7	High Wire Press	Freq %	21 53.8%	18 46.2%	36 94.7%	2 5.3%	36 100.0%	0 .0%	90 79.6%	23 20.4%	NA 7 th		
8	Open Journals Gate	Freq %	30 76.9%	9 23.1%	36 94.7%	2 5.3%	36 100.0%	0 .0%	102 90.3%	11 9.7%	NA 8 th		
9	African Journals Online	Freq %	30 76.9%	9 23.1%	3 7.9%	35 92.1%	4 11.1%	32 88.9%	37 32.7%	76 67.3%	AV 2 nd		
10	Bioline International	Freq %	30 76.9%	9 23.1%	36 94.7%	2 5.3%	36 100.0%	0 .0%	102 90.3%	11 9.7%	NA 8 th		
11	Online Access to Research in the Environment (OARE)	Freq %	30 76.9%	9 23.1%	36 94.7%	2 5.3%	35 97.2%	1 2.8%	67 59.3%	46 40.7%	NA 4 th		
12	Health InterNetwork Access toResearch Initiative (HINARI)		5 12.6%	34 87.2%	2 5.3%	36 94.7%	1 2.8%	35 97.2%	37 32.7%	76 67.3%	AV 2 nd		

^{*}**Key1:** PAU-Pan Atlantic University, MU-Madonna University, IU-Igbinedion University. ***Key2:** AV-Available, NA-Not Available, D-Decision, R-Rating.

Table 2: Mean ratings of respondents awareness of provision of open access web links

SN	Items	Name of university					Overall			Rating	Decision
		PAU		MÜ		IU					
		Mean	SD	Mean	SD	Mean	SD	Mean	SD		
1	Directory of Open Access Journals	3.31	.57	3.08	.27	2.86	.72	3.09	.58	1 st	GE
2	African Journals Online	3.26	.68	3.03	.16	2.78	.72	3.03	.60	2^{nd}	GE
3	Journal Storage	3.13	.61	3.05	.23	2.81	.82	3.00	.61	3^{rd}	GE
4	Directory of Open Access Books	2.85	.90	2.34	.48	2.72	.70	2.64	.74	4 th	GE
5	Health InterNetwork Access to	2.85	1.06	2.26	.45	2.44	.50	2.52	.77	5 th	GE
	Research Iniative (HINARY)										
6	Open Journals Gate	2.69	.86	2.66	.48	2.17	.70	2.51	.73	$6^{\scriptscriptstyle ext{th}}$	GE
7	Bentham Science Publishing	2.79	.86	2.66	.48	2.06	.67	2.51	.76	7 th	GE
8	Hindawi Open Access Journals	2.69	.86	2.66	.48	2.06	.58	2.48	.72	8 th	LE
9	BioMed Central	2.64	.84	2.61	.55	2.06	.71	2.44	.76	9 th	LE
10	High Wire Press	2.54	.79	2.26	.45	2.39	.49	2.40	.61	10 ^{tn}	LE
11	Bioline International	2.77	.48	2.18	.51	2.06	.67	2.35	.64	11 ^{ui}	LE
12	Online Access to Research in the	2.05	.72	2.61	.50	2.39	.73	2.35	.69	12 th	LE
	Environment (OARE)										

^{*}Key1: PAU-Pan Atlantic University, MU-Madonna University, IU-Igbinedion University.

Table 3: Mean ratings of extent of accessibility of open access resources to postgraduate students

SN	Items	Name o	of unive	ersity				Overal	verall Ra		Decision
		PAU		\mathbf{MU}		IU				8	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD		
1	I do access open access resources from the Internet in the library	3.15	.84	3.13	.41	3.33	.63	3.20	.66	1 st	GE
2	I do read articles on open access resources from the Internet in the Library	2.28	.83	3.12	.41	3.32	.63	2.90	.79	2^{nd}	GE
3	I do cite articles of open access resources from the Internet in the Library	2.59	1.02	2.39	.75	2.58	.91	2.52	.90	3^{rd}	GE
4	I do reference articles of open access resources from the Internet in the Library	2.59	1.02	2.39	.75	2.58	.91	2.52	.90	4 th	GE
5	I do download articles on open access resources from the Internet in the Library	2.23	.81	1.45	.60	2.36	.76	2.01	.83	5 th	LE
6	I do publish my work in open access journals	1.13	.41	2.03	.28	1.11	.40	1.42	.56	$6^{\text{\tiny th}}$	NE

^{*}Key1: PAU-Pan Atlantic University, MU-Madonna University, IU-Igbinedion University.

^{*}Key2: GE-Great Extent, LE-Low Extent.

^{*}Key2: GE-Great Extent, LE-Low Extent, NE-No Extent.

Table 4: Mean ratings of the challenges associated with the accessibility of open access resources

SN	Challenges	Name of university						Overall		Rating	Decision
	_	PAU MÚ			IU						
		Mean	SD	Mean	SD	Mean	SD	Mean	SD		
1	Erratic power supply hence, disrupting the flow and stability of the Internet service	2.46	1.05	3.08	.27	3.61	.55	3.04	.84	1 st	A
2	Slow Internet connectivity hence, Delay in opening and downloading open access resources on the net	2.41	.88	3.05	.23	3.03	.51	2.82	.67	2^{nd}	A
3	Lack of Internet searching skills limits me from accessing open access resources on the net	2.51	.91	3.00	.33	2.72	.61	2.74	.69	3^{rd}	A
4	Inability of library staff in assisting me in searching and using Open Access Resources	2.72	.83	2.50	.56	2.75	.73	2.65	.72	4 th	A
5	Inadequate/shortage of computer systems and terminals thus, limiting my access to open access resources on net	2.08	.62	3.08	.27	2.67	.48	2.60	.63	5 th	A
6	Lack of knowledge of the existence of Open Access Resources hinders my use of it	2.54	.88	2.53	.95	2.67	.86	2.58	.89	6 th	A
7	Unavailability of Internet facilities to browse and access open access resources on the net		.54	3.05	.23	2.36	.54	2.46	.64	7 th	D

^{*}Key1: PAU-Pan Atlantic University, MU-Madonna University, IU-Igbinedion University.

Table 4 shows the Mean ratings of the respondents on the challenges associated with the accessibility of open access resources. The overall Mean showed that erratic power supply hence, disrupting the flow and stability of the Internet service (Mean = 3.04) was ranked highest, while unavailability of Internet facilities to browse and access open access resources on the net (Mean = 2.46) was ranked lowest among the itemized challenges associated with the accessibility of open access resources.

Applying the criterion Mean of 2.50, the table shows that the respondents accepted items 1-6 (erratic power supply hence, disrupting the flow and stability of the Internet service, slow Internet connectivity hence, delay in opening and downloading open access resources on the net, lack of Internet searching skills limits me from accessing open access resources on the net, inability of library staff in assisting

me in searching and using Open Access Resources, inadequate/shortage of computer systems and terminals thus, limiting my access to open access resources on net and, lack of knowledge of the existence of Open Access Resources hinders my use of it unavailability of Internet facilities to browse and access open access resources on the net) and disagreed on item 7

(unavailability of Internet facilities to browse and access open access resources on the net) as a challenge associated with the accessibility of open access resources.

Finally, the overall standard deviations ranged between 0.63-0.89. This shows that there was no wide variation in the standard deviations of the responses of the postgraduate students on the above Mean ratings.

Based on the findings of the study, the following recommendations are made:

^{*}Key2: A-Agree, D-Disagree.

- 1. There is need for the library to also provide power inverters or solar power facilities in the library as backup for stable electricity to curb epileptic Internet services which in turn f ust ates use s" use of open resources online access connected via their library webpage. Although, the power stability will also be beneficial in enhancing library services especially for libraries that are digitized or automated.
- 2. Frequent power outage interrupts Internet services, thus there is need for the library to also provide power inverters or solar power facilities in the library as backup for stable electricity to curb epileptic Internet services which if not handled can frustrate use s" use of open access resources online. Besides, the power stability will also be beneficial in enhancing library services especially for libraries that are digitized or automated.
- 3. Increasing the Internet bandwidth in the library can help avoid slow downloading or slow Internet connectivity when browsing free scholarly publications online which may hinder optimal use of these free resources. Internet terminals via Wi-Fi should be increased in the library to encourage capacity use of open access resources among users, especially where the library has limited computer systems.
- 4. Library staff should be given regular in-house training and orientation on the general concept of open access and also the procedures in accessing their

- links hence, enabling them to effectively assist users in accessing these resources easily online. These will as well equip the staffs who are expected to render reference services and answer other information related queries of library users.
- 5. As a way of also maximizing and eradicatingopenaccess ignorance, the university management should occasionally organize seminars or workshops on the availability of open access links on thei lib a y"s webpage. This will further boost optimal use of these websites and their resources thus improve academic performance and quality research among students and lecturers.

References

- Ajibili, D.O. (2017). Awareness and utilization of open access resources in libraries of private universities by postgraduate students in Nigeria, (Doctoral thesis, University of Nigeria, Nsukka, Nigeria).
- Ajibili, D.O. & Emmanuel, H. (2017). The extent of awareness of open access resources in libraries of private universities by postgraduate students in Nigeria. *International Journal of Applied Technologies in Library & Information Management*, 3(2), 27-38.
- Arosanyin, J.O. & Ajibili, D.O. (2014). Awareness and utilization of open access resources in Asom Bur learning resource centre, university of Mkar by undergraduate students. *The Information Technologist*, 11(2), 129-141.
- Asogwa, V.C., Wombo, A.D. & Ugwuoke, C.U. (2014). Challenges and coping strategies adopted by postgraduate

- students of agricultural education in thesis writing in Nigerian universities. *American Journal of Operations Research*, 4(5), 311-318.
- Canada, D. (2009). Open Access and development countries. Retrieved from http://infosherpas.com/ojs/index. php/openandlibraries/article/view/50/7 4.
- Gabriel, U. I.(2013). Enhancing environment for private university contribution to economic development in Nigeria (1). Retrieved from http://www.ngrguardiannews.com/index.php%3.
- Mohammed, A. & Garba, A. (2013).

 Awareness and use of open access scholarly Publications by postgraduate students of faculty of science in Ahmadu Bello University Zaria (ABU), Kaduna State, Nigeria.

 Samaru Journal of Information Studies, 13(1 & 2), 61-68.
- Susan, C. & Skinner, J.Q. (2009). Academic libraries. Encyclopedia of Library and Information Science, 3 Edition. Retrieved from http://www.tandfonline.com/doi/abs/10.1081/E-ELIS3-120044525#.Vshe nV5c_IU OR doi: 10.1081/E-ELIS-120044525.
- Swan, A. (2012). Policy guidelines for the development and promotion of Open Access: Defining open access. Paris, France: UNESCO. Retrieved from http://unesdoc.unesco.org/images/00 0021/002158/215863e.pdf

Swan, A. and Chan, L (2009). The library website and open access. Open access scholarly information sourcebook. Retrieved from http://www.openoasis.org/index.php?Option=com_content&view=article&id=258&Itemid=397.

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