

The Relevance of the Use of Open Access Publications by Undergraduates of Library and Information Science in Delta State University, Abraka

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ABSTRACT

This study was designed to examine the relevance of the use of open access publications by undergraduate Library and Information Science Students in Delta State University, Abraka. As part of the study, questions were formulated so as to achieve the aim and specific objectives of the study; also various literatures of scholars and authors in the field were reviewed. In order to achieve the purpose and objectives of this study, questionnaire was designed to elicit information from the respondents. The sample size for the study was 121 undergraduate LIS students which is 20% of the total population of 610. After the total collection of data, critical analysis of the study was carried out and the major findings revealed the following: that undergraduate LIS students are aware of various open access publications which include theses and dissertations, electronic books, open access journals, conference papers, author personal websites amongst others; that open access is usually the first priority for undergraduate LIS students when sourcing for materials for assignments; LIS students make use of open access publications for their course works, to update their knowledge, to meet their research needs etc; improvement in academic performance, personal growth, career development, easy accessibility and high quality scholarly work are some of the benefits of using open access publications by undergraduate LIS students and there are many problems that militate against the use of open access publications by undergraduate LIS students such as retrieval of too much irrelevant information, inadequate skills to navigate the internet and lack of knowledge of the existence of open access publications, download delay, insufficient bandwidth and so on. Finally, the study was concluded, recommendations made and the researcher gave suggestions for further studies.

Keywords: *Open Access Publication, Relevance, Use, Library and Information Science, Undergraduate students, Higher Institutions.*

INTRODUCTION

Academics in developing countries are fast adapting to the internet as a source of information for teaching, learning and research (Ivwithreghweta & Onoriode, 2012). Open access publications, of different types, are available on various intranets of higher institutions of learning, globally, as well as on the internet (Agber & Agwu 2013). The publications are employed by users, especially in the academia, for teaching, learning and research.

Open access is the term used to describe literature that is available to any reader at no cost on the Internet (Kwan, 2003). Giarlo (2006) explained that open access is used to describe a model of scholarly communication in which users may freely view, download, copy and print scholarly

articles, books, conferences proceedings, squibs and so forth. This implies that the users are able to freely access scholarly materials because the price of publication has been assumed by another party, usually the author, the author's institution or grant which funded the research. The most popular open access publication is the open access journal (Swan & Chan, 2010).

The use of various open access publications has no doubt paved way for academic excellence. Several studies have been carried out on awareness and use of open access publications. Okoye and Ejikeme (2010) argued that most researchers are still reluctant to the use of open access journals. According to Okoye and Ejikeme, one of the major reasons for this is that they are not aware of what is available to them and what the services is capable of doing. They further stated that students are less likely to use open access journal unless they are encouraged to do so by their lecturers (Ivwithreghweta & Onoriode, 2012).

In a similar fashion, Korobili, Tilikidou and Delistarou (2015) revealed that the results of the user survey at the University of Hong Kong library shows that 68.8 percent of the respondents prefer to use open access journals compared to 31.2 percent who prefer to use printed journals.

Furthermore, the use of open access publications as an information seeking channel has many benefits. Suber (2006) opined that the primary advantage of open access journals is that the entire content is available to users everywhere regardless of affiliation with a subscribing library. Okoye and Ejikeme (2010) also identified the benefits of using open access publications to include increased citation to published scholarly works, free publications for authors, free online access to literature necessary for ones research amongst others.

In Nigeria, studies such as those of Ajuwa (2003) and Ureighe, Oroke and Ekruyota (2006) found that access to and use of open access resources is still low. They attributed the factors that may be accountable for the low use as awareness and attitude of researchers.

However, Okoye and Ejikeme (2010) in their investigation identified inadequate skills to navigate the internet, unstable power supply, unavailability of internet facilities, permanence of open access movement due to unstable financial support, lack of knowledge of the existence of open access journals in the internet as constraints to the use of open access publications by researchers.

Problem Statement

Many studies have been carried out on the use of open access publications but not much have been on the relevance of the use of these publications in tertiary institutions in Nigeria. It has been observed that most students and researchers are still reluctant to the use of open access publications; one of the major reasons for this is that they are not aware of what is available to them and what the services is capable of doing. Some studies like that of Ivwithreghweta & Onoriode (2012) have even pointed out that students in tertiary institutions are less likely to use open access journals unless they are encouraged to do so by their lecturers. Based on the stated observations, it is therefore pertinent that this study is aimed at investigating the relevance of the use of open access publications in tertiary institutions in Nigeria using Delta State University, Abraka, Nigeria as a case study.

Research Questions

This study will answer the following research questions:

- (1) What is the level of awareness of open access publications by undergraduate LIS students in Delta State University, Abraka?
- (2) To what extent do the undergraduate students make use of open access publications?
- (3) How relevant is the use of open access publications to the undergraduate students?
- (4) What are the problems militating against the use of open access publications by the undergraduate students?

Purpose of the Study

The purpose of this study is to examine the relevance of the use of open access publications by undergraduate students in Delta State University, Abraka. The specific objectives are to find out:

- (1) The level of awareness of open access publications by undergraduate LIS students;
- (2) The extent to which the undergraduate students make use of open access publications;
- (3) The relevance of the use of open access publications by the undergraduate students and
- (4) The problems militating against the use of open access publications by the undergraduate students.

Significance of the Study

This study is expected to provide a basis for comprehensive information on the relevance of the use of open access publications in tertiary institutions in Nigeria. It is also hoped that the findings of this study shall propel management of higher institutions in Delta State, in particular, and Nigeria, in general, to formulate concrete and systematic procedures as well as take practical steps that will enlighten every undergraduate student on the usefulness of open access publications to their academic performance and personal development as a whole. Thus, this study will contribute to knowledge.

LITERATURE REVIEW

Level of Awareness of Open Access Publications by Undergraduate Students

Awareness is a pre-requisite to subsequent usage of open access publications unless an individual uses it unknowingly. According to Dinev, Hu and Goo (2005), awareness raises consciousness and knowledge about a certain technology and its personal and social benefits. This view was supported by their study which established awareness as the central determinant of user attitude and behaviour towards technology. In the open access environment, awareness has also been acknowledged as an important factor determining usage of this mode of scholarly communication (Warlick & Vaughan, 2006; Fullard, 2007).

Open access concept is still not widely known among researchers from different geographical localities and research disciplines. Some of the studies indicate that open access was an unknown concept to many researchers (Christian, 2008; Greyson, Vezuna, Morrison, Taylor & Black, 2009). Earlier researchers like Bartle and Walton (1996) argued that most students and

researchers are still reluctant to the use of Open Access publications. According to Bartle and Walton, one of the major reasons for this is that they are not aware of what is available to them and what the services is capable of doing.

Also, it is worthy of note that the whole concept of open access publications usage is derived from the awareness of users of the availability of the resources in the first place. Studies have been conducted concerning the awareness or otherwise of open access resources. Thanuskodi (2010) in a study of use of the internet and open access resources for agricultural science information, at Coimbatore University, India, asserts that while the majority of students were aware of the resources on the internet, they lacked the techniques of accessing such information in order to use it; a few students were totally unaware of the existence and possible usage of such resources (Thanuskodi, 2010).

However, a study by Christian (2008) revealed that while only 3 percent of 66 respondents at the University of Lagos were aware of the open access concept, 22.7 percent others knew very little about it and a majority (74 percent) of the respondents were completely unaware of open access. It should be noted that even where open access awareness is reported, the level of understanding was not uniform for different open access terms.

Again, Sanchez-Tarrago and Fernandez-Molina (2009) in their study revealed different knowledge of open access related initiatives among scholars from a group of university students in Cuba. According to this study, while 44.8 percent of the respondents were reported to be aware of open access journals, only 20.7 percent knew about open access repositories.

In the same vein, Ramachandran and Scaria (2004) reported that poor level of awareness of open access publications among scholars in Nigeria is a prime obstacle to optimizing and strengthening open access in Nigeria and other parts of the developing world. Since most of the open access resources are located in the World Wide Web, it will require access to the web to be able to appreciate their immense benefit. Even those who have access to the internet may not necessarily be aware of the existence of the open access technology, while those who are aware of it may have a misconception of it (Chan & Kirsop, 2001).

However, Liew, Foo and Channupatic (2000) in their survey found that many students and researchers are aware of open access resources and they give preference for and use it against printed articles which confines the idea that patrons may limit their research to easily available electronic journals simply because of their convenience and regardless of whether other sources would better suit their information needs.

In another development, Mallik and Roy (2007) in their study of the usage of online resources by undergraduate students found that the respondents or use groups are differ in their usage methods of access and in their frequency of use of online resources and that lack of use or awareness of the library home page could have prevented some users from using the resources.

Extent of Use of Open Access Publications by Undergraduate Students

The use of various open access publications has no doubt paved way for academic excellence in different disciplines. They have become an important source for scientific research and development. Thus, very few studies have been carried out on the use of open access publications by students of tertiary institutions in Nigeria.

It is however pertinent to know that the use of open access resources seems to vary across institutions. Eqbal and Khan (2007) in their study found that 88.24% faculty of science are more aware about open access journals. They also revealed that the majority of research scholars in faculty of science 67.64% and 69.23% faculty of Engineering use open access resources for research work whereas 35.29% in faculty of science use open access resources to update their knowledge and 23.70% in faculty of engineering use them for study.

In a similar fashion, the results of the user survey, at the University of Hong Kong library (cited by Korobili, Tilikidou & Delistarou 2005) shows that 68.8 percent of the respondents prefer to use open access journals compared to 31.2 percent who prefer to use printed journals.

In Nigeria, studies such as those of Ajuwa (2003) and Ureighe, Oroke and Ekruyota (2006) found that access to and use of open access resources is still low. According to them, the factors that may be accountable for the low use may be awareness and attitude of researchers. Though, in earlier researches, Applebee and Clayton (1996) revealed that ease, convenience, and accessibility were major factors influencing academic use of open access publications.

However, the survey conducted by Sandhu and Daviet (2012) on the use of open access resources by the engineering students of Punjab, India revealed that almost two-third of the respondents noted that they know about opportunities and limitations of using open access resources. Many respondents noted that they considered open access resources alongside paid resources while others highlighted research needs that are uniquely met by open access resources. Others mentioned that because some professors require that students cite only traditional paid resources, they do not use open access resources (Sandhu & Daviet, 2012).

Relevance of the Use of Open Access Publications by Undergraduate Students

According to Nicholas, Paul and Ian (2005), open access publications focus on three main characteristics: it is available on the internet, there are no financial or legal barriers to accessing it and authors use copyright only to maintain the integrity of their work and retain the right of attribution.

The use of open access publications as an information seeking channel has many benefits. Dalgeish and Hall (2000) provided two attributes of open access journal as compared to textbooks. Firstly, open access journals have the ability to provide up-to-the-minute information and secondly, this information can be obtained from around the world (Dalgeish & Hall, 2000).

Okerson (1999) pointed that there were weaknesses to the print system of publication. Print journals are slow to appear most times and come to libraries through a distribution system full of pitfalls, which include those contributed by the world's postal systems. Access to individual copy of the print journal is limited to one person at a time and further reproduction is legally

questionable or expensive if done with the publisher's permission is usually labour-intensive. Searching print text with reliability is difficult, though browsing or reading print text is relatively easy. Access to collections is limited by location and availability, and that access can be slow and inconvenient (Okerson, 1999).

According to Ivrihreghweta and Onoriode (2012), the primary advantage of open access publications is that the entire content is available to users everywhere regardless of affiliation with a subscribing library. The main motivation for most authors to publish in an open access journal is increased visibility and ultimately a citation advantage (Suber, 2006).

Several studies have been carried out on open access publications which highlight some of the benefits to their users. Eysenbach (2006) writing on the relevance of these publications to students and researchers in tertiary institutions posited that some of the benefits of these publications include free access to information, increased research impart (measured by citations/downloads) of open access articles versus non-open articles and possible solution to serial crisis or journal affordability problem.

Furthermore, the survey carried out by Ivrihreghweta and Onoriode (2012) on the awareness and use of open access journals by Library and Information Science students at the University of Ibadan, Nigeria made known the benefits derived from using open access journals by master's degree students. Their research revealed that open access journals provides free online access to the literature necessary for research with 84 (60%) and 38 (27%) positive responses. This was followed by the possibility of self-Archiving with 82 (59%) responses and 38(27%) and easy accessibility of research works with 80 (57%) and 47 (34%) positive responses.

However, Okoye and Ejikeme (2010) identified the benefits of using open access journals by undergraduate students in tertiary institutions to include the following:

- Publications are made free from authors
- Increase in the impact of a researcher's work
- Articles can be accessed online free of charge
- Free online access to the literature necessary for ones research
- Personal growth and career development
- High quality scholarly work
- Improved overall academic performance

Problems militating against the use of Open Access Publications by Undergraduate LIS Students.

The foregoing discussion points to the fact that the role played by open access publications in the academic world (particularly the universities) cannot be undermined.

Thus, it is imperative to incorporate principles to re-awaken the importance of open access publications in the minds of the undergraduate students. However, the efforts of undergraduate students are been thwarted as noted by some studies.

Agber and Agwu (2013) opined that the factors which hinder students' effective use of online resources may be technical and non-technical in nature. The technical constraints include

inadequate and poor telecommunication infrastructure, absence of national information communication infrastructure, problems of connectivity, lack of or limited bandwidth for ICT for learning and research and non-reliability of public electricity; while the non-technical constraints include, among other constraints: online usage skills necessary for general surfing of the net, lack of time to use ICTs as a result of school work amongst others (Association of African University, AAU, 2000).

In his view, Nwazuoke (2001) stated that access to and uses of online resources in Nigeria is hampered by the inadequacy of existing resources, lack of information about them, inadequate security of materials, uncooperative attitude of parent bodies, lack of appropriate and coherent policies, inflation and unstable budgetary allocation (Nwazuoke, 2001).

In another development, another serious constraint against the use of the internet, according to Aduwa-Ogiegbaen and Iyamu (2005) is limited access to the internet. Aduwa-Ogiegbaen and Iyamu found that there are few genuine internet service providers (ISPs) that provide internet gateway services in Nigeria. The services offered by these providers are expensive and are not afforded by the majority of Nigerians. Most of the other ISPs are exploitative and fraudulent. These offer poor services, charge high fees and at the same time cheat on their bandwidths.

However, Manda (2005) studied the use of electronic resources in Tanzania by academics. He found out that the use was low, due to inadequate end-user training, slow connectivity, and limited access to PCs, poor search skills, and budget cuts. Smith (2007) looked at South Africa, finding that insufficient bandwidth was a major problem, and the range of open access publications in the respondents' field of interest was fairly limited.

Furthermore, Okoye and Ejikeme (2010) in their investigation indicated that with open access, articles can be accessed online free of charge. They identified inadequate skills to navigate the internet, unstable power supply, unavailability of internet facilities, permanence of open access movement due to unstable financial support, lack of knowledge of the existence of open access resources in the internet as constraints to the use of open access publications by students and researchers in general.

Again, Ivrihreghweta and Onoriode (2012) in their study on the awareness and use of open access journals by Library and Information Science students at the University of Ibadan, Nigeria reported lack of knowledge of the existence of open access journals on the internet, lack of internet search skills, retrieval of too much irrelevant information, download delay amongst others as the major problems militating against the use of open access publications by the students.

METHODOLOGY

Since the central aim of this study is to elicit the opinion of the undergraduate Library and Information Science students on the relevance of the use of open access publications, the researcher used the descriptive survey design to collect data from 121 respondents. The research instrument used for this study was the questionnaire. The questionnaire was titled "Relevance of the use of Open Access Publications by Undergraduate Library and Information Science Students Questionnaire (RUOAPULISSQ)". The copies of the questionnaire were administered

on a face – to – face basis with the help of trained research assistants. The sample consisted of 121 undergraduate LIS students.

FINDINGS AND DISCUSSION

Findings from the study are presented in tables 1 –

Table 1: Analysis of Respondents' Bio-Data

Gender	Responses	Percentage
Male	53	43.8%
Female	68	56.2%
Total	121	100%

Source: Field survey, 2016

Table 1 shows that 53 (43.8%) and 68 (56.2%) of the respondents were male and female respectively. This implies that majority of the respondents were female undergraduate LIS students.

Research question one:

What is the level of awareness of open access publications by undergraduate LIS students in Delta State University, Abraka?

Table 2: Level of awareness of open access publications by LIS students

S/N	Level of Awareness	Agree	%	Disagree	%
1.	I am aware of author personal websites	73	60.3%	48	39.7%
2.	I am aware of Open Access journals	87	71.9%	34	28.1%
3.	I am aware of Monographs	19	15.7%	102	84.3%
4.	I am aware of Conference papers	77	63.6%	44	36.4%
5.	I am aware of institutional repositories	31	25.6%	90	74.4%
6.	I am aware of departmental archives	65	53.7%	56	46.3%
7.	I am aware of theses and dissertations	112	92.6%	9	7.4%
8.	I am aware of free electronic books	107	88.4%	14	11.6%

Source: Field survey, 2016

Table 2 discusses the level of awareness of open access publications by undergraduate LIS students in Delta State University, Abraka. 92.6% agreed that they were aware of theses and dissertations while 7.4% respondents disagreed. Also, 88.4% respondents claimed they were aware of free electronic books while 11.6% disagreed. 71.9% declared their awareness of Open Access journals, 63.6% were aware of Conference papers, 60.3% were aware of author personal websites and 53.7% were aware of departmental archives. This finding supports the study of Thanuskodi (2010) who asserted that while the majority of university students are aware of the resources on the internet; a few students were totally unaware of the existence and possible usage of such resources. It is also worthy of note that the level of awareness of institutional repositories and monographs by the respondents was low as only 25.6% and 15.7% respectively claimed to

be aware of these open access publications. This is in line with the survey of Christian (2008) who revealed that even where open access awareness is reported, the level of understanding for the different open access publications cannot be reported.

Research question two:

To what extent do the undergraduate LIS students make use of open access publications?

Table 3: Extent of Use of Open Access Publications by LIS Students

S/N	Extent of Use	Agree	%	Disagree	%
1.	I usually retrieve scholarly contents from open access	71	58.7%	50	41.3%
2.	I use open access publications for my course works	90	74.4%	31	25.6%
3.	I use open access resources to meet my research needs	67	55.4%	54	44.6%
4.	I make use of open access publications to update my knowledge	86	71.1%	35	28.9%
5.	Open access is usually my first priority when sourcing for materials for my assignments	97	80.2%	24	19.8%
6.	I frequently download and cite open access publications.	61	50.4%	60	49.6%

Source: Field survey, 2016

Table 3 discloses the extent of use of open access publications by the undergraduate LIS students. 80.2% of the respondents agreed that open access is usually their first priority when sourcing for materials for assignments, though 19.8% respondents disagreed. 74.4% use open access publications for their course works and 71.1% respondents make use of open access publications to update their knowledge. Also, 58.7% of the respondents affirmed that they usually retrieve scholarly contents from open access while 55.4% agreed that they make use of open access resources to meet their research needs. More so, there was a thin line between the responses on frequent download and citing of open access publications as 50.4% of the respondents agreed that they do while 49.6% of the respondents disagreed. This analysis is in accordance with Eqbal and Khan (2007) who posited in their study that majority of research scholars use open access resources for research work, to update their knowledge and for study.

Research question three:

How relevant is the Use of Open Access Publications to Undergraduate LIS Students?

Table 4: Relevance of the Use of Open Access Publications to LIS Students

S/N	Relevance of Use	Agree	%	Disagree	%
1.	Free online access to literature necessary for research	111	90.9%	10	9.1%
2.	Reduces publication delay	98	81%	23	19%
3.	Easy accessibility of research works	102	84.3%	19	15.7%
4.	Possibility of self-archiving	87	71.9%	34	28.1%
5.	Personal growth	109	90.1%	12	9.9%
6.	Career development	105	86.8%	16	13.2%
7.	High quality scholarly work	100	82.6%	21	17.4%

8.	Boosts academic performance	113	93.4%	8	6.6%
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Source: Field survey, 2016

Table 4 displays the relevance of the use of open access publications by undergraduate LIS students. Improvement in academic performance was the major benefit of the use of open access publications as affirmed by 93.4% of the respondents and majority declared that they have free online access to literature necessary for their research as revealed by 90.9% of the respondents. Also, personal growth, career development, easy accessibility and high quality scholarly work was seen as some advantages gained from the use of open access publications by 90.1%, 86.8%, 84.3% and 82.6% respondents respectively. However, 81% and 71.9% respondents say that open access publications reduces publication delays and increases the possibility of self-archiving respectively. This analysis supports the findings of Ivrihreghweta and Onoriode (2012) who posited that the benefits derived from using open access journals include free online access to the literature necessary for research, the possibility of self-Archiving, easy accessibility of research works amongst others. Also, Okoye and Ejikeme (2010) asserted likewise.

Research question four:

What are the problems militating against the use of open access publications by the undergraduate students?

Table 5: Problems that hinder use of open access publications

S/N	Problems that hinder use of open access publications	Agree	%	Disagree	%
1.	Retrieval of too much irrelevant information	119	98.3%	2	1.7%
2.	Unavailability of internet facilities	73	60.3%	49	39.7%
3.	Download delay	99	81.8%	22	18.2%
4.	Lack of knowledge of the existence of open access publications	107	88.4%	15	11.6%
5.	Unstable power supply	36	29.8%	85	70.2%
6.	Inadequate skills to navigate the internet	115	95%	7	5%
7.	Insufficient bandwidth	61	50.4%	60	49.6%

Source: Field survey, 2016

Table 5 highlighted the problems militating against the use of open access publications by undergraduate LIS students. It is obvious that retrieval of too much irrelevant information, inadequate skills to navigate the internet and lack of knowledge of the existence of open access publications are major problems militating against the use of open access publications by undergraduate LIS as affirmed by 98.3%, 95% and 88.4% respondents respectively. Thus, 81.8% says download delay is a problem, 60.3% saw Unavailability of internet facilities as a problem and 50.4% picked insufficient bandwidth as a problem. However, unstable power supply was not seen as a problem as 70.2% of the respondents disagreed to it. These findings are in accordance with Okoye and Ejikeme (2010), Ivrihreghweta and Onoriode (2012) and Agber and Agwu (2013) who highlighted various factors that hinders the effective use of open access publications by undergraduate LIS students in tertiary institutions.

CONCLUSION

Having had an insight on the relevance of the use of open access publications by undergraduate LIS students in Delta State University, Abraka, it was shown based on the research findings that the role of open access publications in teaching, learning and research processes in higher institutions cannot be overemphasized. The researcher therefore concludes that the management of the department of Library and Information Science in all tertiary institutions should create more awareness on the use of open access publications by their students at all levels (undergraduate and postgraduate) and as well introduce the use of open access resources into the students' curriculum of studies. Also, the management should implement every strategy possible to combat the problems militating against the effective use of these publications.

RECOMMENDATIONS

From the findings and results of this research, the researcher further recommends:

- (1) Practical lectures should always be organized at all levels by the management of LIS department on how to filter relevant information from open access publications online.
- (2) Undergraduate LIS students should be encouraged to learn relevant skills to navigate the internet.
- (3) Proper awareness should be created for LIS students on the knowledge of the existence of open access publications.
- (4) Challenging tasks/assignments should be assigned to LIS students that warrant making use of open access publications.
- (5) The use of open access resources as a course should be introduced into the curriculum of the department for the undergraduate students.

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