

**Full Length Research**

# Facilitating Conditions, a Factor for Use of Open Access Resources by Lecturers: A Case Study of Lecturers from the University Of Ilorin, Nigeria

OLUSEUN TAIWO AKANNI

UNIVERSITY OF JOS LIBRARY, P.M.B. 2084, Jos. E-mail: oluseunakanni@gmail.com

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The study analysed the access points used by lecturers to access open access resources, types of open access resources used by lecturers and the facilitating conditions that affect the use of open access resources by lecturers in University of Ilorin, Nigeria. The main objective was to find out the relationship between facilitating conditions and use of open access resources by lecturers in University of Ilorin. The design adopted for the study was the descriptive survey research and population comprised lecturers from University of Ilorin. Random sampling was used to select 117 as sample size. Questionnaire for Lecturers was used as the research instrument. The analysis was done using descriptive statistics to answer research questions while Pearson product moment correlation and regression analysis was used to test hypothesis at 0.05 level of significance. The result revealed that majority of the lecturers (76.0%) agreed to using laptops. Also 67.0% of them used smart phones a lot to access open access resources while only about 5.0% did not use laptops at all. The use of smart devices likes laptop and phones have made it very easy for lecturers to utilize open access resources regardless of where they are. The result of the correlation conducted between facilitating conditions and use of open access resources by University of Ilorin yielded positive significant relationship( $r = .432^{**}$ ;  $N = 100$ ;  $p < 0.05$ ). This indicated that facilitating conditions is a strong determinant of use of open access resource. Majority of the lecturers agreed that they enjoyed good management support, possessed high computer and internet literacy skills and had good technological support. While the challenges identified included inadequate power supply and slow internet connectivity.

**Key words:** Open access resources, access points, facilitating conditions Lecturers.

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## BACKGROUND OF STUDY

Traditionally, journals have been sold on subscription to libraries. In the age of print-on-paper, this was the only model available that enabled publishers to disseminate journals and recoup the cost. Unfortunately, this meant that only researchers in institutions that could afford to pay the subscription charges were able to read journal

articles. Even wealthy universities could only afford a proportion of the world's research literature (Chan, 2004).

The revolution of Open Access (OA) since early 1990s has therefore seemed to have liberated libraries and information centers all over the world (Bailey 2006). The primary advantage of open access journals 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 journals is increased visibility and ultimately a citation advantage (Suber, 2006). Researcher citations of articles in a hybrid open access journals has shown that open access journals articles are cited more frequently or than non-open access articles (Antelman, 2004).

Lecturers as researchers in the University system are taking full advantage of the promising avenue presented by the advent of open access resources as information resources made available on the open access platform are made available to researchers free of charge. The provision of free online access to the literature necessary for research, therefore helps in career development, and provides high quality scholarly work. Dulle (2010) posited that through open access, the visibility of research and accessibility to research articles published in open access journals or open access repositories from both developing and developed countries can be made easy and without restrictions.

Infrastructure however appears to be a limiting factor for researchers and lecturers in some developing countries of the world. Christian (2008) reported that most institutions in many developing countries are still battling to overcome many challenging issues like inadequate access to information, lack of research funds, lack of electronic resources, inadequate ICT and Internet facilities and lack of competence in the use of the Internet which surround their research activities.

More importantly, it is pertinent to note that all scientific research activities take place in a conducive environment. Open access resources are based on internet technologies. Therefore, infrastructure like computers and internet as well as technical know-how such as computer literacy skills are of utmost importance when accessing open access resources. It is against this backdrop that the study is set to investigate the effect of facilitating conditions on use of open access resources by lecturers.

## STATEMENT OF PROBLEM

Studies have revealed that basic infrastructure needed to support the use of open access resources by lecturers seem to be deficient in developing countries like Nigeria. Constant electricity supply and fast internet connectivity are still at very low ebb. This situation has incapacitated some lecturers who are willing to use open access resources. Therefore, the presence or absence of these facilitating conditions will either improve use or limit the use of open access resources. It is to this end that the study sets to investigate the effect of facilitating conditions on the use of open access resources in the

University of Ilorin, Nigeria.

## OBJECTIVES OF THE STUDY

The objectives are to;

- i. determine access point to the use of open access resources by the lecturers;
- ii. find out the different types of open access resources used by lectures
- iii. find out the relationship between facilitating conditions and use of open access resources by the lecturers.

## RESEARCH QUESTION

The research questions to be examined in this study are;

1. What are the access points used by lecturers to access open access resources in University of Ilorin?
2. What are the different types of open access resources used by lecturers?

## RESEARCH HYPOTHESIS

The following hypothesis was tested in this study:

H<sub>01</sub>: There is no significant relationship between facilitating conditions and use of open access by university lecturers.

## LITERATURE REVIEW

Many studies have been carried out on the use of open access resources. A survey by Deoghuria and Roy (2007) also established that out of 125 respondents, 80% used open access to access literature and 20% used open access for publishing their research output. The findings reported in an article by Utulu and Bolarinwa (2009) further support the above observations. In the cited article, it is noted that 40% of the respondents claimed to have accessed scholarly content using pre-prints or post-prints and 46% through open access journals. Obuh2013 also explored the attitude of library and information science lecturers towards the Use of Open Access Scholarly Publications. In the research, 104 lecturers from 15 universities from Southern Nigeria were studied. The result revealed that all the 104 LIS lecturers agreed to have used open access resources for; citing references, sourcing materials needed for research, sourcing for materials for other academic activities and perusing scholarly articles from open access journal,

theses and dissertations. The study further revealed that the level of usage of open access resources by both junior and senior lecturers was very high and that both cadre of lecturers indicated similar positive attitude towards the use of open access publications.

Muthayan (2003) points out that only few institutions with reliable and fast Internet connection would benefit from open access initiatives in South Africa. Similarly, Hirwade and Rajyalakshmi (2005) considered lack of infrastructural facilities and connectivity of high bandwidth as among the inhibitors of open access uptake in India. Furthermore, Christian (2008) observed that low Internet bandwidth as among the main hindrances to the widespread uptake of institutional repositories in the sub-Saharan African region. The potential benefits of open access can thus be realized only when the existing technological infrastructure is adequate and users are able to utilize it effectively. Hence, only a few institutions with reliable and fast Internet connection would benefit from open access initiatives in developing countries. Similarly, Lwoga and Questiers (2014) in their work, submit that among factors that determined actual usage of open access included facilitating conditions. Their findings revealed major barriers discovered were related to availability of ICT infrastructure, and technical skills. They recommended that the surveyed institutions should improve the existing ICT infrastructure, including increased bandwidth and power supply, with adequate technical support to enhance use of open access among researchers.

## RESEARCH METHODOLOGY

The research design utilized for the study was the descriptive survey research design as it allows only a sample population to represent the entire population. The entire population for the research was made up of lecturers from four faculties at the University of Ilorin, namely; Science, Arts, Social sciences and Education. The multistage random sampling technique was adopted for this study. At the first stage four faculties each was purposively selected the University. The faculties are Arts, Education, Social Sciences and Sciences. At the second stage, three departments with the highest number of lecturers were selected from each of the chosen faculty. The last stage involved the determination of the sample size. This was done with use of 60% sampling fraction. The sample size randomly selected from the four faculties was one hundred and seventeen (117). Copies of questionnaire were distributed to 117 lecturers out of which 100 were duly filled and returned by the lecturers making a response rate of 85.47%. The sample size for the study is presented in Table 1.

## METHOD OF DATA ANALYSIS

The data collected was analyzed using the statistical package for social sciences (SPSS). Descriptive statistics such as frequencies, percentages, mean and standard deviation was used to answer research questions while the Pearson product moment correlation was used to test hypothesis. This was tested at 0.05 level of significance.

## RESPONSE RATE

A total number of One hundred and seventeen (117) copies of questionnaire were administered at University of Ilorin, out of which one hundred (100) copies were duly filled and returned giving a response rate of 85.47%

## DATA ANALYSIS

### Research question 1: what are the access points used by lecturers to access open access resources?

Table 2 presents the results of the findings on the access points used by lecturers in accessing open access resources. The access points investigated are: Smart phones, I pads, Laptops, and Tablet. The result revealed that majority of the lecturers (76.0%) agreed to using laptops. Also 67.0% of them used smart phones a lot to access open access resources while only about 5.0% did not use laptops at all. The use of smart devices likes laptop and phones have made it very easy for lecturers to utilize open access resources regardless of where they are.

### Research question 2: what are the types of open access resources used by lecturers?

Results presented in table 3 shows that majority 98% of the lecturers used author's' personal archives and open textbook. This was followed by 87% using open access databases and only 45% using Institutional repositories. The reason for the utilization of these resources may be as a result of preference and level of familiarity with these resources.

**Hypothesis testing:**  $H_{01}$ : There is no significant relationship between facilitating conditions and use of open access resources by university lecturers.

Table 4 shows the results of the relationship between facilitating condition and use of open access by lecturers. The result of the correlation conducted between facilitating conditions and use of open access resources by University of Ilorin yielded positive significant relationship ( $r = .432^{**}$ ;  $N = 100$ ;  $p < 0.01$ ). Therefore the hypothesis is rejected. This implies that improvements in

**Table 1:** Sample size for the study

University of Ilorin			
Faculty	Department	No. of Lecturers	Sample Size
Arts	English	18	11
	Performing arts	14	9
	History	15	9
Education	Science & Education	16	10
	Arts and Soc/Sci.	16	10
	Human kinetics	11	7
Social Sciences	Business Admin.	12	7
	Accounting	17	10
	Economics	18	11
Sciences	Chemistry	23	14
	Micro. Biology	14	9
	Mathematics	16	10
		<b>190</b>	<b>117</b>

**Table 2:** Access points to open access resources used by lecturers in University of Ilorin

Access points	SA		A		D		SD	
	F	%	F	%	F	%	F	%
Smart phones	67	67.0	33	33.0	-	-	-	-
Laptop	76	76.0	19	19.0	5			
Tablet	38	38.0	62	62.0	-	-	-	-
I pad	42	42.0	58	58.0	-	-	-	-

**Table 3.** Types of Open Access resources used

Types	Used		Not used	
	F	%	F	%
Institutional repository	45	45.0	55	55.0
Open access databases	87	87.0	13	13.0
Author's personal archives	98	98.0	2	2.0
Open textbooks	98	98.0	2	2.0

**Table 4.** Relationship between facilitating conditions and use of open access resources by lecturers

Name of University	Variables	Mean	Std. Deviation	N	R	Df	Sig. (P)	Remark
University of Ilorin	Facilitating conditions	75.80	6.189	100	.432**	99	.001	Sig.
	Use of open access resources	24.07	2.910					

the facilitating conditions will enhance the use of open access resources by the lecturers.

## DISCUSSION OF FINDINGS

Results revealed that the use of smart devices like laptop

and phones have made this very easy for lecturers to utilize open access resources regardless of where they are to access different types of open access resources. Most of the open access resources that were found out to be used by lecturers included institutional repositories, open access databases, author's personal archives and open textbooks. This supports the results Rowlands and

Nicholas, (2012) who investigated the scientific researchers' perceptions of digital repositories. They analysed 1,685 survey responses obtained from faculty members and found that 1,079 (63.7%) of the respondents had used one type of open access repository or another.

Findings showed that majority of the lecturers agreed that they enjoyed good management support, possessed high computer and internet literacy skills and had good technological support. While the challenges identified included inadequate power supply and slow internet connectivity. This reveals that management of the university still prioritizes the provision of an enabling environment that support research, even in these times of financial crunch. Though, problems like power supply still persist. Alluding to the challenges, Christian (2008) and Lwoga and Questiers (2014) in their separate works submitted that among factors that hinder effective use of open access resources were bandwidth and power supply by researchers in Sub Sahara Africa and Tanzania respectively.

Results also revealed that there was a significant positive relationship between facilitating conditions and use of open access resources by lecturers. If adequate facilities like stable power supply and fast internet connectivity are provided, the use of open access resources would be enhanced. The absence of these facilities will hinder the effective use of open access resources by lecturers. This view was also expressed by Hirwade and Rajyalakshmi (2005) who expressed that lack of infrastructural facilities and connectivity of high bandwidth were among the inhibitors of open access uptake in India.

## CONCLUSION

Information resources of different types hosted on the open access platform has increased access to information resources at no cost. Lecturers are taking full advantage of this channel to access information that is used to improve their research prowess through the publication of articles that contribute to the growth and advancement of knowledge. The portability of electronic devices like laptops and smart phones have made it very easy for the lecturers to access open access resources whenever they want to and where ever they are. However, for lecturers to be able to make appreciable use of open access resources there is a need for the availability of conditions that will enhance the use as the result of this research has revealed that facilitating conditions affects whether or not open access resources would be used by lecturers.

## RECOMMENDATIONS

As a result of the findings presented by this study, it is recommended that;

1. Management of the universities should address the issue of erratic power supply by providing alternative sources of electricity such as; Power generating sets, inverters, solar, coal among others can be considered.
2. Management of Universities should explore avenues of subscribing to Internet service providers that give access to higher bandwidth that will in turn yield higher browsing speed of open access resources. The ICT unit of the university should make sure that internet connection on campus is fast. This will encourage the use of the internet to access the open resources.
3. Lecturers should make a conscious effort to further develop and enhance their ICT skills. This is because technology is not static, and if they will benefit from product of technology like open access resources, they must keep abreast of the changing technology.

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