21



2nd Open Access National Conference

6-7 November 2014, Gaborone, Botswana

Open Access, Research and Scholarship

Proceedings of the 2nd Open Access National Conference

6-7 November 2014, Gaborone, Botswana

Hosted by the Botswana Library Consortium (BLC)

6th - 7th November 2014

At Ave Maria Roman Catholic Pastoral Care Centre, Game City Gaborone

Editor: Prof Priti Jain

Dept. of Library & Information Studies

University of Botswana

Table of contents

S/N		
	Foreword	Priti Jain
1	Perceptions and Attitudes of Mzuzu University Academic Staff Towards the Open Access Initiative	Felix P. Majawa and Prof. Joseph. J. Uta
2	Positioning Yourself as a Research Leader: Open Access	Matthew Buys
3	Open Access Publishing and Digital Scholarship	Priti Jain
4	Frameworks for Open Access in the context of African Institutions	Athulang Mutshewa
5	Enhancing Open Access and Digital Libraries in Botswana: Strategies for the Future	Batlang comma Serema
6	Landscape of Open Access Repositories in Africa	Akakandelwa Akakandelwa
7	Open Access and Open Government in Africa	Nathan Mnjama
8	Awareness and Attitude of Academic Staff towards Adoption of Open Access Publishing in University of Ilorin Nigeria	Tunji Bashorun

Awareness and Attitude of Academic Staff towards Adoption of Open Access Publishing in University of Ilorin Nigeria

Tunji Bashorun
Doctoral Student
Department of Library and Information Studies
University of Botswana, Gaborone, Botswana
mubash4eva@yahoo.com

Abstract

University of Ilorin (Unilorin) of Nigeria has been providing Internet facilities and electronic information (e-information) resources to users such as academics through various scholarly communication models, including open access (OA). Nonetheless, little is known about the academics' awareness and attitude towards OA publishing. The study examined awareness, attitude of academics staff towards adoption and use OA publishing using triangulation means of collecting data. Besides, this study determined the relationship in identified factors. Data were obtained through questionnaires and semi-structured interviews. Academic staff members from the three selected faculties (Social Sciences, Management Sciences and Communication &Information Sciences) of Unilorin were surveyed, while interview conducted for only two academics. Out of 152 copies of questionnaire distributed, only 140 copies were returned with response rate of 92.1 percent. The data collected were analysed using frequency counts, percentages mean and regression analysis. The study revealed high level of awareness of OA publishing and positive attitude towards adoption and use of OA publishing by academic staff. Consequently, there is significant relationship between independent variables and dependent variables of the study. The study recommends that university authority should put in place OA publishing policy that will encourage academics to publish in OA reviewed journals that could be accepted for promotion and tenure elongation.

Keywords: Adoption, Attitude, Awareness, Open Access Publishing, Scholarly Communication, University of Ilorin, Nigeria

Introduction

Open access (OA) has increasingly assumed parallelism with 'open access publishing'. According to Ghosh and Das (2007:3), "the concept of open access emerged during 1991 due to the realization of the need to enhance scholarly scientific communication". It was first embraced at global level in December 2001 during the Budapest Open Access Initiative (BOAI) conference where the need to use the arrival of Internet technology to freely disseminate traditional scholarly research findings was crystallised. Open Access is a useful means of accessing and disseminating knowledge on the condition that authors or creators of knowledge grant

Open Access can be described as literature digital, online, free of charge and free of most copyright and licensing restrictions (Suber, 2010). OA contents are not restricted only to peer-reviewed research articles; they can be in any formats. Okoye & Ejikeme (2010) identified the benefits of using OA journals to include the following:

- Increased citation to published scholarly work
- Publication are free for authors
- Increased the impact and visibility of researcher work
- It helps in career development
- Provides high quality scholarly work.

Jain (2012) asserts that OA is an effective vehicle to information exchange between countries. Despite the potentials and benefits of OA publishing, adoption and use of OA publishing among Nigerian academics remains low. This paper examine the awareness and attitude as factors influencing the adoption and use of OA publishing by academics of University of Ilorin. Although several studies are have been carried out on factors that influence the adoption and use of OA publishing in Nigerian universities, none of these studies has ever looked into awareness and attitude towards the the adoption and use of OA publishing by academic staff at University of Ilorin.

Statement of Problem

Although OA publishing may be a commendable model for scholarly communication system, with its potential use and benefits to users, however, some factors such as low awareness of OA

Awareness and Attitude of Academic Staff towards Adoption of Open Access Publishing in University of Ilorin Nigeria

Tunji Bashorun
Doctoral Student
Department of Library and Information Studies
University of Botswana, Gaborone, Botswana
mubash4eva@yahoo.com

Abstract

University of Ilorin (Unilorin) of Nigeria has been providing Internet facilities and electronic information (e-information) resources to users such as academics through various scholarly communication models, including open access (OA). Nonetheless, little is known about the academics' awareness and attitude towards OA publishing. The study examined awareness, attitude of academics staff towards adoption and use OA publishing using triangulation means of collecting data. Besides, this study determined the relationship in identified factors. Data were obtained through questionnaires and semi-structured interviews. Academic staff members from the three selected faculties (Social Sciences, Management Sciences and Communication &Information Sciences) of Unilorin were surveyed, while interview conducted for only two academics. Out of 152 copies of questionnaire distributed, only 140 copies were returned with response rate of 92.1 percent. The data collected were analysed using frequency counts, percentages mean and regression analysis. The study revealed high level of awareness of OA publishing and positive attitude towards adoption and use of OA publishing by academic staff. Consequently, there is significant relationship between independent variables and dependent variables of the study. The study recommends that university authority should put in place OA publishing policy that will encourage academics to publish in OA reviewed journals that could be accepted for promotion and tenure elongation.

Keywords: Adoption, Attitude, Awareness, Open Access Publishing, Scholarly Communication, University of Ilorin, Nigeria

Introduction

Open access (OA) has increasingly assumed parallelism with 'open access publishing'. According to Ghosh and Das (2007:3), "the concept of open access emerged during 1991 due to the realization of the need to enhance scholarly scientific communication". It was first embraced at global level in December 2001 during the Budapest Open Access Initiative (BOAI) conference where the need to use the arrival of Internet technology to freely disseminate traditional scholarly research findings was crystallised. Open Access is a useful means of accessing and disseminating knowledge on the condition that authors or creators of knowledge grant

permission for unrestricted use of their content with due acknowledgement and, importantly, not for commercial purposes. There is rapidly expanding stock of scientific knowledge and many African countries spend a lot on research (Ivwighreghweta & Onoriode, 2012). Yet access to this pool of knowledge is often difficult because of the relatively high cost of scholarly journals, print or electronic (Okoye & Ejikeme, 2010). Most of academic libraries are facing problem of high cost of printed journals due to inflated price of journals (serial crisis). This situation of serial crisis and emergent of Internet enable stakeholders to come up with new scholarly communication model referred to as Open Access.

Open Access can be described as literature digital, online, free of charge and free of most copyright and licensing restrictions (Suber, 2010). OA contents are not restricted only to peer-reviewed research articles; they can be in any formats. Okoye & Ejikeme (2010) identified the benefits of using OA journals to include the following:

- Increased citation to published scholarly work
- Publication are free for authors
- Increased the impact and visibility of researcher work
- It helps in career development
- Provides high quality scholarly work.

Jain (2012) asserts that OA is an effective vehicle to information exchange between countries. Despite the potentials and benefits of OA publishing, adoption and use of OA publishing among Nigerian academics remains low. This paper examine the awareness and attitude as factors influencing the adoption and use of OA publishing by academics of University of Ilorin. Although several studies are have been carried out on factors that influence the adoption and use of OA publishing in Nigerian universities, none of these studies has ever looked into awareness and attitude towards the the adoption and use of OA publishing by academic staff at University of Ilorin.

Statement of Problem

Although OA publishing may be a commendable model for scholarly communication system, with its potential use and benefits to users, however, some factors such as low awareness of OA

publishing and poor attitude of academics could constitute the problem of low adoption and use of OA publishing in the university. Therefore, this study examined the relationships between independent variables (awareness, attitude) and dependent variables (adoption, use) of OA publishing by academics in the University of Ilorin.

Significance of the Study

The study is significant because it highlights a number of significant issues related to the adoption and use of OA publishing in Nigerian universities in order to address the challenges of slow adoption and use of OA publishing amongst academics in University of Ilorin.

Objective of the Study

The main objective of this study was to investigate awareness and attitude of academic towards adoption and use of OA publishing in University of Ilorin.

The specific objectives of the study are to;

1. Determine the level of awareness of OA publishing by academic staff of University of Ilorin;
2. Find out academics' attitude towards the adoption and use of OA publishing in the University of Ilorin;
3. Examine the level of the adoption and use of OA publishing by the academic staff of University of Ilorin and
4. Establish the relationships between independent variables (awareness, attitude) and dependent variables of the study.

Research Questions

This study sought to answer the following research questions.

1. What is the level of awareness of OA publishing among academic staff of University of Ilorin?
2. What is the academics' attitude towards of OA publishing in University of Ilorin?
3. What is the level of adoption and use of OA publishing by academic staff in University of Ilorin?

4. What is the relationships between independent variables and dependent variables of the study?

Literature review

Awareness is a precondition to successive adoption and use of OA publications unless an individual uses it unknowingly. According to Dinev and Hu (2005), "awareness raises consciousness and knowledge about a certain technology and its personal and social benefits". This opinion was backed by their study which proved that awareness as the central determinant of user attitude and behaviour towards technology. In the OA atmosphere, awareness has also been recognised as a key determinant in usage of this mode of scholarly communication (Fullard, 2007).

Open access concept is still not widely known among researchers from various geographical localities and research disciplines. Some of the studies reveal that OA was an unknown concept to many researchers (Christian, 2008; Utulu & Bolarinwa, 2009). A study carried out by Christian, (2008) for example, revealed that only 3 percent of 66 respondents at the University of Lagos were aware of the OA concept, while 22.7 percent others knew very little about it and a majority (74 percent) of the respondents was completely unaware of open access. It supposed to be noted that the level of understanding was not uniform for various open access terms, even where awareness of OA is reported. For example, a study by Swan & Brown, (2005), reported that subject repositories or archives were the most known types to the respondents who claimed to be aware of OA concept than OA journals. A similar study by Sanchez-Tarrago and Fernandez-Molina (2009) also revealed different knowledge of OA related initiatives among scholars from a group of health researchers in Cuba. According to this study, while 44.8 percent of the respondents (N = 160) were reported to be aware of OA journals, only 20.7 percent knew about open access repositories. Dulle (2008) reported that the most common known terms or initiatives by researchers were OA journals (59.6 percent respondents) and OA repositories (22.8 percent respondents). Very few respondents knew about specific OA initiatives such as Budapest open access initiative (none), OA movement, (8.6 percent) and the OAIster.org (2.9 percent) respectively.

On the contrary, Popin-Ramacharan & Dawe, (2006) found that only 24 percent of their respondents were aware of OA concept. According to Swan & Brown (2005) in the Joint Information Systems Committee/Open Society Institute (JISC/OSI) study of journal authors from mainly developed countries (U.S. and Europe), revealed that about two–thirds (67 percent) of those who never published in an OA journal were aware of OA concepts. Swan & Brown, (2005) carried out a survey of two groups of authors, those who had published in OA journals and those who had not. It was found that the main reason authors had not submitted to OA journals was that they were not aware of suitable titles in their fields. Similarly, Ramachandran & Scaria (2004) noted that poor level of awareness of OA publications among scholars in Nigeria is a major obstacle to optimizing and strengthening OA in Nigeria and other parts of the developing world. Since most of the OA 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 OA technology, while those who are aware of it may have a misconception of it (Chan & Kirsop, 2001).

Ouya (2006) carried out survey to examine the opinion of journals editors in the Sub-Shara Africa region on OA publishing. It was revealed that journals editors perceived OA to be beneficial and recorded high level of OA awareness. The study implies that apart from awareness as a determinant of adoption and use of OA publishing, editors' attitude also plays a significant role.

Attitude is an individual's overall affective reaction to using a system (Venkatesh *et al.*, 2003). Attitude plays a vital role in acceptance of OA publications, which has a significant influence on behavioural intention of OA publication usage. Attitudinal studies of OA publishing has started dates back to 1991(Xia, 2010). However, there has been little research in OA that systematically investigates the variety and grouping of subjective opinions that the academic community may have. Several studies have been carried out that reveal individuals' attitudes towards technology-based system, which have a strong effect on use and intention to adopt and use either OA publications. Supporting such findings, a study by Louho, Kallioja and Oittinen (2006) contends that attitude has a strong effect on technology use and intention. In this study, academic attitudes towards OA publishing were considered to be influenced both their intention and adoption

behaviour of OA publishing (Louho, Kallioja & Oittinen, 2006; Obuh, 2013; Warlick & Vaughn, 2007). Warlick and Vaughn (2007) examined the faculties who had published in OA journals and established that for biomedical faculty to publish in OA journals, quality was of primary concern. Also free public availability and increased exposure "were not strong enough incentive for the author to choose OA over subscription publications, unless the quality issue was properly addressed.

Fass, Cross and Gardner (2013) carried out research on behalf of Taylor and Francis to examine the researcher's perception of OA in six continents of the world. It was established from the findings that researchers have access to most of the articles they need. The responses were: in. Australia = 42%, Middle East = 41%, US &Canada = 39%, Europe = 35%, Africa = 33% and Latin America = 29%. It was glaring from the findings that Africa is still lagging behind in term of having adequate access to OA journals which might be due to negative attitude developed towards OA. This research finding is an eye-opener and motivated scholars to carry out study on African countries to ascertain our status in OA initiatives. Morris and Thorn (2009) investigated 1,368 scholars in the United Kingdom (UK). It was reported that their concerns about open access included "possible cost to authors, possible reduction in quality and negative impacts on existing journal publisher and society. They also found that the faculty had the perception that OA models had little or no means of quality control.

A study by Mammo and Ngulube (2013) examine academics use and attitude towards OA in selected higher learning in Ethiopia. The finding revealed that 50% of respondents agreed that OA journals had adequate standard quality and scientific merit. Obuh (2013) found out researcher's attitude towards use of OA publications in order to determine the position of LIS lecturers in Southern Nigeria. The census sampling method was employed hence the entire population of 141 lecturers from the Departments of Library and Information Science of the fourteen (14) universities in Southern Nigeria were used as sample for the study. It was acknowledged that both junior and senior lecturers exhibited high positive attitude towards usage of OA publications. And this might be responsible for high level of usage of OA publications by the both cadre of lecturers.

Dulle(2008) examined OA usage to determine the extent to which researchers accessed and disseminated scholarly content through OA in Tanzania. It was revealed that a majority of the respondents (71.7 percent) claimed to access scholarly content through open access and 21.2 percent disseminated their research findings through OA avenues such as OA journals and OA repositories. This result is similar to other studies (Schroter & Tite, 2006). Dulle, Mini-Majanja and Cloete (2010) observed in their study that less than 20 percent of Tanzanian researchers disseminated their findings through OA channels than those who accessed free online content. Precisely, less than 20 percent of the respondents published in OA outlets as compared to 62 percent of those who accessed free scholarly content from the Internet. The situation whereby researchers publish less than they access content in OA outlets is not peculiar to public universities in Tanzania. Correspondingly, Deoghuria and Roy (2007) carried out a survey and reported that out of 125 respondents, 80 percent of them accessed OA literature and 20 percent used OA for publishing their research output. Similar finding by Man, Walter, Hess and Wignard, (2008) established that despite the fact that 66 percent of the respondents claimed to have used OA publication media to access scholarly content at least once in their academic career, only 28 percent of them had actually published using the same media. Utulu and Bolarinwa (2009) reported that awareness of OA was not matched with actual use either as authors or as readers of scholarly contents.

Methodology

This study employed the descriptive survey research design. This choice of this design was because it allowed existing information to be gathered to describe the behaviour of an existing population. The data collected were analyzed using frequency counts, percentages, mean, Standard Deviation, Pearson Product Moment Correlation (PPMC) and Regression analysis.

Population and Sample of Study

The population for the study consisted of academic staff (lecturers and librarians) in three selected faculties (Communication and Information Sciences, Social Sciences & Management Sciences) and main library of the university. A sample size of 152 academic staff was randomly selected from the population of 1031 academic staff (Source; Academic Planning Unit of Unilorin) to respond to the questionnaire through a multi-stage sampling procedure involving

purposive, stratified and simple random sampling technique. Only 140 out of 152 copies of questionnaire distributed were returned with response rate of 92.1percent.

Instrumentation

The major instrument that was used to collect the data was a modified questionnaire entitled the "Adoption and Usage of Open Access Publishing (AUOAP). The instrument consists of a 58-item with 54 structured response statements which sought academics perception on adoption and use of OA publishing. Only two independent variables (awareness and attitude toward OA publishing) and two dependent variables (adoption and use of OA publishing) were analysed in the present study. The response pattern was structured after a four-point Likert scale and scored 4,3,2,1 for strongly agree, disagree and strongly disagree agree, respectively. The instrument was subjected to scrutiny by experts in the field of scholarly communication and education measurement unit to ascertain the face and content validity. The questionnaire was personally administered by the researcher to academic staff of the three faculties and the librarians in the main Library of the university.

Limitation of the Study

Due to certain weakness inherent in the methodology adopted in the present study, the study is characterized with some limitations. First, the population of the study cannot be a good representative of the entire academics of the University of Ilorin. Second, the geographical scope of the study, which is Kwara State is rather small and can hardly represent the entire universities in Nigeria or even in the old western state.

Results and Discussion

This study sought to determine the gender of the respondents. The findings are presented in Table 1 below.

Table 1: Gender of Respondents

Gendor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	119	85.0	85.0	85.0
	Female	21	15.0	15.0	100.0
	Total	140	100.0	100.0	

Source: Field data, 2014

Table 1 shows that 85% (119) of the respondents were male and 15% (21) of females This implies that majority of academic staff in the University of Ilorin were male.

Research Question 1: Awareness of Open Access (OA) publishing among Academic Staff of University.

Reserch question 1 sought to determine the level of awareness of OA publishing among academic staff of University of Ilorin? The findings are summarised in Table 2 below.

Table 2: Level of Awareness of Open Access (OA) publishing by academic staff

ITEM	SA	A	D	SD	Total	$\overline{X}$	SD
I heard about OA before this survey .	91(65.0)	36(25.7)	12(8.6)	1(0.7)	140(100.0%)	1.45	.682
I am aware of OA initiatives (BOAI)	55(39.3)	51(36.4)	29(20.7)	5(3.6)	140(100.0%)	1.89	.857
I am aware of OA Journals	66(47.1)	70(50.0)	3(2.1)	1(0.7)	140(100.0%)	1.56	.578
I am aware that I can access research findings through OA outlet	67(47.9)	70(50.0)	2(1.4)	1(0.7)	140(100.0%)	1.55	.567
I am aware that I can disseminate my research findings through OA outlet	76(54.3)	58(41.4)	4(2.9)	2(1.4)	140(100.0%)	1.51	.629
I am aware that OA	44(31.4)	65(46.4)	22(15.7)	9(6.4)	140(100.0%)	1.97	.856

publication are copyright free at the point of use							
I am aware of OA tools e.g OA	29(20.7)	51(36.4)	47(33.6)	13(9.3)	140(100.0%)	2.31	.906
I am not aware of OA publishing	18(12.9)	28(20.0)	47(33.6)	47(33.6)	140(100.0%)	2.88	1.021
Total Average Mean						**1.89**	

Source: Field data, 2014

Table 2 shows that majority 90.7% of the respondents heard about OA before this survey, while 9.3% of the respondents disagreed. Based on this finding it can therefore be argued that level of awareness of OA publishing among academics in the University of Ilorin was high. The mean and standard deviation of staff adoption and uses corroborate this claim. This was shown with the total average mean score of ($\overline{X}$ = 1.89) which was above the lower item rated mean above. The result is contrary to findings by Christian (2008), which revealed that only 3 percent of 66 respondents at the University of Lagos were aware of OA concept , 22.7 percent knew very little and 74 percent of the respondents were completely unaware of OA concept. This is also in congruence with the study carried out by Emojorho, Ivwighregweta and Onoriode (2012) on what is obtainable in University of Benin where statistics indicate high level of awareness of OA (86 percent).

Research Question 2: Academics' attitude towards adoption and use of OA publishing in University of Ilorin?

The second research question sought to determine the academics' attitude towards adoption and use of OA publishing in University of Ilorin. The findings are summarised in Table 3 below.

Table 3: Attitude towards of Open Access (OA) publishing

ITEM	SA	A	D	SD	Total	$\overline{X}$	SD

I read OA Journal articles regularly	34(24.3)	65(46.4)	37(26.4)	4(2.9)	140(100.0%)	2.08	.787
I cite OA Journal Articles often	32(22.9)	73(52.1)	31(22.1)	4(2.9)	140(100.0%)	2.05	.752
I never access OA Journal articles	16(11.4)	20(14.3)	57(40.7)	47(33.6)	140(100.0%)	2.96	.970
OA Publishing is a good idea	42(30.0)	81(57.9)	10(7.1)	7(5.0)	140(100.0%)	1.87	.748
I like OA publications	41(29.3)	81(57.9)	14(10.0)	4(2.9)	140(100.0%)	1.86	.702
I wish I knew of OA Publishing earlier than now	29(20.7)	55(39.3)	42(30.0)	14(10.0)	140(100.0%)	2.29	.910
Total Average Mean						**2.19**	

Source: Field data, 2014

Table 3 shows that majority 70.7% of the respondents read OA publications regularly, while 29.3% of the respondents disagreed. The results show that majority of the academics have positive attitude towards OA publishing in the University. The mean and standard deviation of academic staff adoption and uses corroborate this claim. This was shown with the total average mean score of ($\overline{X}$ = 2.19) which was above the lower item rated mean above. This trend might not be unconnected with sufficient ICT training, coupled with the government current supports provided to upgrade infrastructural facilities in Nigerian Universities.

The above result is in congruence with previous studies (Driscoll, 2009; Dulle *et al.*, 2010; Obuh, 2013) have revealed positive users' attitude towards OA publications. However, Coonin and Younce (2010) reported negative attitude of senior lecturers towards OA publications.

Research Question 3: Level of adoption and use of OA publishing among academic staff of University of Ilorin

The third aspect the study sought to determine relates to the level of adoption and use of OA publishing among academic staff of University of Ilorin. The findings are illustrated in Table 3 below.

Table 4: Level of adoption and use of OA publishing

ITEM	SA	A	D	SD	Total	$\bar{X}$	SD
I often use OA publications in my research	53(37.9)	71(50.7)	15(10.7)	1(0.7)	140(100.0%)	1.74	.672
I usually retrieve scholarly content from OA outlets	51(36.4)	74(52.0)	12(8.6)	3(2.1)	140(100.0%)	1.76	.695
I only cite and not publish in OA publications	13(9.3)	41(29.3)	48(34.3)	38(27.1)	140(100.0%)	2.79	.948
I usually peruse contents from OA Journals	34(24.3)	80(57.1)	24(17.1)	2(1.4)	140(100.0%)	1.96	.688
I have preference for using OA Publications	27(19.3)	58(41.4)	48(34.3)	7(5.0)	140(100.0%)	2.25	.823
I have submitted many papers to OA Journals	23(16.4)	51(36.4)	53(37.9)	13(9.3)	140(100.0%)	2.40	.872
I have made links to others articles from OA journals	25(17.9)	83(59.3)	27(19.3)	5(3.6)	140(100.0%)	2.09	.715
I am willing to publish in OA outlet	36(25.7)	79(56.4)	21(15.0)	4(2.9)	140(100.0%)	1.95	.723
I have intention to use OA scholarly materials	45(32.1)	84(60.0)	9(6.4)	2(1.4)	140(100.0%)	1.77	.627
I will publish in OA outlets in the near future	42(30.0)	81(57.9)	12(8.6)	5(3.6)	140(100.0%)	1.86	.715
Total Average Mean						**2.06**	

Source: Field data, 2014

As can be seen from Table 4 above the majority 88.6% of the respondents often use OA publications in their research, while 11.4% of the respondents were disagree. Also, 87.9% of the

respondents agreed that they will publish in OA outlets in the near future, while 12.1% of the respondents disagree. The results of findings show that academic staff of the university adopted and used of OA publications. The mean and standard deviation of academics' adoption and use of OA publishing corroborate this claim. This was shown with the total average mean score of ($\overline{X}$ = 2.06) which was above the lower item rated mean above.

Research Hypothesis 1: Relationship between awareness and adoption of OA publishing by academic staff of University of Ilorin

Further this study sought to assess whether there is no significant relationship between awareness and adoption of OA publishing by academic staff of University of Ilorin. The findings are illustrated in Table 5 below.

Table 5: Correlation of variables under study

Variables	N	Mean	Std. Dev	R	P	Sig
Adoption of OA publishing	140	20.57	4.333	-	-	-
Awareness of OA publishing	140	15.13	3.654	.473**	0.000	S*

Correlation is significant at the 0.05 level (2-tailed). As shown in Table 5 above, there is a significant relationship between the awareness and adoption of OA publishing among the academic staff. The results t show that adoption of OA publishing has significant relationship with awareness of OA at (r=.473, P<.05). Since P is less than 0.05 level of significant. Hence, there is a significant relationship between the awareness and the adoption of OA publishing by academic staff of University of Ilorin.

Research Hypothesis 2: Relationship between the attitude and adoption of OA publishing by academic staff of University of Ilorin

Moreover the study sought to determine whether there was any significant relationship between the attitude and adoption of OA publishing by academic staff of University of Ilorin. The findings are illustrated in Table 6 below.

Table 6: Correlation of variables under study

Variables	N	Mean	Std. Dev	r	P	Sig

Adoption of Open Access	140	20.57	4.333	-	-	-
Attitudes	140	13.123	2.868	.742**	0.000	S*

Correlation is significant at the 0.05 level (2-tailed).

The findings presented in Table 6 show that that there is a significant relationship between the attitude and adoption of OA publishing by academic staff of University of Ilorin. It reveals, that the adoption of OA publishing has significant relationship with academics' attitude towards OA publishing at (r=.742, P<.05). Since P is less than 0.05 level of significant. Therefore, there is a significant relationship between the attitude and adoption of OA publishing by academic staff of University of Ilorin.

Research Hypothesis 3: Awareness of OA publishing, attitude towards OA publishing

This study set to test whether there are no composite effects of the independent variables (awareness of OA publishing, attitude towards OA publishing) and the dependent variables (adoption and use of OA publishing) of academic staff in University of Ilorin. The findings are illustrated in Table 7 below.

Table 7: Regression Analysis of the combined prediction dependent by the two independent variables.

R=0.764						
R Square=0.583						
Adjusted R^2=0.577						
Std Error of the Est.=2.818						
Model	Sum of Squares	Df	Mean square	F	P	Remark
Regression	1522.043	2	761.022	95.806	0.000	S*
Residual	1088.243	137	7.943			
Total	2610.286	139				

Table 7 shows that there was a significant joint relationship of the independent variables (awareness of OA Publishing, attitude towards OA Publishing) the combination of the independent variables accounted for 58.3% of the total variance in the adoption and uses of OA

publishing (adjusted R =0.577). The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 alpha level F (2/137) = 95.806, P< 0.05. This implies that the combined contribution of the independent variables to the dependent variable was significant and other variables not included in this model may have accounted for the remaining variance.

Table 8: Showing relative contributions of the independent variables to the dependent variables.

Variable	Unstandardized Coefficients (B)		Standardized Coefficients			
Model	(B)	Std. Error	Beta	T	P	Remark
Constant(Adoption and uses of OA)	3.929	1.265	-	3.106	0.002	sig.
Awareness of OA publishing	0.236	0.072	.199	3.284	0.001	sig.
Attitude towards OA	0.996	0.092	.659	10.869	0.000	sig.

Table 8 reveals the relative contribution of each of the independent variable to the prediction of adoption and uses of OA publishing by academics of University of Ilorin. In terms of magnitude of the attitude towards OA publishing contribution to the prediction of adoption and uses of open access publishing indicated above as (β=0.659, t= 10.869, P<0.05), while magnitude of the awareness of OA publishing contribution to the prediction of adoption and uses of open access publishing stands as (β=0.199, t= 3.284, P<0.05).

Summary of Findings

The results of findings show that there was high level of awareness of OA publishing among Academic Staff in the selected faculties of the University of Ilorin. In addition, the mean and standard deviation of academics' adoption and uses support this claim. This was shown with the total average mean score of ($\overline{X}$= 1.89) which was above the lower item rated mean above. In addition, the results of findings show that majority of the academic staff showcased high positive attitude towards the adoption of OA publishing in the University. In summary, the results of findings show that academic staff of the selected faculties in the University of Ilorin adopted and used OA publishing for their scholarly activities. The mean and standard deviation of staff

adoption and uses corroborate this claim. This was shown with the total average mean score of ($\overline{X} = 2.06$) which was above the lower item rated mean above.

Implications of the findings

The implication of these findings is that academics, university authority and other stakeholders need to take the issue of support for adoption and use of OA publishing very seriously. It is not enough for academics to know about OA publishing, they need to be convinced, encouraged and even persuaded to adopt and use peer-reviewed OA journals. The advocacy for adoption and use of OA publishing must be repackaged to remove fear of rejection of OA publications for the promotion and tenure process by the university promotion committee.

Conclusion

The study provides empirical evidence to suggest that awareness and attitude of academics played significant role in adoption and use of OA publishing by the academic staff of the university. Moreover, academics' attitudes towards OA publishing are generally positive, while there are significant reservations about quality and preservation of OA publications in an increasingly digital information organization.

Recommendation

The result of this study suggest that if open access scholarly communication policies are not formulated and honestly pursued, increase in visibility and wide dissemination of research output may become fantasy. It is important to suggest here that the university authority should put in place OA publishing policy that will encourage academics to publish in OA reviewed journals that could be accepted for promotion and tenure elongation. As reflected in the interview part of the study, that academics felts reluctant to publish in OA journals because of fear of rejection of OA publications for the promotion by the university authority. More efforts should be geared towards well equipped and functional Internet facility in the university.

References

Chan, L. & Kirsop, B. (2001) Open archiving opportunities for developing countries: towards equitable distribution of global knowledge. *Ariadne*, 30. Retrieved 17th April 2013 from <http://www.ariadne.ac.uk/issue30/oai-chan/>.

Christian, G. M. (2008). Issues and challenges to the development of open access institutionalrepositories in academic and research institutions in Nigeria. A paper prepared for the International Development Research Centre (IDRC). Retrieved 20th August 2013 from *http://idl.bnc.idrc.ca/dspace/handle/123456789/36986/1/127792.pdf.*

Coonin, B & Younce, L.M. (2010). Publishing in open access education journals: The authors perspectives. *Behaviour Social Sciences,* 29: 118-132

Deoghuria, S. & Roy, S. 2007. Open access: what scientists think? A survey of researchers' attitude towards open access. ICSD-2007. Retrieved 24th April 2013 from http://drtc.isibang.ac.in/bitstream/1849/314/1/081_P32_swapan_deoghuria_formatted.pdf.

Dinev, T & Hu, Q. (2005). The centrality of awareness in the formation of user behavioural intention toward preventive technologies in the context of voluntary use. Retrieved April 24, 2014, from http://sigs.aisnet.org/sighci/icis05/workshop/hci05_proceedings_only.pdf#page=23-27.

Dulle, F.W. (2008). Open Access publishing: The emerging opportunity for wider dissemination of scholarly output. Proceedings of the PANTIL. Annual research workshop, October 06-09, 2008.

Dulle, F.W. Minishi-Majanja, M.K & Cloete, L.M. (2010). Factors influencing the adoption of open access scholarly communication in Tanzania public universities. Procceddings of the 76th IFLA General. August 10-15, 2010. Gothenburg, Sweden.

Driscoll, M.A.(2009).The open movement and Libraries. LIBR 287-05.

Emojorho, D, Ivwighregweta, O. & Onoriode,K.O. (2012). Awareness of open access scholarly publications among lecturers in University of Benin, Edo State, Nigeria. *Journal of Research in Education and Society,*3(1).

Fass, J. Cross, V. & Gardner. (2013). Open access survey: Exploring the views of Taylor & Francis and Routledge authors.

Fullard, A. (2007). South African response to open access publishing: a survey of the research community. *South African Journal of Library & Information Science,* 73 (1). Retrieved June 17, 2014, from http://eprints.rclis.org/archive/0001o749/01/SAJLIS_73(1)04.pdf.

Ghosh, S.B. & Das, A.K. (2007). Open access and institutional repositories: A developing country perspective: a case study of India. *IFLA Journal*, 33: 229, DOI: 101177/0340035207083304.

Gbaje, E.S. (2010). Open access journal publishing in Ahmadu Bello University Zaria, Nigeria. Paper presented at the 76th General Conference and Assembly of the International Federation of Library Associations and Institutions (IFLA), 10 -15thAugust, 2010, Gothenburg, Sweden.

Ivwighreghweta, O., & Onoriode, O.K. (2012). Awareness and use of open access journals by lecturers at Western Delta University, Oghara, Nigeria.*Library Philosophy and Practice.* Retrieved May 19, 2014, from http: //unllib.unl.edu/LPP.

Jain, P. (2012). Promoting open access to research in academic libraries. *Library Philosophy and Practice*. Retrieved August 14, 2014 from http://www.webpages.uidaho.edu/~mbolin/jain.htm.

Louho, R., Kallioja, M., & Oittinen, P. (2006). Factors affecting the use of hybrid media applications. *Graphic Arts in Finland, 35* (3), 11-21.

Mammo.Y., & Ngulube, P. (2013). Academics' use and attitude towards open access in selected higher learning institutions of Ethiopia. *Information Development.* DOI: 10.1177/0266666913500977.

Mann F., Walter B., Hess T & Wigand, R. F. (2008). Open access publishing in science: why it is highly appreciated but rarely used. Retrieved 10th August, 2013from *http:// openaccessstudy.com/pdf.*

Moller, T. (2006). Open access in developing countries frontiers in Neuroscience magazine. Retrieved April 22, 2014 from http://frontierson.org/global-open-access 3.2.

Morris, S., & Thorn, S. (2009). Learned society members and open access. *Learned Publishing*, *22*(3): 221-239. doi:10.1087/2009308.

Obuh, A.O. (2013). Attitude towards the use of open access scholarly publications: The position of LIS lecturers in Southern Nigeria. *The Social Sciences* 8(2): 153-159.

Okoye, M. & Ejikeme,A.(2010). Open access, institutional repositories and scholarly publishing: The role of librarians in South East Nigeria. *Journal of Nigeria Library Association.*

Ouya, D. (2006). Open access survey of Africa-published journal. *INASP Infobrief*, Retrieved 26th April, 2012, from: http: //www.inasp.info/pubs/infobrief7-OA-web.pdf.

Ramachandran, P. V., & Scaria, V. (2004). Open access publishing in the developing world: making a difference. *Journal of Orthopaedics*,1(1). Retrieved June 17 2014, from http://jortho.org/2004/1/1/e1/index.htm (Archived by WebCite® at http://www.webcitation.org/ 5j35by0VQ).

Papin-Ramcharan, J. and Dawe, R. (2006). Open access publishing: a developing country view. *First Monday,* 11(6), Retrieved June 6, 2014 from: http://firstmonday.org/issues/issue11_6/papin/index.html.

Sanchez-Tarrago, N. & Fernandez-Molina, J. C. (2009). The open access movement and Cuban health research work: an author survey. *Health Information and Libraries Journal*, 27 (1): 66-74. Retrieved 7th June 2013 from *http://www3.interscience.wiley.com/cgibin/fulltext/1226 47800/PDFSTART*

Schroter, S, Tite, L & Smith, R. (2005). Perceptions of open access publishing: interview with journal authors, *BMJ*, 330,756. Retrieved April 26, 2014, from: http://bmj.bmjjournals.com/lgi/content/fall/330/7494/756

Suber, P. (2010). Open access overview: Focusing on open access to peer-reviewed research articles and their preprints. Retrieved June, 24, 2014, from http://www.earlham.edu/~peters/fos/overview.htm.

Suber, P. (2004). *A very brief introduction to open access*. Retrieved August 17, 2014 from http://www.earlham.edu/~peters/fos/brief.htm

Swan, A. and Brown, S. (2005). JISC/OSI journal authors survey report. Retrieved August 20, 2014 from *http://www.jisc.ac.uk/uploaded_documents/JISCOAreport1.pdf*

Utulu, S. C. & Bolarinwa, O. (2009). Open access initiatives adoption by Nigerian academics. *Library Review*, 58 (9): 660-669.

Venkatesh, V., Morris, M. Davis, G.B & Davis, F.D. (2003). User acceptance of technology: towards a unified view. *MIS Quarterly, 27*(3), 425-478. Retrieved July 22, 2014, from http://www.jstor.org/stable/30036540.

Warlick, S., & Vaughan, K.T.L.(2007). Factors influencing publication choice: Why faculty choose open access. *Biomedical Digital Libraries, 4*(1), 1.doi:10.1186/1742-5581-4-1.

Xia, J. (2010). A longitudinal study of scholar's attitudes and behaviors toward open-access journal publishing. *Journal of the American Society for Information Science and Technology, 61*(3), 615–624. doi:10.1002/asi.21283.

About Author

M. T. Bashorun: M. T. Bashorun is a Lecturer, Department of Library and Information Science, University of Ilorin, Nigeria. He holds B.Sc in Biology/Education from Obafemi Awolowo University, Master of Library and Information Studies, University of Ibadan. He previously worked as Education Officer II with the Civil Service Commission, Oyo State Government and Business Development Manager with the Nigerian Bottling Company, Nigeria. Bashorun, was PRO –Nigerian Library Association (NLA-Kwara state Chapter). A volunteer member of Nigeria Security and Civil Defence Corps (NSCDC). He is currently a PhD candidate at the Department of Library and Information Studies, University of Botswana in Botswana.