

Awareness and Use of Institutional Repositories by Academic Staff in Nigerian Universities

Taofeek Abiodun OLADOKUN

Taofeekoladokun1@gmail.com

University Library

Lead City University, Ibadan

Institutional repositories offer numerous advantages to academic staff as it provides access to local contents capable of enhancing their research and also offer the opportunity to make research works available to the global community. However, available evidence suggests a low level of institutional repository use among academic staff in Nigerian universities. This study examines the role of multidimensional awareness on the use of institutional repositories. The study adopts a survey research method. The study population is made up of academic staff from Universities in Oyo and Osun state. A multistage sampling procedure is adopted to select 235 lecturers. The research instrument is a structured questionnaire adapted from the Endsley's Situational Awareness Theory (SAT). Data collected was analysed with the IBM SPSS software using both descriptive and inferential statistics. The results shows that while there is a high level of perception among the respondents, majority of the respondents demonstrated low level comprehension and projection, two dimensions, critical to the understanding of the true essence of institutional repositories. In addition, the test of hypothesis revealed that awareness has a significant influence on the use of institutional repositories among the respondents. The study concluded that, without raising full awareness about the mission and functions of institutional repositories, Nigerian tertiary institution and their staff will continue to miss out on the benefits of using institutional repositories. It was therefore recommended that institutional repository awareness programs should be practical oriented.

Keywords: Academic Staff, Institutional Repository, Library Automation, Scholarly communication, Situational Awareness,

Introduction

A functioning institutional repository offers several advantages to academic staff of tertiary institutions globally. It creates wider access for their research outputs while also serving as an indispensable source of information, especially in developing countries such as Nigeria where there is limited access to subscription scholarly databases. To be regarded as regular users of an institutional repository, academic staff of universities are expected to include it in their regularly consulted information sources

for their academic works. In addition, they should also be ready to deposit all relevant research output except where constrained by relevant laws. They should also be willing to deposit these resources in a timely manner so that users can benefit from them. Doing this is important for the relevance of the institutional repository and the only way the advantages of establishing the repository can be enjoyed (Kayungi, Ndenje-Sichalwe, & Manda, 2021).

However, in spite of all the benefits of using institutional repositories, one of the persistent challenges for institutional repositories globally is the low rate of institutional repository use among academic staff who are the major stakeholders (Gunasekera, 2017). The low use of institutional repositories may also have some implications for academic staff of universities themselves as it may lead to poor quality research output, lack of innovative research idea, low visibility, and citation for their research works. Mindful of these consequences, researchers have examined various factors that may be responsible for low or non-use of institutional repositories by academic staff of universities. Factors such as ICT skills, attitude, and copyright law among others have been considered. However, there are less examined factors such as awareness that may influence the use of institutional repositories by academic staff of universities (Kayungi, Ndenje-Sichalwe, & Manda, 2021).

Awareness is considered important because it is the first condition for the use of any information system. Other researchers have also examined the influence of awareness on the use of institutional repositories. However, their examination of awareness tends to be one dimensional with questions measuring level of awareness with scales such as; 'highly aware'; 'moderately aware' etc'. This unidimensional approach to the measurement of awareness seems inadequate compared to available theories on awareness. As a result, awareness in this study is conceptualized as the consciousness of the existence, benefits, and relevance of institutional repositories to Academic staff of universities as outlined in the situational awareness theory (Qazi, Qazi, Naseer, Zeeshan, Hardaker, Maitama, & Haruna, .2020). In this study, these are conceptualized as perception, comprehension and projection

Perception is the situation of being aware of the existence of the institutional repository. This is the basic level of awareness. In this stage, the lecturer is aware that his/her institution has developed something called an institutional repository(Onyebinama, Anunobi, &Uzochukwu, 2020). Comprehension is another level of awareness. It entails have full information about the purpose of setting up the institutional repository and how it works. This dimension of awareness also involves knowing what information resources are available in the repository and their provenance (Orsu, 2019). Projection is the ability to understand the danger or benefit posed by an emerging phenomenon. In the context of this study, it is expected that academic staff of universities should be able to accurately predict or understand the benefits of using the institutional repository such as easy and free access to quality research, visibility of their own research output and their contribution to the growth of their institutions. The available evidence suggests that few Academic staff of universities have reached this

stage of awareness which may be one of the reasons for low rate of institutional repository use among academic staff of universities in Nigeria (Orsu, 2019).

Statement of the Problem

The use of institutional repositories offers a lot of benefits for academic staff of universities, their institutions, and the entire academic community. Academic staff of universities are mainly involved in teaching, research and community services all of which demand the use of quality information resources. When they are able to access relevant and quality information resources, it impacts positively on their quality of teaching, research productivity, and their overall ability to contribute to the development of the society. This is why institutional repositories that collate similar research works together, providing a central platform for related research findings are so essential for academic staff of universities. However, it has been observed that academic staff of universities are often reluctant to deposit their research works in or seek search for information resources from their institutional repositories. This non-use of institutional repository has negative implications which include low awareness of research trends, poor quality of course materials and lack of visibility for academic staff of universities and their institutions.

Various reasons have been identified for this low use of institutional repositories among academic staff of universities. However, the problem persists. Some of the factors that have not been extensively researched in relation to institutional repositories are; level of awareness. Examining these factors could lead to the development of more effective strategies to promote the use of institutional repositories for self-archiving among academic staff of universities. This study, therefore, examines the influence of awareness on the use of institutional repositories for self-archiving among academic staff of universities in Oyo and Osun states.

1.3 Aim and Objectives of the Study

The aim of the study was to investigate the influence of awareness state. In order to achieve this, the specific objectives were to:

- i. identify the level of institutional repository use among academic staff of universities in Oyo and Osun states
- ii. ascertain the level of awareness of institutional repositories among academic staff of universities in Oyo and Osun state;
- iii. ascertain the influence of awareness on the use of institutional repositories by Academic staff of universities in Oyo and Osun state;

1.4 Research Questions

The following questions will guide the study

1. What is the level of institutional repository use among academic staff of universities in Oyo and Osun state?

2. What is the level of awareness of institutional repositories among academic staff of universities in Oyo and Osun states?

Hypotheses

The following null hypothesis will be tested at 0.05 level of significance:

H₀1: There will be no significant influence of awareness (perception, comprehension and projection) on the use of institutional repositories by academic staff of universities in Oyo and Osun states.

Literature Review

Available literature has shown that awareness is one of the earliest factors to be considered in the use of institutional repository. As an innovation, institutional repositories are often virtually unknown to many, including lecturers, which means that they are not likely to consider it as a source of information or a tool they can use for the dissemination of their own research outputs (Bamigbola, 2014; Nunda, & Elia, 2019). As a result, there are quite a body of literature on the subject of awareness of institutional repositories and how it influences the use of institutional repositories. The available literature on the awareness of institutional repositories also shows the multidimensional nature of the concept of awareness.

A study conducted in Texas to assess the degree of awareness on institutional repository at Texas A&M University (TAMU) revealed that the level of awareness was quite low. The result showed that only 27 percent of the respondents surveyed from 10 faculties of the institution were aware of the existence of the institutional repository, and only 7% had submitted, at least, a published research to the repository¹⁰⁸. This finding, coming from an institution in America, a country with the highest number of institutional repositories in the world is surprising and one may think it is an exception to the rule. However, another study conducted three years later also showed that the awareness was still an issue which affect the use institutional repositories by lecturers.

A group of researchers from Canada and the United States of America conducted a study to evaluate the challenges facing institutional repositories development in American universities. The study adopted a mixed research method. Among the key findings of the study was that majority of the lecturers in the institutions were unaware of the institutional repository in their institutions and as a result, many of the lecturers did not submit their research to the repositories and few of them use the available resources in the institutional repository (¹⁰⁹).

The seeming lack of awareness and its influence on the use of institutional repositories in developed nations can however be excused on the availability of several databases and ability of the institutions to subscribe to a large number of journals in each field. This is not so in Africa and other developing countries (Bamigbola&Adetimirin, 2017). It would be expected that information users in

countries such as Nigeria would make large scale use of institutional repositories. However, available literature also suggests that awareness is a significant factor in the use of institutional repositories in these countries as well.

In India, researchers found that about 33% of academic staff use institutional repositories. Furthermore, it was found that higher level of awareness such as comprehension and projection achieved through participation in workshops/seminars have an impact on the use of institutional repositories ()¹¹⁰. This finding is highly instructive as it specifically supports the theory of awareness. When users attained the highest level of awareness, they would make use of the institutional repository frequently and for many purposes. The global situation in the use of institutional repositories also applies to the African continent.

Researchers in Kenya who observed that content recruitment is an important aspect of institutional repositories development conducted a study to ascertain how awareness affect the readiness of lecturers to submit their research outputs to institutional repositories. The findings of the study indicated that majority of the respondents complained about low level of user awareness creation about the institutional repositories in their institutions. This low level of awareness was reported to affect the use of institutional repository as 63%, of the librarians interviewed reported that content recruitment for the institutional repository is a big challenge as they always find it difficult to convince researchers to deposit their research in the repositories¹¹¹. Another study conducted a few years later in Kenya however indicated an improvement.

Scholars investigated the awareness and attitude of lecturers in selected Kenyan universities found that 59% of the lecturers are 'fully aware' of the institutional repository which means that they have attained the three levels of perception, comprehension, and projection. This full awareness was achieved through interaction with Librarians, colleagues, workshop and seminars and Internet tutorials. This awareness influenced the use of institutional repository as it was reported that 69% of the lecturers prefer to use institutional repositories while 85% of them use the repository weekly to meet various information needs.¹¹².

In the Nigerian context, Okhakhu (2015) examined the influence of awareness and knowledge on the attitude of users towards the institutional repository. The study found that majority of the respondents reported that they are aware of the existence of institutional repository. In addition, it was shown that a significant part of the respondent also understands the benefits in the use of institutional repository. It was also found that of the respondent claimed to be familiar with the content of their universities' IR., aware of their universities' IR policy, and the relevance copyright issues relating to open access publishing. There are various aspects of the study which makes it relevant to the current study. The measure of awareness in this study is comprehensive as it was not just limited to having knowledge of the existence of institutional repositories. Most importantly, the study examined the sources from where the lecturers get to know about the institutional repository.

In contrast, Nunda and Elia (2019) reported that while Tanzanian lecturers demonstrated positive perception about institutional repositories, many of them lack the actual knowledge about the use of institutional repositories. Only 17% of the lecturers rated their knowledge of the use of institutional repositories as highly adequate while 34% rated their knowledge level 'averagely adequate'. About 27% of the lecturers rated themselves 'barely adequate while 22% reported that their knowledge of institutional repository was 'not adequate'. This was reflected in their use of institutional repositories as it was found that the library often found it difficult to convince the lecturers to deposit their research in institutional repositories.

A related study conducted by Jabbar, Saqib, and Muhammad (2020) found that majority of the academic staff in an Indian university were aware of the existence, the benefits of using IRs, and the content expected to be in the IR in their universities. However, majority of the lecturers were not aware of; university IR policy, publishers' policy on open access or the processes of depositing research into the in IR. As a result, while the researchers reported that awareness is high, the fact that knowing how to deposit information resources into the institutional repository is the lowest and that lecturers are not fully aware of the policies guiding the use of IR shows that the level of multidimensional awareness is still low. This is reflected in the use of IR among the lecturers. The study found that, although the lecturers use the institutional repository to access published articles and conference papers but they do not access the repository regularly⁵².

Given that there may be institutional dynamics and peculiarities that determine level of awareness and use of institutional repositories especially in a multicultural society such as Nigeria, Okiki, Osedo, and Okpah (2020) examined the awareness and use of institutional repositories by lecturers at University of Lagos, Nigeria. The study found that majority of respondents form their perception of the institutional repository through various communication channel such as the university circular, other accidentally stumbled on the information while visiting the University/Library website. It was also found that the respondents understand the benefits of using institutional repositories as majority agreed that submitting research to the IR is a means of preserving scholarly works, achieve recognition and promotion, earn recognition for the university, and expose lecturers to global recognition. This moderate high level of awareness affected the use of institutional repositories.

The study found that majority of the respondents were willing to submit their research and other intellectual output to the repository, and they would recommend the repository to their colleagues. However, due to lack of comprehension about the total essence of institutional repository, majority of the respondents expressed fear about copyright infringement of their intellectual properties. This study further validates the importance of all round awareness to the use of institutional repositories. The effort of the library in creating liaison officers generated significant awareness among the lecturers which makes them willing to submit their research.

This is buttressed by Jabbar, Saqib, and Muhammad (2020) who reported that the awareness of an institutional repository is not restricted to just knowing that it exists; lecturers also need to be aware of its goals, advantages, and various usage policies. While the reviewed literature has shown improvement in the level of awareness of institutional repositories, there still appear to be a significant lack of awareness of them at the policy and technical level throughout the world, particularly in Africa.

4. Methodology

The research design used in this study is descriptive research of the survey type. There are about fourteen Universities in Oyo and Osun state. However, only four of them possess functioning institutional repositories which is the inclusion criteria for this study. The population for this research includes 1,009 lecturers from the universities that meet this criterion namely, Ajayi Crowther University, Oyo State, University of Ibadan, Oyo state, Obafemi Awolowo University, Ife and Adeleke University, Ede, Osun state. The sampling procedure went through various stages before the sample size was determined. The first stage is the determination of the population from each institution. This is important because the population of the Federal universities is highly disproportionate to that of the private universities selected in this study. As a result, only lecturers from faculties of Education and Science from the federal universities were included to strike a balance in the population. Stage two, The Taro-Yamane sample size formula is used to determine the sample size which is 286. The third stage involves the use of stratified sampling technique to determine the sample from each stratum (Universities).

The instrument used in collecting data for this study is structured questionnaire. The questionnaire is divided into three distinct sections; Section A: Demographic information; Section B: Use of Institutional Repository Scale and Section C: Awareness of Institutional Repository Scale. All of the items are measured using a 4-point Likert scale such as 4= Strongly agreed; 3= Agreed; 2 = Disagree; 1= Strongly disagree

Validity and Reliability of the Research Instrument

In order to ensure its face and content validity, the research instrument was subjected to the scrutiny of experts especially the thesis supervisor and other experts in the department of Information Management who will vet all the items for face validity. Furthermore, in order to ensure the reliability of the study instrument, 30 copies of the questionnaire were administered on academic staff from Dominion University, Ibadan who are not part of the study. The returned questionnaire was analysed and the Cronbach alpha value were measured to see if it meets the acceptable standard. The results shows that the awareness scale has a Cronbach alpha value of 0.78 while the use of institutional repository scale has a value of 0.71.

The data collected from the field was analysed using a combination of descriptive and inferential statistics. The demographic data and the research questions were analysed using descriptive

statistics (simple frequencies and percentages as well as means, and standard deviations). In addition, inferential statistics in the form of linear regression were used to measure the first and second hypotheses while the third hypothesis was analysed using multiple linear regression analysis.

5. Results

4.1 Demographic Analysis

Table 1 Demographic Analysis

		Frequency	Percent
Institution	University of Ibadan	76	35.8
	Obafemi Awolowo University	57	26.9
	Ajayi Crowther Univeristy	40	18.9
	Redeemers University	39	18.4
	Total	212	100.0
Sex	Male	107	50.5
	Female	105	49.5
	Total	212	100.0
Age	25-29	74	34.9
	30-39	70	33.0
	40-49	47	22.2
	50-59	12	5.7
	60 and Above	9	4.2
	Total	212	100.0
Rank/Designation	Professor/University Librarian	2	0.9
	Associate Prof/Deputy UL	10	4.7
	Senior Lecturer/Principal Librarian	15	7.1
	Lecturer I/Senior Librarian	30	14.2
	Lecturer II/Librarian1	49	23.1
	Assistant Lecturer/ Librarian II	78	36.8
	Graduate Assistant	28	13.2
	Total	212	100.0

Source: Fieldwork 2023

Table 1 presents the demographic distribution of the respondent. The table shows that the 57 (26.9%) respondents were from the universities of Ibadan, 57 (26.9%) of the respondents were Obafemi Awolowo University, Ile-Ife, while 40 (18.9%) were from Ajayi Crowther University, Oyo and 39 (18.4%) were from Redeemers University, Ede. This shows that majority of the respondents were from the university of Ibadan. Gender wise, there were 107 (50.5%) male respondents compared to 105 (49.5%) female respondents meaning that male respondents are in the majority. In term of age distribution, 74 (34.9%) of the respondents are between the age 25 to 29, 70(33%) are in the 30-39 years age bracket, 47(22.2%) are aged between 40 to 49years while 12(5.7%) are aged between 50 to 59 years while 9 (4.2%) are in the bracket 60 years and above.

The data presented in Table 4.2 also shows the rank/designation of the respondents. There are 2 respondents with the rank of Professor/University Librarian which constitute 0.9% of the total respondents. Also, 1(4.7%) of the respondents indicated that they are either Associate Professor or Deputy University Librarian. In addition, 15 (7.1%) are Senior Lecturer or Principal Librarian, 30 (14.2%) are Lecturer I or Senior Librarian; 49 (23.1%) Lecturer II or Librarian I; 78 (36.8%) are either Assistant Lecturer or Librarian II while 28 (13.2%) indicated that they are Graduate Assistants. The age and rank of the respondents show a youthful population balanced with age and experienced.

Table 2: Institutional Repository Use among Academic Staff of Universities in Oyo and Osun State

Statements	Always	Often	Rarely	Never	Mean
To make access to my works cheaper for others	97 (45.8%)	65 (30.7%)	45 (21.2%)	5 (2.4%)	3.20
To gather information for personal research	74 (34.9%)	98 (46.2%)	31 (14.6%)	9 (4.2%)	3.12
my scholarly work is disseminated more quickly	66 (31.1%)	103 (48.6%)	36 (17.0%)	7 (3.3%)	3.08
For guidelines on how to write research/review articles	60 (28.3%)	108 (50.9%)	34 (16.0%)	10 (4.7%)	3.03
To ensure that my published material is easy to find	48 (22.6%)	126 (59.4%)	23 (10.8%)	15 (7.1%)	2.98
depositing my work in the repository protects it from plagiarism	58 (27.4%)	94 (44.3%)	36 (17.0%)	24 (11.3%)	2.88
Weighted mean					3.04

Source: Fieldwork 2023

Table 2 presented data on institutional repositories use among the respondents. The data shows that use of institutional repositories in order of frequency of use is to make access to my works cheaper for others information users (Mean = 3.20); gather information for personal research (Mean = 3.12); for quick dissemination of research works (Mean = 3.08); to find guidelines on how to write research/review articles (Mean = 3.03); to ensure that published material is easy to find (Mean = 2.98) while others also use the repository to protect their scholarly work from plagiarism (Mean = 2.88). Overall, the average mean of all the items comprising the use of institutional repositories is 3.04 which means a high level of institutional repository use. This result is unique because previous studies have reported low use of institutional repositories (Bonsu, Essel, & Ofori, 2018; Eromosele, 2019).

What is the level of awareness of institutional repositories among academic staff of universities in Oyo and Osun states?

Table 3 Awareness of Institutional Repositories among Academic Staff of Universities in Oyo and Osun States

Perception	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I have come across it and know quite a bit about it	88 (41.5%)	96 (45.3%)	23 (10.8%)	5 (2.4%)	3.26
I have heard about institutional repositories	73 (34.4%)	118 (55.7%)	19 (9.0%)	02 (0.9%)	3.24
I have come across institutional repositories but know just a little about (R)	65 (30.7%)	89 (42.0%)	53 (25.0%)	5 (2.4%)	1.99
I have heard about institutional repositories but know nothing about it (R)	100 (47.2%)	64 (30.2%)	35 (16.5%)	13 (6.1%)	1.81
Weighted mean					2.58
Comprehension	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I am aware of the content of my university's IR	75 (35.4%)	95 (44.8%)	38 (17.9%)	4 (1.9%)	3.14
I am aware of the processes of	67	105	24	16	3.05

depositing my work into IR	(31.6%)	(49.5%)	(11.3%)	(7.5%)	
I am aware of my university's IR policy	52	111	42	7	2.98
	(24.5%)	(52.4%)	(19.8%)	(3.3%)	
I am aware of journal publishers' policy on OA	68	89	30	25	2.94
	(32.1%)	(42.0%)	(14.2%)	(11.8%)	
Weighted mean					3.03
Projection	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
Institutional repositories will provide me access to scholarly works easily	82	94	33	3	3.20
	(38.7%)	(44.3%)	(15.6%)	(1.4%)	
I would find institutional repositories useful in my career	52	127	29	4	3.07
	(24.5%)	(59.9%)	(13.7%)	(1.9%)	

Table 3 presents the data on the level of awareness of institutional repositories among academic staff. Awareness of institutional repositories was examined under three sub-metrics, namely; perception, comprehension, and projection. Under perception, the responses showed that most of the have come across institutional repositories and know quite a bit about them (Mean = 3.26). this is followed by the who have merely heard about institutional repositories (Mean = 3.24). However, majority have come across institutional repositories but know just a little about (Mean = 1.99) while only a minority reported that they have heard about institutional repositories and know what it stands for (Mean = 1.81) which shows low level of awareness in that aspect Overall, the average mean score for the perception dimension of awareness is 2.58 which indicates a moderate level of positive perception.

The second dimension of awareness is comprehension which measures the understanding of the workings of institutional repositories among the respondents. The responses indicates that a high number of the respondents are aware of the content of my university's IR (Mean = 3.14); aware of the processes of depositing their research works into institutional repositories (Mean = 3.05) and my university's IR policy (mean = 2.98). In addition, the respondents are also aware of journal publishers' policy on OA (Mean = 2.94). Overall, the comprehension dimension of awareness has an average mean score of 3.03 indicating a high level of comprehension.

This level of comprehension dovetails into the third dimension of awareness which is projection.

Projection as a dimension of awareness means the level of understanding of the respondents regarding the potential benefits or harms of using institutional repositories. The responses shows that

majority of the respondents also perceive that institutional repositories will provide them access to scholarly works easily (mean = 3.20). Furthermore, majority of the respondents strongly agreed would find institutional repositories useful in their careers (Mean = 3.07). Also, majority agreed that using institutional repositories allow students to find their research output in one place (mean = 3.01). In addition, many of them also agreed that using institutional repositories can boost the number of citations of their research works (Mean = 2.94). Overall, the average mean score of projection as a dimension of awareness of institutional repositories among the respondents is 3.06.

To answer the research question on the level of awareness of institutional repository among the respondent, the aggregate mean score of the three dimensions is considered. This is perception (2.58), comprehension (3.03), and projection (3.06). Aggregate mean score is 2.89 indicating a high level of multidimensional awareness of institutional repos among the respondents. This result is also unique because previous studies have merely focused only on one dimension of awareness which is perception^{5,6}.

Hypothesis

There will be no significant influence of awareness (perception, comprehension and projection) on the use of institutional repositories by academic staff of universities in Oyo and Osun states.

Table 4 Influence of Awareness on the Use of Institutional Repositories by Academic Staff of Universities in Oyo and Osun States.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.390 ^a	.152	.148	.54128

a. Predictors: (Constant), Awareness of IR

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.058	1	11.058	37.743	.000 ^b
	Residual	61.528	210	.293		
	Total	72.586	211			

a. Dependent Variable: Use of IR

b. Predictors: (Constant), Awareness of IR

Coefficients^a

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	1.436	.271		5.297	.000
Awareness of IR	.036	.006	.390	6.144	.000

a. Dependent Variable: Use of IR

Table 4. presents the results of the linear regression analysis for the influence of awareness on the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria. From the results in Table 4.6a, awareness of institutional repositories has a positive correlation with the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria, Nigeria ($R = 0.390$, $p < 0.05$). The coefficient of determination (Adj. R^2) of 0.152 shows that awareness of institutional repositories explains 15.2% of the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria.

Furthermore, Table 4b presents the results of ANOVA of regression test which revealed that awareness of institutional repositories has a significant influence on the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria. This can be explained by the F-value (37.743) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that the use of institutional repositories is influenced by the level of awareness of institutional repositories among the respondents.

In addition, the results of regression coefficients in table 4.6c, revealed that at 95% confidence level, a unit change in awareness of institutional repositories will lead to a 0.036 increase in the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria, given that all other factors are held constant. On the strength of this result (Adj. $R^2 = 0.152$, $F(1, 210) = 37.743$, $p = 0.000$), the null hypothesis one (H_0) which states that there will be no significant influence of awareness (perception, comprehension and projection) on the use of institutional repositories by academic staff of universities in Oyo and Osun states is thus rejected.

6. Discussion of Findings

The aim of the study is to determine the influence of awareness on the use of institutional repositories by academic staff of universities in Oyo and Osun State of Nigeria. The study found that both the level of institutional repositories use among the respondents is high. This finding is in line with several similar studies while also contradicting other studies on the use of institutional repositories. For instance, a study conducted on the use of institutional repository for self-archiving by lecturers in Africa found that

many of them do not share or disseminate their research after it has been published through the peer-review system because, in most cases, they are unaware of the benefits of informal networks or how to use them to promote their study (Bamigbola, 2021). Although many academic libraries across the world have successfully implemented IRs, several studies indicate scholar's reluctance to archive their work in IRs. In fact, the current IR deposition estimates indicate that only 15 to 30% of eligible scholars and researchers deposit their work in institutional repositories (Peechapol, Na-Songkhla, Sujiva, & Luangsodsai, 2018)

There are however findings that agrees with the current study. Bonsu, Essel, & Ofori, (2018). reported that the majority of lecturers in Ghana, use the institutional repository for depositing and retrieving scholarly resources while others use the repository for information retrieval only. In the same vein Eromosele (2019) who examined the use of institutional repositories in Covenant University and University of Ilorin found that there is a higher level of IR resources at Covenant University while the University of Ilorin recorded low usage by lecturers. The frequency of use of the repositories was also found to be different. It was found that the frequency of usage of institutional repository is higher in Covenant University when compared to UNILORIN.

The second research question of this study examined the level of awareness of institutional repositories among the respondents. The study found a high level of awareness among the respondents. Most importantly, the awareness is multidimensional as it covers the perception, comprehension and projection of the relevance of institutional repositories. The findings showed that the respondents scored high on all of the dimensions. There are several studies that support this finding although most of the studies focused on one or two dimensions to the exclusion of others. For instance, Olayinka, Ogheneruemu, and Oluwayemisi (2021) reported that lecturers are aware of the benefit of institutional repositories such as; wider communication of research outcome; increased personal prestige in one's field; increase institutional prestige; protection of research from plagiarism; increase the citation impact. Similarly, Jabbar, Saqib, and Muhammad, (2020) found that majority of the respondents were aware of the existence of; the benefits of using IRs and the content expected to be in the IR in their universities. However, majority of the lecturers were not aware of university IR policy, publishers' policy on open access or the processes of depositing research into the in IR. As a result, while the researchers reported that awareness is high, the fact that knowing how to deposit information resources into the institutional repository is the lowest and that lecturers are not fully aware of the policies guiding the use of IR shows that the level of awareness is still low.

This finding also agrees with a similar study by Okhakh (2015) in which the analysis showed that majority of the respondents reported that they are aware of the existence of institutional repository. In addition, it was shown that a significant part of the respondent also understands the benefits in the use of institutional repository. It was also found that more than half of the respondent claimed to be

familiar with the content of their universities' IR., aware of their universities' IR policy, and the relevance copyright issues relating to open access publishing.

The test of hypothesis on the influence of awareness on the use of institutional repositories shows that awareness has a significant influence on the use of institutional repositories among academic staff of universities in Oyo and Osun states. The finding indicates that, the more fully aware users are about institutional repositories, the more likely they are to make use of it. As shown in the study by Nunda and Elia who reported that majority of the respondents in their study were aware of the existence of; the benefits of using IRs; and the content expected to be in the IR in their universities. However, majority of the lecturers were not aware of; university IR policy, publishers' policy on open access or the processes of depositing research into the IR. As a result, there was limited use of institutional repository among the respondents.

This is also supported by a study of Kampa and Patra (2020) in which the researchers found that a higher level of awareness such as comprehension and projection achieved through participation in workshops/seminars have an impact on the use of institutional repositories. In the same vein, researchers in Kenya by Njagi and Namande (2018) found that there is low level of user awareness about institutional repositories in their institutions which means that majority of the lecturers were simply informed about the existence of the institutional repository (perception) without in depth training on the use of institutional repositories and continuous advocacy on the use of institutional repositories to create higher level of awareness (i.e; comprehension and projection). This low level of awareness was reported to affect the use of institutional repository as majority of the librarians interviewed reported that content recruitment for the institutional repository is a big challenge as they always find it difficult to convince researchers to deposit their research in the repositories.

7. Conclusion

Research and scholarly activities that constitute the major preoccupation of academic staff in universities thrive on the availability and accessibility of quality information resources. In the same vein, the research output of scholars need to be disseminated as quickly and widely as possible. Effective use of institutional repositories, both as tool for scholarly communication and as information systems provide a holistic solution to achieve these objectives. In an era where Nigerian lecturers have better access to research conducted abroad than local research due to poor scholarly communication infrastructure, institutional repositories offer an opportunity to promote local content in research and so its use should be widely promoted. It is therefore important that academic staff as key stakeholders in the development and sustenance of institutional repositories should be made to understand everything related to the relevance, workings and advantages of institutional repositories so that they can be part of the efforts not only to promote local research outputs but also to enhance the quality and impact of research conducted in Nigeria.

8. Recommendations

Based on the findings as presented in this chapter and the conclusion reached in this study, the following recommendations are considered relevant;

- i. Although there seems to be a widespread use of institutional repositories among academic staff of universities, the relative large numbers of infrequent users and those who have never used them demand that more institutional repositories should be developed and the existing ones made more robust to meet the information needs of target users.
- ii. The fact that perception of institutional repositories has the lowest score among the dimensions of awareness indicates a need for more publicity and marketing activities on the part of universities that have developed institutional repositories to ensure that their staff do not depend on second hand information about institutional repositories.
- iii. Given the significance of awareness to the use of institutional repositories by academic staff of universities, it is important to enrich any awareness programme with monitoring and evaluation procedures to ensure that they continue to contribute to improved use of institutional repositories.

References

- Bamigbola, A. A. (2014). Surveying attitude and use of institutional repositories (IRs) by faculty in agriculture disciplines: A case study. *Procedia-Social and Behavioral Sciences*, 147, 505-509.
- Bamigbola, A. A. (2021). Awareness, anchor and adjustment factors in the use of institutional repositories by Nigerian lecturers. *IFLA journal*, 47(2), 182-195.
- Bamigbola, A. A., & Adetimirin, A. E. (2017). Evaluating use of institutional repositories by lecturers in Nigerian universities. *Information Impact: Journal of Information and Knowledge Management*, 8(3), 83-102.
- Bonsu, F. M., Essel, H. B., & Ofori, E. R (2018). Evaluating the Reasons for The Non-Participation of Kwame Nkrumah University of Science and Technology Institutional Repository by Academic Staff. *Journal of Basic and Applied Research International*, 24(2), 58-64.
- Eromosele, G. (2019). Information and Communication Technology skills as determinants of utilizations of institutional repositories by lecturers in two Universities in Nigeria. *Library philosophy and practice (e-journal) Available at ProQuest*, <https://search.proquest.com/docview/2234441845>.
- Gunasekera, C. (2017). Social science scholars perception towards open access and institutional repositories. *International Journal of Social Sciences*, 3(2), 2244-2259.
- Jabbar, A., Saqib, U. R., & Muhammad, A. H. (2020). Accessibility and Use of Institutional Repository among Research Scholars: A Case of COMSATS Institute of Information Technology, Lahore. *Library Philosophy and Practice*, 1-18.

- Kampa, R. K., & Patra, N. K. (2020). Determining the factors influencing the level of awareness and usage of open source digital repository software by academic librarians in India. *Digital Library Perspectives*, 36(3), 303-317.
- Kayungi, P. N., Ndenje-Sichalwe, E., & Manda, P. A. (2021). Academic staff awareness of institutional repositories (IRs) in Tanzania universities. *University of Dar es Salaam Library Journal*, 16(1), 67-83.
- Njagi, P. R., & Namande, B. (2018). The status of the implementation of institutional repositories in selected newly established universities in Kenya. *Regional Journal of Information and knowledge management*, 3(1), 30-40.
- Nunda, I., & Elia, E. (2019). Institutional repositories adoption and use in selected Tanzanian higher learning institutions. *International Journal of Education and Development using ICT*, 15(1).
- Okhakhu, D. (2015). Librarians' perception of lecturers' awareness as a factor influencing the development of institutional repository in public universities in South-West Nigeria. Available at SSRN 2659199.
- Okiki, O. C., Osedo, O. A., & Okpah, B. (2020). Stakeholders Awareness and Willingness to Submit Scholarly Works to Institutional Repository Towards Research Visibility: A Case of University of Lagos.
- Olayinka, A. T., Ogheneruemu, O. G., & Oluwayemisi, A. A. (2021). Academic Staff Perceptions of Institutional Repository and Academic Staff Productivity in South-West Universities, Nigeria. *International Journal of Research in Library Science (IJRLS)* 7(4), 179-190,
- Onyebinama, C. O., Anunobi, C. V., & Uzochukwu, A. U. O. (2020). Effect of gender on lecturers' submission and retrieval of research output in institutional repositories in Private Universities in Southern Nigeria. *Library Philosophy and Practice (e-journal)*.
- Orsu, N. E. (2019). Utilization of open access repositories for visibility of academic publications by lecturers in South-East, Nigeria. *International Journal of Knowledge Content Development & Technology*, 9(4).
- Peechapol, C., Na-Songkhla, J., Sujiva, S., & Luangsodsai, A. (2018). An exploration of factors influencing self-efficacy in online learning: A systematic review. *International Journal of Emerging Technologies in Learning (Online)*, 13(9), 64.
- Qazi, A., Qazi, J., Naseer, K., Zeeshan, M., Hardaker, G., Maitama, J. Z., & Haruna, K. (2020). Analyzing situational awareness through public opinion to predict adoption of social distancing amid pandemic COVID 19. *Journal of medical virology*, 92(7), 849-855.