Full Length Research

Performance Expectancy as a Determinant of Use of Open Access Resources by Lecturers in University Of Ibadan, Nigeria

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The research work examined the open access resources as a major source of information resources available to lecturers. Open access provides information resources to lecturers at no cost. Notable among the open access resources are Institutional Repository, Open access databases, open access journals, Author's personal archives and open text books.

Objective of this study was to examine performance expectancy, as a factor affecting the use of open access resources by lecturers in University of Ibadan. The design adopted for the study was the descriptive research and population comprised lecturers from University of Ibadan. Random sampling was used to select 174 as sample size. Questionnaire for Lecturers was used as the research instrument. The analysis was done using descriptive statistics such as frequencies and percentages, while inferential statistics such as the Pearson product moment correlation and regression analysis was used to test hypothesis at 0.05 level of significance.

Majority of the lecturers (77.1%) used open access resources to publish articles in the open access medium and also refer their students for assignment completion. Open access resources were useful to most of the lecturers (76.3%): of relative advantage and very relevant to the academic activities. However the study also revealed that Performance expectancy is a strong determinant of use of open access resources as result showed there was a significant positive correlation between performance expectancy and use of open access resources by lecturers (r= .867[**]; n = 152; p <0.05)by lecturers. In conclusion, performance expectancy is a strong determinant of use of open access resources by lecturers.

Key words: Open access resources, performance expectancy, Lecturers.

BACKGROUND OF STUDY

Universities play fundamentally important roles in any given society. To individuals, they create improved life chances and opportunities; to the economy, enhancement of innovation and skills; and to the society; through increase in knowledge and research discoveries.

Research is very important in the university system and is basically carried out in the university system by lecturers and students. Journals and electronic databases form important information sources to lecturers as they provide current information resources. However, most databases

and journals are subscription based which most lecturers may not be able to afford. Ivwighreghweta and Onoriode (2012) observed that over 2.5 million of articles published annually appeared in subscription based journals making it impossible for researchers with financial limitation to gain access to such information.

With the foregoing, lecturers have been made to seek for new ways of getting access to information resources to carry out their functions. A key and promising opportunity that has presented itself through the enabling information and communication technologies (ICTs) as an alternative form of scholarly publication is open access which now provides scholarly information resources to lecturers at no cost (Suber, 2006). Open access has been defined as a new mode of scholarly communication through which author(s) and right holder(s) of scholarly work grant(s) to all users a free, irrevocable, worldwide right of access to, and a license to copy, use, distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship (Berlin declaration, 2003).

The primary advantage of open access resources is that the entire content is available to users everywhere regardless of affiliation with a subscribing library. Open access resources from all indications give authors a worldwide audience larger than that of any subscription-based journal no matter how prestigious or popular. Hence, the use of open access resources by lecturers in both disseminating and accessing scholarly information has become important for teaching, learning and research. Open access resources have therefore become important sources of information needed for research and development.

Some of the factors affecting the use of an information system have been explained through the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis and Davis, 2003). UTAUT accounted for 70% of the variance in behavioral intention and about 50% in actual use towards information technology adoption. Among factors of UTAUT found out to influence usage of technology was performance expectancy (Dulle, 2010).

Performance expectancy has implications for the use of open access resources by lecturers. The way lecturers perceive open access resources to be useful in enhancing their job performance will either influence or hinder the use of the resources. It is obvious from the definition of performance expectancy that the user of a technology is interested in how a particular technology will help him to attain the gains in his job. This is why performance expectancy is a crucial factor that could either influence or hinder the use of open access resources by lecturers.

STATEMENT OF PROBLEM

Open access resources are of great importance to lecturers as it is helpful in expatiating their research impact and enabling wider access to scholarly articles, creates global visibility and high impact factor for their research articles. Despite the benefits associated with the use of open access resources, it has been observed that some factors could influence the use of these resources by lecturers. One of these factors is performance expectancy. Interactions with some lecturers revealed that, at times the motivation to use open access resources for academic activities was lacking. This was as a result of the assumption that what they expect of open access resources in terms of usefulness, job relevance and benefits may not be derived. It is to this end that this study sets to investigate the effect of performance expectancy on the use of open access resources by lecturers in University of Ibadan, Nigeria.

OBJECTIVES OF THE STUDY

The specific objectives are to;

i.   determine the purpose of use of open access resources by the lecturers;
ii.   find out the relationship between performance expectancy and use of open access resources by the lecturers.

RESEARCH QUESTION

The research question to be examined in this study is;

1.   What is the purpose of use of open access resources by lecturers in University of Ibadan?

RESEARCH HYPOTHESIS

The following hypothesis will be tested in this study:

H01: There is no significant relationship between performance expectancy and use of open access by university lecturers.

REVIEW OF RELATED LITERATURE

Open access resources play very important role in scholarly communities, especially, among lecturers, who need access to up to date and relevant information for their teaching, learning and research. Through the initiative of open access, lecturers may now have

information resources provided to them without the limitation of time, budget, and frequent trips to a physical library. Lecturers all over the world have been able to publish their intellectual output in electronic form in open access resources, which are faster and easier to access than traditional materials, also information resources emanating from open access cover broad subject areas, and of course, including the subject area of Library and Information Science (Thaotip, 2011).

The use of open access resources by lecturers for teaching, research and disseminating knowledge has attracted the attention of many scholars all over the world. In a survey carried out by Dulle and Minishi-Majanja (2009) to examine the perspectives of researchers on usage of institutional open access repositories from six public universities in Tanzania, a total of 392 researchers were studied out of which majority (62.3%) of the respondents claimed to have had access to open access materials while 37.7% claimed to have never accessed such content. it was evident that Tanzanian researchers predominantly used open access to source information needed for their research and other academic activities. Findings further revealed that many of the researchers supported the idea of establishing institutional repositories at their respective universities as a way of improving the dissemination of local content.

Lwoga and Questier (2014) also carried out a study on faculty attitudes, use of open access, and the role of information professionals in supporting open access (OA) scholarly communication in Tanzanian health sciences universities. Findings of the study revealed that among the faculty members surveyed, two thirds (64.4%) which was a majority of the respondents reported to have used OA outlets to disseminate their research materials. Most faculty members further considered the establishment of repositories important. The usage data of the institutional repository from the universities in Tanzania which had installed the repository were also analyzed. The repository had only 100 research materials including theses/dissertations, research reports and journals at the time the survey were conducted. The usage data showed that a total of 755 people visited the repository from July to December 2012, with 1,092 total visits and 68.5% new visits. Their findings further showed that about 75.92% of the visits were made in Tanzania. Generally, these data show that the repository was used at a low rate.

Notable among the open access resources are open access journals. In the same vein, Obuh2013, 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.

Open access resources have been found to be used by lecturers for their various academic endeavors. In a study conducted by Isa, Igwe, Akangbe and Aliyu (2014), in investigating the information environment of lecturers in Federal Polytechnic, Offa, Kwara State, Nigeria, in relation to their information seeking behavior, level of awareness and extent of use of the open access model of scholarly communications. Out of the164 lecturers under study, 59% revealed that they access and use open access resources for teaching and research. Implication for this is that majority of the lecturers found open access useful to them in their teaching and research work.

Ivwighreghweta and Onoriode (2012) carried out a study on use of open access by lecturers at Western Delta University, Oghara, Nigeria and the findings revealed that they have downloaded, printed accessed, made links to other articles, published, referenced, and have cited articles from open access journals articles. This connotes that lecturers at Western Delta State University are pleased using open access journals for their academic research purposes. In another survey by Deoghuria and Roy (2007) on scientists in Kolkata, India found out that out of 125 respondents, 80% accessed open access literature and only 20% published in open access resources.

Some studies have also established the low usage of open access resources. Moller (2006) reports the results of a study carried out in South Africa focusing on open access journals and their prospects in the country in question. Using a survey questionnaire, the data were collected from biomedical researchers, managers of university based research, government agencies and science councils. The study gathered opinions and perceptions of the respondents regarding open access publishing. It was observed that more than one third of the respondents claimed to know open access publishing.

Performance expectancy is a strong determinant of intention to use. Performance expectancy is formulated via five constructs from literature: perceived usefulness from Technology acceptance model (TAM), extrinsic motivation from Motivation model (MM), Job relevance, from Personal computer utilization (PCU), relative advantage from Innovation diffusion theory (IDT) and outcome expectations from Social cognitive theory (SCT). Venkatesh and colleagues' findings support performance expectancy as the most important determinant of intention among the four determinants (Venkatesh 2003).

Several studies have been conducted on the application of Unified theory of Acceptance and use technology (UTAUT) in relation to technology and online platforms. Recently, Kasim (2015) carried out a study on researchers from five research and development organisations in Malaysia on factors affecting knowledge sharing using virtual platforms – a validation of Unified Theory of Acceptance and use of technology (UTAUT). In a section on performance expectancy, majority of the researchers (mean=4.09) believe virtual platforms enable them to retrieve knowledge needed for problem solving, decision making and learning. On the other hand, the use of virtual platforms to promote innovativeness and creativity has the lowest score (mean = 3.99) in sharing knowledge through the virtual environment. Thus, performance expectancy was shown to be the strongest predictor and motivator of virtual knowledge sharing behavior. Therefore, it is believed that an individual with high performance expectancy is more likely to adopt the use of virtual platforms than is an individual with lower performance expectancy.

Oye, Iahad, and Ab.Rabin (2011), in an attempt to understand why people accept or reject new communication technology, conducted a study in which the models TAM and UTAUT were used to understand teachers' behavioral intention on the acceptance and use of technology. The research was carried out in University of Jos, Plateau State in which 100 lecturers were examined through questionnaire. The result of their research indicated that 86.5% of the respondents agreed that using Information and Communication Technology (ICT) greatly improved their skills. Also, among the four UTAUT constructs examined, performance expectancy exerted the strongest effect of 86.5%. They further concluded that performance expectancy was the most influential factor for the use of ICT by lecturers.

Accordingly, Dulle (2010) in a research carried out on adoption of open access publishing by scholars in six public universities in Tanzania, submits that performance expectancy relates to how well scholars believe that open access will help them in accessing and disseminating scholarly content. Performance expectancy was therefore assessed to determine whether or not it is among the motivations for the researchers' adoption of open access. The findings reveal that majority (83%) of the respondents agreed or strongly agreed with the statement that open access outlets improves accessibility to scholarly literature; 82.3% agreed or strongly agreed with the statement that publishing in open access outlets exposes scholarly works to a large potential readership; 80.6% agreed or strongly agreed with the statement that open access enables researchers from developing countries to access literature more easily; 72% agreed or strongly agreed with the statement that open access outlets increases research impact; and 69.3% agreed or strongly agreed with the statement that open access enables scholars to publish more quickly.

From the literature reviewed, it has also been found out that open access resources have allowed researchers and lecturers to access scholarly contents without any form of restriction. All these have made research easy and affordable and in turn have helped in improving standard of education in our universities. Lecturers, irrespective of their financial capacity, could have free access to scholarly contents online, which has aided their academic and research activities. Literature has also shown that lecturers use open access resources for various purposes which include: citing references, sourcing for current information in their various fields, and for sourcing for materials needed for teaching, learning and research.

It is also evident from literature that despite the seemingly great benefits and opportunities that open access resources afford lecturers, there seems to be some factors that affect its use as a product of internet technology and one of these factors is performance expectancy. However, based on the literature reviewed, it was observed that various studies have been conducted on how these factors affect the adoption and use of various types of technology products but very little research has been carried out on how performance expectancy affects the use of open access resources by lecturers in Nigeria. This indicates that there is dearth of literature on how this factor affects the use of open access and hence, this is the gap in knowledge that this study sets out to fill.

RESEARCH METHOD

The research design utilized for the study is the descriptive research design. The research design is chosen because it is the most suitable for the study of large population as it allows only a sample population to represent the entire population. The population of the study was made up of lecturers in University of Ibadan. The number of lecturers in University of Ibadan was obtained from the MIS. The preliminary investigation indicates that there are 1,460 lecturers in the University of Ibadan. The multistage random sampling technique was adopted for this study. At the first stage four faculties each were purposively selected from University of Ibadan. 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 instruments used for this study was structured questionnaire. The questionnaire for this study is a survey instrument containing a number of well-structured questions specifically to gather relevant data for the study.

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. All was tested at0.05 level of significance.

RESPONSE RATE

A total number of One hundred and seventy four (174) copies of questionnaire were administered at University of Ibadan, out of which one hundred and fifty two (152) copies were duly filled and returned giving a response rate of 87%.

DATA ANALYSIS

Research question

What is the purpose of use of open access resources by lecturers?

Tables 1 and 2 reveal the purpose of use of open access resources by the lecturers. Tables revealed that most of the lecturers 29 (96.3) in Social Sciences agreed that they referred students to open access resources for their assignments, while 37 (77.1%) in Science stated that they used Open Access resources in order to publish articles in OAR. To a large extent Open Access resource was found to contribute extensively to the teaching and research functions of lecturers in the university.

Hypothesis testing: There is no significant relationship between performance expectancy and use of open access resources by university lecturers.

Table 3 presents the findings to establish the association between performance expectancy and use of open access resources by lecturers. The results shows that in University of Ibadan, there was a significant positive correlation between performance expectancy and use of open access resources by lecturers (r= .867[**]; n = 152; p < 0.01). This means that as the perception of lecturers in relation to perceived usefulness, relative advantage and job relevance of open access resources to their activities increases use of these resources also increases. Therefore, the hypothesis is rejected.

DISCUSSION OF FINDINGS

Majority of the lecturers used open access resource to publish articles in the open access medium and also refer their students for assignment completion. This reveals that most of the lecturers used the open access resources for various academic activities. In support of this, Obuh (2013) in the research on lecturers from 15 Universities Southern Nigeria, 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.

Most of the lecturers agreed to a high extent that open access resources were useful, of relative advantage and very relevant to their academic activities. The results showed that the lecturers linked their use of open access resources to high level of performance expectancy. If they realize that these resources are very useful and relevant to them, they will use them more frequently. The findings of Oye, Iahad, and Ab.Rabin (2011) also supports the results of this study as their research indicated that 86.5% of the lecturers in the University of Jos, Plateau state Nigeria, agreed that using Information and Communication Technology (ICT) greatly improved their skills. Also, among the four UTAUT constructs examined, performance expectancy exerted the strongest effect of 86.5%. They further concluded that performance expectancy was the most influential factor for the use of ICT by lecturers.

In conclusion, this study revealed that there was positive significant relationship between performance expectancy and use of open access resources by lecturers. This is because the benefits that lecturers hope to derive from the use of open access resources will motivate them to use them for academic activity. The lecturers will not want to waste their time on any activity that will not add value to the academic activities. Therefore, performance expectancy is a strong determinant of use of open access resources by lecturers.

CONCLUSION

Open access as a scholarly medium of information dissemination and retrieval has changed the information scene. Information resources of different types are hosted on this platform, increasing access to information 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

Table 1. Purpose of use of open access resources (OAR) by lecturers in University of Ibadan (A)

Purpose	Arts								Education							
	SA		A		D		SD		SA		A		D		SD	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Sourcing for information to aid my teaching	13	36.1	6	16.7	8	22.2	9	25.0	19	63.3	11	36.7	-	-	-	-
To gain access relevant information resources	4	11.1	15	41.7	10	27.8	7	19.4	11	36.7	19	63.3	-	-	-	-
Publish articles in OAR	6	16.7	15	41.7	6	16.7	9	25.0	8	26.7	22	73.3	-	-	-	-
Preparing for workshops and seminar	7	19.4	12	33.3	12	33.3	5	13.9	13	43.3	17	56.7	-	-	-	-
Research purposes	7	19.4	12	33.3	12	33.3	5	13.9	16	53.3	14	46.7	-	-	-	-
To cite references in my research work	6	16.7	14	38.9	9	25.0	7	19.4	10	33.3	20	66.7	-	-	-	-
Preparing course materials and lecture notes for my students	8	22.2	13	36.1	10	27.8	5	13.9	10	33.3	20	66.7	-	-	-	-
For self-archiving my scholarly publications on the internet	7	19.4	13	36.1	9	25.0	7	19.4	8	26.7	22	73.3	-	-	-	-
Referring students to open access resources for their assignments	10	27.8	10	27.8	9	25.0	7	19.4	8	26.7	22	73.3	-	-	-	-

Table 2. Purpose of use of open access resources (OAR) by lecturers in University of Ibadan (B)

Purpose	Social sciences								Sciences							
	SA		A		D		SD		SA		A		D		SD	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	% F	
Sourcing for information to aid my teaching	24	63.2	14	36.8	-	-	-	-	27	56.3	21	43.8	-	-	-	
To gain access to relevant information resources	15	39.5	23	60.5	-	-	-	-	18	37.5	30	62.5	-	-	-	
Publish articles in OAR	10	26.3	20	52.6	8	21.1	-	-	11	22.9	37	77.1	-	-	-	
Preparing for workshops and seminar	16	42.1	17	44.7	5	13.2	-	-	19	39.6	29	60.4	-	-	-	

Table 2. Continuation

Research purposes	26	68.4	12	31.6	-	-	-	-	24	50.0	24	50.0	-	-
To cite references in my research work	15	39.5	23	60.5	-	-	-	-	16	33.3	32	66.7	-	-
Preparing course materials and lecture notes for my students	13	34.2	25	65.8	-	-	-	-	14	29.2	34	70.8	-	-
For self-archiving my scholarly publications on the internet	11	28.9	27	71.1	-	-	-	-	15	31.3	33	68.8	-	-
Referring students to open access resources for their assignments	9	23.7	29	76.3	-	-	-	-	12	25.0	36	75.0	-	-

Table 3. Relationship between performance expectancy and use of open access resources by lecturers

Name of University	Variables	Mean	Std. Deviation	N	R	Df	Sig. (P)	Remarks
University of Ibadan	Performance expectancy	28.84	15,156					
	Use of open access resources	22.45	5.100	152	.867**	151	.001	Sig.

lecturers to access open access resources whenever they want to and where ever they are. Lecturers will continue to use open access resources if relevant information that can add value to their work in terms of performance expectancy is accessible to them on the open access platform. Even in the face of daunting infrastructural challenges that confront various institutions today, lecturers still make appreciable use of open access resources. This is because they consider these resources to be of advantage to their academic endeavors.

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