

Awareness of Electronic Databases by Academic Staff in Private Universities in South-West Nigeria

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Abstract

Awareness of the databases among academics in institutions of higher learning is important because the ultimate use of the databases is for academics to be aware and utilise them effectively to contribute to academic achievement in academia. Literature identified lack of awareness as the main factors militating against effective use of electronic databases partly due to level of user education, preference, orientations and training. This study therefore, investigated the awareness- perception, level of user education and information literacy. The descriptive survey research design of the correlational type was adopted. A total of 1656 academic staff in the 21 private universities were sampled. Stratified random sampling technique was used to select 60% academic staff across the ranks in 21 private universities. The main research instruments used to collect data for the study was questionnaire. Data generated were analysed using descriptive and inferential statistics. Spearman's rank was used to test hypothesis at 0.05 level of confidence. The result of the analysis showed that there was average level of awareness of electronic databases among academic staff in private universities in South-west, Nigeria. The study recommended libraries/librarians, database producers/ vendors, publishers and private universities ICT units/departments to raise the level of awareness of electronic databases in the private universities in South-west, Nigeria as higher awareness can influence higher utilisation of the electronic databases.

Keywords: Research Productivity, Electronic Databases, Private Universities, Academic Staff, Awareness

1.0 Introduction

Awareness is defined as the ability of people to realise or know that something exists. It can also be seen as ones' understanding of a particular subject, situation or trend. Webster's third New International Dictionary of the English Language (1994) defined awareness as understanding a lot about what is happening around someone and the person or persons paying attention to it either positively or negatively. Awareness is a situation where someone is informed of something. It is the act of knowing about the existence of something. Awareness can also be defined as the act of having perception or wide knowledge of the existence of something. According to Schmidt (2002), awareness is an attribute of action. Doing one thing while taking heed of other relevant occurrences as two parallel lines of action, namely: heedfully, competently, mindfully, and accountably.

Heath, Vom Lehn, Hindmarsh, Svensson, Sanchez and Luff (2002) defined awareness as a feature of practical action which is systematically accomplished within developing course of everyday activities. According to Owolabi and Atama (2007), awareness is a pre-requisite to subsequent usage of open access publications unless an individual uses it unknowingly. Obuh and Bozimo (2012) stated that awareness raises consciousness and knowledge about a certain technology and its personal and social benefits. This view supported their study which established awareness as the central determinant of user attitude and behaviour towards technology.

Dulle and Minishi-Majanja (2010) stated that in the open access environment, awareness has been acknowledged as an important factor that determines usage of mode of scholarly communication. According to Fullard (2007), awareness is the state or the ability to perceive, to feel, or to be conscious of events, objects or a new trend such as new technology or system. Broadly, Fullard further stated that awareness is the state or quality of being aware of something. According to Encyclopedia Britannica (2011) awareness is the state or ability to perceive, to feel, or to be conscious of events, objects, or sensory patterns. It is the state or quality of being aware of something. Knowledge is a familiarity, awareness or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning. In this study, the concept of awareness is the degree to which academic staff of private Universities in Nigeria have heard about electronic databases and how informed they are concerning it.

1.1 Objectives of the study

The specific objective were to:

- i. ascertain the level of awareness of the academic staff on electronic databases available in private universities in South-west, Nigeria; and
- ii. to determine frequency level of utilisation of electronic database by academic staff in private

universities in South-west, Nigeria.

1.2 Research question

1. What is the extent of awareness of academic staff on electronic databases in private universities in South-west, Nigeria?
2. What is the frequency of utilisation of electronic databases by academic staff databases in private universities in South-west, Nigeria?

1.3 Hypothesis

The below null hypothesis was tested in the study at 0.05 level of significance:

- Ho₁: There is no significant relationship between awareness and utilisation of electronic databases and of academic staff in private universities in South-west, Nigeria.

2.0 Literature Review

In a study of awareness, accessibility and use of electronic databases among academic staff of Babcock University Business School, Aina (2014), showed that the level of awareness of electronic resources among the academic staff of Babcock Business School is varied. Majority of respondents were aware of academic Journal (69.4%), followed by JSTOR (56.5%), as well as Theses and Dissertation and Ebscohost (54.1) and (50.6) respectively. The analysis revealed that majority of respondents were not aware of Book boon, World Bank Open Knowledge Repository and National Virtual Library with (25.9%), (32.9%) and (29.4) respectively. Findings also showed that nine out of thirteen databases under consideration were averagely aware of by respondents. The Finding also depicts that the following electronic databases were not utilized: SAGE (27.1%), World Bank Open Knowledge Repository (36.8%), International Research Journal and National Virtual Library with (29.4%) each. Also, a survey by Nwokedi (2011) which evaluated University of Jos lecturers' knowledge of the existence of IR and willingness to submit research works, found that majority (79%) of the respondents did not have any idea of open access IR and only 21% of the respondents claimed to be aware of the existence of IR in their institution through a seminar on IR by the library. However, when the benefits of IR were explained to them during the research, 91.6% of them agreed that IR was very useful and only 8.3% were undecided.

Ani and Edem (2012) reported a survey conducted to explore the extent of access and use of online databases by academic staff in the University of Calabar, Nigeria. The findings of the study indicated that although vast majority (96.3%) of the academic staff are accessing and using relevant online databases in teaching / research, the frequency of usage is rather low, as most (48.1%) respondents used these databases "occasionally." From the findings, their major factors that impede access and use of online databases by academics in the university include non subscription of relevant online databases by the university library, cost of access and usage, lack of access to relevant databases and lack of inadequate internet skills for proper access in the university library. Analyzing and evaluating the use of electronic resources, a study conducted by Bhatt and Rana (2011) revealed that, the utilisation of electronic resources by academics improved their professional competencies.

Madukoma, Onuoha and Ikonne (2014) investigated the electronic resources information use behaviour of faculty of law members at Babcock University in Ogun state. The study established among others that faculty members use electronic resources available in the library. They were however faced with difficulties such as power fluctuations, inadequate orientation/training, and lack of awareness of electronic resources in the library. They in conclusion recommended that the library administration should provide modern technologies; create adequate awareness of electronic resources acquired in the library; provision of orientation/training of faculty members; and difficulty in navigating and searching databases.

Utulu & Bolarinwa (2009) reported results from a study on level of awareness of open access initiatives and adoption by academics from the Universities of Ibadan and Lagos in Nigeria. The two universities were selected on sampling basis. Using the survey, 250 copies of questionnaire were distributed to the respondents selected from a population of 2,224 academic staff from the study areas. Categories in the two main research disciplines, 58.3% of the respondents belonged to sciences and 40% were from humanities disciplines while the remaining 1.7% of the respondents did not indicate their research disciplines. The key finding from this study is that the academics awareness of open access initiatives with respect to open access e-resources did not tally with the actual usage of information resources from such open access outlets by these respondents as users and as well readers of scholarly publications. The research findings indicate that on average, the awareness of open access by the academics was above 50% while the actual usage of different OA outlets to access and disseminate scholarly content by these respondents was less than 50%. Another pertinent finding from this study was that the respondents were found to prefer usage of open access journals than other open access outlets. This was considered as a sign for the increasing acceptance of open access journals as a formal media for dissemination of scholarly content even in the developing world.

The findings of Ibegwam, Ogunyade and Ajuwon (2013) about awareness of use of electronic information resources by academic staff of two medical colleges in Nigeria, namely University of Ibadan and that of University of Lagos, show that 80% of the respondents who are lecturers at different levels are aware about the availability of e-resources in the two colleges of medicine. While discussing their findings in the study carried out to find out the awareness, motivation and utilisation of the agricultural information resources in the library of Federal University of Technology, Akure in Nigeria, the author reported that there was low awareness of the electronic resources, particularly TEEAL and AGORA which are the two agricultural databases in the library collection. The implication of this, according to the author, is that the library has not created sufficient awareness about the electronic resources.

Eke (2006) surveyed the extent of awareness and use of ICTs by academic staff in tertiary institutions in Imo State, Nigeria; in which one polytechnic, one college of education, and two universities, were used in the survey. The findings showed that while 50% of the respondents were using the computers and the Internet, it was found that access to ICTs was the major problem against use. Emojorho and Adomi (2006) surveyed the use of information technology facilities by all categories of staff (academic staff, senior non-academic staff and junior non-academic staff) of Delta State University, Nigeria for academic and research activities. It was found that academic staff were major users of ICTs as 92.2% of them were using computers, 13.7% of the respondents used local area networks (LANs) and a vast majority used the Internet in their academic and research activities.

In a study that aimed to explore the impact of the Internet use on research by academic staff in Ladoko Akintola University of Technology in Nigeria, Ajala et al., (2010) found that a vast majority of respondents were using the Internet regularly in research. According to Egberongbe (2011), the emergence of ICT has tremendously affected how information is accessed and used by academic staff in Nigerian universities. In her study, she surveyed the use of electronic resources by academic staff at the University of Lagos, Nigeria. It was found that 90.6% of the respondents accessed and used electronic journals, WWW (53.6%), e-books (28.6%) and online databases (17.86%) among other resources. Of the available online databases in the university library, ScienceDirect was popularly used by the respondents (53.57%), EBSCOHOST (28.6%) and AGORA (21.43%). User training was recommended as a major tool to facilitate and optimize the use of electronic resources.

Ukonu Wogu and Obayi (2012) surveyed the challenges confronting faculty at the University of Nigeria Nsukka in the use of digital library of the institution. Three hundred and ninety (390) respondents and the entire seven members of staff of the digital library in UNN were interviewed. They reported that awareness of the meaning of multi-media is low among faculty members of the institution. The study also indicated that library is being run as an internet café as against the real purpose of a digital/virtual library which should offer virtual access to other libraries, access to e-books among other crucial services. Among other issues raised by the study are slow networks, difficulty in reaching needed e-books due to no subscription as well as inability to access online books.

From the foregoing, it is interesting to note and observe that, on the average there seems to be increasing trend towards awareness and utilisation electronic databases in African (Nigerian) universities by academic staff within the past one decade. However, the present study intends to further contribute to this debate in order to bridge the observed awareness and utilisation gap of e-databases, not only in Nigerian universities, but Africa.

3.0 Methodology

The descriptive survey research design of the correlational type was adopted. The population for this study were lecturers in the twenty (27) private universities in South-west, Nigeria. Twenty-one (21) out of the twenty seven (27) private universities established and approved between 1999 and 2012 in south-west, Nigeria were purposively covered in the study. (Table: 3.1)

The stratified random sampling technique based on probability proportionate to size method was adopted in selecting 1656 (60%) academic staff from the population size of 2760 in the Twenty-one (21) private universities established and approved between 1999 and 2012 in south-west, Nigeria. The main research instruments used to collect data for the study was questionnaire.

Data generated were analysed using descriptive and inferential statistics. Descriptive statistics of frequency counts, standard deviation, mean and simple percentages were employed to analysed the demographic information and research questions, Spearman's rank was used to test hypotheses at 0.05 level of confidence.

In each selected private universities, 60% of the total estimated population of academic staff were selected for the study. Consequently, a sample size of 1,656 were selected for the study.

Table 3.1 Selected private universities and their population

	Names of universities	Year approved	No. of Academic staff	Sample Size 60%
1.	Achievers University, Owo	2007	78	46.8
2.	Adeleke University, Ede	2011	66	39.6
3.	Afe Babalola University, Ado-Ekiti - Ekiti State	2009	213	127.8
4.	Ajayi Crowther University, Oyo	2005	119	71.4
5.	Babcock University, Ilishan-Remo	1999	372	223.2
6.	Bells University of Technology, Ota	2005	107	64.2
7.	Bowen University, Iwo	2001	310	186
8.	Caleb University, Lagos	2007	72	43.2
9.	Covenant University, Ota	2002	319	191.4
10.	Crawford University, Igbesa	2005	65	39
11.	Crescent University, Abeokuta	2005	104	62.4
12.	Elizade University, Ilara-Mokin	2012	54	32.4
13.	Fountain University, Osogbo	2007	89	53.4
14.	Joseph Ayo Babalola University, Ikeji-Arakeji	2006	171	102.6
15.	Lead City University, Ibadan	2005	129	77.4
16.	McPherson University, Seriki Sotayo, Ajebo	2012	49	29.4
17.	Oduduwa University, Ipetumodu - Osun State	2009	67	40.2
18.	Pan-Atlantic University, Lagos	2002	132	79.2
19.	Redeemer's University, Ede	2005	154	92.4
20.	South-western University, Ijebu Ode	2012	41	24.6
21.	Wesley Univ. of Science & Tech., Ondo	2007	49	29.4
	Total		2,760	1,656

4.0 RESULTS AND DISCUSSION

What is the extent of awareness of academic staff on electronic databases?

In order to know the extent of awareness of academic staff on electronic database, Tables 4.1 below presents respondents perception on awareness in the utilisation of electronic database, level of user education, consciousness about a certain technology, and level of awareness of online databases.

Table 4.1: Awareness of Academic Staff on Electronic Databases in Private Universities in South-West Nigeria (N=657)

S/No.	Items	Strongly Agree (4) N (%)	Agree (3) N (%)	Disagree (2) N (%)	Strongly Disagree (1) N (%)	Mean (\bar{x})	Std.D
Having perception							
1	I am aware that Outstanding Academic Papers by Students (OAPs) implies full text availability	129 (19.7%)	338 (51.4%)	144 (21.6%)	46 (7.0%)	4.37	6.70
2	I am aware of institutional repositories and other e-database	285 (43.4%)	326 (49.6%)	-	46 (7.0%)	3.29	0.79
3	My informal interaction with colleagues enabled me to use e-database	233 (35.5%)	268 (40.8%)	110 (16.7%)	46 (7.0%)	3.05	0.90
4	I am aware that OAPs are in online/electronic format.	181 (27.5%)	260 (39.6%)	139 (21.2%)	77 (11.7%)	2.83	0.96
5	I can conduct searches independently in e-database	145 (22.1%)	299 (45.5%)	145 (22.1%)	68 (10.4%)	2.79	0.90
6	I am aware of disciplinary archive and e-database	104 (15.8%)	363 (55.3%)	113 (17.2%)	77 (11.7%)	2.75	0.86
7	Open access databases are copyright free at the point of use	83 (12.6%)	353 (53.7%)	175 (26.6%)	46 (7.0%)	2.72	0.77
8	I am aware of open Access (OA) search tools e.g. O Alster	136 (20.7%)	232 (35.3%)	212 (32.3%)	77 (11.7%)	2.65	0.94
Level of User Education							
9	I am aware of adequate computers, printers and other facilities to use e-databases	129 (19.6%)	446 (67.9%)	36 (5.5%)	46 (7.0%)	3.00	0.73
10	I always remember my password to access e-journals in the library	144 (21.9%)	363 (55.3%)	73 (11.1%)	77 (11.7%)	2.87	0.89
11	I am aware of Berlin Declaration on Open Access to Knowledge (BDOAK)	135 (20.5%)	347 (52.8%)	98 (14.9%)	77 (11.7%)	2.82	.89
12	I am aware of the Directory of Open Access Repositories (DOAR)	181 (27.5%)	244 (37.1%)	119 (18.1%)	113 (17.2%)	2.75	1.04
13	I am aware of e-databases in my field of expertise	83 (12.6%)	337 (51.3%)	175 (26.6%)	62 (9.4%)	2.67	0.81
Consciousness about a certain Technology							
14	High internet band width encourages articles download	346 (52.7%)	275 (41.9%)	36 (5.5%)	-	3.47	0.60
15	Fast internet access enhances the use of e-databases	206 (31.4%)	384 (58.4%)	67 (10.2%)	-	3.21	0.61
16	I am aware of lot of relevant online databases in my fields.	253 (38.5%)	322 (49.0%)	36 (5.5%)	46 (7.0%)	3.19	0.83
17	It is quick accessing articles in the databases	68 (10.4%)	490 (74.6%)	99 (15.1%)	-	2.95	0.50
18	It isn't technical accessing articles in the database	83 (12.6%)	470 (71.6%)	67 (10.2%)	37 (5.6%)	2.91	0.67
19	The interface to access article is easy to follow	83 (12.6%)	466 (70.9%)	62 (9.4%)	46 (7.0%)	2.89	0.70
20	Links to articles in the portals are easy to use.	119 (18.1%)	394 (60.0%)	67 (10.2%)	77 (11.7%)	2.84	0.85
21	The design makes the databases easy to navigate	46 (7.0%)	476 (72.5%)	104 (15.8%)	31 (4.7%)	2.82	0.62
22	Database designs are clear and understandable	15 (2.3%)	565 (86.0%)	-	77 (11.7%)	2.79	0.67
23	Accessing articles in the databases is fast and quick	68 (10.4%)	445 (67.7%)	67 (10.2%)	77 (11.7%)	2.77	0.79
24	Majority of the full-text articles are downloadable.	129 (19.6%)	281 (42.8%)	201 (30.6%)	46 (7.0%)	2.75	0.85
25	The databases design is simple and of high quality	36 (5.5%)	446 (67.6%)	98 (14.9%)	77 (11.7%)	2.67	0.75
26	As a result of information literacy programmes received The articles are free, I often use the database	68 (10.4%)	296 (45.1%)	185 (28.2%)	108 (16.4%)	2.49	0.89

Source: Field survey (2017)

Result of awareness of electronic database by academic staff of private universities in South-West is presented in Table 4.1 above. The result of perception of academic staff toward electronic database showed that more than 70% of respondents are aware of outstanding academic papers (mean=4.37, SD=6.70) and institutional repositories together with other materials (mean=3.29, SD=0.79). About 76.3% of respondents also claimed that their information interaction with colleagues enabled them to use e-database (mean=3.05, SD=0.90).

The result also revealed that 467 (71.1%), of respondents are aware of disciplinary archive and e-database, followed by 444 (61.1%) of respondents are aware that OAP are online, and 368 (56.0%) are aware of open access (OA). Most (67.6%) respondents be of the same opinion that they can conduct searches independently in e-database. In knowing the level of user education, the result shows that respondents are adequately aware of computers, printers and other facilities to use e-database (87.5%, mean=3.00), remember their password to access e-journal (77.2%, mean=2.87), and also aware of BDOAK (73.3%, mean=2.82), DOAR (64.6%, mean=2.75) and e-database (63.9%, mean=2.67).

The result further revealed the conscious of respondents about certain technology, and more than 80% of respondents be of the opinion that, high internet band width encourages articles download (mean=3.47, SD=0.60), fast internet access enhance the use of e-database (mean=3.21, SD=0.61) and quick accessing articles in the database (mean=2.95, SD=0.50). The result also shows that 575 (87.5%) of respondents are aware of lot of relevant online database, and this make it easy for more than 70% of respondents to access article in database, link to articles in portals and enable them to understand, navigate and download full-text articles in the database.

Table 4.2: Level of Awareness of Online Database by Academic Staff of Private Universities in South-West Nigeria (N=657)

S/No.	Level of awareness of online databases	Fully aware (4) N (%)	Partially Aware (3) N (%)	Scarcely Aware (2) N (%)	Not aware (1) N (%)	Mean (\bar{x})	Std.D
1	E-resources (e-books, journals)	476 (72.5%)	135 (20.5%)	-	46 (7.0%)	3.58	0.81
2	Online Public Access Catalogue (OPAC)	440 (67.0%)	171 (26.0%)	-	46 (7.0%)	3.53	0.82
3	E-Abstract and Indexes	366 (55.7%)	172 (26.2%)	37 (5.6%)	82 (12.5%)	3.25	1.03
4	Repositories	253 (38.5%)	327 (49.8%)	-	77 (11.7%)	3.15	0.91
5	E-Archives	304 (46.3%)	240 (36.5%)	-	113 (17.2%)	3.12	1.07
6	E-bibliographies	275 (41.9%)	269 (40.9%)	-	113 (17.2%)	3.07	1.05
7	E-Prints	232 (35.3%)	311 (47.3%)	37 (5.6%)	77 (11.7%)	3.06	0.94

Source: Field survey (2017)

Table 4.2 shows the level of awareness of online database by academic staff. It reveals that e-resources (such as e-books, journals) are fully aware by the respondents (mean=3.58), followed by online public access catalogue (OPAC) (mean=3.54), e-abstract and indexes (mean=3.25), repositories (mean=3.15), e-archives (mean=3.12), e-bibliographies (mean=3.07) and e-prints (3.06).

of electronic database in private universities in South-West Nigeria. The result shows that there is significant positive correlation among awareness of electronic database and level of utilisation of electronic database ($r = 0.690$; $p < 0.05$). Awareness of electronic database and accessibility of electronic database had a statistical significant positive correlation among them ($r = 0.420$; $p < 0.05$). Awareness of electronic database and availability of electronic database had a significant positive correlation ($r = 0.652$; $p < 0.05$). Statistically, the null hypothesis four was rejected.

5.0 Discussion of findings

Responses to the question on the awareness of academic staff in the utilisation of electronic databases revealed that majority of academic staff were aware of electronic databases. It means that more than half of the academic staffs have used electronic databases. This is an indication that the rate at which respondents were aware of electronic databases was not the same way these resources were used. The finding reflects an increased in the use of the electronic databases more than before. This result is a welcome development as the interest of electronic databases developers is to increase usage of the databases. This development may not be unconnected with the significant level of awareness currently recorded in this study which is also above fifty percent though the level of awareness is higher than that of utilisation. Individually, the various electronic databases available in each of the private universities studied recorded significant level of awareness. Increasing awareness and training academic staff on how to use electronic databases is crucial. It implied therefore, that awareness can be a factor that can influence utilisation of electronic databases among academic staff in private universities in South-west, Nigeria.

Relating awareness to utilisation, this result supported Aina (2014), that the level of awareness of electronic resources among the academic staff of Babcock Business School is varied. Majority of respondents were aware of academic Journal (69.4%), followed by JSTOR (56.5%), as well as Theses and Dissertation and Ebscohost (54.1) and (50.6) respectively. The analysis revealed that majority of respondents were not aware of Book boon, World Bank Open Knowledge Repository and National Virtual Library with (25.9%), (32.9%) and (29.4) respectively. Findings also showed that, nine out of thirteen databases under consideration were averagely aware of by respondents. The Finding also depicts that the following electronic databases were not utilised: SAGE (27.1%), World Bank Open Knowledge Repository (36.8%), International Research Journal and National Virtual Library with (29.4%) each Also, Wang and Wu (2011) posited that awareness is one of the factors affecting use and non use of Internet ICT and portals. At Makerere University, Uganda, Namugera (2014) concluded that, usage of library and information services such as electronic services has a direct link to awareness of users about those services. It can be concluded that there is a growing awareness and utilisation of electronic databases among academic staff in private universities in South-west, Nigeria.

The result is also in consonance with Kwafoa, Osman and Afful-Arthur (2014), in their study of faculty's awareness and usage of online academic databases in order to determine the benefits they associate with electronic resources and the challenges they encounter in accessing electronic resources. A questionnaire was used to collect the data among one hundred surveyed respondents. The Statistical Package for the Social Sciences (SPSS) software was used to analyse the data collected. The descriptive statistics established that faculty members depended highly on online electronic resources not only for the purposes of research, but also to support their teaching. Their relative advantage has also been shown to be more helpful especially to faculty and distance learners who may have limited access to library resources in traditional formats.

Conclusion

Majority of academic staff were aware of electronic databases hence, more than half of the academic staff have used electronic databases. This is an indication that the rate at which the respondents were aware of electronic databases was not the same way these resources were used. The finding reflects an increased in the use of the electronic databases more than before. This result is a welcome development as the interest of electronic databases developers is to increase usage of the databases.

This development may not be unconnected with the significant level of awareness currently recorded in this study which is also above fifty percent, though the level of awareness is higher than that of utilisation. Individually, the various electronic databases available in each of the private universities studied recorded a significant level of awareness. Increasing awareness and training academic staff on how to use electronic databases is crucial.

References

- Aina, R. F. 2014. Awareness, accessibility and use of electronic databases among academic staff of Babcock University Business School. Kuwait Chapter of Arabian Journal of Business and Management Review Vol. 3, No.6.
- Ani, Okon and Edem, Nkoyo., 2012. Access and usage of online databases in Nigerian Universities in

- teaching/research. *Library and Information Practitioner* 5 (1 & 2), 475–486.
- Ajala, I. O., Adegun, A.I., Adetunji, A., & Oyewumi, OO. 2010. The Impact of the Internet Use on Teaching and Research by Ladoke Akintola University of Technology (LAUTECH) Academic Staff. *The Information Technologist* 7 (2):187-194.
- Bhatt, S. and Rana, M. S., 2011. E-information usage among engineering academics in India with special reference to Rajasthan state. *Library hi tech*. 29 (3): 496-511.
- Dulle, F.W. & Minishi-Majanja 2010. Researchers' perceptive on open access scholarly communication in Tanzanian public Universities. *New library world*; 106(1210/1211):141-163.
- Egberongbe, H. S., 2011. The use and impact of electronic resources at the university of lagos. *Library philosophy and practice (e-journal)* paper 472. Retrieved February 2, 2017 from <http://digitalcommons.uni.edu/cgi/newcontent.cgi;article=149&context=hbphilprac>.
- Eke, FM. 2006. Information and Communication Technologies (ICTs) Awareness and Use by Academic Staff of Tertiary Institutions in Imo State. *Nigerian Library and Information Science Trend: Journal of Nigerian Library Association Imo State Chapter* 4 (1/2): 20-36.
- Emojorho, D. & Adomi, A. 2006. An Assessment of the Use of Information Technology Facilities for Academic Pursuit. *The Electronic Library* 24 (5): 706-713.
- Heath, C., Vom L. D., Hindmarsh, J., Svensson, M., Sanchez, & Luff, P. 2002. Configuring Awareness Computer Supported Cooperative Work. *An International Journal of Collaborative Computing*, 11(3 – 4): 317 – 347.
- Ibegwam, A., Ogunyade, T.O. & Ajuwon, A.G. 2013. "Awareness and use of electronic information resources by academic staff of two medical colleges in Nigerian university". *Middle Belt Journal of Library and Information Science*. 11(1): 74-91
- Kwafoa, P. N. Y., Osman, I. and Afful-Arthur, P. 2014. Assessment of the use of electronic resources among administrators and faculty in the University of Cape Coast. *Library Philosophy and Practice (e-journal)*. Paper 1094. Retrieved 10th May, 2015 from: <http://digitalcommons.unl.edu/libphilprac/1094>
- Madukoma, E, Onuoha, U. D and Ikonne, C. N. 2014. Electronic resources information behavior of faculty members at Babcock university Ilishan-Remo, Ogun state, Nigeria. *Information Trends*, 11:60-68.
- Namugera, L., 2014. Users' awareness, perceptions and usage of Makerere library services in the main and selected branch libraries. *Qualitative and Quantitative Methods in Libraries*, 3(3),.741-758.
- Nwokedi, V. C. 2011. Nigerian University academics and institutional repository: A case study of University of Jos, Faculty of Natural Sciences Lecturers. *An International Journal of Information and Communication Technology (ICT)*. 7.2:137 – 146.
- Obuh, A. O. and Bosimo, D. O. 2012. Awareness and Use of Open Access Scholarly Publications by LIS Lecturers in Southern Nigeria. *International Journal of Library Science*, 1.4:54-60. Retrieved August 4, 2015 from <http://article.sapub.org/10.5923.j.library.20120104.02.html>
- Owolabi, K.A. & Atama, A. O. 2007. Level of awareness and use of open access electronic resources in agricultural research institutes in Ibadan, Nigeria. *An International Journal of Information and Communication Technology (ICT)*, 6 (1), p.17 – 23.
- Schmidt, K. 2002. The problem with Awareness: Introductory remarks on awareness in Computer Supported Cooperative Work (CSCW): *The International Journal of collaborative Computing*. 11(3-4) 2002: 285 -298.
- Ukonu, M., Wogu, J. and Obayi, P. 2012. Problems and Challenges Facing the University Of Nigeria Undergraduate Students in the Use of the UNN Digital Library. *IOSR Journal of Humanities and Social Science (JHSS)*, 3. 2: 4-12.
- Utulu, S.C. & Bolarinwa, O. 2009. Level of Open Access Initiatives adoption by Nigerian Academics. *Library Review*, 58 (9), p.660 – 669.
- Wang, P. and Wu, L. 2011. Research use of the Internet ICT by Faculty: an interdisciplinary and cross cultural comparison. Retrieved June 17, 2015, from: www.cci.utk.edu/files/u14/wang.pdf.
- Webster, M. 1994. Webster's third New International Dictionary of the English, unabridged. G. & C. Merriam company, Springfield, Massachusetts, U.S.A. ISBN-01: 0671882430; ISBN 13: 0671882433 Hardcover, p. 2524 -2530