

**Access and Use of Electronic Information Resources as Determinants of Research Output of Academic Staff in Selected Universities in Ogun State, Nigeria**

**<sup>1</sup>Olusola Bamidele Bamigboye, <sup>2</sup>Uwaila Gift Oyagbinrin <sup>3</sup>Bosedede Olutoyin Akintola**

**<sup>4</sup>Chituru Nancy Okiore, <sup>5</sup>Olubunmi K Oduwole**

*<sup>1,2,3,4,5</sup>Federal University of Agriculture, Abeokuta, Ogun State, Nigeria*

**Abstract**

This study examines access and use of electronic information resources as determinants of research output of academic staff in selected universities in Ogun State Nigeria. Descriptive survey research design was adopted for the study. Questionnaire were employed to obtain data from 180 respondents but, 144 representing 80% returned questionnaire were used for the study. The data obtained were analysed using descriptive statistics of frequency percentage mean and standard deviation. Findings of the study revealed that E-journals, E-books, Online Resources and Reference Databases were the most utilised electronic information resources, also revealed that Effort Expectancy (EE), Performance Expectancy (PE) were the major factor influencing respondents' use of electronic information resources and finally revealed that access and use of electronic information resources promote efficiency, effectiveness and increase in the research output. Part of the recommendations is that library management should subscribe to more e-journals since it was established that academic staff make more use of electronic information resources.

**Keywords:** *Access, Use, Electronic Information Resources, Research Output, Academic Staff, Nigerian University*

**Introduction**

Research output of academic staff in universities is key to the achievement of the educational goals of the institutions and the nation at large. The research output contributes to the development and qualified manpower and the society. The primary objective of a university is the transmission of knowledge, training of minds and character as well as, conducting researches that could lead to the advancement of knowledge. Universities all over the world place emphasis on qualitative and quantitative research outputs, which is generally accepted as the foundation of knowledge generation, thereby occupying a critical position in promoting the prosperity of a nation and its citizens' well-being in every sphere of life.

Research output is an outcome of research which can take many forms and must meet the definition of research. Some examples of output of research include books, chapters in research books, journal articles, conference publications, and research reports amongst others. Research Output is basically measured in terms of the number of publications (articles, journals, books, conference papers, magazines among others) published within a given period of time. Research output is basically the ways to assess academic staff for promotion, the research output which can be measured in form of publication is a prerequisite for their promotion Madu (2012).

The emergence of electronic information resources, according to Ani and Edem (2012) has tremendously transformed the handling and management of information in Nigerian academic environments. In academia, electronic information resources are dominating the research activities of researchers; researchers have realized the significance of such resources in their research work (Hadagali, Kumbar, Nelogal and Bachalapur, 2012). Electronic information resources provide accurate and timely information, to advance research and collaboration with other researchers around the world for intellectual growth (Ukpebor, 2012). The use of electronic information resources in recent times has produced positive results in the areas of research, teaching, learning, publications among others. Through the use of electronic information resources, academic staff now has access to firsthand information through the Internet. It was observed by Okiki and Asiru (2011) stated that one of the strongest factors that influence the use of electronic information resources is the need to carry out research. The shift from print to electronic information resources means that academic staff in a university system must use these resources for better quality, efficient, and effective research more than ever. Electronic information resources are easy to use, search and provide access to a vast amount of information within the shortest possible time. These electronic information resources are available online or offline which can be accessed either free of charge or through university's subscriptions to provide free online databases access to academic staff members and researchers to support academic activities especially in the area of teaching, learning and research.

Access to relevant information is necessary for successful conduct of research in the universities. Hoq (2012) stated that access and use of information is very vital in effective research work. Just as Madu (2012) reiterated that access and use of information is required "for decision making and problem solving" in research process. However, accessibility and use of electronic information resources cannot be engaged in without first investigating the availability of those information resources in the various universities. Availability of electronic information resources can be seen as easy retrieval of information in electronic format by researchers with little or no stress. Availability of electronic information resources in the library is not just enough, but users must know of their existence to be able to make use of them effectively. Availability of electronic information resources relates to the provision of ICT resources that are available or at the disposal of users in academic institutions. Availability of electronic resources provides access to reliable, accurate and timely access to information.

### **Literature Review**

Research can be described as systematic inquiries or investigation in order to establish facts and bring out new findings. With regard to these definitions, the following can be inferred as some of the characteristics of research, consequently, the results of a research are to bring about increase in knowledge (Butler and Sellborn, 2002), According to Lynch (2000) research begins with a question or a problem, searching, discovery or enquiries into some of the methods by which knowledge is obtained. Therefore research, has to be scientific, and logical in nature, systematic and diligent,

which requires the need for planning, organisation and persistence. Research is important to every profession and it is frequently referred to as the cornerstone of the development of a profession (Bar-Ilan, Peritz and Wolman, 2003).

Every professional needs knowledge on which to base their practice. Scientific knowledge provides a particularly solid foundation and an integral part of every sector including healthcare practice, education, business and management. Research has been defined by various scholars. Yuen and Ma (2002) defined research as a systematic process of collecting and analysing information to increase the understanding of a phenomenon under study, while Weman, Kauger and Michell (2005) defined research as a process that involves obtaining scientific knowledge by means of various objective methods and procedures. Butler and Sellborn (2002) opined that, research is a diligent systematic enquiry to validate and refine existing knowledge and generate new knowledge. Just as Cox (2003) claimed that research method involves the techniques of data collection, analysis and interpretation that a researcher proposes or used for his/her study.

Research output in this study is the quantity of research in terms of publication output that an academia is able to carry out within a specified period. Academics place emphasis on research and publication because that is the act of academics, not only because it is known that research enriches teaching and the learning process, but it also contributes to the body of knowledge, and also serves as a major determinant of institutional prestige. Ochai and Nwafor, (2014) stated that research output is of benefit to every nation. This is due to the fact that the wealth and economic progress of the nation depends on the extent of research carried out in that country.

Goel (2002) defined research output as the number of articles published in standard journals; and this is affirmed by Kirlidog and Bayir (2007) who described productivity as the measure of scientific publications which are published in prestigious journals. Usually, publications are classified into international (foreign) publications and national (local) publications (Collazo-Reyes, Luna-Morales, Russell and Perez-Angon, 2011). Academic staff in developing countries prefer to publish their work or research in international journals due to their relative high visibility, scholarly quality and to have international recognition in their disciplines/fields of specialization. International publication is beneficial to both the academic staff and the university at large as publication output is one of the very important indicators use in the global ranking of universities (Ani, Esin and Inyang, 2003).

Quadri, Adetimirin and Idowu (2014) affirmed that availability of electronic information resources does not imply its accessibility as resources may be available in the library and even identified bibliographically as relevant to one's subject of interest, but the users may not be able to access them. The more accessible information resources are, the more likely they are to be used. Researchers tend to use electronic information resources that require the least effort to access. Access to good information is necessary to successful conduct of research in the universities.

In describing the role of access to electronic information resources in the research, Hoq (2012) noted that access to relevant electronic information resources is important for researchers and academic staff to take efficient decision in their research. According to him, access and use of electronic information resources is very vital in effective research work. This view is supported by Ederibhalo (2017) who argued that access and use of information is required “for decision making and problem solving” in research process. According to Tiemo (2016) electronic information resource databases as a collection of electronic journals, books and other study materials available through the computer and the internet. Some can be accessed free of charge, while others are subscribed to by universities or organizations before users can have access to these resources online. Chukwu and Njoku (2018) therefore categorized electronic information resources databases into two: open-source and subscription-based databases.

Open source databases allow users free and unrestricted access to electronic information resources, while subscription-based or paid-for databases usually require payment, in which case, libraries need to pay subscription fees in order to have access to these resources. In addition, there are large numbers of databases that can be searched for at no cost an example of these includes the Directory of Open Access Journal and many others. Extant literature indicates that many governments in developed countries provide free access to electronic information resources databases for academic staff in order to increase their research productivity. Some universities in developing nations, foundations and international organizations provide free access to electronic information resources databases to higher institutions and research centers in developing nations to support teaching, learning and research work.

The World Health Organization (WHO) is one of such international agencies that subsidize payment of online databases such as HINARI, AGORA and OARE to research centers, hospitals, non-governmental organizations, colleges, universities and government ministries (Research4life, 2012). In a study conducted by Ani and Ahiauzu (2008) and Chukwu and Njoku (2018) revealed that there are available electronic information resources databases in some Nigerian university libraries either through free based access or fee-based subscription. Similar research conducted by Khan and Dominic (2012) on the perceived impact of electronic information resources on the research productivity of academic staff in the engineering colleges of Moradabad, India, revealed that 50% of the respondents agreed on the productive impact of electronic information resources on their research process. The study further established that most Indian libraries subscribe to e-journals database such as Elsevier Science, Springer, American Institute of Physics, Blackwell, American Chemical Society, John Wiley, Cambridge University Press, Oxford University Press, Royal Society of Chemistry and Engineering databases. It must be noted here that it is what the library subscribed to that they get. The e-journals that are relevant to the institution curricular are what they focused on.

Ellis and Oldman (2005) researched on the extent to which academics in the United Kingdom universities are accessing information as a result of the emerging electronic

information resources, particularly the internet resources. The basic objectives of the study were to examine the extent of accessibility and utilization of the Internet resources in research in the Humanities. It was found that most of the respondents were accessing and using the World Wide Web and the Internet to search for e-resources in their research. Adeleke and Nwalo (2017) noted that many university libraries in developing countries are making efforts to promote access to electronic information resources usage in order to promote research productivities of faculty members. They however lamented that the impeding challenges been faced by underdevelopment such as power failure, low level of electronic resources, lack of requisite information technology (IT) skills; machine breakdowns, lack of spare parts and technicians etc. which constantly slow down the performance of modern gadgets of information storage and transfer in developing countries.

### **Objectives of the study**

The specific objectives are to:

1. ascertain the extent to which academic staff members utilise electronic information resources that are available in the selected universities in Ogun State, Nigeria;
2. examine the factors that influence the use of electronic information resources in the selected universities in Ogun State, Nigeria; and
3. identify the level of research output of academic staff in selected universities in Ogun State, Nigeria.

### **Research Methodology**

A descriptive survey research design was adopted for the study. A questionnaire was constructed to obtain information on accessing and use of electronic information resources by academic staff. The questionnaire sought for the respondent's academic staff use of electronic information resources, factors that influence the use of electronic information resources and level of research output of academic staff. Sample random technique was used to select 180 academic staff from Federal University of Agriculture Abeokuta, Bells University of Technology Ota, and Olabisi Onabajo University, Ago-iwoye all in Ogun State. Out of the one hundred and eighty (180) copies of questionnaire administered, one hundred and forty-four (144) representing 80.0% were duly completed and returned. Descriptive statistics of frequency percentage mean and standard deviation were used for data analysed for the study.

**Data Presentation and Interpretation**

This presents the result of the analysis in line with the objective of this study.

**Table 1: Extent of electronic information resources (EIRs) utilisation by respondents**

**N = 144**

S/N	EIR Utilisation	Very Often	Often	Rarely	Never
1	E-journals	98(68.1)	40(27.8)	3(2.1)	3(2.1)
2	E-books	49(34.0)	82(56.9)	9(6.3)	4(2.8)
			57(39.6)	3(2.1)	12(8.3)
3	Online Resources	72(50.0)			
4	Reference Databases	74(51.4)	54(37.5)	7(4.9)	9(6.3)
5	E-content	38(26.4)	71(49.3)	23(16.0)	12(8.3)
	Electronic document		62(43.1)	16(11.1)	21(14.6)
6	delivery	45(31.3)			
	Online Dictionaries and		42(29.2)	44(30.6)	13(9.0)
7	Encyclopedia	42(29.2)			
8	CD-ROM	17(11.8)	61(42.4)	43(29.9)	23(16.0)
9	E-proceeding	13(9.0)	55(38.2)	35(24.3)	41(28.5)
10	E-magazine	25(17.4)	35(24.3)	38(26.4)	46(31.9)
11	Online Databases	13(9.0)	48(33.3)	41(28.5)	42(29.2)
12	E-print	13(9.0)	43(29.9)	42(29.2)	46(31.9)
13	Biblio online	10(6.9)	43(29.9)	38(26.4)	53(36.8)
	E- Thesis and		28(19.4)	17(11.8)	87(60.4)
14	Dissertations	12(8.3)			

Source: Field survey, 2019

Table 1 presents the result of respondents' utilisation of electronic information resources on a four-point scale of very often, often, rarely and never. Findings revealed that electronic journals (E-Journals) were the most utilized electronic information resources as indicated by 95.9% of the respondents. Followed by E-Books 90.9%, Online Resources 89.6% and Reference Databases 88.9%.

**Table 2: Factors that influence use of electronic information resources (EIRs)  
N = 144**

S/N	Performance Expectancy (PE)	SA	A	D	SD
1	I find EIRs useful in my research work	78(54.2)	66(45.8)	0(0.0)	0(0.0)
2	Using EIRs helps me to accomplish task more quickly	60(41.7)	84(58.3)	0(0.0)	0(0.0)
3	Using EIRs helps me improves my research work Social Influence (SI)	60(41.7)	83(57.6)	1(0.7)	0(0.0)
4	My universities has subscribe to electronic database to enable me access EIRs	50(34.7)	78(54.2)	3(2.1)	13(9.0)
5	My senior in the profession have been helpful in training me in the use of EIRs	51(35.4)	73(50.7)	5(3.5)	15(10.4)
6	My supervisor who influence my research work think I should use EIRs to boost my work Effort Expectancy (EE)	52(36.1)	66(45.8)	21(14.6)	5(3.5)
7	I found EIRs easy to use	77(53.5)	67(46.5)	0(0.0)	0(0.0)
8	It is easy for me to become more skillful in using EIRs Facilitating Condition (FC)	65(45.1)	79(54.9)	0(0.0)	0(0.0)
9	I can use EIRs anytime in the University	68(47.2)	58(40.3)	8(5.6)	10(6.9)
10	My university has the support system necessary to use EIRs	55(38.2)	70(48.6)	5(3.5)	14(9.7)
11	ICT/Library unit helps to organize training on the use of EIRs	38(26.4)	63(43.8)	29(20.1)	14(9.7)

Source: Field survey, 2019

Table 2 revealed that, the respondents were asked to indicate the factors that influence the use of Electronic Information Resources (EIRs). The UTAUT constructs were used to examine the factors that influence the use of electronic information resources. The result revealed that Effort Expectancy (EE) were the major factor influencing respondents' use of electronic information resources as confirmed by 100% of the respondents. This was closely followed by Performance Expectancy (PE) as indicated by 99.3% of the respondents.

**Table 3: Research output/productivity of respondents N = 144**

S/No	Research Output/Productivity	VH	H	L	VL
1	Access and use of electronic resources promote efficiency and effectiveness in my researches	82(56.2)	61(42.2)	1(0.7)	0(0)
2	Access and use of electronic resources increase my research productivity	77(53.2)	66(45.4)	1(0.7)	0(0)
3	Access and use of electronic resources improve the quality of my research	72(50.0)	71(49.3)	1(0.7)	0(0)

Source: Field survey, 2019

Table 3 presents results on the influence of electronic information resources on research output of academic staff on a four-point scale of very high, high, low and very low. Findings revealed that 99.3% of the respondents indicated that access and use of electronic information resources promote efficiency, effectiveness and increase in their researches. Followed by access and use of electronic resources increase research productivity 98.6% and access and use of electronic resources promote efficiency and effectiveness in researches 98.4%.

**Table 4: Publication output of respondents**

Publications	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Mean
Journal Articles	240	315	326	414	446	348
Conference Proceedings	83	86	86	91	88	87
Chapters in Textbooks	11	26	19	20	30	21
Textbooks	13	11	17	14	15	14
E-Magazine	7	7	7	11	16	10

Source: Field survey, 2019

Table 4 shows the cumulative yearly publication of academic staff in the selected institutions between 2015 and 2019. Findings revealed that the respondents published



more of Journal Articles 1,741, followed by Conference Proceedings 434, Chapters in Textbooks 106 and Textbooks 70.

### **Discussion of the Findings**

The study showed that E-journals, E-books, Online Resources and Reference Databases were the most utilised electronic information resources. This result supported the finding of Okiki's (2012) study on electronic information resources awareness, attitude and use by academic staff members of University of Lagos, Nigeria, which revealed that e-journal was the most used electronic information resources in the University. The finding is also in line with the finding of Ochai and Nwafor (2014) in Ghana which revealed that e-journal was the most utilised electronic resources among agricultural research scientists at the Food Research and Animal Research Institutes.

The study also revealed that Effort Expectancy (EE), Performance Expectancy (PE) were the major factor influencing respondents' use of electronic information resources. This finding corroborates the finding of Johnson, Evensen, Gelfand, Lammers and Zilper (2012) in Malaysia, which revealed that Effort Expectancy (EE) and Performance Expectancy (PE) were the two major UTAUT constructs that influenced use of electronic information resources in the country. It equally supported the findings of Obasuyi and Usifoh (2013) which revealed that PE and EE were two factors that influenced usage electronic information resources among students of the University of KwaZulu-Natal, South Africa.

The findings revealed that access and use of electronic information resources promote efficiency effectiveness and increase in their researches. This finding is in line with the findings of Bamigboye, Odunlade, Agboola and Emmanuel (2018) which found that electronic information resources improved the research output of academic staff both in the Federal University of Agriculture, Abeokuta and the University of Ibadan respectively. It also agreed with the finding of Iroaganachi and Izuagbe (2018) which revealed that electronic information resources enhances research output of academic staff in the Southwest Nigeria.

The study finally, showed that the respondents published more of journal articles, followed by conference proceedings, chapters in textbooks and textbooks. Overall, it can be said that access and use of electronic information resources have significantly affected the research publication of academic staff in the universities, thereby corroborated the finding of Omeluzor, Madukoma, Bamidele and Ogbuiyi (2012) which revealed that journal articles were the most published of academic staff research in private universities in Ogun State, Nigeria.

### **Conclusion and Recommendations**

Accessing and use of electronic information resources are vital for research output of academic staff. These are important aspect of research, where recent and current information can be accessed. It is compulsory and important for a researcher to be aware of latest happening in his/her research interest. This will be a kind of direction

and advantage for carrying out good research. The following were recommended for the study:

1. There is need for the universities to provide more access to electronic information resources to enhance the research activities of academic staff.
2. There is need for library management to subscribe to more e-journals since it was established that academic staff make more use of electronic information resources.
3. University management should endeavour to improve the internet facilities of their institutions to facilitate easy access to electronic information resources.

### **References**

- Adeleke, D. S. and Nwalo, K. I. N. 2017. "Availability, Use and Constraints to Use of Electronic Information Resources by Postgraduates Students at the University of Ibadan". *International Journal of Knowledge Content Development and Technology*, 7(4), 51-69
- Ani, O.E, and Ahiauzu B. 2008. "Towards Effective Development of Electronic Information Resources in Nigerian University Libraries". *Library Manage* 29(6/7),504-514.
- Ani, O. and Edem, N. 2012."Access and Usage of Online Databases in Nigerian Universities in Teaching/ Research". *Library and information Practitioner* 5(1x2), 475-486.
- Ani, O.E, Esin, J.E. and Inyang, S.O. 2003. "Publication Patterns and Productivity of Academic Scientists: Case Study of University of Calabar –Nigeria". *Global Journal of Humanities* 2(1/2), 66-70.
- Bamigboye, O.B., Odunlade, R.O., Agboola, I.O., and Emmanuel, S.O. (2018): Electronic Resources as a Panacea for Research Output of Academic Staff: A Case Study of Nigerian University. *Journal of Library and Information Sciences*. 6(1)32-36, Pulished by American Research Institute for Policy Development. New York USA. Available Online at <https://doi.org/10.15640/jlis.v6n1a5>
- Bar-Ilan, J., Peritz, B. C. and Wolman, Y. 2003. "A Survey on the Use of Electronic Databases and Electronic Journals Accessed through the Web by the Academic Staff of Israeli Universities". *The Journal of Academic Librarianship*, 29, 346–361.
- Butler, D.L. and Sellbom, M. 2002. "Barriers to Adopting Technology for Teaching and Learning". *EducauseQuarterly*, (2), 22-28. Retrieved from <http://net.educause.edu/ir/library/pdf/eqm0223.pdf>, (11 March, 2018).
- Chukwu, S. and Njoku, I. S. 2018. "Information Search Technologies and Academic Library Databases in a Nigerian University of Technology". *Library Philosophy and Practice (e-Journal)*, 18-25. Retrieved from [https://digitalcommons.unl.edu/libphilprac/1825?utm\\_source=digitalcommons.unl.edu%2Flibphilprac%2F1825&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](https://digitalcommons.unl.edu/libphilprac/1825?utm_source=digitalcommons.unl.edu%2Flibphilprac%2F1825&utm_medium=PDF&utm_campaign=PDFCoverPages)(June, 2018)
- Collazo-Reyes, F., Luna-Morales, M.E., Russell, J.M., and Perez-Angon, M. 2011. Emergence and Convergence of Scientific Communication in a Developing Country: Mexico (1990-1901979). Proceedings of the ISSI 2011 Conference: 13th International Conference of International Society for Scientometrics and

- Informetrics, Durban, South Africa, 04-07 July, edited by Ed Noyons, Patrick Ngulube and Jacqueline Leta, Volume I.155-162.
- Cox, S. 2003. 'What Factors Support or Prevent Teachers from Using ICT in their Classrooms?' Paper Presented at the British Educational Research Association Annual Conference, University of Sussex at Brighton, September 2nd–5th. Retrieved from <http://www.leeds.ac.uk/educol/documents/00001304.htm>, (22, July, 2019).
- Ederibhalo, P. O. 2017. *“Impact of Electronic Resources on Information Service Delivery: A Study of Selected Polytechnic Libraries in Edo State”*. Unpublished PhD Thesis, Ambrose Alli University Ekpoma Edo State.
- Ellis, D. and Oldman, H. 2005. “The English Literature Researcher in the Age of the Internet. *Journal of Information Science*3 (1), 29-36.
- Goel, K. 2002. “Gender differences in Publication Productivity in Psychology in India”. *Scientometrics*55(2), 243-258.
- Hadagali, G. S., Kumbar, B. D., Nelogal, S. B. and Bachalapur, M. M. 2012. Use of Electronic Resources by Postgraduate Students in different Universities of Karnataka State. *International Journal of Information Dissemination and Technology*, 2(3), 189-195.
- Hoq, K. M. 2012. “Role of Information for Rural Development in Bangladesh”. *A Sector-wise Review. Information Development* 28 (1),13-12. Retrieved from <http://www.gvsu.edu/library/librarylights/winter02/ChangingRoles.html> (May, 2018).
- Iroaganachi, M. A. and Izuagbe, R. 2018. "A Comparative Analysis of the Impact of Electronic Information Resources Use Towards Research Productivity of Academic Staff in Nigerian Universities". *Library Philosophy and Practice (e-journal)*. 1702. <https://digitalcommons.unl.edu/libphilprac/1702>
- Khan, S. and Dominic, J. 2012. “Use of Internet by the Faculty Members of Engineering Colleges of Moradabad: A Comparative Study”. *ICAL: Library Services*, Retrieved from [http://crl.du.ac.in/ical09/papers/index\\_files/ical-95\\_124\\_278\\_1\\_RV.pdf](http://crl.du.ac.in/ical09/papers/index_files/ical-95_124_278_1_RV.pdf) (26 June, 2018).
- Kirlidog, M. and Bayir, D. 2007. “The Effects of Electronic Access to Scientific Literature in the Consortium of Turkish University Libraries”. *The Electronic Library* 25 (1), 102-113.
- Lynch .C. 2000. *From Automation to Transformation: Forty years of Library and Information Technology in Higher Education*.
- Madu, I. D. 2012. *“Library Resources, Services and Use as Factors Influencing Publications Output of Fisheries Scientists in Nigeria”*. Unpublished PhD Thesis, University of Ibadan.
- Obasuyi, L. and Usifoh, S. F. 2013. “Factors Influencing Electronic Information Sources Utilised by Pharmacy Lecturers in Universities in South-South Nigeria”. *African Journal of Library, Archives and Information Science*, 23(1), 45 – 57
- Ochai, A. and Nwafor, P.S. 1998. “Publications output of Librarians: The Search for Alternative Justification”. *African Journal of Library, Archive and Information Science*14 (2), 89-96.
- Okiki, O.C. and Asiru, S.M. 2011. “Use of Electronic Information Sources by Postgraduate Students in Nigeria: Influencing Factors”. *Library Philosophy and Practice*, Retrieved from <http://www.webpages.vlddo.edu>. (March, 2018).

- Omeluzor, S.U., Ezinwayi, M. Bamidele, I. and Ogbuiyi, S.U. 2012. "Use of Electronic Information Resources and Research Output by Academic Staff in Private Universities in Ogun State, Nigeria". *Canadian Social Science*, 8 (3). Retrieved from <http://cscanada.net/index.php/css/article/view/j.css.1923669720120803.1895> (May, 2018)
- Quadri, G. O., Adetimirin, A. E. and Idowu, O. A. 2014. "A study of the availability and utilisation of library electronic resources by undergraduate students in private universities in Ogun State, Nigeria". *Academic Journals*, 6(2); 28 – 34.
- Research4life. 2012. "Developing world access to leading research". Retrieved from <http://www.research4life.org/about.html>. (20 June, 2018)
- Tiemo, P. A. 2016. "Availability of Electronic Information Resource Databases in University Libraries in South- South, Nigeria". *British Journal of Education*, 4(13); 77 – 89
- Welman, C., Kruger, F. and Mitchell, B. 2005. *Research Methodology Third Edition*. London: Oxford University Press.
- Yuen, A. and Ma, W. 2002. "Gender Differences in Teacher Computer Acceptance". *Journal of Technology and Teacher Education*, 10(3), 365–382. Retrieved from [http://www.ascilite.org.au/conferences/brisbane05/blogs/proceedings/51\\_Markau\\_skaite.pdf](http://www.ascilite.org.au/conferences/brisbane05/blogs/proceedings/51_Markau_skaite.pdf), (23 July, 2019).