Media Resource Utilisation and Productivity of Lecturers in Federal Universities in South-West, Nigeria

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ABSTRACT

The study investigated the relationship between media resources utilization and productivity of lecturers in federal universities in south-west, Nigeria. Descriptive Survey research design was adopted for the study while the sample size for the study constitute 735.. Questionnaire was the instrument used for data collection. Findings from the study revealed a high level of productivity among lecturers in federal universities in south-west, Nigeria. Electronic media resources ranked highest among the media resources utilised by the lecturers closely followed by printed resources sources. The major purposes of utilising media resources by the lecturers were for preparing lecture notes, research and publications, obtaining general knowledge, paper presentation and writing papers and proposals. Regular use of print and electronic resources by the lecturers and positive significant relationship between media resources utilization and productivity of lecturers were also established. Recommendations were made on the need for management of federal universities should come up with policies that would encourage improve on the provisions and access to relevant media as well as enabling environment that could improve the lecturers' productivity in the areas of teaching, research and publications.

KEYWORDS: Media resources utilsation, Productivity of lecturers, Federal universities, Southwest, Nigeria.

INTRODUCTION

Productivity of employees is key to the achievements of organisation' mission and goals. Consequently, productivity of lecturers in higher educational institutions, including universities, has great implications on the achievements of the universities" goals, mission and objectives as well as the development of the societies in which the universities are established. The lecturers are to teach students and in so doing, they are directly involved in changing the students to educated fellows. The effective utilisation of intellectual ability of lecturers is very paramount to developing tertiary institutions and society at large.

Productivity has to do with the knowledge, skills and attitudes required to enable an individual perform the expected activities in the job description, and may be high or low depending on the input of the employee (Nakpodia, 2011).

According to Vipinosa, (2015), productivity is a measure of effectiveness and competence of lecturers in their profession which reveals how much an individual can produce in a certain period of time with available resources. Naturally, a productive individual contributes greatly to the growth of institution, establishment or society to which he belongs.

The measurement of productivity of lecturers usually around teaching, research and community service, though the research output is usually give more prominence in determining the productivity in most higher educational institutions in Nigeria. The quantity of research output of lecturers is viewed in terms of the numbers of publications in learned journals, globally accepted indexed databases, number of patents produced, number of chapters in books or books published locally or internationally. Others, includes number of publications in proceedings of conferences/workshop, research oriented books, staff bulletins, subject books and technical reports, among others, articles, Gunawan, Barasa and Tua, (2018). This measure varies from one institution to another.

The measurement of the quality of output is determined by parameters such as: composition of professionals who are members of the board of the organisation, composition of cross border contributors to the publications, whether the publication is indexed by reputable indexing agency, where the publication is on a field of study. Many globally accepted h-index and citation index databases such as Google, Google scholars, Science Direct, SCOPUS, HINARI, Web of Science, EBSCO Host, PROQUEST Central, AJOL, DOAJ are acclaimed to be strong determinants.

Productivity is crucial to scholars, researcher's and learned members especially in the universities. This is because the academic mandate of a lecturer is to teach, conduct research and participate in community service. Research is one of the elements of a university that set them apart from their competitors within the context of ranking. It is a key indicator used to place institutions on the ivy-league table of world ranking universities. This makes it crucial for employees who are faculty or staff to engage in research and become productive.

According to Vipinosa (2015), productivity is the measure of efficacy and competence of a person which shows how much he/she can generate in regard to the organization's set goals in a certain period of time with available resources. The productivity of lecturers is vital to the accomplishment and fulfillment of the aims and vision of tertiary institutions. Hence, to ensure that the educational aims of a country are accomplished, the fulfilment of the goal of education, as an indispensable instrument for economic growth and national development depends to a large extent on the productivity of the lecturers.

Productivity of lecturers is a crucial element that decides the performance of every tertiary institution. In academic institutions like universities, productivity of lecturers is considered in terms of teaching, planning for class, study and scholarly practices, student research supervision, communicating with students within classroom, working with students other than course works, creativity and conducting community service activities (Sullivan, Mackie, Massy and Sinha, 2012). The Federal Government (2004) averred that lecturers in tertiary institutions are the major determinants of the educative process particularly in ensuring quality. Hence the success or failure of the education system depends on them.

According to Okonedo (2015), research productivity in universities often serves as a major role in attaining upward mobility in the academic environment as it is related to promotion, tenure and salary of academic staff. Andrew (2018) is of the view that that productivity is measured in Universities using assessment of publications that are submitted or accepted (in press), or published which could be journal articles (refereed and non-refereed), books

(including edited books and textbooks), book chapters, monographs, conference papers, and research proposals written to receive external and internal grants.

On the other hand, productivity of lecturers is considered in terms of teaching, preparing for class, research and scholarly activities, student research supervision, interacting with students outside classroom, working with students other than course works, innovation and conducting community service activities (Sullivan, Mackie, Massy and Sinha, 2012). In addition, the extent to which universities would become productive depends principally on the effectiveness of the work force or staff, which is made up of different individual whose perception of his or her ability can be closely linked to how he or she learns or behaves.

Generally, there are several factors that influence the productivity level of lecturers. Some of these factors include; availability of information and media resources, access to information resources, lack of relevant and adequate skills on the part of some lecturers to gaining access to the content of non-print materials (Aina and Adekanye, 2013); job stress, work overload, and leadership style which impact negatively on their efficiency and their entire productivity (Tijani, 2015; Abba, Anumaka and Gaite, 2016; Orluwene, 2013); lack of motivating personal factors, and workplace among others. environment is also assumed to be the result of low productivity of lecturers. Meanwhile, this study investigated the influence of media resources on lecturers productivity.

Media resources are information bearing materials which can be regarded as essential part of educational process and stimulating tools in education, which facilitate teaching and learning. . Haliso and Laja-Ademola (2013) asserted that, the quality of teaching, research and community service of lecturers coupled with their publications, depend on the quality of information sources and services used by them. They added that a lecturer's role in the working environment and in the world of scholarly communication depends on the quality of information used. Information provided in most media resources is pivotal to achieving successful work performance and increased job productivity among lecturers. Reitz (2004) described information as "all facts, conclusions, ideas, and creative works of the human intellect and imagination that have been communicated, formally or informally, in any form". Information types are identified by the manner of presentation which could be in form of oral information, textual information, graphics or numeric. However, the web technology has now brought together the above four types in a single medium, providing to users the opportunity of having ready access to all types of information hence known as multimedia information (Ojedokun,2014).

The lecturer's work involve creating, using, manipulating and disseminating information to others, who will in turn use and manipulate the information to create more information and knowledge (Haliso and Laja-Ademola, 2013). Lecturers are group of workers, classified as knowledge workers whose work involves using mental faculty and using information (Mohanta, 2021). The importance of media resources to polytechnic lecturers cannot be over emphasised as there is need for them to access information sources from the different formats, ranging from the prints to electronic formats in which information is recorded and from which it is retrieved. These resources provide them with diverse information needed to help them improve in the areas of teaching and research.

Media resources include all kinds of materials which can be used to store and transmit information and they come in numerous formats, such as, print and non-print materials (Egunjobi, 2012). The print materials are paper based information materials such as textbooks, reference books, monograph and so on. The non-print materials are however, often referred to as audio-visual resources, a product of advanced technology, some of which require

special equipment to operate (Adeoye and Popoola, 2011). The competence of the students that are graduating is mainly through the use of effective teaching and learning strategies (Kei,2019). Meawhile, studies have revealed that media resources are not being integrated as classroom tools especially in developing countries. The extent of usage in some places is not only varied but also not consistent. Some institutions experience inadequate media resources such as ICT equipment like desktops, projectors, video camera and so on (Ndiku, 2003, Omwenga and Rodrigues, 2006; Nyika, 2015). The importance of these media resources cannot be over-emphasised, it is opined that lecturers access to them would go a long way in exposing them to diverse information needed especially in the areas of teaching and research. They are tools that could be used to enhance teaching effectiveness, stimulate the lecturers` interest to work, light of the foregoing that

The productivity of polytechnic lecturers is often defined in terms of teaching effectiveness, research output or publications and community service. Unfortunately, there seems to be a serious decline in university lecturers' productivity. There is the problem of inadequate or dysfunctional facilities which impair productivity of the lecturers. It is in the light of the foregoing that this study influences of media resources on lecturers productivity in Nigerian universities.

OBJECTIVES OF THE STUDY

➢ identify the types of media resources available to lecturers in federal universities in the South-west, Nigeria;

➢ examine the frequency of media resource utilisation by lecturers in federal universities in the South-west, Nigeria;

➢ find out the purposes of media resource utilisation among lecturers in federal universities in the South-west, Nigeria;

➢ examine the level of productivity of lecturers in federal universities in the South-west, Nigeria; and

➢ establish the relationship between media resource utilisation and productivity of lecturers in universities in federal universities the South-west, Nigeria.

Research questions

The following questions were answered in the study:

✓ What types of media resources are available to lecturers in federal universities in the South-west, Nigeria?

✓ What is the frequency of media resource utilisation by lecturers in federal universities in the South-west, Nigeria?

✓ For what purpose do lecturers in lecturers in federal universities in the South-west, Nigeria utilise media resources?

✓ What is the level of productivity of lecturers in federal universities in the South-west, Nigeria?

✓ What relationship exists between media resource utilisation and productivity of lecturers in universities in federal universities the South-west, Nigeria.

LITERATURE REVIEW

Productivity is an overall measurement of an organization or individual's ability to produce goods and services. According to Saxena (2014), productivity reflect the efficient and effectiveness of organisational activities in terms of output and input. Productivity of an employee is very important, as it enhances service provision, leads to the

organisational growth and also enables competitiveness (Cania, 2014). Having productive employees in an organisation also enables the organisation to accomplish her goals and objectives, it enables efficient utilisation of resources, attainment of quality output, adhering to standard and customer satisfaction (Raza, Anjum & Zia, 2014; Ayinde, 2014). Productivity of personnel in any workplace, either in an institution, factory, business or other organisations is determined by many factors apart from the employee´s qualifications or experience. Some of these factors could be determined by the employee, and the working environment (Hartley, 2012). Productivity of an employee measures how much of the goals of an organisation are being achieved through the employees` commitment to and his performance on the job. Hence a decline in productivity is a cost that many organisations or institutions may find very difficult to cope with. Obviously, the productivity of employee is relevant to the successful performance of organisation in such a way that it eventually leads to the accomplishment of the goals and objectives of the organisations (Raza, Aujum and Zia, 2014). In organisations like polytechnics, the employees include lecturers also known as knowledge workers. Their productivity is considered in terms of teaching, research and community service. The extent to which the lecturers are able to perform these important responsibilities in their institutions determines their productivity. According to Nakpodia (2011), productivity is a measure of performance which may be high or low depending on the input of the employee.

Productivity among academic members could be of great interest especially when it comes to the development of a nation. There is need to advance the frontier of knowledge so as to enhance societal development. The productivity of lecturers is measured using a number of indicators such as teaching effectiveness, publication output, number of research funding received among others (Oka for, 2011). Meanwhile, research and publication outputs in addition to teaching has been taken to be a vital indicator for measuring lecturers' productivity. Ani (2013) defined productivity among the academics as the number of published papers obtained by a given academic staff within a period of time. He added that the elements of publication output that were usually used in measuring productivity include journal articles, books, reports, articles in conference proceedings, seminar or workshop paper and so on. Publication of journal articles is generally accepted by scholars as very important element of lecturer's productivity. This is basically due to the fact that journal is the basic means through which research findings of academics are disseminated and communicated to the society. In tertiary institutions, major requirement for the promotion of academic staff is his or her research and publication output.

Oka for (2011) buttressed that a certain number of articles published in international journals were required of academic staff in Universities, before he or she is promoted to certain academic ranks. He added that there a significant difference between articles published in local and international journals. As Universities in Nigeria seems to be the main point of higher education research in the country, other institutions such as polytechnics and colleges of education in Nigeria have also firmly established research as an essential part of their system (Yusuf, 2012). The academic staff members in polytechnics are expected to carry out research in addition to teaching in order to move higher in their career. Different criteria used by researchers to evaluate productivity of lecturers. These include ratings by colleagues, research publications, ratings by the heads of departments, self ratings, students' ratings of their lecturers and students academic performance.

Ibrahim and Muyir (2011) stated that, it is important for lecturers to share the vision of their organisation or institution, get committed to the mission and goals in order to help the institution achieve purposes. Raji (2012) emphasised that the quality of school productivity will be meaningless if attitude of academic staff or lecturers in the

institutions is neglected. However, productivity could be enhanced when academic staff or lecturers feel gratified to see their students' progress academically in their studies. The school heads or faculty heads in various institutions performed their duties differently, and their performance is determined by the circumstances that come their ways (Raji, 2012). To buttress this, studies conducted by Gmech and Miskin (2004) identified four comprehensive roles performed by academic department heads, that were critical to lecturers' performance and productivity. The four roles include managing the department, leading, developing the faculty and performing as scholars. It is possible to see schools where teachers enjoyed friendly relations with one another and the school head. The extent to which a lecturer could perform his or her academic functions in creating new knowledge, advancing knowledge and transmitting knowledge determines his or her productivity.

Naikote and Bakkabulindi (2011) proposed that productivity of lecturers result from interplay of several factors. These include work environment, leadership practices, information availability and utilisation and several other personal factors. As earlier indicated, the focus of this present study is on media resources utilisation as one of the predictive variable of productivity. The study conducted by Abba, Amimaka and Gaite (2016) examined the influence of leadership practices on productivity of academic staff in polytechnics in Nigeria. The result revealed that, transformational leadership was a positive significant predictor of academic staff productivity. Haliso and Laja-Adeyemo (2013) in their study, revealed that, there is significance influence of information use on the academic productivity of lecturers. A study by Mahmood, Hartley and Rowley (2011) significantly revealed the importance of access to information as means of supporting and facilitating efficient and productive research. This implies that the lecturers need to obtain timely and relevant information from various information sources (media resources) in order to carry out effective research. Ani (2013) submitted that information is a resource for academic research and access to quality information is a prerequisite to academic productivity.

Hemmings and Kay (2009), conceptualised the work of lecturers into three broad areas namely research, teaching and service. Mamiseishvili and Rosser (2011) in their study also conceptualised and examined faculty productivity in the areas of research, teaching and service, in relation to job satisfaction at research universities. The findings revealed that undergraduate teaching and service productivity was significantly and negatively related to faculty job satisfaction. Popoola (2008) stated that, research output is one of the critical factors used in determining productivity. Oloruntoba and Ajayi (2009) also observed that research publications in universities is a major or most significant indicator of academic staff productivity and that research attainment is determined by the number of published articles in referred journals and conference proceedings of repute. Due to the fact that, research tends to be valued over teaching and service in many higher education settings, the faculty members commonly feel the pressure to research and disseminate their research findings (Hemmings and Kay, 2009).

Research productivity includes, research publications in professional journals, and in conference proceedings, writing books or chapters in books, obtaining research grants and so on. Kaniki, (2003) defined academic productivity as " the efficiency with which lecturers perform their multiple responsibilities of learning(product of teaching), knowledge and scholarships (the product of research and other scholarly activities) institutional, community and professional well-being (the products of shared governance, community service and professional activities)". It shows that productivity of a lecturer in the area of research, teaching or community service is very paramount to the development and stability of higher institutions environment.

Media resources are information bearing materials which appear in various formats. They include not only the paper media such as books, journals, newspapers but also comes in form of audiovisual media and electronic resources such as charts, radio, models, television, audio cassettes, video cassettes, CDs, computer, computer software, internet, e-journals, e-books, projectors and other media. Fakunle (2008) classified the media resources into print, visual, audio, audio-visual, static (flip chart, board) and electronic resources. These media resources are regarded as essential part of educational process and a stimulating factor which facilitates learning and also aid the promotion of continuing development of individuals. According to Fayose (2000), the media resources can be categorized based on their functions, level of scholarship and functions. In tertiary institutions, they are mainly categorized into the level of scholarship and function which include study/teaching and research materials. The study/teaching materials consist of recommended textbooks, journals, reference books monographs and so on which are used for study, while the research materials are used by higher degree students and lecturers.

As important as the media resources are, their usage in the classroom teaching and research is determined by the way they are perceived by the lecturers who are to use them. The importance of instructional media for both the teachers and students cannot be over-emphasised, as they are used to improve the quality of instruction and also enrich the research output of lecturers. The media resources play very important role in the process of teaching, learning and other contemporary scholarly achievements. Teachers need various kinds of information for teaching and research for the purpose of impacting in students and for self development (Adeoye and Popoola, 2011). Likewise, the use of media resources for classroom instruction enables the growth of specific learning abilities and enhances intellectual skills. A productive lecturer would utilise available media resources to enhance students' learning and also use them to support his teaching and research activities.

The advantages of using media rsources include; helping to develop quantitative reasoning as a result of high production quality which is capable of explaining complex ideas within a short period of time. Media resources utilisation assists learners to see concepts and new examples especially when using audio visual media. Media resources can be used to enhance learning in any discipline, in the classroom and also, for out of classroom assignments. The non print media, most of which are the product of advanced technology and require special equipment to operate, are usually categorized into visual, audio and audio-visual media. Vakkari (2008) studied the influence of media resource use on scholarly work and publication productivity at university of Finland where the university scholars agreed that the use of media resources has improved their work. According to Thanuskodi (2012) revealed in his study that a significant percentage (32.78%) of respondents for his study used printed journals and (19.44%) respondents used both the printed and electronic resources.The study of Opeke and Odunlade (2011) confirmed that the highest percentage of polytechnic lecturers mostly utilise textbooks (93.5%). This is followed by journals (80.4%), conference proceedings (56.5%) and encyclopedia (52.2%). In the study conducted by Haliso and Laja-Ademola (2013), the findings revealed that journals were rated as highest in having influence on lecturers' academic productivities.

The rapid developments in information and communication technologies have led to the increase in the use of electronic information resources. Storage and retrieval of information in various forms and from different places using computer and other internet enabled devices are now made possible (Ahmad and Panda, 2013). Electronic information resources are important aspect of media resources. They are materials that require computer access whether through a personal computer, mainframe or handheld mobile devices which could either are accessed remotely or via the internet (IFLA, 2012).

The use of electronic information resources enhances innovation in teaching and it also allows research to be carried out within the shortest possible time. Many studies have revealed that despite the challenges facing higher education in Nigeria, electronic information resources has become an asset to the members of academic community, helping them in performing their academic activities and promoting teaching and learning (Aregbesola and Oguntayo, 2014; Okiki, 2012). Electronic information resources have been identified as important research tools, which are available to complement the print based resources. Sivathaasan, Murngathas and Chandraseka (2014) gave a list of electronic information resources to include e-books, online journal, e-magazing, e-news and so on. In the study carried out by Otu, Asante and Martin (2015) on awareness and utilisation of e-journals by faculty of Koforidua Polytechnic, Ghana, it was reported that most of the faculty members were aware of the existence of e–journals in the polytechnic. Meanwhile, the strong positive correlation which was revealed between awareness and utilisation of e–journals was not statistically significant. The implication of this is that awareness of the existence of e–journals do not imply that the e-journals are adequately utilised by the faculty members. Nevertheless, the finding further revealed that e-journals were having significant impact on the academics teaching and research activities.

According to Velu and Nordin (2011) research is about reporting and supervising research, conducting and managing, writing major works and reviewing and having a broad view of research area. Teaching has to do with designing and assessing instruction and delivering tutorials and lectures while service has to do with carrying out professional engagement activities and executing administrative tasks. A study conducted by Nwankwoala (2015) on the use of ICT by lecturers and students of two different Universities in Rivers State revealed that ICT usage contributed to the change in capacity building level of the users. Nachukwu and Asom (2015) surveyed utilisation of computer technology for academic work by lecturers of University of Jos, Nigeria and found out that a greater percentage of the lecturers ,make use of computer mostly for typing/printing of lecture notes. In a survey conducted by Alarape, Kawonise and Odeniyi (2017) on ICT usage among academic staff of polytechnics in Osun State, Nigeria, findings revealed a high level of ICT usage.

Several studies have been carried out on the use of e-resources by lecturers, students and research scholars in tertiary institutions and research organisations. Okello-Obura and Magara (2008) studied on the access and utilisation of electronic information at the Makerere University having a response rate of 76%, the study revealed that the respondents derived a lot of benefits from electronic information resources, as it allows them to have access to wider range of information and their academic performance improved as a result of their access to quality information. Jagboro (2003) also conducted a study among some Nigerian Universities and found out that s significant number, 45.2% of respondents accessed electronic resources through cybercafes. This, according to her was as a result of proximity of cybercafés to user facilities. Kaur and Vernia (2006) in their study found that users of e-resources use all sources available to them regularly such as the CD ROMS, on-line databases, Web resources and audio/video tapes. Seventy-eight percent(78%) of the respondents from another study felt that the use of e-journals has created high dependency value on their research work and they needed current article alert services and electronic document supply services (Madhusudhan, 2008).

The quality of the lecturers' teaching research, coupled with their publications depend to a large extent on the availability of library facilities and when there is lack of library facility or adequate media resources to support teaching and learning, the lecturers may become under-productive. This is because, media resource availability, accessibility and utilization is very paramount to the teaching,and research activities of the lecturers in polytechnics.

Lack of adequate media resources in the library affects lecturers productivity in the areas of teaching and research, since research outputs is of the factors used in determining productivity of lecturers. The various roles performed by lecturers require that they constantly update their knowledge by consulting a range of media resources provided in their institutions' library. This could be done to satisfy their various information needs. Hence, there is need for adequate library facilities in polytechnic communities in order to avoid under productivity among polytechnic lecturers. Many academic libraries do not seem to have sufficient and adequate media resources to their users especially the lecturers. A study carried out by Nzoka (2015) claimed that a significant percentage 42.1% of the lecturers studied disagreed that relevant journals were adequately made available for their use. Though majority of the lecturers (50%) agreed that there were adequate and relevant books for their research work. Haliso and Laja-Ademola (2013) asserted that lecturers, students and scholars seek current information from the various media available in libraries. This current information are sought especially in journals and more current electronic media, the current information is necessary in enhancing lecturers' productivity.

RESEARCH METHODOLOGY

The descriptive design was adopted for this study. The population of this study comprised 7213 lecturers spread across 6 federal universities in South-west, Nigeria. The sample for the study was selected through a multi-stage sampling procedure. Stage one involved the use of purposive radom sampling technique to select 3 out of the 6 federal-owned universities in the South-West, Nigeria for the study viz: University of Ibadan, Oyo State, Obafemi Awolowo University, Osun State and University of Lagos, Lagos State. At the second stage purposive sampling technique was used to select 3 out of the commonly available schools/faculties/colleges in the universities selected for this study. These are schools of Engineering, Sciences and Agriculture. The third stage involved the use of total enumeration to include all the lecturers within the three chosen faculties and departments. This was in view of the fact that the total population of the lecturers was not too large. Thus, a total of 735 constitutes the sample size for the study. The research instruments used for the study was a questionnaire tagged 'Media Resource Utilisation and Productivity of Lecturers Questionnaire (MRUPLQ). It consists of three sections (A-C). Section A is on demographic variables of the respondents such as the institution, school, age, gender, academic qualification, and rank while Section B is designed to collect data on Media Resource Utilisation by Polytechnic Lecturers (MRUPL). Five main items were developed to identify the types of print and non-print media resources that are available and accessible to the lecturers, purpose and frequency of usage of media resources by the lecturers. Section C on the Productivity of lecturers consists of thirty items that measured the lecturers´ productivity in the areas of teaching, research and publication output. It is a 4 point like at scale of Strongly Agree(SA) = 4, Agree(A) = 3, Disagree(D) = 2, and Strongly Disagree(SD) = 1. It was developed by the researcher. The questionnaire was given to the supervisor and experts in media technology and educational management for their inputs on the adequacy and appropriateness of the items in the instruments. Based on their suggestions and criticisms, items in the instruments were modified to make them appropriate for the study. The questionnaire was trial-tested on 30 lecturers of Federal University of Technology, Akure, Ondo State which was not part of the the main study, to determine their reliability coefficients. The data obtained were analysed using Cronbach Alpha Coefficient. The reliability coefficients of each section of lecturers' questionnaire were Media Resource Utilisation (α =0.95) and Productivity (α =0.77). The administration of the questionnaire was done over a period of 11 weeks. The questionnaire was administered with the help of 4 research assistants. A total of 735 copies were administered, however out of which 711 (96.7%) were returned and found adequate for the data analysis. Data collected for research questions 1 to 4 were analysed using descriptive statistics such as frequency counts, percentages, means and standard deviations while Pearson's Product Moment Correlation was used to answer research question 5.

INTERPRETATION OF DATA AND DISCUSSION OF FINDINGS

The section A of the questionnaire contained items on the bio-data of the respondents, such as, gender, age, highest academic qualification and rank. Results on demographic characteristics of respondents and the results show that the majority of the respondents 481 (67.0%) were males while 230 (32.4%) were females. Majority of the respondents were within the age ranges of 25-44 (52.1%) and 45-54 (21.1%). Most respondents had Master's degree 362 (50.9%) which implies that most of the polytechnic lecturers are highly educated. Majority of the respondents surveyed were lecturers in the senior categories ranging from Senior Lecturer to Professor with response rate of 413 (58.2%).

Research question 1: What types of media resources are available to lecturers in federal universities in South-west, Nigeria?

Table 1: Media resources available to lecturers in federal universities in South-west, Nigeria

S/N	Statements	HA	A	FA	NA	Mean	STD.D
Print Resources							
A	Textbooks	445 62.6%	218 30.6%	44 6.2%	5 0.7%	3.55	0.64
B	Encyclopedias and Dictionary	387 54.4%	262 36.8%	48 6.8%	14 2.0%	3.44	0.71
C	Journals	358 50.3%	238 33.5%	101 14.15	15 2.1%	3.32	0.79
D	Newspapers	349 49.1%	250 35.1%	90 12.7%	22 3.1%	3.30	0.81
E	Newsletters	323 45.5%	167 37.6%	70 9.9%	50 7.0%	3.22	0.89
F	Book of Abstract	303 42.6%	272 38.2%	121 17.0%	16 2.2%	3.21	0.80
G	Conference proceedings	247 34.8%	350 49.2%	100 14.0%	14 2.0%	3.17	0.74
H	Bulletins	278 39.1%	280 39.4%	141 19.9%	11 1.6%	3.16	0.79
I	Posters	283 39.8%	252 35.5%	139 19.5%	37 5.2%	3.10	0.89
J	Theses and Dissertations	206 29.0%	281 39.5%	193 27.2%	30 4.2%	2.93	0.85
Weighted mean = 3.24							
Non print resources							
A	Illustrations and Drawings	279 39.2%	274 38.5%	124 17.4%	35 4.9%	3.12	0.87
B	Realia (real objects)	282 39.6%	223 31.35	157 22.1%	49 6.9%	3.04	0.95
C	Charts	261 36.7%	256 36.0%	158 22.25	36 5.1%	3.04	0.89
D	Pictures	282 39.6%	226 31.8%	142 20.0%	60 8.5%	3.03	0.967
E	Maps	249 35.0%	250 35.2%	179 25.2%	33 4.7%	3.01	0.89
F	Models	147 20.7%	353 49.7%	164 23.1%	46 6.5%	2.85	0.82
G	Posters	131 18.4%	382 53.7%	150 21.1%	49 6.9%	2.84	0.80

Weighted mean = 2.99						
Electronic media resources						
A	Computer	431 60.6%	210 29.5%	61 8.6%	9 1.3%	3.49	0.71
B	Printers	392 55.1%	233 32.75	66 9.3%	21 2.9%	3.40	0.78
C	Laptops	385 54.2%	237 33.4%	65 9.1%	23 3.3%	3.39	0.79
D	Notebooks	345 48.5%	235 33.0%	79 11.1%	53 7.5%	3.22	0.92
E	Multimedia projector	285 40.1%	274 38.6%	128 18.05	23 3.3%	3.16	0.83
F	Scanner	291 40.9%	270 38.0%	101 14.2%	49 6.9%	3.13	0.90
G	Internet	309 43.4%	228 32.0%	119 16.7%	56 7.9%	3.11	0.95
H	Electronic mail	277 38.9%	234 32.9%	130 18.3%	70 9.8%	3.01	0.98
I	E-books	272 38.2%	238 33.5%	134 18.8%	68 9.6%	3.00	0.98
J	E-journals	250 35.2%	247 34.7%	137 19.2%	77 10.9%	2.94	0.99
K	Radio	260 36.5%	231 32.5%	137 19.2%	84 11.8%	2.94	1.01
L	Digital camera	271 38.1%	215 30.2%	137 19.3%	88 12.4%	2.94	1.03
M	CD ROMS	232 32.7%	256 36.0%	139 19.6%	84 11.8%	2.90	0.99
N	Television	210 29.5%	281 39.5%	162 22.8%	59 8.3%	2.90	0.92
O	Online Public Access Catalogue (OPAC)	256 36.0%	197 27.7%	160 22.5%	97 13.7%	2.86	1.06
P	Audio cassette	246 34.6%	188 26.4%	150 21.1%	128 18.0%	2.78	1.11
Q	Ipads	173 24.4%	268 37.65	146 20.6%	124 17.4%	2.69	1.03
R	Teleconferencing	92 13.0%	194 27.3%	239 33.6%	186 26.1%	2.27	0.99
S	Video cassette	57 8.0%	204 28.7%	290 40.8%	160 22.5%	2.22	0.89
T	Photocopiers						
Weighted mean = 2.97						
Databases						
A	Science Direct	232 32.6%	154 21.6%	167 23.5%	159 22.3%	2.65	1.15
B	EBSCOHOST	232 32.6%	131 18.4%	182 25.6%	166 23.3%	2.60	1.17
C	AGORA	39 5.5%	162 22.8%	331 46.6%	179 25.2%	2.09	0.83
Weighted mean = 2.45						
Grand weighted mean = 2.91						

Media Resource Utilisation and Productivity of Lecturers in Federal Universities in South-West, Nigeria

Table 1 reveals the responses of the respondents to types of media resources are available to lecturers in federal universities in South-west, Nigeria. The rating is as follows: Printed resources (3.24) is ranked highest by the mean scores rating, followed by Non print resources (2.99), Electronic media resources (2.97), while Databases (2.45) is ranked lowest. Table 4.4 further indicates the grand weighted mean of 2.91 out of the 4.00 maximum obtainable score, which is higher than the standard mean of 2.50. This implies that media resources were available to lecturers in federal universities in South-west, Nigeria. It could be inferred from the grand weighted mean that printed resources (3.24) and non print resources (2.99) were the major resources contributing to the availability of media resources as they were rated above the weighted mean, while Electronic media resources and Databases had the least contributions to media resources availability. This implies that majority of the media resources available to the respondents are print resources. This findings corroborate that of Thanuskodi (2012) who revealed print resources as the mostly available media resources. A similar study carried out by Anhwere, Paulina and Manu (2018) on use of media resources by lecturers in Cape Coast revealed textbook as the media resource with highest level of availability, followed by internet.

Research question 2: What is the frequency of media resources utilisation by lecturers in federal universities in South-west, Nigeria?

Table 2: Frequency of media resources utilisation by lecturers in federal universities in South-west, Nigeria?

S/N	Statements	Daily	Weekly	Fortnightly	Never	Mean	STD.D
Print Resources							
A	Textbooks	452 63.6%	144 20.25	101 14.2%	14 2.0%	3.45	0.81
B	Journals	284 39.9%	236 33.2%	149 20.9%	43 6.1%	3.07	0.92
C	Encyclopedias and Dictionary	269 37.8%	250 35.1%	125 17.6%	68 9.5%	3.01	0.97
D	Newsletters	287 40.3%	215 30.3%	109 15.3%	100 14.1%	2.97	1.06
E	Newspapers	311 43.8%	167 23.5%	102 14.4%	130 18.3%	2.93	1.15
F	Book of Abstract	212 29.75	240 33.8%	186 26.1%	74 10.4%	2.83	0.97
G	Conference proceedings	196 27.5%	234 32.85	207 29.1%	75 10.6%	2.77	0.97
H	Theses and Dissertations	134 18.8%	281 39.5%	218 30.6%	79 11.1%	2.66	0.91
I	Posters	205 28.9%	188 26.5%	165 23.2%	152 21.4%	2.63	1.11
J	Bulletins	154 21.6%	231 32.45	215 30.2%	112 15.8%	2.60	1.00
Weighted mean = 2.89							
Non print resources							
A	Illustrations and Drawings	313 44.0%	205 28.8%	131 18.4%	63 8.8%	3.08	0.99
B	Charts	287 40.4%	167 23.5%	188 26.4%	69 9.7%	2.95	1.03
C	Pictures	263 37.0%	189 26.55	144 20.25	117 16.4%	2.84	1.10
D	Realia	297	143	124	147	2.83	1.18

	(real objects)	41.8%	20.05	17.5%	20.7%		
E	Maps	251 35.3%	167 23.5%	187 26.25	107 15.0%	2.79	1.08
F	Models	94 13.2%	343 48.3%	171 24.0%	103 14.5%	2.60	0.89
G	Posters	190 26.7%	149 21.0%	159 22.4%	213 29.9%	2.45	1.18
Weighted mean = 2.79							
Electronic media resources							
A	Internet	427 60.1%	182 25.6%	54 7.6%	48 6.7%	3.39	0.89
B	Laptops	397 55.9%	193 27.1%	63 9.7%	51 7.2%	3.32	0.92
C	E-books	369 51.9%	230 32.3%	68 9.6%	44 6.2%	3.30	0.88
D	Computer	370 52.0%	218 30.6%	78 11.0%	45 6.3%	3.28	0.90
E	Printers	357 50.2%	228 32.0%	82 11.6%	43 6.1%	3.26	0.89
F	Electronic mail	363 51.1%	185 26.0%	87 12.2%	75 10.6%	3.18	1.02
G	E-journals	316 44.5%	216 30.5%	100 14.1%	77 10.9%	3.09	1.01
H	Photocopiers	328 46.2%	197 27.7%	96 13.5%	90 12.6%	3.07	1.05
I	Notebooks	299 42.1%	236 33.25	103 14.45	73 10.3%	3.07	0.99
J	Scanner	235 33.1%	240 33.8%	144 20.2%	92 12.9%	2.87	1.02
K	Radio	254 35.7%	179 25.2%	132 18.5%	146 20.6%	2.76	1.15
L	Digital camera	196 27.5%	267 37.5%	134 18.8%	115 16.2%	2.76	1.03
M	CD ROMS	160 22.5%	314 44.1%	130 18.4%	106 14.9%	2.74	0.97
N	Television	239 33.6%	202 28.4%	118 16.6%	152 21.4%	2.74	1.14
O	Multimedia projector	147 20.7%	311 43.75	164 23.0%	90 12.6%	2.72	0.93
P	Ipads	194 27.3%	256 36.0%	113 15.9%	148 20.8%	2.70	1.08
Q	Online Public Access Catalogue (OPAC)	152 21.4%	312 43.9%	112 15.7%	135 19.0%	2.68	1.01
R	Audio cassette	192 27.0%	211 29.7%	129 18.2%	178 25.1%	2.59	1.14
S	Video cassette	187 26.3%	167 23.5%	161 22.6%	196 27.6%	2.48	1.15
T	Teleconferencing	106 14.9%	276 38.8%	135 19.0%	194 27.3%	2.41	1.04
Weighted mean = 2.92							
Databases							
A	Science Direct	257 36.2%	257 36.2%	166 23.4%	166 23.4%	2.47	1.03

B	EBSCOHOST	119 16.8%	237 33.3%	136 19.1%	218 30.7%	2.36	1.09
C	AGORA	51 7.2%	267 37.6%	183 25.7%	209 29.4%	2.23	0.96
Weighted mean = 2.35							
Grand weighted mean = 2.74							

Table 2 shows the rating as follows: Electronic media resources (2.92)is ranked highest by the mean scores rating, followed by Printed resources (2.89), Non print resources (2.79), while Databases (2.35) is ranked lowest. Findings indicate the grand weighted mean of 2.74 out of the 4.00 maximum obtainable score, which is higher than the standard mean of 2.50. This means that media resources available to lecturers in federal universities in South-west, Nigeria were used on daily and weekly basis. The table further revealed that among the print resources, textbooks were used daily 452 (63.6%), non-print resources showed illustrations and drawings 313 (44%) while electronic resources showed internet 427 (60.1%). It could be observed from the grand weighted mean that electronic media resources (2.92), printed resources (2.89) and non print resources (2.79) were the major resources contributing to the utilisation of media resources as they were rated above the weighted mean, while databases had the least contribution to media resources utilisation.

This study is similar to previous studies of Opeke and Odunlade (2011) and Rugut and Makowa (2016) where it was affirmed that print resources especially the textbooks are frequently used by polytechnic lecturers. However, computers and internet are found to be the most frequently used among the electronic media resources. It is not surprising that printed books topped the list probably, due to the fact that print materials are easily accessible. Findings showed that most of the respondents rely mainly on printed books which may be due to the fact that textbooks as a type of print resources, is readily available and accessible to a large number of users and could be accessed by the lecturers. The textbooks could also contain the required information for the lecturers' teaching and research activities.

Research question 3: For what purposes do lecturers in federal universities in South-west, Nigeria?

Table 3: Purposes of media resources utilisation by lecturers in federal universities in South-west, Nigeria

Purpose	Frequency	Percent of Cases
Preparing lecture notes	609	92.5%
Research and publication	604	91.8%
Obtaining general knowledge	566	85.9%
Paper presentations	547	83.1%
Writing papers/proposals	304	71.4%
Writing book reviews	323	49.1%
Others	96	14.6%

Table 3 indicates that the respondents utilised media resources mostly for preparing lecture notes 92.5%, research and publications 91.8%, obtaining general knowledge 85.9%, paper presentation 83.1% and writing papers and proposals 71.4%. . This findings are in line with that of Ukih (2012). Haliso and Laja-Ademola (2013) reported that lecturers use media resources to prepare lecture notes. This is not unexpected, since teaching and research are the major tasks performed by lecturers which also have great impact on their level of productivity. No wonder, a

significant percentage also claimed to use media resources for research and publications. The use of media resources for preparation of lecture notes would enable the polytechnic lecturers to provide quality notes for their students and avoid repeating notes with same formats and contents over and over again.

Also, the findings revealed that a significant percentage of the lecturers utilise media resources for research and publication purpose. However, this is in contrast with Anhwere, Paulina and Manu (2018), study which reported that vast majority of lecturers utilise media resources for reference purpose. The lecturers may need to be kept abreast of current happenings in their various fields. Furthermore, results from this study also showed that another significant percentage of the respondents utilise media resources for the purpose of obtaining general knowledge.

Research question 4: What is the level of productivity of lecturers in federal universities in South-west, Nigeria?

Table 4: Productivity of lecturers in federal universities in South-west, Nigeria

S/N	Statements	SA	A	D	SD	Mean	STD.D
	Teaching						
1	I allow students' participation in all my teaching sessions	601 84.5%	100 14.0%	11 1.6%	- -	3.83	0.42
2	I keep up to date and revise lecture materials	582 81.8%	128 18.0%	1 0.2%	- -	3.82	0.39
3	I use variety of assessment strategies	570 80.2%	134 18.9%	6 0.9%	- -	3.79	0.43
4	In every course 1 take, I instruct and give my students adequate course works	549 77.2%	153 21.5%	9 1.3%	- -	3.76	0.46
5	I spend considerable part of my work time with students	472 66.4%	193 27.1%	21 2.9%	11 1.6%	3.62	0.62
6	I avoid teaching courses that appear too difficult to me	79 11.1%	148 20.8%	297 41.8%	188 26.4%	2.84	0.94
7	I avoid facilitating students' discussion in class	138 19.4%	134 18.9%	277 39.0%	162 22.8%	2.65	1.04
8	I rarely make course outlines available to students	141 19.9%	156 21.9%	247 34.8%	166 23.4%	2.62	1.05
9	I mark students' assignments at random	136 19.1%	163 22.9%	277 38.9%	136 19.1%	2.58	1.01
10	I seldom explore new teaching strategies	366 51.5%	174 24.5%	102 14.4%	69 9.7%	1.82	1.01
Weighted mean = 3.13							
	Research/Publications						
11	I have participated in one or more research project in the past three years	559 78.6%	127 17.9%	26 3.6%	- -	3.75	0.51
12	I have collaborated with colleagues about research within the last three years	545 76.7%	130 18.3%	28 4.0%	6 0.9%	3.71	0.58
13	I have supervised not less than five students research projects in the last three years	521 73.3%	149 20.9%	21 2.9%	21 2.9%	3.65	0.68

14	I have published not less than three journal articles in local peer reviewed and accredited scientific journals in the last three years	461 64.8%	219 30.7%	89 12.5%	14 2.0%	3.48	0.79
15	I have published three or more-chapter contributions in the last three years	361 50.8%	162 22.8%	129 18.1%	60 8.4%	3.16	1.00
16	I have reviewed one or more proposals for funding agencies in the past three years	348 48.9%	173 24.3%	129 18.2%	61 8.6%	3.14	0.99
17	I have attended international conference(s) at least once in the last three years	336 47.3%	166 23.3%	137 19.3%	72 10.1%	3.08	1.03
18	I have not published any research studies in the last three years	70 9.8%	116 16.3%	278 39.1%	247 34.8%	2.99	0.95
19	I have hardly published an article in a local journal in the last three year	73 10.2%	128 18.0%	277 39.0%	232 32.7%	2.94	0.96
20	I have not participated in any local or international conference in the last three years	73 10.3%	131 18.4%	279 39.3%	227 31.9%	2.93	0.96
21	I have not participated in any workshop/exhibition in the last three years	86 12.1%	114 16.1%	299 42.0%	213 29.9%	2.90	0.97
22	I have no international publication in the last three years	114 16.1%	147 20.7%	212 29.8%	237 33.4%	2.81	1.07
23	I have served on an editorial board of an academic journal in the last three years	251 35.3%	175 24.6%	148 20.8%	137 19.2%	2.76	1.13
24	I have not presented any international conference papers in the last three years	120 16.9%	142 20.0%	258 36.3%	191 26.8%	2.73	1.04
25	I have not co-authored nor published a textbook in my discipline in the last three years	109 15.4%	191 26.8%	255 35.9%	156 21.9%	2.64	0.99
Weighted mean = 3.11							
Services							
26	I usually participate in school/departmental activities	556 78.3%	130 18.3%	19 2.7%	5 0.7%	3.74	0.53
27	I often advice prospective students	504 70.9%	166 23.3%	33 4.7%	8 1.1%	3.64	0.63
28	I communicate my research outputs by answering public enquiries	333 46.9%	244 33.9%	110 15.5%	26 3.7%	3.24	0.85
29	I rarely serve as adviser to clubs, societies and associations	134 18.9%	131 18.4%	283 39.8%	163 22.9%	2.67	1.03
30	I seldom participate in polytechnic wide committees	243 34.2%	197 27.7%	127 17.8%	144 20.3%	2.24	1.13
Weighted mean = 3.11							
Grand weighted mean = 3.12							

Table 4 shows the weighted mean of 3.12 out of the 4.00 maximum obtainable score, which is higher than the standard mean of 2.50. This indicates that the productivity of **lecturers in federal universities in South-west, Nigeria** is high. It was also observed that the respondents rated 14 items above the weighted mean as the contributing items to their productivity. In the area of teaching, they were rated as follows: I allow students' participation in all my teaching sessions (3.83) is ranked highest by the mean scores rating, followed by I keep up to date and revise lecture materials (3.82), I use variety of assessment strategies (3.79), In every course I take, I instruct and give my students adequate course works (3.76). The lowest ranked items on teaching were I marked students' assignment at random (2.58) and I seldom explore new teaching strategy (1.82).

In research, the highest ranked item is I have participated in one or more research project in the past three years (3.75), I have collaborated with colleagues about research within the last three years (3.71), I have supervised not less than five students research projects in the last three years (3.65), I have published not less than three journal articles in local peer reviewed and accredited scientific journals in the last three years (3.48) were ranked as the highest among other items. In service, I usually participate in school/departmental activities (3.74), I often advice prospective students (3.64), I communicate my research outputs by answering public enquiries (3.24) were ranked the highest.

Research question 5: What relationship exists between media resource utilisation and productivity of lecturers in universities in federal universities the South-west, Nigeria.

Table 5: Relationship between media resource utilisation and productivity of lecturers in federal universities in South-west, Nigeria

Variables	N	Mean	SD.	R	p value	Remark
Media resource utilization	711	108.62	32.96	0.40*	0.00	Sig.
Job productivity	711	90.77	17.08			

Table 5 shows that there is a positive, significant relationship between media resource utilisation and job productivity of lecturers in federal universities in South-west, Nigeria (r = 0.403, p<0.05). This implies that as improvement in the use of media resources by the would lead to improvement in their job productivity.

CONCLUSION

The study investigated media resource utilization and productivity) of lecturers in federal universities in South-west, Nigeria. The study revealed that media resources contributed significantly to productivity of lecturers in federal universities in South-west, Nigeria. The study concluded that lecturers in federal universities in South-west, Nigeria utilise media resources to improve their productivity in teaching, research and publications.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were proffered.

- ✓ University libraries should make deliberate effort to provide adequate media resources for teaching and learning in their various institutions. This will facilitate increased utilisation.
- ✓ All university lecturers should be kept abreast of the various digital devices and electronic information resources, especially in this world of information technology. This will help them to keep up with their

counterparts in other parts of the world. The lecturers should engage their students in the use of digital tools and their electronic information resources, so as to facilitate their academic activities.

✓ The management of federal uiversities should come up with policies that would encourage and improve lecturers' productivity. Their productivity should not only be rewarded with promotion.

✓ The federal government should create an enabling environment and make more funds available for the federal universities to have access to facilities that would improve the lecturers' productivity in the areas of teaching, research and publications.

✓ More researches should be encouraged among the federal universities lecturers as this would motivate them to interact with many digital technologies and electronic information resources thereby, increasing their productivity un the areas of research and publications.

✓ Modern and relevant media resources should be provided for lecturers so as to improve their academic productivity.

✓ The federal uiversities lecturers should put more effort into attending and participating in seminars, workshops and conferences by presenting more papers and writing more journal articles thus enhancing their productivity.

REFERENCES

[1] Abba, H.D.; Anumaka, I.B. and Gaite, S.S. 2016. Leadership practices and productivity of academic staff in the polytechnics in Nigeria. *American Journal of academic Research.* 1.2: A56-A68. Retrieved from http://www.asraresearch.org/ajar-vol-1-   no-2-2006/.

[2] Adeoye, M.O and Popoola, S.O. 2011. Teaching effectiveness, availability, accessibility and use of library and information resources among teaching staff of schools of Nursing in Osun and Oyo state, Nigeria. *Library Philosophy and   Practice 2011. http://unlib,unl.edu/hpp/adeoye.popoola.html*

[3] Adomi, E.E, Omodeko, F.S and Otolo, P.U. 2004. The Use of cybercafé at Delta State university, Abraka, Nigeria. *Library Hi tech News*, 22.4: 383 – 388.

[4] Agboola, I.O. 2010. Use of print and electronic resources by agricultural science students in Nigerian universities. Library and information science research 32:62-65. Retrieved 4th Feb., 2019 from http://www.google.com.

[5] Agyekum B.O and Ossom S. 2015. Awareness and impact of electronic journals usage by faculty members and lecturers in Kumasi Polytechnic, Ghana. *Information Knowledge Management* 5.1: 9-17.

[6] Ahmad, M. and Panda, K.C. 2013. Awareness and use of electronic information resources by   the   faculty members of Indian Institutes in Dubai international academic city (diac): A   survey.   International   Research Journal of Computer Science Information Systems   (IRJCSIS) 2.1:8-17.

[7] Aina, J.A. and Adekanye, E.A. 2013. Audio-visual resources availability and use for library services among Colleges of Educatin in Lagos State Nigeria. *International Journal of Library and Information Science*. 5. 10. 417-425.

[8] Ajayi, I.A. and Afolabi, C.Y. 2012. The influence of sex and experience on Secondary school teachers' productivity in South-West, Nigeria. *European Journal of Educational Studies*. 4.3: 361-366.

[9] Ajibade, Y.A.; Oloyede, E.O; Adeleke M.A and Awopetu, E.O 2010. Lecturers' views on and attitude to pedagogical skills training: Obafemi Awolowo as a case study. *Review of Higher Education in Africa* 2.1.

[10] Akoma O. 2018. Lecturers should go digital in order to enhance quality of learning. Retrieved 20 Feb., 2019 from http://www/biu.edu.ing

[11] Aladeniyi F.R 2017. The use of e-journals by academic staff of Rufus Giwa Polytechnic, Owo, Ondo state, Nigeria. *International Journal of Library and Information Science* 9.5:37-43. http://www.academicjournals.org/IJLIS. Retrieved June 20, 2019.

[12] Al-Ansari, H. 2006. The internet use by faculty members of Kuiat University. *The Electronic Library* 26.6:791-803.

[13] Ali, N. 2005. The Use of electronic resources at IIT Delhi Library: a study of search behaviors. *The Electronic Library*, 23. 6: 691 – 700.

[14] Anhwere B., Paulina, A. and Manu, A.E. 2018. Utilisation of library resources by lecturers in University of Cape Coast. *International Journal of Library and Information Science*. 10.1.10-16.

[15] 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 Nigeria University. *Journal of Library and Information Sciences* 6. 1: 32 – 36. Retrieved April 2, 2019, from www.google.com

[16] Bland, C.J; Center, B.A; Finstad, D.A; Risbey K.R and Staples J.G. 2005. A theoretical, practical, predictive model of faculty and department research productivity. *Academic Medicine*. 80:225-237.

[17] Bolarinwa, J.A., Aladeniyi, F.R.; Ayodele, F.K. and Arikawe, S.A. 2014. Internet use by Academic Staff of Rufus Giwa Polytechnic, Owo, Ondo State, Nigeria. *American International Journal of Contemporary Research* 4.9:99-105.

[18] Chimanikire, P., Mutandwa, E., Gadzirayi, C.T; Muzondo N. and Mutandwa, B. 2007. Factors affecting job institutions in Zimbabwe. *African Journal of Business Management* 1:166-177.

[19] Chiwar, M.A. 2015. Academic staff awareness and use of library resources and services in Nigeria: The case of Adamawa State Polytechnic, Yola. *Journal of Research in Education and Society* 6.3:18-25.

[20] Creamer, E. (1998) Assessing the faculty publication productivity: issues of equity. Retrieved March 5 2015 from *http://www.ericodigest.org/1998-1/equity.html*

[21] Dadzie, P.S.2005. Electronic resources: access and usage of ashes university college computer wide information system 22.5:290-297.

[22] Depaartment of Education, Training and Employment:2001 certificate 1. *Information Technology.* South Australia: DETE publishing

[23] Egberongbe H. S. 2011. The use and impact of electronic resources at the University of Lagos. Library Philosophy and Practice. Retrieved Sept. 10, 2016 from http://unlib.unl.edu/LPP/egberongbe.html

[24] Egunjobi, A.O. 2012. Concise and Basic Concept of Educational Technology, Ibadan, JETSOL Prints.

[25] Fakunle, 2008. Enhacinng the teaching and learning of Mathematics through effective utilisation of instructional materials. *Journal of Teacher Education* 9.1.102ß111.

[26] Fasae, J.K. and Aladeniyi, F.R. 2012. Internet use by students of faculty of science in   two   Nigerian universities library philosophy and practices. Retrieved from   http://unlib.unl.ed/lpp on 20th June, 2014.

[27] Fayose, O. 2000. Library resources and their roles in educational. Ibadan: the centre for external studies. University of Ibadan.

[28] Fayose, O. 1995. School library resource centre for educational excellence. Ibadan: AENI educational publishers.

[29] Fletcher, D. 2006. Technology integraton. Do they or don't they? A Self report survey from Break-through 5th grae professional edducaators. *AAC Journal*. 14 3:207-219

[30] Gambari, A.I. and Okoli, A. 2007. Availability and utilisation of information and communication technology (ICT) facilities in higher institutions in Niger state, Nigeria. *Information.Technology 4*:34-46.

[31] Gupta, S. and Kumar S. 2016. Preference and Usage of print and e-resources among faculties and students: a study of Vasanta College for women. From ownership to access: leveraging the digital paradigm. D.C. Kar, P.K Jain, P. Babbar. Eds. Synergy Books, India. 31 – 35. Retrieved 6 Feb. 2019 from https://www.researchgate.net

[32] Haliso, Y. and Laja-Ademola, T. 2013. Influence of information use on academic productivity of lecturers in Babcock University, Nigeria. *Journal of Information Engineering and Applications*, 3.11: 70.76.

[33] Hargittai, E. 2002. Second level digital divide: differences in people's online skills. *First Monday*. 7.4.

[34] Hartley, N. 2012. Emotional intelligence as a predictor of job satisfaction and performance among customer service provider. Retrieved Jan. 14, 2014 from *Sydney edu.au>Home>Research>completed PhD Theses > Marketing.*

[35] Ibrahim, M.S and Muyir, S.J.M. 2012. Impact of malaysian polytechnics' head of department multi dimensional leadership orientation towards lecturers' work commitment *Educational Research and Review*. 7.7: 169-181.

[36] Igwe, K.N, Akangbe, R. and Aliyu, M.B. 2012. An investigation into the information environment of lecturers in Federal Polytechnic Offa. *Tin city Journal of Library, Archival and Information Science*. 3.2:32-43

[37] Inan, I.A. and Lowther, D.L. 2010. Laptops in the K-12 classrooms: exploring impacting instructional use. *Computer and Education* 55.3:944-957

[38] Isah, A. 2010. Electronic library use by academic staff at the University of Ilorin, Nigeria. *Journal of Library and Information Science*. 7. 1 -2: 138 – 149.

[39] Itsekor, V.O and James, J.I. 2011. Influence of digital literacy on career progression and work motivation of academic library staff in south – west, Nigeria. Library philosophy and practice. Retrieved Jan. 5, 2014 from *http://digitalcommons.unl.edu/libphilprac/863.*

[40] Jagboro K.O. 2003. A study of internet usage in Nigerian universities.: a case study of Obafemi Awolowo University Ile-Ife Nigeria. *First Monday 8.2: http://firstmonday.org/issues/issues82/jagboro/index.htm.*

[41] Jenkins, H. 2009. Confronting the challenges of participatory culture*: Media education for the 21st century*. Cambridge MA: The MIT press.

[42] Jones, S and Johnson-Yalle,C. 2006. The Impact of internet on college faculty. Retrieved Oct. 10. 2010 from *www.firstmonday.org/issues/issues 10-9/*

[43] Kaniki, A. 2003. Information seeking and information providers among Zambian farmers. *Libri*. 41. 3:147-164. Kaur, B and Verma P. 2006. Use of electronic resources at TIET Library Patiala: a case study. *ILA Bulletin* 42. 3:18-20.

[44] Kei, R. M. 2010. The Challenges facing the use of media resources in instructional process in the School of Public Health of Moi University. *International Journal of Current Research*. Retrieved Feb. 2, 2015 from *www.journalcra.com/article/challenges facing use of media.htm*..

[45] Kei, R.M. 2019. Factors influencing the use and type of media resources for teaching/learning in the Moi University School of Public Hallth. *International journal of Current Research* 3.12: 311-318

[46] Kulthau, C.C 1995. The process of learning from information. *School Libraries Worldwide* 1.1:1-12.

[47] Larose. R.; Mastro, D. and Eastin, M. 2001. Understding internet usage: A social-cognitive approach to uses and gratifications. Social Science Computer Review 19.4;395-413.

[48] MacColl, J. 2010. Academic libraries and the challenge of abundance: the impact of the explosion of retrieval information on universities. Retrieved 3 April, 2015 from http://hdl.handle.net/10023/1875.

[49] Madhusudhan, M. 2008. Use of UGC infonet-journals by the research schorlars of the University of Delhi. *Library Hi Tech*. 26.3:369-386

[50] Mamiseishvili, K and Rosser V.J. 2011. Examining the relationship between faculty productivity and job satisfaction. *The Journal of the professoriate* 5.2:100-132..

[51] Mtega, W.P., Bernard, R. Msungu, AC. And Sanare, R. 2012. Using Mobile phones for teaching and learning purposes in higher learning institutions. The case of Sokoire University of agriculture in Tanzania. Ubuntu Net-Connect 2012. Promoting regional research and Educational Collaboration. Retrieved from https://www.ubuntunet.net/sites/default/files/mtegaw.pdf.

[52] Mohammed Y.A 2015. Utilization of print and electronic information resources and services by undergraduate students of university libraries in Niger State. MLS Project. Department of Library and Information Science. Ahmadu Bello University. Zaria.

[53] Nakpodia, E.D. 2011. Work environment and productivity among primary school teachings in Nigeria. *International Multidisciplinary Journal* 5:5:367-381.

[54] Nakpodia, E.D. 2001. The Role of educational administrator in the promotion in service teaching education of primary school teachings in Nigerian. In M,A Nwagwu Ed. *Issues in Educational Management in Nigeria*. Benin City.

[55] Ndiku, L. 2003. The problems encountered by school personnel in the implementation of computer use in Uasin Gishu District. M.Phil. Thesis,Moi University.

[56] Novakovich , J. 2016. Fostening critical thinking and reflection through blog – mediated peer feedback. *Journal of Computer Assisted Learning* 32: 1.16-13 doi: 10 ; 1111 /jcal.12114.

[57] Nwaogu, H.O and Ifijeh, G. 2014. The use of electronic journal by lecturers: a case study of university of Ibadan, Nigeria. *International Journal Educ. Soc. Sci* 1.1: 66-73

[58] Nwezeh, C. M. T. 2010. The use of ICT in Nigerian Universities: a case study of Obafemi Awolowo University, Ile-Ife. *Library Philosophy and Practice*. Retrieved from www.webpages.uidaho.edu/../nwezeh3.htm. 28-12-2014

[59] Nzoka, J.M. 2015. Institutional factors influencing lecturers productivity at Kenya Methodist University.MEd. Project. Dept. of Educational Administration and Planning. University of Nairobi. xii+80pp

[60] Oghenevwogaga B.A and Oghenevwogaga D.T. 2006. The Impact of the internet on research : the experience of Delta State University, Nigeria. *Library any Philosophy and Practice* 8.2: *www.webpage.wdaho.edu/mbolin/ado....Retrieved 20-02-2015*

[61] Ogunrewo, J.O. and Odusina, E.K. 2010. An appraisal of internet usage among academic staff members of Joseph Ayo Babalola University, Ikeji Arakeji, Osun State Nigeria. *Ozean Journal of Applied Sciences* 3.4:279-385.

[62] Ogunwuyi, B.O. 2018. Emotional intelligence, media improvisation and self –efficacy as determinants of media resources utilization among lecturers in state – owned colleges of eduction in South-West, Nigeria. PhD. Thesis. Centre for Educational Media Resource Studies. University of Ibadan. xiii + 159 pp.

[63] Ojedokun A.A. and Owolabi E.O. 2003. Internet access competence and the use of internet for teaching and research activities by university of Botswana academic staff. *African Journal of Library, Archives and Information Science 13.1: 43-53.*

[64] Okello-Obura, C. and Magara, E. 2008. Electronic information access and utilisation by Makerere University in Uganda. Retrieved Aug. 13 2014 from *http://creative common.org/licence/by/2.0.*

[65] Olaofe I.A. 2005. Nigerian educational emancipation : roadmap from crisis to resurgence. Faculty of Education seminar series,1. Ahmadu Bello University, Zaria.

[66] Olaojo, P.O. 2013. Influence of availability and utilization of school media resources on students learning outcomes state, Nigeria. Unpublished Ph.D. Thesis, University of Ibadan.

[67] Ologunde, A.O., Akindele, R.I. and Akande, W.O. 2013. Moonlighting among university lecturers and their performance in the south-western Nigeria. *Journal of management and sustainability* 3.4:92-102.

[68] Oloruntoba and Ajayi. 2009. Gender and research attainment in Nigerian Agricultural Universities. JHEA/RESA 4.2:83-98. Ormrod, J.E. 2006. *Educational psychology*: *developing learners*. 5th ed. Upper Saddle River, N.J: Pearson Merrill Prentice Hall.

[69] Omwenga, E.I and Rodrigues, A.J. 2006. Towards an education evaluation framework: synchronous and asynchronous E.learning cases. *Journal of the Research Centre for Educational Technology. Oct 12 2014* Retrieved *from http;//www.reet.org.*

[70] Onasanya, S.A., Shehu, R.A.; Oduwaye, R.O. and Shehu, L.A. (2010): Higher institutions lecturers' attitude towards integration of ICT into teaching and research *Journal of Information technology*. http://scialert.net/abstract/ Opatolu, J.O. 1995. Some salient aspects of instructional effectiveness in the teaching of physical education activities in junior and senior secondary schools. *The Nigerian Teachers*. 4.1:26-34.

[71] Opesanwo, O. and Simisaye, A.O. 2017. Influence of gender, academic disciplines on research productivity of lecturers in two universities in south-west Nigeria. Nigerian libraries*: Journal of the Nigerian Library Association*. 50.1:21 – 36.

[72] Orluwene, G.W. 2013. Teachers' workload and stress management. In. J.D. asodike, J.M. Ebong, S.O. oluwon and N.M. Abraham (Eds). *Contemporary administrative and teaching issues in Nigeria schools*. Owerri. Alphabet Nigeria publishers. 138-152.

[73] Owoyemi T.E and Abayomi, T. 2013. Factor analytic study of internet usage by lecturers in Nigerian tertiary institutions of higher learning. *Global Journal of Human Sciences, Linguistics and Education*. 13. 11:6-12

[74] Osaat, D.S. and Ekechukwu, R. 2017. Managing workload of academic staff for job effectiveness in Nigerian Universities: a study of University of Port Harcout in South-south Geopolitical zone of Nigeria. *International Journal of Humanities, social sciences and Education* (IJHSSE). 4.12:102-108.

[75] Oyewusi, F.O. and Oyeboade, S.A. 2009. An empirical study of accessibility and use of library resources by undergraduates in a Nigerian State University of Technology Library Philosophy and Practice (e-journal) 277. Retrieved on 8th Nov., 2018.

[76] Oyewusi, F.O. 2016. Understanding School Library Media Concepts. Sterling Horden Limited, Ibadan. Pajares, F. and Valiante, G. 2001. Gender differences in writing motivation and achievement of middle school students. A function of gender orientation? *Contemporary Educational Psychology* 26: 366-381

[77] Pool, C.R. 1997. A New digital literacy: a conversation with Paul Gilster. *Educational leadership*. 55.3:6-11.

[78] Popoola, S.O. 2008. The use of information sources and services and its effect on the research output of social scientists in Nigeria universities. Library, Philosophy and practice. Rretrieved Jan. 4, 2014 from *webpages.uidaho.edu./../popoola.htm.*

[79] Raji, S.A. 2012. An Analysis of Job performance among academic staff of Federal Polytechnic Offa, Kwara state. *Mediterranean Journal of Social Sciences* 3.13: 67-74.

[80] Rehman, S. and Ramzy, V.2004. Awareness and use of electronic information resources at the health science centre of Kuwait University. *Library Review* 53.3.150-156

[81] Reitz, J. M. 2004. *Dictionary of library and information science*. Westport, Connecticut: Libraries Unlimited.

[82] Roger, P. S. and Thomas, J.O. (2005): *Essential of Computer Science*, London: International Global Press.

[83] Salau S.A. and Gana, U.G. 2015. Access to and use of electronic journals in selected federal university libraries in the federal capital territory and north central zone of Nigeria. African Journal of Library Archival and Information Science 25.2: 161-171.

[84] Sharp, J.G., Hemmings, B., Kay, R. and Callinan, C. 2013. An application of the revised lecturer self-efficacy questionnaire' an evidence-based route for initiating transformational change. *Journal of further and Higher Education* 37.5:643-674. http://www.tandfonline.com/loi/gfh20 eprints.hncoln.ac.uk>.

[85] Shelton, C. 2011. University lecturers' perceptions of the technology they use. A paper presented at cal conference held at Manchester Metropolitan University, Manchester, UK 13 – 15 April

[86] Sofoluwe, A.O. 2007. Information and Communicaion Technology and administrative effectiveness of Nigerian Universitties. *International Journal of Educational Management* 2.3: 43

[87] Stone, T.O, Kpeela A.A. and Etong, J.S.2012. Computer Aided Instruction and Teacheers job performance of Nigerian Science Schools. *Journal of Higher Education* 3.2:54-60

[88] Sullivan, T.A.; Mackie, c., Massy, W.F. and Sinha, E. 2012. Improving Measurement of Productivity in Higher Education, New York, USA: *National Academy of Sciences.*

[89] Swank, R.C. 2011. The educational of University Library. Retrieved from http://www.ideals.illinois.edu/bitestream/handle/2142/5455/librarytren

[90] Thanuskodi, S. 2012. Use of online public access catalogue at Annamalai University Library. *International Journal of Information Science*. 2.6:70-74.

[91] Tijani, A.A. 2015. Lecturers' occupational stress and productivity in Kwara state owned tertiary institutions in Nigeria. *Asia Pacific Journal of Education, Arts and Sciences*. 2.4:56-60.

[92] Tinuke, F.M. 2015. Dimensions of University Academic staff performance appraisal in selected public universities in Nigeria. *Journal of Global Economics, Management and Business Research.* 3.3:139-149.

[93] Ugah, A.D. and Arua, U. 2011. Expectancy theory, Maslow's hierarchy of needs and cataloguing department. *Library Philosophy and Practice*. Retrieved Feb 20, 2015 from http://unllib.unl.edu/LPP/.

[94] Unwin, T. 2014. Towards the use of ICT in teacher training in Africa: open learning. *Journal of Open and Distance Learning* 20.113-129.

[95] Uyeri, A.O. 2016. The relationship between manpower development and lecturers' productivity in Colleges of Education inn Delta State. *Global Journal of Management and Business Research.* 16.10:64-77.

[96] Vakkari, P. 2008. Perceived influence of the use of electronic information resource on scholarly work and publication productivity. *Journal of the Amerian Society for Information Science and Technology* 59. 4: 602-612.

[97] Vipinosa, L.D. 2015. Productivity, work value and teaching effectiveness of science teachers in Capiz State University. *International Journal of Interdisciplinary Research and Development*. 2.5: 423-427

[98] Warlizasusi, Supriyati, Y. and Karnati, N. 2018. The Effect of transformational leadership, self-efficacy and self-learning towards lecturers' job performance at STAIN Curup Rejang Lebong Regency of Bengkulu Province. International Journal of Scientific Research and Management (IJSFRM) 6.7:486-496. Retrieved 04 March, 2019 from www.ijsrm.in.

[99] Waters, J. 2014. A comparison of e-books, and print book discovery, preferences, and usage by science and engineering faculty and graduate students at the university of Kansas. *Science and Technology Librarianship* 75: 24.

[100] Westerma, S. and Barry, W. 2009. Mind the gap: staff empowerment trough digital literacy in Mayes, T. Transforming Higher Education through Technology Enhanced learning, The HEA, Heslington.

[101] Wood, R. and Bandura, A. 1989. Effect of perceived controllability and performance standards on self-regulation of complex decision making. *Journal of Personalty and Social Psychology*. 56.5: 805-814.

[102] Yumba, D. 1997. Internet in the library: potentials. *African Journal of Library, Archives and Information Science 7.2: 163-168.*

[103] Yusuf, M.O. and Onasanya S.A. 2004. Information and communication technology (ICT) and teaching in tertiary institution. *Teaching in Tertiary Institutions*. Ogunsakin, E.A. Ed. Faculty of Education, University of Ilorin, Nigeria. 67-76

[104] Yusuf, M.O. 2006 using the internet for teaching , learning and research in higher education. *Journal of Nigeria Association of Teachers of Technology* 6(1) 163-168.

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