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Ibrahim Ayandare Ayankola & Ismail Taiwo Busari

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Media Resources' Utilisation and Productivity of Lecturers' in Public Polytechnics, South-west, Nigeria

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ABSTRACT

The study was carried out with a view to investigating the influence of the utilisation of media resources on the productivity of public polytechnic lecturers in South-west, Nigeria. Descriptive survey research design was adopted while close-ended questionnaire was used for data collection. A total of 735 copies of questionnaire were administered to the lecturers, while 711 (96.7%) were returned and considered appropriate for data analysis. The data collected was analysed using both descriptive and inferential statistics. Findings from the study revealed availability of media resources to the lecturers and that printed and non-print resources topped the list of resources available to the respondents. Also, the study established regular use of media resources by the lecturers. They made use of media resources on regular basis and majorly for the purposes of preparing lecture notes, research and publications, obtaining general knowledge, paper presentation and proposals. High level of productivity, likewise positive significant relationship between media resource utilisation and job productivity of the respondents were established. The study recommended that modern and relevant media resources be provided for the lecturers to improve academic productivity, and that the lecturers should put in more efforts in attending and participating in seminars, workshops and conferences by presenting more papers and writing more journal articles to enhance productivity level.

Keywords: Media resources utilisation, Productivity, Polytechnic lecturers in South-west Nigeria

INTRODUCTION

The productivity of lecturers is key to the attainment and achievement of the goals and vision of tertiary institutions. Productivity has to do with the knowledge, skills and attitudes required to enable an individual perform the expected activities in the job description, and this may be high or low depending on the input of the employee (Nakpodia, 2011). Unfortunately, there has been a decline in lecturers' productivity in many educational institutions in Nigeria, of recent, since many of the lecturers exhibit low level of productivity due to inadequate supply of institutional materials cum financial resources that can bring about the desired productivity in their institutions. According to Vipinosa (2015), productivity is to measure effectiveness and competence of teachers in their teaching profession which reveals how much an individual can produce in a certain period of time with available resources. Naturally, productive individual contributes greatly to the growth

of institution, establishment, or society to which they belong. Every establishment or institution definitely looks up to their staff for effective service delivery which will assist in achieving the goal of the institution that usually has to do with attaining high level of productivity.

In academic institutions, productivity of lecturers is considered in terms of teaching, preparing for class, research and scholarly activities, students 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 an institution such as polytechnics would become productive depends principally on the effectiveness of the work force or staff, which is made up of different individuals 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. Most institutions do not support their learning and research activities with adequate equipment and instructional materials such as computer and other technical aids. Lack of relevant and adequate skills on the part of some lecturers to gaining access to the content of media resources could also undermine the productivity of lecturers (Aina and Adekanye, 2013).

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. The lecturer's work involves 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, 2010 in Dabara, Soladoye, Omotehinse, Lawal and Asa, 2020). The importance of media resources to lecturers cannot be over emphasised as there is need for them to access information sources from the different formats, ranging from 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). Meanwhile, 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. Also, some institutions experience inadequate media resources (Nyika, 2015 in Atubi, 2021). The importance of these media resources cannot be over-emphasised as 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. Media resources are, thus, tools that could be used to enhance teaching effectiveness, stimulate the lecturers' interest to work, and consequently stimulate the lecturers' overall productivity in tertiary institutions.

The polytechnic is an institution that helps in the quest for technological and economic growth. It is an institution of higher learning, providing manpower needs to advance education sector and national development just as it is specifically charged with the primary responsibility of producing technical manpower needed for industrial growth in Nigeria. Polytechnic education places a strong emphasis on practical based learning and attachment of requisite skill acquisition in every facet of course delivery. Polytechnics in Nigeria are set up to impart knowledge and necessary skills for provision of competent and well skilled labour force for industrial and technological development in Nigeria. Polytechnic lecturers, in addition to their academic knowledge, are to acquire interpersonal skills, communication and presentation, skills as well as problem solving skills to enhance their productivity and also assist their students to be able to compete with their contemporaries, globally. The lecturers are always under the great pressure to conduct research, publish scholarly articles, teach classes, advise their students and also serve in various committees, hence there is need for lecturers in polytechnics to embrace the full use of diverse media resources in the implementation of curriculum and their research activities.

The productivity of polytechnic lecturers is often defined in terms of teaching effectiveness, research output or publications and community service. Unfortunately, there is a serious decline in polytechnic lecturers' productivity due to several factors, which include media resources utilisation. There is evidence of low utilisation of media resources in institutions where they are provided. There is poor utilisation of many available electronic media resources due to lack of digital skills, low level of competence and resistance to adopting new digital technology to effectively teach in the classroom. When teaching is not effectively carried out, it has a negative effect on the quality of students produced. Thus, this study surveyed media resource utilisation and polytechnic lecturers' productivity in South-west Nigeria.

The findings of the study could shed light on the need by the polytechnic library to provide maximum support to the polytechnic lecturers by providing them with the necessary media resources which could help them improve on their job. The management of the institutions would realise the importance of media resources to learning, thereby making funds available to libraries to provide more of these resources to assist both staff and students. It is expected that the study could be of great significance to the polytechnic students, as the teaching and learning would be made better and easier, when these resources are being integrated into their learning activities. Also, they would experience changes in the way lectures are delivered to them.

Research questions

The following questions were answered in the study:

1. What types of media resources are available to polytechnic lecturers in South-west, Nigeria?
2. What is the frequency of media resource utilisation by polytechnic lecturers in South-west, Nigeria?
3. For what purpose do polytechnic lecturers in South-west, Nigeria utilise media resources?

4. What is the level of productivity of polytechnic lecturers in South-west, Nigeria?
5. What relationship exists between media resource utilisation and productivity of polytechnic lecturers in South-west, Nigeria?

REVIEW OF RELATED LITERATURE

Media resource utilisation and productivity of polytechnic lecturers

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 come 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 to facilitate learning, as well as aiding the promotion of continuing development of individuals. According to Fayose (1995), the media resources can be categorised based on their functions and level of scholarship. In tertiary institutions, they are mainly categorised 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. These research materials include periodicals, government publications, conference proceedings and research papers (Fayose, 1995).

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 to 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.

Patrikakou (2016) observed that lecturers who use the media technologies effectively will inevitably raise their quality of teaching experience. Media resources are information carriers that play important role in enhancing teaching and learning in tertiary institutions. Alazam, Bakar, Hamzah and Asmiran (2012) argued that technical and vocational teachers use information communication technologies to store, create, share and exchange information. They use modeling, diagrams and other interactive examples for teaching. Unwin (2014) affirmed that the quality of teaching and learning has been enhanced through the provision of a variety of media resources and participatory methodologies. Al-Ansari (2006) in Ejiroghene (2021) studied the use of internet by the faculty staff. It was found out that majority of them have been using the internet and computer for more than five years and the internet has helped them to save time and find up-to-date

information. Opeke and Odunlade (2011) described media resources as variety of information bearing materials which teachers (lecturers) use to teach, present, illustrate and elucidate teaching activities which include journals, textbooks, theses, online databases and so on. Media resource utilisation is a means through which subject mastery and authority is exercised by the teacher or lecturer.

Media resources can be seen as communication and educational tools which could be inform of equipment, software and facilities that are used to collect, process, preserve, store and deliver information or data. 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 categorised 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. Thanuskodi (2012) revealed in his study that a significant percentage (32.78%) of respondents for his study used printed journals and (19.44%) while others used both the printed and electronic resources. The study of Opeke and Odunlade (2011) confirmed that the highest percentage of polytechnic lecturers mostly utilised 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 use of electronic information resources enhances innovation in teaching and learning, 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 have 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; Okiko, 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-magazine, 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 teaching, learning and research activities.

Onasanya, Shehu, Oduwaye and Shehu (2010) noted that lecturers in tertiary institutions are basically involved in two things which are teaching and research. The ICTs have the potentials of ensuring effectiveness and efficacy in the areas of teaching and research. Olaofe (2005) opined that when teaching and learning process is critically accessed in Nigerian tertiary institutions, one would observe that the challenges facing the lecturers in their institutions are no longer the covering of course contents or in adopting appropriate teaching pedagogy but having access to ICT and using it to improve teaching and learning.

Internet is another medium that carries relevant and current information to assist lecturers' in the areas of teaching and research and it has been identified as an invaluable tool for teaching, learning and research (Yumba, 1997; Abacha, Jumare and Vashista, 2020; Adomi and Kpangban, 2010). The internet as part of media resources has been found useful to higher education institutions both in the developed and developing nations of the world. Oghenevwogaga and Oghenevwogaga (2006) studied the impact of internet on academic staff research and it was revealed that majority of the respondents, 68 (97.1%) attested to the fact that internet has contributed significantly to the ease of their research work. It allows them to download related information materials for research and also ease the sending and receiving of research materials. Likewise, a survey conducted by Bjork and Turk (2000) among authors and readers of scholarly articles revealed that individuals within the middle age group used the internet more than the younger or older groups. The survey also revealed that professors/teachers and researchers used internet as one of the media resources.

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 significant number, 45.2% of the respondents accessed electronic resources through cybercafes. This, according to the researcher was as a result of proximity of cybercafés to user facilities. Kaur and Vernia (2006) in their study found that users of e-resources used 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 in Akussah, Asante and Adu-Sarkodee, 2015).

In the study carried out by Egberongbe (2011), it was revealed that most lecturers (90.6%) used electronic resources such as e-journals, e-mails among others. The study revealed that both the lecturers and scholars acknowledged the usefulness and importance of e-resources to their research and productivity. It was revealed that the use of e-resources is very common among lecturers and research scholars of the university, as majority of them are dependent on electronic resources to get desired and relevant information. The internet enables the lecturers to acquire new knowledge about teaching practices, research findings and also affords them the opportunities of sharing news about the profession and much more easily and quickly among scholars.

Creamer (2004) in her assessment of faculty publication productivity acknowledged that individual lecturers' reputation, visibility and advancement in the academic reward structure depends on the utilisation of the new technologies. In the same study, she empirically established the fact that academics of all ranks that do not actively use the Internet are significantly less likely to be among the top producers of research publications in their fields. In other words, a small group of scholars of all ranks with innovative skills are adjudged by this study to account for a large

proportion of the research publications produced in their fields due to their versatility with the internet environment.

METHODOLOGY

The research design adopted for this study was descriptive survey design. The population for the study comprised all the 2751 lecturers in the state-owned polytechnics in South-west, Nigeria. Southwestern Nigeria comprises Lagos state, Oyo state, Ondo state, Osun state and Ogun state. Multi-stage sampling technique was used to select the sample for the study. Stage one involved the use of purposive sampling technique to select the oldest polytechnics from each state considered for the study. These Polytechnics were Lagos State Polytechnic, Lagos State; The Polytechnic Ibadan, Oyo State; Rufus Giwa Polytechnic, Owo, Ondo State; Osun State Polytechnic, Iree, Osun State and Moshood Abiola Polytechnic, Abeokuta, Ogun State. At the second stage, purposive sampling technique was made use of to select three out of the commonly available schools/faculties and departments in the polytechnics chosen for this study. These were schools of Engineering, Sciences and Environmental Studies. The third stage involved the use of total enumeration of all the lecturers across all the departments within these schools/faculties. This was in view of the fact that the total population of the lecturers was considered not too large for the study.

Table 1: Sample for the Study

S/N	State	School / Faculty	No of Lecturers	Sample
1	Lagos	Lagos State Polytechnic		
		Faculty of Engineering	62	62
		Faculty of Sciences	75	75
		Faculty of Environmental Studies	24	24
TOTAL			161	161
2	Oyo	The Polytechnic Ibadan		
		Faculty of Engineering	65	65
		Faculty of Sciences	72	72
		Faculty of Environmental Studies	45	45
TOTAL			182	182
3	Ondo	Rufus Giwa Polytechnic, Owo		
		Faculty of Engineering	65	65
		Faculty of Sciences	45	45
		Faculty of Environmental Studies	32	32
TOTAL			142	142
4	Osun	Osun State Polytechnic, Iree		
		Faculty of Engineering	31	31
		Faculty of Sciences	68	68
		Faculty of Environmental Studies	26	26
TOTAL			125	125
5	Ogun	Moshood Abiola Polytechnic, Abeokuta		
		Faculty of Engineering	33	33
		Faculty of Sciences	58	58
		Faculty of Environmental Studies	34	34
TOTAL			125	125
GRAND TOTAL			735	735

The research instrument for this study was a self-structured questionnaire named “Media Resource Utilisation and Productivity of Polytechnic Lecturers Questionnaire (MRUPPLQ)” which 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. Section B is tagged Media Resource Utilisation by Polytechnic Lecturers (MRUPL). Five main items were developed to identify the types of print and non-print media resources that were available and accessible to polytechnic lecturers. It was also designed to elicit data on purpose and frequency of usage of media resources by polytechnic lecturers. Section C consists of the Productivity Scale for Polytechnic Lecturers (PSPL) and this was made up of thirty items that measured polytechnic lecturers’ productivity in the areas of teaching, research and publication output. It is a 4-point Likert scale of Strongly Agree (SA) = 4, Agree(A) = 3, Disagree(D) = 2, and Strongly Disagree (SD) = 1. The questionnaire was validated by library and information science experts which was trial-tested on 30 lecturers from Osun state College of Technology, Esa Oke which was not part of the Polytechnics surveyed in order to determine their reliability coefficients. The data obtained were analysed using Cronbach Alpha Coefficient. The reliability coefficients of each the Media Resource Utilisation ($\alpha = 0.95$) and Productivity ($\alpha = 0.77$). Data collected for research questions

1 to 5 were analysed using descriptive statistics such as frequency counts, percentages, means and standard deviations while research question 5 was answered using Pearson's product moment correlation.

INTERPRETATION OF RESULTS AND DISCUSSION OF FINDINGS

Out of 735 copies of the questionnaire administered to the lecturers, only 711 (96.7%) were returned with useful responses and were considered adequate and appropriate for the data analysis.

Demographic characteristics of the respondents

The demographic characteristics of respondents and the results showed that majority of the respondents 481 (67%) 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 were holders of 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 Lecturer II to Chief Lecturer with response rate of 413 (58.2%).

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

Table 1: Media resources available to polytechnic lecturers

S/N	Statements	HA	A	FA	NA	Mean	SD
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	274	124	35	3.12	0.87

		39.2%	38.5%	17.4%	4.9%		
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	iPad	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							

Table 1 reveals the responses of the respondents to types of media resources available to polytechnic lecturers in the 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. Overall, the results revealed availability of media resources to the respondents since the overall weighted mean of 2.91 is higher than the criterion mean of 2.50 set as benchmark for availability of media resources. This implies that media resources were available to polytechnic lecturers in the South-west, Nigeria. The results further revealed printed resources (3.24) and non-print resources (2.99) as topping the list of media resources available to the lecturers surveyed.

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

Table 2: Frequency of media resources utilisation by polytechnic lecturers

S/N	Statements	Daily	Weekly	Fortnightly	Never	Mean	SD	
Print Resources								
A	Textbooks	452 63.6%	144 20.25	101 14.2%	14 2.0%	3.45	0.8 1	Regular use
B	Journals	284 39.9%	236 33.2%	149 20.9%	43 6.1%	3.07	0.9 2	Regular use
C	Encyclopedias and Dictionary	269 37.8%	250 35.1%	125 17.6%	68 9.5%	3.01	0.9 7	Occasional use
D	Newsletters	287 40.3%	215 30.3%	109 15.3%	100 14.1%	2.97	1.0 6	Occasional use
E	Newspapers	311 43.8%	167 23.5%	102 14.4%	130 18.3%	2.93	1.1 5	Occasional use
F	Book of Abstract	212 29.75	240 33.8%	186 26.1%	74 10.4%	2.83	0.9 7	Occasional use
G	Conference proceedings	196 27.5%	234 32.85	207 29.1%	75 10.6%	2.77	0.9 7	Occasional use
H	Theses and Dissertations	134 18.8%	281 39.5%	218 30.6%	79 11.1%	2.66	0.9 1	Occasional use
I	Posters	205 28.9%	188 26.5%	165 23.2%	152 21.4%	2.63	1.1 1	Occasional use
J	Bulletins	154 21.6%	231 32.45	215 30.2%	112 15.8%	2.60	1.0 0	Occasional use

Weighted mean = 2.89								
Non-print resources								
A	Illustrations	313 44.0%	205 28.8%	131 18.4%	63 8.8%	3.08	0.9 9	Regular use
B	Charts	287 40.4%	167 23.5%	188 26.4%	69 9.7%	2.95	1.0 3	Occasional use
C	Pictures	263 37.0%	189 26.55	144 20.25	117 16.4%	2.84	1.1 0	Occasional use
D	Realia (real objects)	297 41.8%	143 20.05	124 17.5%	147 20.7%	2.83	1.1 8	Occasional use
E	Maps	251 35.3%	167 23.5%	187 26.25	107 15.0%	2.79	1.0 8	Occasional use
F	Models	94 13.2%	343 48.3%	171 24.0%	103 14.5%	2.60	0.8 9	Occasional use
Weighted mean = 2.79								
Electronic media resources								
A	Internet	427 60.1%	182 25.6%	54 7.6%	48 6.7%	3.39	0.8 9	Regular use
B	Laptops	397 55.9%	193 27.1%	63 9.7%	51 7.2%	3.32	0.9 2	Regular use
C	E-books	369 51.9%	230 32.3%	68 9.6%	44 6.2%	3.30	0.8 8	Regular use
D	Computer	370 52.0%	218 30.6%	78 11.0%	45 6.3%	3.28	0.9 0	Regular use
E	Printers	357 50.2%	228 32.0%	82 11.6%	43 6.1%	3.26	0.8 9	Regular use
F	Electronic mail	363 51.1%	185 26.0%	87 12.2%	75 10.6%	3.18	1.0 2	Regular use
G	E-journals	316 44.5%	216 30.5%	100 14.1%	77 10.9%	3.09	1.0 1	Regular use
H	Photocopiers	328 46.2%	197 27.7%	96 13.5%	90 12.6%	3.07	1.0 5	Regular use
I	Notebooks	299 42.1%	236 33.25	103 14.45	73 10.3%	3.07	0.9 9	Regular use
J	Scanner	235 33.1%	240 33.8%	144 20.2%	92 12.9%	2.87	1.0 2	Occasional use
K	Radio	254 35.7%	179 25.2%	132 18.5%	146 20.6%	2.76	1.1 5	Occasional use
L	Digital camera	196 27.5%	267 37.5%	134 18.8%	115 16.2%	2.76	1.0 3	Occasional use
M	CD ROMS	160 22.5%	314 44.1%	130 18.4%	106 14.9%	2.74	0.9 7	Occasional use
N	Television	239 33.6%	202 28.4%	118 16.6%	152 21.4%	2.74	1.1 4	Occasional use
O	Multimedia projector	147 20.7%	311 43.75	164 23.0%	90 12.6%	2.72	0.9 3	Occasional use
P	iPad	194 27.3%	256 36.0%	113 15.9%	148 20.8%	2.70	1.0 8	Occasional use
Q	Online Public Access Catalogue (OPAC)	152 21.4%	312 43.9%	112 15.7%	135 19.0%	2.68	1.0 1	Occasional use
R	Audio cassette	192 27.0%	211 29.7%	129 18.2%	178 25.1%	2.59	1.1 4	Occasional use
S	Video cassette	187 26.3%	167 23.5%	161 22.6%	196 27.6%	2.48	1.1 5	Occasional use

T	Teleconferencing	106 14.9%	276 38.8%	135 19.0%	194 27.3%	2.41	1.0 4	Occasional use
Weighted mean = 2.92								
Databases								
A	Science Direct	257 36.2%	257 36.2%	166 23.4%	166 23.4%	2.47	1.0 3	Occasional use
B	EBSCOHOST	119 16.8%	237 33.3%	136 19.1%	218 30.7%	2.36	1.0 9	Occasional use
C	AGORA	51 7.2%	267 37.6%	183 25.7%	209 29.4%	2.23	0.9 6	Occasional use
Weighted mean = 2.35								
Grand weighted mean = 2.74								

Decision rule: 0.1-1.0 = No use; 1.1-2.0 = rarely use; 2.1-3.0 = Occasional use; 3.1-4.0 = Regular use

Table 2 presents results on the frequency of use of media resources by the respondents. The results revealed regular use of only textbooks (3.45) and journals (3.07) among the print resources while other print resources were found to be on occasional use by the lecturers. Also, only Illustrations (3.08) of the non-print resources was found to be on regular use by the respondents while most of the electronic resources were on regular use. Furthermore, all the databases available to the respondents were found to be occasionally used by the respondents. 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 overall weighted mean of 2.74 which is higher than the criterion mean of 2.50. This means that media resources available to polytechnic lecturers in the South-west, Nigeria were used on regular basis. It could be deduced from the overall weighted mean that electronic media resources (2.92), printed resources (2.89) and non-print resources (2.79) were the major resources used on regular basis by polytechnic lecturers in South-west, Nigeria.

In determining the frequency of utilisation of media resources by polytechnic lecturers in South-west, Nigeria the test norm method was used.

Test norm of frequency of media resources utilisation by lecturers in state-owned polytechnic lecturers in South-west, Nigeria.

Maximum Scores for a respondent on the 40th item access scale (40 x 4) = 160

Level of use (regular, occasionally and never) = 3

To establish an interval score (160 / 3) = 53.

Therefore, an interval score of 53 is used to chart the norm table. Thus, the overall mean score of the polytechnic lecturers in South-west, Nigeria on their frequency of media resource utilisation of 113.93 falls within the range of 108-160 which is considered as regular use. This clearly reveals that polytechnic lecturers in South-west, Nigeria made use of media resources on regular basis.

Table 3: Test norm table of frequency of media resource utilisation by polytechnic lecturers in the South-west, Nigeria

Interval	Total mean score	Remark
1-53		Never
54-107		Occasional
108-160	113.93	Regular

Research question 3: For what purposes do polytechnic lecturers in the South-west, Nigeria utilise media resources?

Table 4: Purposes of media resources utilisation by polytechnic lecturers in the South-west, Nigeria

Statement	Frequency	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%

Table 4 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%). Writing book reviews ranked least among the purposes for which lecturers utilised media resources (49.1%). The implication of this result is that the major purposes for which polytechnic lecturers in south-west, Nigeria used media resources were preparing lecture notes, research and publications, obtaining general knowledge, paper presentation and writing papers and proposals.

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

Table 5: Productivity of polytechnic lecturers in the South-west, Nigeria

S/N	Statements	SA	A	D	SD	Mean	SD
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 I 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 5 shows the overall weighted mean of 3.12 which is higher than the standard mean of 2.50. This indicates that the productivity of polytechnic lecturers 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).

In research, 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), and 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.

In determining the level of productivity among state –owned polytechnic lecturers, Maximum Scores for a respondent on the 30-item scale (30 x 4) =120

Level of use (high, average and low) = 3

To establish an interval score (120 /3) = 40

Therefore, an interval score of 40 is used to chart the norm table.

Thus, the overall mean score of the polytechnic lecturers’ productivity 93.53 falls within the range of 81-120 which is considered high. This clearly reveals that productivity level of polytechnic lecturers is high.

Table 6: Test norm Table of productivity level of polytechnic lecturers in the South-west, Nigeria

Interval	Total mean score	Remark
1-40		Low
41-80		Average
81-120	93.53	High

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

Table 7: Relationship between media resource utilisation and job productivity of polytechnic lecturers

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 7 shows that there is a positive, significant relationship between media resource utilisation and job productivity of polytechnic lecturers in the South-west, Nigeria ($r = 0.403$, $p < 0.05$). Thus, the hypothesis was rejected. This implies that as polytechnic lecturers utilised media resources to boost their teaching presentation, their job productivity was also improved.

DISCUSSION OF THE FINDINGS

Background information of polytechnic lecturers in South-west Nigeria revealed that there were more male lecturers than female while most of the lecturers were found within the age range of 35-44 years. Furthermore, the majority of the lecturers were found to have qualifications ranging from H.N.D. to Ph.D. The findings showed that the highest no of respondents possessed Master's Degree as their highest qualification. Findings on the rank of the lecturers revealed that the majority of the lecturers were senior lecturers.

Findings on media resources available to the polytechnic lecturers revealed that they were mostly in printed format. These resources ranged from textbooks, dictionaries, journals, newsletters to newspapers. The 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.

The findings further revealed that media resources were used on daily and weekly basis. The mostly utilised media resources are textbooks (print), illustrations and drawings (non-print) and internet (electronic). 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 relied mainly on printed books. Under the category of non-print resources, illustration and drawings were found to be frequently used by polytechnic lecturers. This may not be far from expectation, because by virtue of polytechnic education, especially in the fields of engineering and environmental studies, these particular media resources are meant to be part of the major teaching instruments. Print materials are easily accessible and more available. The findings showed that most of the respondents frequently utilized textbooks on daily basis. This may be due to the fact that textbooks as a type of print resources are readily available and accessible to a large number of users and could be accessed by the polytechnic lecturers. The textbooks could also contain the required information for the lecturers' teaching and research activities.

Findings showed that the specific purposes for utilising media resources are identified to include research and publication, paper presentations, preparing lecture notes, writing papers, writing book

reviews, and obtaining general knowledge. The findings also revealed that preparing lecture notes was the most frequent reasons for using media resources. This is followed by research and publication, and quest to obtain general knowledge. This finding is in line with that of Ukih (2012) and Haliso and Laja-Ademola (2013) that reported lecturers' use of media resources to prepare lecture notes.

However, this is in contrast with Anhwere, Paulina and Manu (2018) study which reported that vast majority of lecturers utilised media resources for reference purpose. The lecturers may need to be kept abreast of current happenings in their various fields. The study revealed that there was a moderate significant relationship between media resource utilisation and productivity of state-owned polytechnic lecturers in the South-west, Nigeria. The null hypothesis was thus rejected. This implies that an increase in the use of media resources can lead to a corresponding increase in the lecturers' productivity.

SUMMARY AND CONCLUSION

The study investigated the relationship between media resource utilization and productivity of lecturers in polytechnics in South-west, Nigeria. The study showed that the polytechnic lecturers in South-west, Nigeria frequently utilised media resources especially the print resources and electronic resources (such as textbooks and internet). The frequency of utilisation on media resources by the respondents revealed daily and weekly usage of the media resources by the polytechnic lecturers. The study indicated that print media resources were mostly available to the polytechnic lecturers in the South-west, Nigeria. Lecturers' purposes of using media resources were mainly for preparation of lecture notes and for research and publications. There was moderate positive significant relationship between media resource utilisation and lecturers' productivity. The study concluded that there might be a need to give priority to media resources provision for polytechnic lecturers in order to improve their productivity.

RECOMMENDATIONS

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

1. All polytechnic libraries and polytechnic librarians should make deliberate efforts to provide adequate media resources for teaching and learning in their various institutions. This will facilitate increased utilisation.
2. All polytechnic lecturers should be kept abreast of the various digital devices and electronic information resources, especially in this era 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.
3. The management of polytechnics should come up with policies that would encourage and improve lecturers' productivity. Their productivity should not only be rewarded with promotion.
4. The state governments should create an enabling environment and make more funds available for the polytechnics to have access to facilities that would improve the lecturers' productivity in the areas of teaching, research and publications.
5. Modern and relevant media resources should be provided for lecturers so as to improve their academic productivity.

6. The polytechnic lecturers should put more efforts into attending and participating in seminars, workshops and conferences by presenting more papers and writing more journal articles to enhance their productivity.

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