

OBSTACLES TO AVAILABILITY AND UTILISATION OF ELECTRONIC RESOURCES ON RESEARCH PRODUCTIVITY OF LECTURERS IN SPECIALISED UNIVERSITIES IN NORTHERN NIGERIA

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Abstract

This study investigated obstacles involve in availability and utilisation of electronic resources for research productivity of lecturers in specialised universities, northern, Nigeria. The study was guided by (1) one research objective. The population of the study consisted of three thousand eight hundred and twenty-seven 3,827 lecturers in eleven (11) fully operational public and private specialised universities in Northern Nigeria. Simple random sampling technique was adopted to select 400 lecturers across the eleven (11) specialized universities in Northern Nigeria. Using taro yamee formula modify by pollona. The study adopted self-designed structured questionnaire with 4-point likerts scale as data collection instruments. The study analysed the data using descriptive statistics (mean, frequency count and percentage) The study found that obstacles on availability and utilisation of electronic resources are inability to easily access the internet, high cost of accessing resources, irregular power supply, information resources are not accessible. The study conclude that even when the resources are available there are some obstacles in utilising them. The study suggest that management of the libraries studied should provide alternative power supply so that power will not be a challenge in rendering electronic information services or illuminating the library for readers as well as making the atmospheric condition of the library conducive for users.

Keywords: Availability, Electronic resources, Utilization, Obstacles, Research productivity. Specialized Universities, Northern Nigeria.

Introduction

Research productivity is the output of findings or investigation obtained by academic staff within a period of time. In other word, research productivity is the output of research conducted by academic staff within specific period of time. It can also be refers to means of finding solution to research problems.. Several authors have defined research in various ways in the world, it was based on the above that Ladipo & deola (2021) defined research as any creative systematic activity undertaken in order to add to the store of knowledge and the development of new applications to enhance living conditions of citizens in a society

Research productivity refers to the number of publication per researcher. It can also be seen as number of articles published in standard journal or textbooks within a period of time, by a researcher and the results are published either locally or internationally. Appahet *et al.*(2020) viewed research productivity as the measure of an academic achievement in terms of quality and quantity of publications over a period of time. The importance of research productivity in the career advancement and prestige of academic staff in universities is quite obvious as such it is not taken with levity by academic staff and employers. Research provides a good platform for members of academic staff to become successful academics. This is because research develops academic knowledge and reinforces the skills needed for effective knowledge. The need for timely and easy access to knowledge has transformed the formats in which information is packaged to meet the need of users. The time has passed when traditional or orthodox information resources constitute the sole repository of knowledge in the library. Electronic information resources are gradually dominating the university library although they cannot be said to have replaced print resources in the library. (Ladipo, 2022). In the quest to advance knowledge, researchers' performance is evaluated based on research outcome in terms of productivity. This could be used by other scholars, stakeholders, policymakers, industries and the wider society (Appah *et al.*, 2020). The measurement of the quality of research output of

lecturers is viewed in terms of the number of publications in learned globally accepted indexed databases, number of patents produced, number of chapters in books published locally or internationally, publications in proceedings of conferences, workshop, research oriented books, staff bulletins, subject books, technical reports, article in referred journals, pamphlets, and monographs and the measure varies from one institution to another. Furthermore, Okenedo (2020) asserted that the principal criteria for measuring academic staff research productivity are the research output or publications in referred national and international journals.

The researcher maintained that the research productivity of academic staff often serves as a gateway to promotion, tenure, and salary advancement. Research productivity also serve as a medium for academic staff to become accomplished scholars and are able to play an important role in facilitating the prosperity of the nation and wellbeing of citizens. According to Andrew (2018) most research productivity measure in universities are put in place to assess publications that are submitted or accepted or published which could be journal articles, books, book chapters, monographs, research proposals written to receive external and internal grants.

Specialised universities were started as 3rd generation universities in Nigeria established between 1980 and early 1990. The objective for their establishment were to give effect to the nation's drive for the much-needed self-reliance in Science, Engineering and especially Technology. These universities are the Federal Universities of Technology and Agriculture, located in Owerri, Makurdi, Yola, Akure, Minna and Bauchi (Muhammad, 2021). In order to drive food security and enhance agriculture, the federal government of Nigeria established three universities of agriculture in Abeokuta, Makurdi and Umudike. The underlying philosophy is that the average Nigerian farmer should have easy access to the fruits of scientific agriculture. The rust of this paper therefore, is to examine the obstacles involve in availability and utilisation

of electronic resources for research productivity of lecturers in specialised universities in northern Nigeria

Research Problem

Lecturers in universities are by the virtue of their appointments expected to be highly productive. Research productivity is one of the major indicators of significant contributions of lecturers to uplift the parent institutions where they work. Apart from showcasing the intellectual acquisitions of the parent institutions, research productivity is one of the criteria that are used in promoting lecturers. Lecturers that are not productive, as the saying goes, will perish or remain in one rank for years. There are benefits of research productivity by lecturers who are highly productive in terms of career progression.

Fom the casual literature and discussion with some lecturers in specialised universities, this researcher discovered that majority of the libraries in specialized universities in Northern Nigeria still rely on outdated hard copies of information resources which could hardly be used by the lecturers in conducting researches. Only few of them have electronic information resources where the databases subscribed are still active. This is affirmed by Ifijeh, Ogbomo & ifijeh (2018) whom in a study, found a significant relationship between use of library resources and research productivity of lecturers in private Universities in South-South geopolitical zone of Nigeria.

Tella, *et. al.* (2018) also corroborated that several environmental factors can influence lecturers' productivity, including inadequate facilities, classrooms, laboratories, or technology that can hinder lecturers' ability to conduct research effectively. It is on this basis that the researcher investigated the availability and utilization of electronic resources and environmental variables as determinants for research productivity of lecturers in specialized universities in Northern Nigeria.

Objective of the Study

The aim of this study is to find out obstacles that affect availability and utilization of electronic resources for research productivity of lecturers in specialized universities in Northern Nigeria, to achieve this aim this objective was formulated to:

1. Determined the obstacles facing availability and utilization of electronic information resources for research productivity among lecturers in specialised universities in Northern Nigeria?

Literature Review

Ugwu & Orsu (2020) in their research on challenges of online information resources utilization by undergraduate students: implication for information services delivery. Qualitative descriptive method was adopted, inductive content analysis that enabled the researchers to show who said what with respect to the research questions. Data were collected from a total of 200 level third year undergraduate students who visited the university library between September, 30, 2015 and March 31, 2016. Questionnaire was developed based on data collected by the researcher. While the demographic information of the participants was illustrated in descriptive statistics, qualitative data were analysed through inductive content analysis to represent participants' views on each of the research questions. The study revealed that many students used the online information resources in the university. The most widely used online information resources, the freely available ones such as Wikipedia (80%), Google Books (67%) and Internet public library (64%). It can also be deduced from this table that many online resources, especially those that the university library is subscribing to such as e-journal, e-book, Science Direct, and EBSCO Host Database were not widely used. From the table, eight (10) out of the total of fifteen (15) resources were not widely used. This signifies that the online information resources in the library are under-utilised. Furthermore, the study revealed the

students' preferred options for access to online information resources. The most preferred option was Cyber cafes (93%) and followed by university library system (46%).

On challenges associated with the use of online information resources, the most crucial of the underlying factors includes, Lack of internet connectivity at home, Absence of online assignments, Students do not have internet access in their halls of residence,. Poor social pressure for online information use, Ownership of laptops is lacking,. No time to attend awareness workshop on online materials, No functional computer lab, Engaging in extra jobs to be in school,. Finally, a greater percentage of the students do not have smart phones for m-learning experience. The study recommended training of students on online searching, functional policy ICT, University library funding, supply of power regularly and consortium building.

Emmasiegbe & Anaehobi (2021) investigated the challenges to the use of electronic databases by lecturers in Government-owned university libraries in Anambra State Nigeria. Two research questions and two null hypotheses guided the study. Using a descriptive survey design, a sample of 749 respondents (570 for NAU and 179 for COOU), out of the 2,495 lecturers, (1,900 in NAU, while that of COOU is 595) in the 2 government-owned universities in Anambra State was selected through proportionate sampling technique. A 21-itemed adopted questionnaire which was validated by three experts, and having a reliability coefficient of 0.78 for parts 2, and 0.82 for part 1.

The findings of the study indicated that 7 out of the 10 identified items were rated above 50% which means that the lecturers accepted these items as the electronic databases they use. These databases include; EBSCO Host, AJOL, JSTOR, HINARI, AGORA, OARE, DOAJ, DATAD, EBRARY and Web of Science. Although there were few disagreements on three items which suggests that there are some challenges encountered in the use of these databases. The 2 most

top challenges are; Lack of user education and guidance on use of databases and slow internet connectivity. Based on the findings, it was recommended among others, that Greater publicity should be provided for lecturers and that improvement in the internet connectivity be guaranteed. The similarities between both studies can be seen in the areas of research design in which both studies adopted descriptive survey design, in the area of research instrument (questionnaire) and in the area of method for data analysis where both studies employed descriptive statistics.

Mamman & Abubakar (2022) investigated the challenges of access and use of electronic information resources among students of higher institutions in Taraba State, Nigeria. The objective of this study was to explore the challenges of access and use of electronic information resources (EIRs) among students of higher institutions in Taraba State, Nigeria. The study employed quantitative research methodology, with a cross-sectional survey design to elicit data from the respondents. The study population comprises the three (3) higher institutions with available and functional electronic information resources namely: Taraba State University, Federal University, Wukari and Taraba State College of Nursing and Midwifery with 10748 registered users who constituted the population and out of these, 370 users were selected using a simple random sampling technique. This was done by selecting the respondents from all areas of study regardless of their course, level, age and gender. Research advisors table 2006 was used in determining the sample size of the study.

The data gathered were analysed using descriptive statistics, via the statistical package for social sciences (SPSS) version 16.0. The results of the study revealed that various types of electronic information resources were available in the higher institutions libraries in Taraba State. These include e-books, online databases, e-journals, as well as CD-ROMs. It was also found that the extent of access to the available EIRs was moderate and also poor internet connectivity,

insufficient computer terminals, inadequacy of Information and Communication and Communication Technology (ICT) skills were some of the major factors working against the smooth access and use of EIRs in the institutions studied. This research is novel to Taraba State, in that it examined the extent of access and use of electronic information resources in the state. It also identify the challenges bedeviling the smooth access and use of EIRS among students of higher institutions in Taraba State as well as proffer solutions to the challenges.

Zuru (2023) investigated the factors affecting the utilisation of electronic resources among undergraduate students in tertiary institutions in Kebbi state. Three research question was designed which are what are the factors affecting the utilisation of electronic resource among undergraduate students in Kebbi state, what are the utilisation of electronic resources among the undergraduate student in Kebbi state tertiary institution, and suggested measures that will help in solving the factors affecting the utilisation of e-resources am/ong undergraduate student of tertiary institutions inKebbi state. Although tertiary institutions in Kebbi state have not fully automated their resources and services, they are rather acquiring electronic resources to complement the paper-based resources because of their numerous important and some of the electronic resources are e-books, e-journals, online databases, and online public access catalogs. Some of the e-Resources software used is Koha Application and Dspace application for libraries. The result indicated that the undergraduate students in Kebbi state tertiary institutions do not fully utilise electronic resources because of the following reasons: Lack of proper network to access information online, and insufficient numbers of computers in the library. A research questionnaire was designed and distributed physically out of 260 questionnaires, of which 249 were dully filled and returned successfully, 5 Likert scales were always used to analyse the data using SPSS version 2.0. With a mean score. Also, the factors affecting the utilisation of electronic resources among undergraduate students in tertiary institutions in Kebbi state necessitate the need for similar research to be conducted to understand more on the topic.

Ezejiofor et al. (2023) investigated the constraints encountered by lecturers in their use of electronic information resources (EIRs) and identified potential measures to ameliorate the situation. EIRs are invaluable tools that impact teaching, learning and research productivity all over the world. They have revolutionized how information is accessed and shared, impacting various domains such as education, research, healthcare, and business. Descriptive survey design was adopted and two research questions guided this study. The population of the study comprised 4265 lecturers in four federal universities in South East Nigeria out of which 428 were selected as sample size through multi-stage sampling technique. The instrument for data collection was a structured questionnaire. Data were analysed using mean rating and standard deviation. The findings revealed that major issues were lack of awareness, irregular power supply, inadequacy of ICT facilities and poor Internet access. Recommendations made include awareness creation, regular power supply, provision of adequate infrastructure and broader and technical assistance.

Methodology

The study employed survey research design. The population consisted of 3,827 lecturers in fully operational public and private specialized universities in Northern Nigeria.

Simple random sampling technique was adopted to select 400 lecturers across the eleven (11) specialized universities in Northern Nigeria. According to Thomas (2022), simple random sample is a randomly selected subset of a population where each member of the population has an exactly equal chance of being selected. This method is the straightest forward of all the probability sampling method, since it only involve single random selection and requires little advance knowledge about the population.

The data collection instruments used for the study are self-designed structured questionnaire with 4-point likert s scale as well as observation checklist. The observation checklist contains

list of electronic resources and the respondents are expected to tick either of the two (2) columns (Available or Not Available), this is to ascertain the availability or otherwise of the collections in the universities studied through the sectional heads of E- libraries

Data collected passed through validation using Cronbach alpha before administering them to the respondents.

The data collected were analyzed using descriptive statistics (mean, frequency count and percentage) According to Adamu & Kabir (2019), a descriptive statistical analysis could be used to facilitate the reader understanding. Regression analysis was used to test the three null hypotheses at 0.05 level of significance.

Results and Discussion

Table 1 What are the obstacles facing the availability and utilization of electronic information resources for research productivity among lecturers in specialised universities in Northern Nigeria?

Table 1 Obstacles facing availability and use of electronic information resources for research productivity of lecturers in specialized universities in Northern Nigeria

Obstacles facing the the availability and use of electronic resources for research productivity of Lecturers in availability and use of Northern Nigeria electronic resources													
S/N	Obstacles Measured	Strongly agreed		Agreed		Disagreed		Strongly disagreed		N	FX (Sum)	Mean	Decision
		Freq	%	Freq	%	Freq	%	Freq	%				
1	Lack of relevant information	13	3.7	25	7.1	304	86.4	10	2.8	352	745	2.11	Disagreed
2	Inability to easily access the Internet	123	34.9	190	54	25	7.1	14	4	352	1126	3.20	Agreed
3	Delay in accessing print information	20	5.7	31	8.8	196	55.7	105	29.8	352	670	1.90	Disagreed
4	High cost of accessing Internet	104	29.8	143	40.6	104	29.5	0	0	352	1057	3.00	Agreed
5	Irregular power supply	191	54.3	141	40.1	13	3.7	7	2.0	352	1220	3.47	Agreed
6	Electronic resources are not accessible	14	4.0	298	84.7	24	6.8	16	4.5	352	1014	2.88	Agreed
7	The information content of available resources are not authentic	11	3.1	20	5.7	283	80.4	38	10.8	352	708	2.01	Disagreed
8	Inadequacy of existing facilities (information resources)	10	2.8	25	7.1	306	86.9	11	3.1	352	738	2.09	Disagreed
9	Lack of fixed schedules for common laboratory	13	3.7	27	7.7	208	59.1	104	29.5	352	653	1.86	Disagreed
10	Poor packaging of electronic resources	6	1.7	8	2.3	245	69.6	93	26.4	352	631	1.79	Disagreed
Average weighted mean												2.43	

Table 1 revealed that (5) of the item listed have a mean score greater than the benchmark mean of 2.48. The highest number of respondent who indicated agree are on (Q5); irregular power supply (3.47), (Q2) inability to easily access the internet (3.20), (Q4) high cost of accessing internet (3.00), (Q6) electronic resources are not accessible (2.88) the respondent who indicated disagree are on (Q1) lack of relevant information (2.11), (Q8) inadequacy of existing facility (2.09) (Q7) the information content of available resources are not authentic (2.01) (Q3) delay in accessing print information (1.90) (Q9) lack of fixed schedules for common laboratory (1.86) (Q10) poor packaging of electronic resources (1.79) from the above result the number of respondent who indicated agree are more than the number who indicated disagree.

Discussion of findings

Finding from research question one revealed that inability to easily access the internet, high cost of accessing internet resources, irregular power supply, information resources are not accessible to me are their challenges facing availability and utilization of electronic resources for research productivity of lecturers in specialised Universities in Northern, Nigerian. This is in line with the finding of Ugwu & Osur (2017) in their research on challenges of online information resources utilization by undergraduate student; implication for information services discover that lack of internet connectivity, absent of online assignment, student do not have internet access in their home of resident, poor social pressure for online information use, no time to attend awareness workshop on online materials, and no functional computer lab are the challenges affecting utilization of electronic resources in the library. The finding is also similar to that of Ishola & Olurotimi (2020) who carried out research on availability access and level of use of information resources in academic library, the study of some selected academic libraries in South –Western Nigeria, revealed that inability to get relevant materials, delay in receiving requested materials, spending personal cash to buy substitute resources, inability to access the internet, high cost of access to the internet, were the

challenges facing the utilization of electronic resources. The highest mean score was observed on item no 5 i.e irregular power supply, this is because irregular power supply has become a nationwide problem and lecturers require electricity for their research activities, The lowest mean score was on item no 10 poor packaging of electronic resources and lecturers require very good packaging of electronic resources.

Conclusion

The study seeks to evaluate the obstacles that affect availability and utilization of electronic resources for research productivity of lecturers, the findings of the study revealed that irregular power supply, inability to easily access the internet, high cost of accessing internet, electronic resources are not accessible, are obstacles affecting the availability and use of electronic resources for research productivity of lecturers in specialised universities in Northern Nigeria

Recommendations

Base on the findings of the study the following recommendations are made;

1. The management of the specialised university libraries should create a special place for leisure and entertainment. Dead bulbs in the library should be fixed to improved lightening problems, staff of the library should be motivated by training and workshop.

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