AVAILABILITY AND UTILIZATION OF LIBRARY AND INFORMATION RESOURCES FOR RESEARCH PRODUCTIVITY BY ACADEMIC STAFF IN PRIVATE UNIVERSITIES IN NORTH CENTRAL, NIGERIA

Idakwo, Sunday Innocent Ph.D.
idakwo.Sunday@bazeuniversity.edu.ng
Baze University Library Abuja

Abstract

The study investigated the availability and extent of utilization of library and information resources for research productivity by academic staff in private universities in North Central, Nigeria. Two questions and null hypotheses guided the study. A descriptive survey research design was used for the study. The population of the study (1536) consisted of all academic staff in private universities, North Central Nigeria. A sample size of 770 respondents was selected using proportionate stratified sampling technique. The researcher developed a questionnaire titled "Availability and Utilization of Library and Information Resources for Research Productivity among Academic Staff Questionnaire`(AULIRRPASQ) and an observation checklist, which were used to collect data for the study. The internal consistency of the instruments was ensured using Cronbach Alpha which yielded 0.75 and the instruments were judged reliable. Out of 770 questionnaire distributed, 725 copies were returned and found to be correctly filled. Frequencies, percentages, Mean (X) and Standard Deviations were used to answer the research questions while anova was used to test the hypotheses. The finding of the study revealed overall availability of print and electronic information resources in the libraries as adequate. Also, the utilization of library and information resources by academic staff was high. Based on the findings, it was strongly recommended that the university management should endeavour to always create conducive environment for the utilization of library and information resources for research among the academic staff, library management should create awareness of new arrival among Lecturers and subscription to more electronic materials

Keywords: Utilization, research, academic staff, Library and Information resources, research productivity

Introduction

Research has a significant positive impact on both the advancement of knowledge and the settlement of societal problems. As it relates to advancement, residency, compensation, and other incidental benefits inside the university framework, the research productivity of academic staff, also known as faculties, plays a key role in achieving results in the scholarly community. According to Mole (2019), research is defined as a planned investigation that tries to provide enough information to develop inferences, findings, and a conclusion on a research issue. Additionally, Mole emphasized that finding the solution to a problem required ongoing investigation. Since societal problems cannot be resolved in the absence of research, research is a problem-solving activity. Making library and information resources available and simple to use will enhance the university's research operation which is one of the three primary purposes of establishing university libraries.

A university library is any library that is connected to a university and offers information to researchers both inside and outside the university. University libraries, according to Sambe and Emmanuel, cited in Famaren and Part (2021), are the kinds of libraries designed to be connected to universities with the purpose of meeting the general information demands of the nearby scholarly community. A university library, in accordance with Omeluzor, Dolapo, Agbawe, Onasote, and Abayomi (2017), is a planned and organised vital part of a university with a suitable order to supply timely and current information resources that satisfy its customers' information wants. The main objective of university libraries is to assist the information needs of faculty and staff in the university's teaching, learning, and research activities. University libraries are libraries that are designed, sponsored, overseen, and connected to academic institutions.

The main sources of information are libraries and other places to find information. All types of information resources that can be used to support and aid in successful research and development endeavors are included in these sources. These information resources come in printed and electronic versions. Library and information resources, according to Onah, Adayi, Okonkwo, and Onyebuchi (2020), are the print and electronic sources that library patrons use to meet their information needs. The phrase "print materials" refers to common library materials including books, dictionaries, catalogues, diaries, handbooks, manuals, reference books, journals, magazines, announcements, and so forth. Information and Communication Technologies (ICTs) were presented to create electronic information resources. These computerized resources include electronic diaries, electronic reference information sources, electronic books, CD ROMs, e-magazines, e-papers, and others. Computerized resources that can only be examined with a cutting-edge gadget are known as electronic data assets. To improve the efficacy of their research, these information sources are compiled, examined, and organized in a user-friendly way.

Utilization is the practice of using information and library resources for academic purposes. How academic staff and students use the tools at their disposal is referred to as "utilization of library and information resources." This study's main objective is to discover how frequently academics use the intellectual substance of libraries and information resources for their research (Borgman, 2000). One of a university's main objectives is to provide a supportive environment for the dissemination of information regarding cultural shifts. A university can accomplish this goal by allowing its students and other users access to and use the library and other informative resources. In other words, using library and information resources is essential for conducting fruitful research in academic settings. According to Obasuyi (2020), one way to increase the library's importance and usefulness in our businesses

is to use it. If academic staff researchers have access to crucial and diverse resources, their efficiency will be impacted by library use (Gbemi-ogunleye, 2016). The number of peer-reviewed distributed publications, disseminated course readings, introductions made at meetings, gathering processes, and awards earned over a certain time period are all indicators of a researcher's analytical success and serve as benchmarks for research productivity. No faculty member may progress within the university system beyond their current level of research output. This shows that one of the most crucial factors in deciding a faculty member's advancement, pay, and prestige in any Nigerian university system is the production of their research. However, a study by Cultivate, Heppensta, Lazarz, and Broug (2008) found that academic staff members in private Nigerian universities performed poorly on research, which they blamed on the inefficient use of library and information resources.

Private universities are those that are created and run by private individuals, groups, or partnerships as opposed to any type of official authority. According to Gabriel (2013), a private university is one that was established and is managed by individuals, faith-based groups, community development organizations, and other organizations as opposed to the federal or state governments. Preliminary research indicates that academic staff members at private institutions in North Central Nigeria do not publish as frequently as academic staff members at private universities in other geopolitical regions of Nigeria. Comparing private universities in the Southeast, Southwest, and South-South of Nigeria, it is clear that the north central region performs poorly. Since no evidence-based research can be conducted without the right use of print and electronic information resources, it is crucial to evaluate whether academic staff members' use of libraries and information resources may enhance their research outcomes. Each institution's reputation will supposedly rise as a result of this.

Statement of the problem

Research productivity in Nigerian universities and throughout Africa depends on using library and information resources, just as it does in industrialized nations. In essence, universities act as centres for the development and transmission of information based on research that helps create the nation. In light of this, across many private universities in the North Central, concerns have been raised regarding the adequacy, accessibility, and utilization of library and information resources by academic staff. Despite the growing number of private universities in the geo-political zone and their potential contributions to national research output, there appears to be a significant gap between the availability of library resources and their actual use for research purposes.

Moreover, while some private universities invest heavily in digital and physical library facilities, the extent to which these resources are being accessed and used effectively by academic staff remains unclear. This study, therefore, seeks to investigate the availability and utilization of library and information resources and how they influence the research productivity of academic staff in private universities in North Central Nigeria.

Objectives of the Study

The general objectives of this study is to examine the extent of utilization of library and information resources for research productivity by academic staff in private universities in North Central, Nigeria. Specifically, this study sought to:

1. Identify the types of library and information resources available for utilization by academic staff in private universities in North Central, Nigeria.

2. Examine the extent of utilization of library and information resources for research productivity by academic staff of private universities in North Central, Nigeria.

Hypotheses

The following null hypotheses were postulated to guide the study and were tested at 0.05 of significance:

1. **$H0_1$**: There is no significant difference in the extent of utilization of library and information resources for research productivity by academic staff based on their institution of affiliation.

2. **$H0_2$**: There is no significant difference in the extent of utilization of library and information resources for research productivity by academic staff based on their professional status (rank).

Literature Review

Faculties need information to promote their professional career, enhance their research activities, to keep up with the current happenings in their fields of study, and to develop competence in their teaching skills, among others. Okiki (2013) defined Library and information resources as print and non-print (electronic) materials that could be sourced and accessed manually or electronically by users. Adequate and relevant information resources provide opportunities for users to get access to needed information which is dependent on the availability of emerging technologies as means for creating, storing, distributing, retrieving, and using information resources from the existing literature.

Popoola, and Haliso, (2009) referred to library and information resources as those materials containing information that are in print and non-print formats, such as textbooks, journals, newspapers and magazines, indexes, abstracts, reports, CD-ROM databases, the Internet/E-mail, video tapes/cassettes, diskettes magnetic disk, computers, micro forms and so on specifically selected and organized for actualizing the curriculum of primary, secondary and tertiary institutions of learning.

All these resources in their different forms help to provide some library services in the form of current awareness, video and teleconferencing, internet services, web browsing, electronic mails, cable networks, virtual library, inter and intra networks and many others that are considered ingredients of research. In his work, Liu (2006) wrote that preferences in application and use of either print or electronic resources vary among different individuals and disciplines. He was of the view that research scholars or graduate students seem to expect a hybrid of print and non-print resources and presently, they desire to meet their information needs through a mix of print and online resources. According to Hanif, Zabed, and Nasir, (1997) a good and functional library should be well stocked with relevant and adequate books and periodicals in diverse subject areas to advance study and research. The role of a university library is to acquire, organize and disseminate information to academics, research scholars and students, and support the generation of new knowledge.

The utilization of library and information resources is a function of how properly the resources are organized and made available for consumption. According to Cole (2008), the widest possible reason for which information is put to use has to do with human survival. The skills to use information items effectively and resourcefully depends largely on the quantity of information/knowledge the faculty members possess about the available information resources

and how best to explore such. Information utilization involves creation of awareness and provision of means of accessing available information materials for diverse purposes (Eiriemiokhale and Ibeun 2017). The driving force for academic staff' information use is to enhance teaching and research activities. Academic functions typically revolve around teaching, community development, support for the research needs of its staff, faculty, and students to assist in supporting the school's curriculum and as a result they require a wide range of information resources (Omopupa 2016). According to Omopupa (2016:39), the growing diversity of library and information resources gives academic staff a variety of sources of information to choose from depending on their skills and individual efficiency. Cornwall (2011) noted that the way an information resource is presented will go a long way to determine the effectiveness of its use.

Research productivity entails the total outcome of publications of academics with first degree, Masters and Ph.D. in their respective fields. It also refers to their own productivity in terms of research publication, number of seminar papers presented, number of workshops conducted, conferences and training in emerging technology. Okonedo et al (2015) also define research productivity as the entirety of researches conducted by faculties in universities in their subject area over a given period of time.

This period can be a period of 3 years which rest largely on the quality and quantity of peer reviewed scholarly publications such as books, book chapters, journal articles, conference papers and proceedings, creative works and visual arts among others (Tsafe, Chiya &Aminu, 2016). In universities, recognition and advancement of faculty members depend greatly on the quality and quantity of their research productions, which are communicated in form of books, journal articles, book chapters, conference proceedings, technical reports, and other types of publications (Bassey, Akuegwu, Udida, and Udey, 2007; Kusure, Mutanda, Mawere, and Dhliwayo, 2006; Torchich, 2006; Vakkari, 2008). The evaluation of the published literature of academic staff helps to identify the characteristics of research productivity, authorship pattern, collaborative attitude and impact of citations on any discipline of knowledge, journal or group of journals, institution-wise, or country-wise.

Methodology

In the present study, quantitative approach through survey design was used to elicit data for the study. The study was conducted in the North Central Geopolitical zone of Nigeria. The population of the study comprised of 1536 academics in eleven (11) selected private universities. The sample used for the study consisted 770 people. Proportionate stratified sampling technique was used in drawing the sample from each faculty of the private universities under study.

The sample from each university is a direct representation of the proportion of the university in the entire population. The instruments used for data collection was a structured questionnaire and observation checklist containing 23 items. The instruments were face validated by three research experts. Data collected were analysed using frequencies, percentages, mean scores and standard deviation while the null hypothesis was analysed using anova at 0.05 level of significance. The decision rule for answering the research questions was arrived at by finding the average of the four-point scale thus: $\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50$

Thus any item with the mean scores equal to or above 2.50 was considered as high extent while score below 2.50 were considered as low extent. The two (2) null hypotheses were assessed using the ANOVA at a significance threshold of 0.05.

Results

In line with the research questions and the null hypothesis that guided the study, the summary of the analysis of the data collected are presented in the table below:

Research Question 1: What are the types of library and information resources available for utilization by academic staff in private universities in North Central, Nigeria?

Table 1: Observation Checklist Results of library and information resources available for utilization by academic staff in private universities in North Central, Nigeria

S/N		AUST		BUA		VU		NUN		AUI		LUO		SUO		CHU		BUN		UM		SU	
		A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA
	PRINT RESOURCES																						
1	Textbooks	√		√		√		√		√		√		√		√		√		√		√	
2	Journals	√		√		√		√		√		√		√		√		√		√		√	
3	Magazines	√		√		√		√		√		√		√		√		√		√		√	
4	Newspapers	√		√		√		√		√		√		√		√		√		√		√	
5	Dictionaries	√		√		√		√		√		√		√		√		√		√		√	
6	Encyclopedia	√		√		√		√		√		√		√		√		√		√		√	
7	Student research projects	√		√		√		√		√		√		√		√		√		√		√	
8	Literature book (novel, poems etc.)	√		√		√		√		√		√			X	√		√		√		√	
9	Conference proceedings	√		√		√		√		√		√		√		√		√		√		√	
10	Workshop papers	√		√		√		√		√		√		√		√		√		√		√	
11	Manuals		X	√		√		√		√		√		√		√		√		√		√	

12	Government publications	√		√		√		√		√		√			X		X	√		√			X
	ELECTRONIC RESOUCES																						
13	e-books	√		√		√		√		√		√		√		√		√		√		√	
14	e-journals	√		√		√		√		√		√		√		√		√		√		√	
15	e-newspapers	√		√		√		√		√		√		√		√		√		√		√	
16	Internet	√		√		√		√		√		√		√		√		√		√		√	
17	CD-ROMs	√		√		√		√		√		√			X	√		√		√		√	
18	Electronic student projects and Thesis	√		√		√		√		√		√		√		√		√		√		√	
19	Institutional repository	√		√		√		√		√		√			X	√		√			X		X
20	OPAC(Online Catalogue)	√		√		√		√		√		√		√		√		√		√		√	
21	e-abstract	√		√		√		√		√		√		√		√		√		√		√	
22	e-databases	√		√		√		√		√		√		√		√		√		√		√	
23	e-report	√		√		√		√		√		√		√		√		√		√		√	
	Total	**22**		**23**		**23**		**23**		**23**		**23**		**20**		**21**		**23**		**22**		**21**	

Data from table 1 above which was collected through observation checklist shows that all the 23 print and electronic information resources are available in Baze University, Abuja; Veritas University; Nile University of Nigeria; Al-Hikmah University, Ilorin; Landmark University, Omu-Aran, Kwara State; and Bingham University New Karu. On the other hand, manuals are not available in African University of Science and Technology; Institutional repository is not available in University of Mkar. While, government publications and CD-ROMs are not available in Crown Hill University, Eiyenkorin, Kwara State; government publication and Institutional repository in Salem University, Lokoja. Also, Summit University, Offa, Kwara State do not have Literature book (novel, poems etc.), government publications and CD-ROMs. This revealed that the outlined information resources are available in most of the university libraries of the private universities under study.

Research Question 2: What is the extent of utilization of library and information resources for research productivity by academic staff of private universities in North Central, Nigeria?

Table 2: Mean Response on the extent of Utilization of Library and Information Resources for Research Productivity by Academic Staff of Private Universities in North Central, Nigeria

S/N	Types of Information Resources	VHE	HE	LE	VLE	$\bar{x}$	SD	Decision	Rank
	Print Information Resources								
1	Journals	410	175	74	66	3.28	0.98	Accepted	1st
2	Textbooks	279	282	135	29	3.12	0.85	Accepted	2nd
3	Conference proceedings	198	262	183	82	2.79	0.97	Accepted	3rd
4	Workshop papers	176	271	208	70	2.76	0.93	Accepted	4th
5	Student research projects	158	336	126	105	2.75	0.95	Accepted	5th
6	Encyclopedia	104	303	236	82	2.59	0.87	Accepted	6th
7	Dictionaries	128	231	247	119	2.51	0.97	Accepted	7th
8	Magazines	124	260	177	164	2.47	1.02	Rejected	8th
9	Manuals	83	309	178	155	2.44	0.95	Rejected	9th
10	Government publications	34	290	245	156	2.28	0.85	Rejected	10th
11	Literature book (novel, poems etc.)	76	179	262	208	2.17	0.96	Rejected	11th
12	Newspapers	33	215	301	176	2.14	0.84	Rejected	12th
	Electronic Information Resources								
13	Internet	588	99	34	4	3.75	0.56	Accepted	1st
14	e-journals	486	177	17	45	3.52	0.82	Accepted	2nd
15	e-books	427	233	24	41	3.44	0.81	Accepted	3rd
16	e-databases	332	193	93	107	3.03	1.08	Accepted	4th
17	Electronic student projects and Thesis	275	214	175	61	2.97	0.98	Accepted	5th
18	e-report	279	267	56	123	2.97	1.07	Accepted	5th
19	e-abstract	204	320	119	82	2.89	0.94	Accepted	7th
20	Institutional repository	229	191	260	45	2.83	0.95	Accepted	8th
21	e-newspapers	273	93	255	104	2.74	1.11	Accepted	9th
22	OPAC(Online Catalogue)	118	325	204	78	2.67	0.87	Accepted	10th
23	CD-ROMs	125	100	275	225	2.17	1.05	Rejected	11th

KEY: VHE – Very High Extent; HE – High Extent; LE – Low Extent; Very Low Extent

Data in table 2 shows the responses on the extent of utilization of library and information resources for research productivity by academic staff of private universities in North Central, Nigeria. From the results; print information resources such as Journals, Textbooks, Conference proceedings, Workshop papers, Student research projects,

Encyclopedia, and Dictionaries, with mean ranging from 2.51-3.28 were accepted by the academic staff as the major print information resources they utilize for their research. On the other hand, electronic information resources, Internet, e-journals, e-books, e-databases, Electronic student projects and Thesis, e-report, e-abstract, Institutional repository, e-newspapers, and OPAC (Online Catalogue), with mean ranging from 2.67-3.75 were accepted by the academic staff as major electronic information resources they utilize for research. The standard deviation of items 1-23 ranged from 0.56–1.11. This revealed that the respondents were fairly close to one another in their opinion on the items.

Hypothesis 1: There is no significant difference in the extent of utilization of library and information resources for research productivity by academic staff based on their institution of affiliation.

Table 3: Summary of ANOVA on mean ratings of Academic Staff in the extent of Utilization of Library and Information Resources for Research Productivity based on their Institution of Affiliation

S/N		Sum of Squares	Df	Mean Square	F	Sig.	Decision
1	Between Groups	5.353	10	.535	0.743	0.684	Not significant
	Within Groups	514.446	714	.721			

Table 7, reveals that the F value 0.743 is significant at 0.684. Since this significant level 0.684 is higher than 0.05 level of significance at which the null hypothesis is tested, the null hypothesis is therefore upheld. Hence, there was no significant difference in the extent of utilization of library and information resources for research productivity by academic staff based on their institution of affiliation.

Hypothesis 2: There is no significant difference in the extent of utilization of library and information resources for research productivity by academic staff based on their professional status (rank)

Table 4: Summary of ANOVA on mean ratings of Academic Staff in the extent of Utilization of Library and Information Resources for Research Productivity based on their Professional Status (rank)

S/N		Sum of Squares	Df	Mean Square	F	Sig.	Decision
1	Between Groups	102.030	6	17.005	29.226	0.000	Significant
	Within Groups	417.768	718	.582			

Table 8, reveals that the F value 29.226 is significant at 0.000. Since this significant level 0.000 is less than 0.05 level of significance at which the null hypothesis is tested, the null hypothesis is therefore rejected. Hence, there was a significant difference in the extent of utilization of library and information resources for research productivity by academic staff based on their professional status (rank).

Discussion

Types of Library and Information Resources Available for Utilization by Academic Staff in Private Universities in North Central, Nigeria.

The findings of the study revealed that, there is adequate availability of print and electronic information resources in university libraries of private universities in North Central, Nigeria which the academic staff utilizes for their research activities. This implies that both electronic and print information resources are adequately available in all the private university libraries studied in north central Nigeria.

The finding of the study is in accordance with that of Akinola and Ngeme (2021) who found out that there are adequate availability of print and electronic information resources in university libraries in federal universities in north central, Nigeria. The findings of the study also correspond with that of Joseph, Shaashie and Mathias (2020) who also found out that there are adequate information resources in university libraries. The similarities between the two findings might be due to time and the fact that both were carried out in university libraries in Nigeria.

Extent of utilization of library and information resources for research productivity by academic staff of private universities in North Central, Nigeria

The findings of the study revealed that, the extent of utilization of library and information resources for research productivity by academic staff of private universities in North Central, Nigeria is high. However, the extent of utilization of electronic information resources is higher than that of print information resources by academic staff for their research productivity. This is because print information resources such as Magazines, Manuals, Government publications, Literature book (novel, poems etc.) and Newspapers are utilized to a low extent when compared to the utilization of all the electronic information resources ranging from e-journal, e-books, e-newspaper, e-magazines, among other e-resources which are utilized to a high extent among the academic staff.

The finding of the study is in accordance with that of Ani, Ngulube, and Onyancha (2015) who found out that academic staff prefer electronic information resources more than print information resources when carrying out their research activities. Similarly, the finding is also in accordance with that of Ismail and Khan (2020) who found out that researchers prefer the use of internet or online information resources to the print information resources. The similarities among the findings justifies the established fact that electronic information resources are more recent, relevant and more accurate for evidence-based research than print information resources.

Conclusion

The study examined the utilization of library and information resources for research productivity by academic staff in private universities in North Central, Nigeria. Based on the findings, the study concluded that, private universities in North Central Nigeria have adequate information resources (print and electronic) for meeting the research information needs of academic staff for enhanced research productivity. However, the academic staff utilizes electronic information resources than print resources. The study also concluded that, the research productivity of academic staff in private universities in North Central, Nigeria is inadequate to promote the global ranking of the private universities internationally. Utilization

of library and information resources has the potentials to enhance the research productivity of academic staff of private universities when properly and adequately utilized.

Recommendations

The following recommendations were suggested by the researcher based on the findings of the study:

1. The University Management should endeavor to continue to create conducive environment for the utilization of library and information resources for research among the Academic Staff

2. Creating awareness of new arrival among Lecturers through text message or memo by the University Library Management

3. The University and University Library Management should ensure that the institution subscribes to more electronic resources since the academic staff prefers it when carrying out their research.

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