



Usage of Library Information Resources and Research Productivity among Lecturers in Federal Universities in South-South, Nigeria

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Abstract

The study investigated the relationship between usage of library information resources and research productivity among lecturers in federal universities in South- South, Nigeria. The research was anchored on correlational research design. From a population of 7,219 a sample size of 368 was drawn using accidental sampling technique. Data were collected from respondents via questionnaire and, analysed with frequency, mean and Pearson Product Moment Correlation Coefficient. The study found that there was no significant relationship between usage of library information resources and research productivity among lecturers in federal universities in South-South, Nigeria; usage of library information resources and research productivity among lecturers in federal universities in South-South, Nigeria were low, while challenges lecturers encountered in the process of research productivity were inadequate funds, excess workload, poor research facilities, delayed payment of research grant, inadequate management support, time pressure, deadline and publication cost. The study concluded that, usage of library information resources did not correlate with research productivity among lecturers in federal universities in South-South, Nigeria. It was recommended that Librarians in federal university should employ promotion strategies such as social media, posters, influencers and word - of - mouth marketing to create awareness of library information resources to lecturers, improve usage and consequently increase research productivity among lecturers.

Key Words: University library, information resources, usage, research productivity, Nigeria

Introduction

The functions of a university as an institution of higher learning are: teaching; learning; research and community service. Hence, the Federal Republic of Nigeria (2013) stated that "the goals of tertiary educational institutions in Nigeria include: quality teaching; research and development, and generation and dissemination of knowledge" (p. 26). Research function is central to other functions of institutions of higher learning, research conducted in universities is

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critical to the institutional growth and development which hitherto reflects on the national growth and development as well, as is the case with Nigeria. The notion of research entails free enquiry, painstaking search for the truth no matter where it leads, un-filtered intellectual engagement aimed at expanding the frontiers of knowledge, unbiased recording and interpretation of events with a view to unveiling new facts or trends and knowledge mining of systems in the universe (Falase, 2005, as cited in Okwilagwe & Ogbomo, 2012). Furthermore, Falase noted that “research occupies a strategic position as it is more important in wealth creation than the mere possession of raw materials because the key to sustainable socio-economic development comprises knowledge creation, processing, packaging and dissemination”. Research according to McMillan and Wergin, (2002 as cited in Okorodudu, 2013) was defined as a “systematic investigation, involving the analysis of information (data), to answer a question or contribute to our knowledge about an educational theory or practice” (p.29). Research is conducted in order to create awareness and to contribute to the body of knowledge in a particular field of study. It seeks to understand given situations like natural or social phenomena through observation or experimentation and to explain them for the benefit of mankind.

Quality research requires scholars’ awareness of accumulated knowledge, and easy access to information to construct their own theories and findings. Research provides a good platform for lecturers to become successful academics. It develops and reinforces the skills needed by academics for effective knowledge transfer. Research outputs come in the form of journal articles, published books, chapters in books, technical reports, conference papers, seminar papers, edited works, workshop papers, thesis and other types of publications. These research outputs enable academics to earn recognition in academic circles nationally and internationally.

Research productivity is the extent to which lecturers engage in their own research and publish articles in refereed journals, conference proceedings, writing a book or a chapter, gathering and analyzing original evidence, working with postgraduate students on dissertations and class projects, obtaining research grants, carrying out editorial duties, obtaining patents and licenses, writing monographs, developing experimental designs, producing work of an artistic or a creative nature and engaging in public debates and commentaries (Okonedo, 2015).

According to Okwilagwe and Ogbomo (2012), “scholarly publications are the primary means by which the outcome of academic work is expressed: it comes in the form of, Journal articles, books, conference proceedings, etc have been the primary delivery vehicle for determinants of productivity of researchers” (p.2). Publications based on published works are the primary means of disseminating academic research productivity. Academic institutions primarily measure research productivity based on published works, externally funded grants, and the number of citations the published work received in Google scholar, citation index and web of science which is a criterion for determining world class universities (Chiemeke, et al, 2009). Research productivity is the quantity of research in terms of publication output a lecturer is able to carry out within defined period.

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The use of information resources available in the library is a significant factor that could affect the research productivity of lecturers at Nigerian universities. Ajegbomogun and Popoola (2014) examined the influence of self-efficacy, accessibility, perceived usefulness and utilisation of internet and library resources as predictors of research productivity of lecturers in the University of Agriculture in Nigeria. Their findings demonstrated that respondents' self-efficacy, perceived usefulness, access to internet resources, and use of library resources all contributed significantly to their research output. As a result, optimising the use of library information resources may have a good impact on lecturers' research output.

Statement of the Problem

University lecturers are required to engage in teaching, learning, and research, as well as to publish the results of their research discoveries in respected publications. Despite the emphasis on research productivity as a measure of tenure and promotion, scholars have reported that research productivity among lecturers in Nigerian universities is low. This may have an impact on lecturers' research output since it is regarded as a measure of departmental and institutional prestige, and it is strongly linked to lecturers' reputation, visibility, and advancement in the academic reward structure. Variables such as the use of library information resources may be attributed to the decline in research productivity among lecturers. Therefore, this study investigated usage of university library information resources and research productivity among lecturers in federal universities in South-South, Nigeria.

Research Questions

The following research questions guided the study:

1. What is the extent of usage of library information resources by lecturers in federal universities in South-South, Nigeria?
2. What is the extent of research productivity among lecturers in federal universities in South-South, Nigeria from 2019-2021?
3. What are the challenges lecturers experienced in their research productivity in federal universities in South-South, Nigeria?

Hypothesis

The following hypothesis guided this study.

1. There will be no significant relationship between usage of library information resources and research productivity among lecturers in federal universities in South-South Nigeria.

Literature Review

The library is a collection of print and non-print materials (books, serials, audiovisuals, and other electronic resources) selected, acquired, organized, interpreted and made available to meet the information, and recreation needs of users. The libraries play vital roles in the selection, acquisition, organization, preservation and dissemination of information resources to users (including lecturers) in the university community. Libraries help to transfer information from the media to the mind (Odaro, 2010). Obodo et al. (2022) investigated library resources utilization in

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Nigerian university and found that “all library resources were used to a very high extent among lecturers at the Imo State University of Science and Technology, Owerri, Nigeria”. Ifijeh et al (2018) in a study, reported that “there was a high extent of utilization of academic library resources among lecturers in private universities in Nigeria”. Earlier, Kannappanavar and Manjunatha (2010, as cited in Ifijeh et al 2018) reported that lecturers made use of their University libraries to access information for teaching and research. In his study on utilisation of academic library resources for research productivity, Kumar (2009) observed that most users (lecturers) visited the library to borrow, study, search for information, or to read, and the purpose of their visits depended on time available and needs. Contrary to the reports above, Eke et al. (2016) investigated lecturers’ assessment of information resources and services in academic libraries in Imo State, Nigeria. They found that “a great number of lecturers 149(57%) used the information resources and services to a marginally low and very low extent”.

Ofodile and Ifijeh (2013) in a study found that “lecturers will use inter-library loan and commercial document delivery services and are willing to pay for such services, if it speeds up access to needed information”. Also, majority of them also indicated that, they frequently or sometimes placed print materials on the traditional reserve services at their institutions’ library for their students, and also recommended print resources. Again, some lecturers said that they have frequently, or sometimes used electronic resource services through their colleges or university libraries. The survey also revealed that the majority of them search library catalogues. Alshabrani (2013) while looking at how lecturers interact with digital tools, and how they organize their work in physical and virtual work places, found that, what lecturers and university researchers want, was to do their research, read and write about it, share it with others, and keep up in their fields.

The output of lecturers’ research published in scholarly publications and communications is referred to as research productivity (Ogbomo & Adekoya, 2019). It is usually defined in terms of publication that is easily quantifiable among the measures of faculty productivity. Webber (2011, as cited in Ogbomo & Adekoya, 2019, P. 70) noted “faculty productivity is discussed through the enumeration of research productivity, and research productivity in turn has most often been defined as the number of publications produced in a short period of time or a life time career”. Therefore, the quantity and quality of research publications of lecturers constitute their research productivity. The publications could be in the forms of journal articles, books, book chapters, monographs, conference papers and research proposals. Ekhurutomwen (2021) in a study on lecturers’ research productivity in universities in Nigeria, found that the level of lecturers’ productivity in the universities was low. Earlier, Ogbomo and Adekoya (2019) in their research on lecturers’ research productivity in South – west, Nigeria, revealed that “for a period of five years (2013-2017) there was low output of research productivity among librarians (lecturers) in universities in South – west, Nigeria. However, the lecturers’ articles in journal was high with a mean of 3.21. Also, Ifijeh et al (2018) found that majority of lecturers in private universities in in South - west, Nigeria have published between 1 – 5 times in a period of three years (2014 – 2016). The authors noted that scholarly books, chapter in books, journal articles

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and research reports written for funded project were some of the scholarly publications output of the lecturers.

Researchers have acknowledged that library resources are essential to supporting their research and productivity. Scholars have quantitatively investigated the correlation between library collection usage and research productivity among lecturers. In a study on research productivity and its relationship to library collections, De Groote et al (2020) found that “full-text article requests (from the library) has a significant effect on publications and full-text downloads uniquely explained 10.2% of the variation in publications” (P 29). In another investigation, Rawls (2015) found that research productivity was positively correlated with library investment and more specifically electronic library resources expenditure correlated positively with an increase in productivity. On the perceived value of the library to research productivity, Murray and Ireland (2018) in a study found that “institutions perceived the academic library as very involved (84.21%), somewhat involved (10.53%), or marginally involved (5.26%) in faculty research productivity”. In Nigeria, Ekhurutomwen (2021) in her research study, found that “there was a significant relationship between the use of library resources and lecturers’ research productivity in universities in South-south, Nigeria.

Research productivity is the best way to demonstrate lecturers’ research performance. Studies such as Kasule et al (2023), Ekhurutomwen (2021), De Groote et al (2020), Ogbomo and Adekoya (2019) and Salman et al (2018) have examined factors affecting the productivity of universities lecturers. Individual lecturer’s productivity studies have examined a wide range of factors such as age, experience, social-economic status, educational background along with several cultural organizational dimensions. Kasule et al (2023) conducted a study on research infrastructure and lecturer’s research output at Kyambogo University Kampala, Uganda. They found that “Kyambogo's research infrastructure is hampered by a lack of current equipment, office space, computer sets, software, remote library services, low online subscriptions, and poor internet connectivity, which affected the productivity of lecturers” (p. 28). Also, Salman et al (2018) noted that “data collection assistance, online access, funding, pay, promotion, training, internet speed, teaching load, technological advancement, self-satisfaction, conference impact, and peer recognition are all elements that influence research productivity” (p. 1049). Ekhurutomwen (2021) in a study reveals that “challenges affecting lecturers' research productivity in South-south Nigerian universities include inadequate funding, institutional support, government recognition, inadequate infrastructure, poor implementation, excessive workload, and non-payment of government grants”.

Methodology

The study utilized a correlational research design to examine the relationship between library information resource usage and research productivity. The population of the study was 7,219 lecturers from seven federal universities in South-South Nigeria, as shown in Table 1, and a sample size of 368 respondents was drawn. The sample size was chosen based on Krejcie and Morgan (1970) recommendation that a sample size of 368 is suitable for a population ranging from 7,000 to 9,000. A sampling fraction of 5.1% was used to determine respondents from each

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university, while accidental sampling was deployed to select each respondent. The instrument for data collection was the questionnaire. The questionnaire has three sections (A, B, & C). Section A was on extent of usage of library information resources. Items in the section were measured on a range of responses from very high (VH), high (H), low (L), very low (VL) to never (N). Section B, contained items on lecturers' research productivity with responses ranging from above 15 times, 6 – 10 times, 1 – 5 times to none (N). And section C, dwelt on challenges lecturers experienced in research productivity with the responses of agree and disagree. A total of 368 copies of the questionnaire were distributed with the aid of research assistants. Two hundred and sixty - eight (231) copies were returned and judged useful, resulting in a 63% response rate. Data assembled were analyzed using mean to answer research questions and Pearson Product Moment Correlation Coefficient (PPMCC) was used to test the hypothesis as 0.05 level of significant.

Table 1: Population and Sample Size

Name of University	Population	Sampled size
University of Benin, Benin City, Edo State	1,884	96
Nigerian Maritime University, Okorenkoko, Delta State	351	18
Federal University of Petroleum Resources Effurun, Delta State	149	8
Federal University, Otuoke, Bayelsa State	315	16
University of Calabar, Calabar, Cross River State	1,745	89
University of Uyo, Uyo, Akwa Ibom State	1,283	65
University of Port-Harcourt, Port-Harcourt, Rivers State	1,492	76
Total	7,219	368

Results

Research Question 1: What is the extent of usage of library information resources by lecturers in federal universities in South-South, Nigeria?

Data in Table 2 provided answer to the research question.

Table 2: Extent of Usage of Library Information Resources by Lecturers.

Library Information Resources	VH	H	L	VL	N	M
Books	40	110	60	21	00	3.73
Encyclopedias	20	45	65	80	21	2.83
Handbooks	00	00	15	35	180	1.28
Newspapers	50	71	56	50	04	3.48
Journals	40	71	60	58	02	3.42
Dictionaries	10	55	50	86	30	2.69
Maps and Atlases	01	03	10	20	197	1.22
Electronic Databases	01	04	15	181	30	1.98
E-Journals	01	04	14	179	33	1.96
Government Publications	01	03	07	45	175	1.31
Highwire Press	01	02	02	16	210	1.08
Ebscohost	02	05	15	30	179	1.35

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OPAC	00	01	02	13	215	1.08
CD-ROM	00	01	01	19	210	1.10
E-books	00	15	20	26	170	1.48
Jstor	00	01	01	20	209	1.10

Aggregate Mean = 1.94

Criterion Mean = 3.00

The results in Table 2 showed that there was low extent of usage of library information resources among lecturers in federal universities in South-South, Nigeria. This is as a result of the fact that, the aggregate mean of 1.94 is lower than the criterion mean of 3.00. However, books, newspapers, and journals were heavily used because their mean were above the criterion mean of 3.00.

Research Question 2: What is the extent of research productivity among lecturers in federal universities in South-South Nigeria from 2019 – 2021?

Data in Table 3 provided answer to the research question.

Table 3: Extent of Lecturers' Research Productivity

Research productivity item	Above 15 times	11 – 15 times	6 – 10 times	1 – 5 times	N	M
Published books	00	00	00	113	118	1.48
Books co-authored	00	00	05	55	171	1.28
Chapters in books	01	18	20	180	12	2.16
Technical reports	00	01	02	48	180	1.23
Technical papers	00	01	01	20	209	1.10
Articles in journals	2	29	150	50	00	2.92
Conference papers	00	06	110	115	00	2.52
Artistic work performed/exhibited	00	00	03	20	208	0.21
Audio and video/film produced	00	00	00	05	226	0.04
Bibliographies compiled	00	00	05	180	26	1.62
Edited works	00	00	01	78	152	0.68
Editorial duties	18	24	128	61	90	2.99
Theses and dissertations supervised	00	00	155	106	70	1.93

Aggregate Mean =1.55

Criterion Mean =3.00

Results in Table 3 revealed that lecturers' research productivity in federal universities in South-South, Nigeria, was low. The conclusion was reached because the aggregate mean of 1.55 was lower than the criterion mean of 3.00. However, the lecturers' editorial duties (2.99) and articles in journals (2.92) were encouraging. Also, the results revealed that audio and video/film produced was the least among lecturers' research productivity in federal universities in South-South, Nigeria.

Research Question 3: What are the challenges lecturers' experiences in their research productivity in federal universities in South-South Nigeria?

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Data in Table 4 provided answer to the research question.

Table 4: Challenges Lecturers experienced in their Research productivity

Challenges	Agree		Disagree	
	Freq.	%	Freq.	%
Inadequate funds	231	100	-	-
Inadequate management support	210	91	21	9
Time pressure and deadline	205	89	26	11
Excess workload	231	100	-	-
Delayed payment of research grant	225	97	06	3
Attendance to lectures/seminars	190	82	41	18
Participation in institutional administration	70	30	161	70
Inadequate time for research	180	78	51	22
Publication cost	195	84	36	16
Poor research facilities	231	100	-	-

Results in Table 4 showed the challenges lecturers encountered in their research productivity in federal universities in South-South, Nigeria. The study revealed that inadequate funds 231 (100%), excess workload 231 (100%), poor research facilities 231 (100%), delayed payment of research grant 225 (97.40%), inadequate management support 210 (90.90%), time pressure and deadline 205 (88.74%) and publication cost 195 (84.41%) are the challenges lecturers encountered in the process of research productivity.

Hypothesis 1: There is no significant relationship between usage of library information resources and research productivity among lecturers in federal universities in South-South Nigeria.

Data in Table 5 were used to test the stated hypothesis at 0.05 level of significance.

Table 5: Relationship between Usage of Library Information Resources and Research Productivity

		Extent of Usage of LIR	Lecturers' Research Productivity
Usage of LIR	Pearson Correlation	1	.225**
	Sig. (2-tailed)		.068
	N	231	231
Lecturers' Research Productivity	Pearson Correlation	.225**	1
	Sig. (2-tailed)	.068	
	N	231	231

From Table 5, Pearson Correlation Coefficient $r (=0.225)$. Since the significant value (Sig.2-tailed) is 0.068 (which is greater than 0.05) it means that the null hypothesis which states

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that there will be no significant relationship between usage of library information resources and research productivity among lecturers in federal universities in South-South, Nigeria, was accepted. Therefore, it can be concluded that there is no significant relationship between usage of library information resources and research productivity among lecturers in federal universities in South-South, Nigeria. The finding implies that an increase in usage of library information resources may not lead to a corresponding increase in lecturers' research productivity.

Discussion of the Findings

Usage of Library Information Resources by Lecturers in federal Universities in South-South, Nigeria

The study revealed that the extent of usage of library information resources by lecturers in federal universities in South-South Nigeria was low. This finding corroborates that of Ojo and Akande (2015), that which found "the level at which library resources are used by lecturers for academic activities was not high". The low usage of library information resources may be due to free access to free information resources in the internet, such as Open Access (OA) and Open Educational Resources (OER). These resources contain journal articles, course materials, textbooks, streaming videos, software, and any other material meant for teaching, research and learning that is made freely available and accessible at the point of use. Also, OA and OER materials are accessed through mobile phones, tablets and computers which lecturers have in their offices and so may not rely on the library resources.

Research Productivity among Lecturers in Federal Universities in South- south, Nigeria

The study found that the extent of research productivity among lecturers in federal universities in South-South, was low. This corroborated the finding of Ekhlorutomen (2021) which revealed that "the level of lecturers' research productivity in the universities in South-South, Nigeria, was low". However, the finding contradicted that of Okonedo (2015) which found that "research productivity of lecturers in public universities in South-West, Nigeria, was high within the period 2009-2014". The current finding may be related to the difficulties associated with the process of lecturers' research productivity, such as excessive workload, insufficient funding, publication costs, and inadequate research facilities. Also, low research productivity among lecturers in South-south, Nigeria, may be due to their low level of library information resources utilization. By not exploiting library resources optimally, lecturers may not have access to relevant information for higher research productivity.

Challenges in Research Productivity among Lecturers in Federal Universities in South-south, Nigeria

The study revealed inadequate funds, excess workload, poor research facilities, delayed payment of research grant, inadequate management support, time pressure and deadline, and publication cost as challenges they encountered in the process of research productivity. The finding is in consonant with that of Ekhlorutomen (2021) which found that "the problems militating against lecturers' research productivity in South-South, Nigeria, includes inadequate funds, lack of adequate institutional support, lack of adequate recognition and support from

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government, lack of adequate infrastructure for research, poor implementation of research recommendation and non-payment of research grants”.

Relationship between Usage of Library Information Resources and Research Productivity among Lecturers’ in Federal Universities in South-South, Nigeria.

The study established that there is no significant relationship between usage of library information resources and research productivity among lecturers in federal universities in South-South, Nigeria. This means that lecturers’ usage of library information resources did not influence their research productivity. This finding is at variance with that of Ekhurutomwen, (2021) which found that “there was a positive significant relationship between the use of library resources and lecturers’ research productivity in universities in Nigeria”. This finding may be due to low usage of library information resources among lecturers. Also, access to free information resources in the internet, such as Open Access (OA) and Open Educational Resources (OER). These resources contain journal articles, course materials, textbooks, streaming videos, software, and any other material meant for teaching, research and learning that is made freely available and accessible at the point of use. Lecturers use the free resources for research because the free materials are at their immediate reach in the office, home or remotely using mobile technologies which the university libraries could not offer.

Conclusion

The study empirically explored usage of library information resources and research productivity among lecturers in federal universities in South-South, Nigeria. The results indicated that there was low usage of library information resources among lecturers in federal universities in South-South, Nigeria. The level of research productivity was low and there was no significant relationship between usage of library information resources and research productivity among lecturers in federal universities in South-South, Nigeria. The study has demonstrated that the usage of library information resources did not influence research productivity among lecturers in federal university.

Recommendations

In view of the findings of this study, the following recommendations were made:

- i. Librarians in federal university should employ promotion strategies such as social media, posters, influencers and word – of - mouth marketing to create awareness of library information resources to lecturers. This may not only improve usage of library information resources but increases research productivity among lecturers.
- ii. University management should organize workshop and training on research productivity to expose lecturers to strategies for writing quality research works that meet international standards. provision of research grants, and create enabling academic environment that will encourage lecturers to write research.

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- iii. University management should step-up their funding strategies and provide easy access to research grant to mitigate the effects of inadequate funding, high publication cost and poor research facilities to enhance lecturers' research productivity.

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