ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158

KIJCL @ 2024



Kijcl.khairun.edu.ng

RELATIONSHIP BETWEEN RECOGNITION OF INFORMATION NEEDS, ACCESS TO INFORMATION AND RESEARCH PRODUCTIVITY AMONG LECTURERS IN FEDERAL UNIVERSITIES IN NORTH-WEST, NIGERIA

by

Auwalu Muhammad Giginyu

Department of Library and Information Sciences, Bayero University, Kano, Nigeria

amgiginyu.lis@buk.edu.ng

and

Prof. A. U. Echedom

Department of Library and Information Science, Nnamdi Azikiwe University, Awka,

Nigeria

au.echedom@unizik.edu.ng

Abstract

In order to conduct quality research, lecturers must acquire certain skills that will allow them to generate a vast amount of research products. The paper examined relationship between lecturers' ability to recognize information needs, ability to access information and research productivity. Two research questions guided the study and two hypotheses were tested at 0.05 level of significance. The descriptive correlational research design was employed. The population of the study was 9,839 lecturers of 12 federal universities in the north-west states of Nigeria. The sample size of the study was 368 lecturers and a random selection of respondents was made from each university. The research instrument was administered to the respondents directly by the researchers. The returned copies of questionnaire was analyzed using inferential statistics. The Pearson Product Moment Correlation Coefficient r was used to answer the research questions and regression analysis was used to test the hypotheses. Findings from data analysis revealed that, there is significant strong positive relationship between lecturers' score on the ability to recognize information needs and research productivity in the federal universities in the North-west, Nigeria. The findings also revealed that, there is significant weak positive relationship between lecturers' score on the ability to access information and research

MAIDEN EDITION

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

productivity in the federal universities in the North-west, Nigeria. The study recommended that, universities should provide training in information literacy through a variety of channels, including lectures, conferences, and symposiums. It was also recommended that, should to make available information resources on various sources to lecturers and other users in such a way that users and devise mechanisms that facilitate access and retrieval.

Keywords: Recognition of information needs, access to information, research productivity, federal universities, North-west, Nigeria

Introduction

Information literacy skills is the ability of person to recognize when information is needed, ability to access information, ability to evaluate information and the ability to use needed information. These skills are highly needed in this era where information is produced in large amount on different sources. In order to carry out research there is need for lecturers to acquire some skills that will enable them to come up with huge amount of research outputs. The ability to recognize an information need and the definition of that need, is the first step towards achieving information literacy skills. The recognition of a need or problem is often said to be the beginning of the solution of that problem. A need is a fact or feeling of the lack of something (Vasudevan, 2012). In other words, the lecturers must be aware of their information need; aware of possible sources of information, knows their cost implications, and understands the benefit of getting the needed information. Awareness is knowledge about something that exists or understanding of a situation or subject based on information or experience. It can also be seen as knowledge or perception of a situation, fact, consciousness, recognition, realization, grasp and acknowledgement; concern about and well-informed interest or familiarity in a particular situation or development (Akpojotor, 2016). Ojedokun (2007) affirms that lectures will need ideas for a research topic that will interest him as well as others. The lecturers will need to research on a subject that is timely; something for which information exists but on which not too much has already been written. Abbot (2014) maintains that the need to solve information need is what drives the research. Foster (2014) affirms that the greater challenge of the researchers lies in the recognition of the information need. It is easier to search when your research topic is clearly defined (Monash University, 2017).

The ability to access information can be defined as the ability to search for information, find and obtain the information from a given source (Bolek et al., 2018). The access to information resources is the second important aspect of information literacy skills. This is because the traditional technique of accessing information was characterized by some challenges, which made libraries embrace technological opportunity by introducing digital library to their users in

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

facilitating access to global information. This traditional system of accessing information in libraries is gradually giving way to digital system, where users only require a computer connected to the internet to access information (Issa, Sereme, Mutshewa & Bwalya, 2014). According to Obembe (2020) in the present information age, which characterized by information explosion and information overload there is need for lecturers to possess information literacy skills so as to effectively and efficiently use information resources.

The study of Ikenwe and Anaehobi (2020) found out that there was low positive relationship between abilities to identify the extent of information, access information in the utilization of digital library resources in Federal Universities, Southern Nigeria. The findings of Yazon, Ang-Manaig, Buama and Tesoro (2019) revealed that there was a strong and significant relationship between faculty members' ability to recognize the information need and research productivity of the educators in Laguna, Philippines. The findings of Adetomiwa (2020) revealed that, the private university lecturers in southwestern Nigeria were able to use various browsers to access information. They were also able to narrow search using Boolean operator, truncation and phrase searching. It was also revealed that, the above abilities influence the research productivity of the private university lecturers. It was recommended among others that, there should be continuous acquisition of relevant information literacy skills by academic staff to enable them identify and use specific e-resources in their various disciplines. The findings Noll, and Wilkins (2021) showed among others that, the information is available to lecturers through different sources such as the Internet, libraries, and contact with friends and authorities. However, lecturers were limited in respect to access to relevant online resources for their academic activities due to inadequate information access skills which affect their research productivity negatively.

The ability to recognize information needs and have access to information is crucial for university lecturers to achieve high levels of research productivity. Based on observations that some university lecturers are unable to identify when information is needed, they search for information at a later stage and encounter many challenges in the process of finding what they need, which may result in low-quality research outputs, this paper examined the relationship between ability to recognize information needs, access to information and research productivity among lecturers at federal universities in North-West Nigeria.

Research Questions

The following research questions guided the work

1. What is the relationship between lecturers' ability to recognize information needs and research productivity in federal universities in North-West Nigeria?

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158

KIJCL @ 2024



Kijcl.khairun.edu.ng

2. What is the relationship between lecturers' ability to access information and research productivity in federal universities in North-West Nigeria?

Hypotheses

The following null hypotheses were formulated and be tested for the study at 0.05 level of significance.

- 1. H_{o1}: There is no significant relationship between lecturers' score on ability to recognize information needs and research productivity in federal universities in North-West, Nigeria
- 2. H_{o2}: There is no significant relationship between lecturers' score on ability to access information and research productivity in federal universities in North-West, Nigeria

Methodology

The descriptive correlational research design was employed. This design was chosen because it allows the researcher to explore the relationship that exist between variables of the study without manipulation. The population of the study comprised number of lecturers in 12 federal universities of North=west, Nigeria. These universities include Ahmadu Bello University, Zaria, Bayero University, Kano, Usmanu Danfodiyo Unversity, Sokoto, Nigerian Defense Academy, Kaduna, Federal University, Birnin Kebbi, Federal University, Dutse, Federal University, Dutsin-ma, Federal University, Gusau, Nigeria Police Academy, Wudil, Kano, Air force Institute of Technology, Kaduna, Federal University of Agriculture, Zuru and Federal University of Technology, Babura. The total number of lecturers in these universities was 9,839 lecturers. The sample size of the study is 368 lecturers. The sample size was determined by published table for sample size selection. In order to ensure the relative proportions of lecturers in the final sample match those in the parent population, a random selection of respondents was made from each university. The instrument of the study was divided into two parts; achievement test and structured questionnaire. Achievement test solicited information on the ability of lecturers to recognize information needs and ability of lecturers to access information. On the other hand structured questionnaire solicited information on the research productivity of the lecturers. The research instrument was administered to the respondents directly by the researcher. This approach has advantage of ensuring optimum response, clarification of misconception on any item in the instrument, speeding up the process as well as enabling researcher to be familiar with the environment. The returned copies of questionnaire was analyzed using inferential statistics. The Pearson Product Moment Correlation Coefficient r was used to answer the research questions. The

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

choice of this tool is because the study is aimed to measure the relationship between variables. Simple regression analysis was used to test the hypotheses.

Answering Research Questions

Research Question 1: What is the relationship between lecturers' ability to recognize information needs and research productivity in federal universities in North-West Nigeria?

Table 1: Pearson r on Lecturers' ability to recognize information needs and research productivity

| Source of Variation | Ν | Lecturers' ability | Research | Remarks | |
|-----------------------------|-----|--------------------|--------------|-----------------|--|
| | | to recognize | productivity | | |
| | | information | | | |
| | | needs | | | |
| Lecturers' ability to | 333 | 1 | .969 | Strong Positive | |
| recognize information needs | | | | Relationship | |
| Research productivity | 333 | .969 | 1 | | |

Table 1 shows a strong positive relationship (r=.969) existing between lecturers' ability to recognize information needs and research productivity in federal universities in North-west, Nigeria. This indicates that an increase in the lecturers' ability to recognize information needs could result in a rise in their research productivity. This describes how lecturers' high levels of research productivity are largely a result of their ability to recognize information needs.

Research Question 2: What is the relationship between lecturers' ability to access information and research productivity in federal universities in North-West Nigeria?

Table 2: Pearson r on Lecturers' ability to access information and research productivity

| Source of Variation | N | Lecturers' ability | | Research | Remarks |
|---------------------|---|--------------------|--------|--------------|---------|
| | | to | access | productivity | |
| | | information | | | |

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

| Lecturers' ability to access information | 333 | 1 | .207 | Weak Positive Relationship |
|--|-----|------|------|-------------------------------|
| Research productivity | 333 | .207 | 1 | |

Table 2 shows a weak positive relationship (r=.207) existing between lecturers' ability to access information and research productivity in federal universities in North-west, Nigeria. This indicates that an increase/decrease in the lecturers' ability to access information could result in a rise/fall in their research productivity. The fact that there is a weak positive correlation between the variables may indicate that variables other than ability to access information have an effect on research productivity.

Testing Hypotheses

H_{ol}: There is no significant relationship between lecturers' score on ability to recognize information needs and research productivity in federal universities in North-West, Nigeria

 Table 3: Relationship between lecturers' score on ability to recognize information needs and research productivity

| Source of | Ν | Lecturers' | ability | to | Research | df | P- | Remark |
|--------------------|-----|------------|-----------|----|--------------|-----|-------|--------|
| Variation | | recognize | informati | on | productivity | | value | |
| | | needs | | | | | | |
| Lecturers' ability | 333 | 1 | | | .969 | 967 | .000 | Sig. |
| to recognize | | | | | | | | |
| information needs | | | | | | | | |
| Research | 333 | .969 | | | 1 | | | |
| productivity | | | | | | | | |

Table 3 shows the result of correlation indicates that there was a significant strong positive relationship between lecturers' ability to recognize information needs and research productivity in federal universities in North-West, Nigeria, r = .969, df = 967 p = 0.00. Therefore, the null hypothesis on no significant relationship between lecturers' ability to recognize information needs and research productivity was rejected. The implication of this is that a significant relationship exist between lecturers' ability to recognize information needs and research productivity in the federal universities in North-West, Nigeria.

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



KIJCL @ 2024

 H_{o2} : There is no significant relationship between lecturers' score on ability to access information and research productivity in federal universities in North-West, Nigeria

Table 4: Relationship between lecturers' score on ability to access information and research productivity

| Source | of | Ν | Lecturers' | ability | to | Research | df | P- | Remark |
|-------------|---------|-----|--------------|---------|----|--------------|-----|-------|--------|
| Variation | | | access infor | mation | | productivity | | value | |
| Lecturers' | ability | 333 | 1 | | | .207 | 205 | .000 | Sig. |
| to | access | | | | | | | | |
| information | 1 | | | | | | | | |
| Research | | 333 | .207 | | | 1 | | | |
| productivit | У | | | | | | | | |

Table 4 shows the result of correlation indicates that there was a significant weak positive relationship between lecturers' ability to access information and research productivity in federal universities in North-West, Nigeria, r = .207, df = 205 p = 0.00. Therefore, the null hypothesis on no significant relationship between lecturers' ability to access information and research productivity was rejected, implying that a significant relationship exist between lecturers' ability to access information and research productivity in the federal universities in North-West, Nigeria. **Discussion of Results**

Relationship between Ability to Recognize Information Needs and Research Productivity.

The result of study revealed that there is a significant strong positive relationship between lecturers' ability to recognize information needs and research productivity in federal universities in North-west, Nigeria. By implication the extent of lecturers' ability to recognize information needs will predict the level of research productivity in universities. In order to carry out quality research lecturers need to have a good ability to recognize the information needs and how to meet their needs. Therefore lecturers need to understand and recognize when information is needed in order to effectively conduct quality research. This study supported the findings of llevbare, Enang and Ukpanah (2022) that there was a relationship between lecturers' recognition of information needs skill and research productivity.

Rafique (2019) emphasized the need of academic staff to possess skills needed to identify a need for information and find such information that will assist them to response to research questions. By implication, lecturers are required to be able to ascertaining and exploring the information

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

needs as prerequisite for the quality research productivity. Thus, at the basic level, ability to recognize information need is instrumental to the effectiveness of research productivity in universities. The beginning of every research is identification of a problem and subsequent need for information to systematically solve the identified problem. As such, for lecturers to effectively have quality research, they are expected to be knowledgeable in the concept of information needs. However, to improve their knowledge of information needs, lecturers must do well to engage in creating means of acquiring knowledge on the information needs through discussions, online courses and others.to this end university libraries must be proactive in the provision of services to the faculty members.

Relationship between Ability to Access Information and Research Productivity

The study revealed that there is weak positive significant relationship between lectures' ability to access information and research productivity in federal universities in North-west. This study replicated the findings of Afolabi and Oladokun (2020) that there is a significant relationship between ability to access information and research productivity among Lead City University scholars, in Nigeria. Kennan et al. (2014) noted that lecturers must be able to carry out literature searching which reflects their ability to systematically access information. Consequent to the aforementioned, libraries provision of research productivity is determined by their ability to access information, especially as the information is the basic element of every research endevours. This gives credence to the ability to access information as a predicting factor of research productivity in universities. The positive significant correlation between ability to access information and research productivity could also be implied in the study of Olakunle and Olanrewaju (2019) that indicates a significant relationship between ability to access information and research productivity. The study revealed that 782 academic staff from 12 research institutes in South West Nigeria were able to access information materials provided by the libraries. Such ability enable them to search information sources that meet their research needs. However, for lecturers to improve their ability to access information, they must consciously undergo trainings which aimed at improving their information access skills. This include the acquisition of associated ICT skills which act as enablers of information accessibility. Thus, ability to access information is critical to research productivity in universities.

Summary of Findings

Findings from data analysis revealed that:

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

- 1. There is significant strong positive relationship between lecturers' score on the ability to recognize information needs and research productivity in the federal universities in the North-west, Nigeria
- 2. There is significant weak positive relationship between lecturers' score on the ability to access information and research productivity in the federal universities in the North-west, Nigeria

Conclusion

Based on the results from the analysis of data and discussion of findings it was concluded that lecturers' ability to recognize information needs will increase the research productivity in universities. It was also concluded that the research productivity in universities will rise with the lecturers' ability to access information.

Implications of the Study

The practical implication which can be deduced from this study based on the results, include the following:

- 1. The study has been able to reinforce the need for lecturers working in universities to plan their personal and professional development to accommodate information literacy dimensions
- 2. The study has given empirical backing to the fact that university management must create avenue for the acquisition of information literacy skills to the lecturers in universities.

Recommendations

The following recommendations were made in light of the study's findings:

1. Universities should provide training in information literacy through a variety of channels, including lectures, conferences, and symposiums.

2. In an effort to fulfill their responsibility of facilitating access to the resources, university libraries should to make available information resources on various sources to lecturers and other users.

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

References

- Abbott, A. (2014). *Digital papers: A manual for research and writing with library and Internet materials*. University of Chicago Press, Chicago, 259p.
- Adetomiwa (2020). Predictors of research productivity in private universities in southwestern Nigeria. *Journal of information science* 26.4: 227-237.
- Akpojotor, L. O. (2016). Awareness and usage of electronic information resources among postgraduate students of library and information science in Southern Nigeria. Retrieved from <u>http://Digitalcommons.unl.edu/cgi/viewcontent.cgi</u>? article387context=libphilprc on 15th March, 2023.
- Bolek, V., Kokles, M., Romanova, A. & Zelina, M. (2018). Information literacy of managers: models and factors. *Journal of Business Economics and Management*, 19 (5), 722-741. doi:10.3846/jbem.2018.6906.
- Foster, N. F. (2014). Information literacy and research practices. <u>www.sr.thaka.org/wp-content/Uploads/2014/11/SR</u>. Retrieved on 14th October 2018.
- Ikenwe, J. I. & Anaehobi S. E. (2020). Ability to identify extent of information need and access information as correlates of utilization of digital library resources by lecturers. <u>Digital</u> <u>Library Perspectives</u>, 36(3), 265-279. Retrieved from <u>https://doi.org/10.1108/DLP-03-2020-0015. on 23rd March, 2023.</u>
- Issa, A. Sereme, B.C. Mutshewa, A. & Bwalya,K.J. (2014). The adoption and usage of digital library resources by academic staff in Nigerian universities: a case study of university of Ilorin,. *IEEETCDL*, 74-81. Retrieved from www.ieee-tcdl.org>paperisa Digitallibraryresources on 12th July, 2023.
- Monash University (2017). *Managing results*. Retrieved from http://lib.monash.edu/managing-results/10 on 4th July 2023.
- Noll, C. L., & Wilkins, M. (2021) Information skills for an electronic world: training University lecturers for research output. *Journal of Information Technology Education. Research*, 4, 376.
- Obembe, H. B. (2020). Survey on the utilization of electronic resources in colleges and universities in Ghana. *The Electronic Library*, 48 (6), 828-840.

ISSN: XXXX-XXX

MAIDEN EDITION

DOI: https://doi.org/10.5281/zenodo.13886158



Kijcl.khairun.edu.ng

KIJCL @ 2024

- Ojedokun, A. A. (2007). *Information Literacy for Tertiary Education Students in Africa*, Third world information services, Ibadan.
- Vasudevan, T. M. (2012). Information literacy of research scholars of Universities in Kerala. University of Calicut. Retrieved from http://shodhganga.inflibnet.ac.in/handle/robs on 23rd July, 2023.
- Yazon, A. D., Ang-Manaig, K., Buama, C. A. C., & Tesoro, J. F. B. (2019). Digital literacy, digital competence and research productivity of educators. *Universal Journal of Educational Research*, 7(8), 1734-1743.