

ACCESSIBILITY AND PERCEIVED USEFULNESS OF LIBRARY ELECTRONIC INFORMATION RESOURCES ON POSTGRADUATE STUDENTS' ACADEMIC ACTIVITIES IN NORTH-CENTRAL NIGERIA

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Abstract

The study determined the accessibility and perceived usefulness of library electronic information resources on postgraduate students' academic activities in North-Central Nigeria. The specific objectives of the study were to: determine the level of accessibility of library electronic information resources for academic activities by postgraduate students in North-central, Nigeria and to determine the level of perceived usefulness of library electronic information resources for academic activities by postgraduate students in North-Central, Nigeria. The population of the study is 15,338 postgraduate students enrolled in the government-owned Universities in North-Central Nigeria as of the 2015/2016 academic session. A survey research design was adopted for the study. The study was guided by two research objectives. A questionnaire was used as the instrument for data collection to a sampled population of 566 postgraduate students. Data was analysed using descriptive and inferential statistics such as percentages, mean scores, and standard deviation. The study revealed that postgraduate students have access to e-books, e-journals, films, e-newspapers, e-theses, bibliographic databases, e-reports, CD-ROMs, and e-zines at a very high level. Findings also revealed that postgraduate students' perception of the usefulness of library electronic information resources is very high. It was concluded that postgraduate students have access to e-books and e-journals among other relevant electronic resources. It was recommended that university library management should always grant maximum access to the postgraduate students on other relevant electronic resources which is not limited to only e-books and e-journals and that quality orientation and training should be given to the postgraduate students upon getting admitted into the university so that they would have a better understanding on how to make use of these resources to enable them to address the various gaps in knowledge and also achieve academic excellence.

Keywords: Accessibility, Perceived Usefulness, Academic activities, Information resources.

Introduction

University libraries are primarily established to support the university learning process, serve as the storehouses of knowledge, help in research development and satisfy the information needs of the staff and students of the institution. This is in line with the submission of Okiy (2012) that the university libraries share similar roles with other academic libraries like polytechnic libraries and College of Education libraries, which are to effectively support their institutions in meeting the key functions of teaching, research, and

community service. These institutions are responsible for the production of middle and higher-level manpower for national development.

The standard of a university library is usually measured by the quality of the collection, staff, services, equipment, and space at its disposal; hence the quality of information resources available is a function of the services offered by any library. Information resources which are both in print and non-print formats can be made available in the library via several methods which are not limited to purchase, subscription, gift, and exchange, interlibrary loan, and bequeath. The extent to which they can effectively accomplish that task depends largely on how well their libraries are equipped with the relevant and needed information resources. This agrees with the position of Ajibero in Udofot (2016) that if a university library scores less than 70% during accreditation and scores 100% in other components; the discipline with a deficiency in their library stock will be denied accreditation.

Postgraduate students use the libraries to search for current, adequate, and relevant electronic information resources for effective study and research. According to Quadriet *al.* (2014), university libraries are established to provide adequate and relevant information resources both in print and non-print formats. These print formats include; journals, textbooks magazines, newspapers, and many reference materials. The non-print materials include CD-ROM, audiovisual materials, microfilms, databases, micro fitches, electronic journals, and other electronic resources. With the advent of Information and Communication Technology (ICT) facilities in almost every sector, libraries that were formerly regarded as storehouses of knowledge have a new look with the integration of modern Information and Communication Technologies especially in the academic activities of postgraduate students.

Electronic information resources have tremendously helped in improving the academic activities of postgraduate students by providing them with current and relevant literature to carry out their researches. Undergraduate students, Postgraduate students and other researchers have benefited from electronic information resources in so many ways which include; provision of current literature, carrying out their assignments, participating in online discussions, seminar presentations, academic conferences and most importantly, acting as a guide to write their projects/theses. Information resources in electronic formats are categorised as information resources in various forms which include electronic books, electronic journals, films, CD-ROMs and many fixed media.

Several information resources which are in electronic form are brand new innovations that represent the analogue media; these are the millions of web pages and databases produced all over the globe by either individuals, corporate organisations, institutions and or government agencies. These innovations symbolise a number of different types of information including descriptive materials, datasets, corporate reports, theses and dissertations, and many more. Many universities now require that their students submit their theses and dissertations in electronic format for easy access and utilisation (Tiwari, 2008).

Accessibility of information resources is an important aspect of literature search. Ntui and Udah (2015) pointed that accessibility of library resources means the ease in location and retrieval of various information from the numerous information storage media. Accessibility in general terms is used to describe the degree to which a system is useable by a wide range of users as possible. That is to say, it is the degree of ease with which it is possible to reach a certain location from other locations. Accessibility can also be viewed as the ability to access the functionality and possible benefit of some system or entity (Nwachukwu et al. 2014). Accessibility of library electronic information resources determines the availability and usefulness of these resources.

Perceived usefulness (PU) in this context is viewed as the degree to which postgraduate students in North-Central Nigeria believe that using library electronic information resources (LEIR) would enhance his or her academic activities. It is the perception of a user towards a particular resource that determines if the information resource is to be used or not. The use of any information resource depends on its usefulness to the user, (Izuagbe et. al 2016).

Problem Statement

University management spends huge amount of money from its budget in subscribing to various e-resources for the library (Adeleke & Makinde, 2020). The level to which postgraduate students access and perceive the usefulness of these research oriented resources remain very unclear.

This is a very worrisome situation for students in Nigerian higher institutions. There is no doubt that access and use of quality information resources is the key to academic excellence in universities. University libraries in Nigeria are storehouses of knowledge that provide different types of information resources for students and staff to improve on their research output and academic activities. Recently in Nigeria, electronic information resources have been added to these lists of resources. Electronic information resources also provide students with opportunities to access relevant and current literature whilst complimenting the printed materials. Physical observation and verbal interactions have shown that there are available electronic information resources for postgraduate students to utilise in the university libraries, but the factors influencing their level of access and utilisation by postgraduate students for academic activities remain unclear. Thus, this study seeks to ascertain how accessibility and utilisation of electronic information resources could influence the academic activities of postgraduate students in universities in North Central Nigeria.

Study Objectives

The main objective of this study is to examine how accessibility and utilisation of electronic information resources could influence the academic activities of postgraduate students in universities in North Central Nigeria. The specific objectives are to:

4. Determine the level of accessibility of library electronic information resources by postgraduate students in North Central, Nigeria for academic activities.
5. Determine the level of perceived usefulness of library electronic information resources by postgraduate students in North Central, Nigeria for academic activities.

Literature Review

Concepts of Postgraduate Students

According to Udofot (2016), Postgraduate students are students who have continued to study for higher degrees after obtaining a bachelor's degree or its equivalents. Postgraduate students usually involve themselves in more advanced study which requires succinct information resources in order to accomplish their research.

Postgraduate studies represent a specific field of knowledge which is accepted by a university or other institutions of higher education. Udofot (2016) postulated that the word "postgraduate" represents the insinuation that the person undergoing such studies must have been through with a formal Bachelor's degree, and now enrolled for a Postgraduate Diploma, Master's and at some points the PhD, at a qualified university or tertiary institution. The researcher further asserted that the nature of postgraduate study programmes varies considerably from one university to another, and even within an institution, sometimes depending on the mandate of the establishment of a particular institution. The researcher further stated that the aim of postgraduate studies is not automatically to make an innovation discovery or a major technical invention. Rather, it means a machinery by which graduate students study how to commence a methodical research, which is based on the works already carried out by peers in the same area of study, and thereafter, spread the present state of knowledge. In the framework of assessment of a postgraduate study programme, it is usually the methodical technique of research and enquiry that is given more consideration than the level to which information is extended.

Accessibility of Library E-Information Resources

Several studies have been carried out on the influence of accessibility and perceived usefulness of library electronic information resources. For instance, Kumar and Singh (2011) studied Access and Use of Electronic Information Resources by Scientists of National Physical Laboratory in India. The research aimed to determine the usefulness of electronic resources to the scientists of the National Physical Laboratory, New Delhi India, and their skills in utilising various search methods and techniques to access and utilise these resources. It was survey research that combined questionnaires and interviews as instruments for data collection. The study has a sample size of 75 scientists, and the data were analysed using the simple calculation of percentage method. The findings revealed that access and use of electronic information resources is an important component of research activities for scientists. This study shares similar characteristics with the present study in the areas of

utilisation of electronic resources, survey, and the use of questionnaires as instruments for data collection. They also share similarities in the area of data analysis. The clear differences between the two studies are that the present study is a university-based research and is being conducted in Nigeria while the former is not.

In another study, Nwachukwu et. al (2014), studied the availability, accessibility, and use of information resources and services among information seekers of Lafia public library, Nasarawa State. The study was survey research that sampled a total population of 114 users. A questionnaire was used as the instrument for data collection. Data were analysed using frequency tables and simple percentages. The study revealed that information resources of Lafia public library are used mostly for solving assignment questions by secondary school students. The study concluded that the effectiveness of any library depends on the availability, accessibility, and utilisation of information resources by users. It was recommended among others that public library management should improve on the availability, accessibility, and utilisation of its information resources.

This research work also shares a few similarities with the current research in the areas of accessibility and utilisation of information resources. They are both descriptive surveys and questionnaires were the instrument for data collection. The major disparity in the two research works is that the former research studied the general public who are the patrons of public libraries while the current research studied postgraduate students in the universities in North-Central Nigeria.

In yet another study, Akpojotor (2017) studied the perception of ease and usefulness of electronic information resources among postgraduate students of library and information science in southern Nigerian universities. The study aimed to determine the perception of postgraduate students of library and information science towards electronic information resources in southern Nigerian universities. A survey research design was adopted for the study. The sample size for the study was 375, questionnaire was used as the instrument for data collection, data were analysed using simple percent statistical tools and the Person Product Moment Correlation Coefficient (PPMCC) was used to test the hypothesis. The study found that postgraduate students have a very high positive perception towards the ease of use and usefulness of electronic information resources. The study concluded that electronic information resources are essential tools for the empowerment of postgraduate students.

The former research shared several similarities with the present study in the areas of research design, an instrument for data collection, audience, and data analysis. The few major notable disparities among the two research works are that they were conducted in two different geopolitical zones of Nigeria; southern and northern Nigeria respectively. Also, the former studied only the postgraduate students in the department of library and information science while the present study covered all the postgraduate students in north-central Nigeria irrespective of their disciplines.

In another related study, Adetunla (2016) researched the perceived ease and use of electronic information resources by undergraduate students in private universities in Oyo state. The study aimed to examine the awareness, perceived ease, and use of electronic information resources by undergraduate students of private universities in Oyo state. The study used a descriptive survey design with a population of 2,171 undergraduate students. The sample size of the study was determined using the multi-stage sampling technique. The instrument for data collection was a questionnaire and the data were analysed using descriptive statistics and Pearson Product Moment Correlation (PPMC) was used to test the hypothesis. The study found that electronic information resources were perceived to be complex, non-flexible, and non-easy to use. The study concluded that students perceived electronic information resources as complex and flexible to use. It was recommended that there should be technical support and training of undergraduate students to ensure optimal use of electronic information resources.

The former study is closely related to the current research in terms of design, sampling technique, an instrument for data collection and analysis, but differs in terms of audience and geographical scope. The former studied undergraduate students in only one state in southwestern Nigeria while the present research focuses on postgraduate students in the north-central zone of Nigeria.

Methodology

The study adopted a quantitative approach where data was collected through the use of a structured questionnaire which was directly administered to the respondents. The population of the study comprised all 15, 338 postgraduate students in five federal and five state universities in North-Central Nigeria as at 2015/2016 academic session. Sample size for the study was 566, which was determined using Browler's allocation formula as in (Abedoh, 2018). The two research questions were answered through the questionnaire. Data collected were analysed using descriptive statistics such as percentages, mean scores and standard deviation.

Results

Table 1: Response of Postgraduate Students on Accessibility of Library Electronic Information Resources.

S/N	Items	Very high (VH)	High (H)	Low (L)	Very low (VL)	X	S	Decision
1	E-books Resources, online and offline databases	236(43.9)	221(41.1)	62(11.5)	20 (3.7)	3.26	0.79	Accepted

2	E-journals and conference proceedings.	141(26.2)	297(55.2)	73(13.6)	28(5)	3.03	0.77	Accepted
3	Films	111(20.6)	197(36.6)	177(32.8)	54(10.0)	2.68	0.91	Accepted
4	CD-ROMs	108(20.1)	200(37.2)	165(30.7)	66(12)	2.66	0.93	Accepted
5	E-zines	77(14.3)	191(35.5)	209(38.8)	62(11.5)	2.53	0.87	Accepted
6	E-theses	129(24.0)	241(44.8)	128(23.8)	40(7.4)	2.86	0.86	Accepted
7	E-newspapers	137(25.5)	241(44.8)	120(22.3)	41(7.6)	2.87	0.87	Accepted
8	E-reports	123(23.9)	241(44.8)	133(24.7)	42(7.7)	2.83	0.86	Accepted
9	Bibliographic databases	133(24.7)	227(42.2)	144(26.8)	35(6.4)	2.86	0.86	Accepted
10	Others please specify							

Research question one examined the accessibility of library electronic information resources by postgraduates. It was revealed that 236 respondents representing 43.9% of the postgraduate students indicated that they have very high access on e-book resources, 221 representing 41.1% indicated high, 62 representing 11.5% indicated low and 20 representing 3.7% indicated very low. On accessibility of e-journals, 141 respondents representing 26.2% indicated very high, 297 representing 52.2% indicated high, 73 representing 13.6% indicated low and 28 representing 5% indicated very low. The Table revealed that, 111 respondents representing 20.6% of the postgraduate students indicated very high on the utilisation of films, 197 representing 36.6% indicated high, 177 representing 32.8% indicated low and 54 representing 10.0% indicated very low. Equally, 108 respondents representing 20.1% of the postgraduate students indicated very high for the utilisation of CD-ROMs, 200 representing 37.2% rated high, 165 representing 30.7% rated low and 66 representing 12% rated very low. On accessibility of e-zines, 77 respondents representing 14.3 postgraduate students indicated very high, 191 representing 35.5% indicated high, 209 representing 38.8% indicated low and 62 representing 11.5% rated very low. On accessibility of e-theses, 129 respondents representing 24.0% indicated very high, 241 representing 44.8% indicated high, 128 representing 23.8% indicated low and 40 representing 7.4% indicated very low. The Table equally showed that 137 respondents representing 25.5% postgraduate students indicated very high for accessibility of e-newspapers, 241 representing 44.8% rated high, 120

representing 22.3% rates low and 41 representing 7.6% rated very low. On accessing e-reports, 123 respondents representing 23.9% postgraduate students indicated very high, 241 representing 44.8% indicated high, 133 representing 24.7% indicated low and 42 representing 7.7% indicated very low. And finally on accessibility of Bibliographic databases, 133 respondents representing 24.7% postgraduate students indicated very high, 227 representing 42.2% indicated high, 144 representing 26.8% indicated low and 35 representing 6.4% indicated very low.

Table 2: Responses of Postgraduate students on level Perceived Usefulness of Library Electronic Information Resources

S/N	Statements	VH	H	L	VL	X	S	Decision
Gap in Knowledge								
1	I use e-resources to identify a gap in knowledge	247(45.9)	238(44.3)	41(7.63)	13(2.3)	3.33	0.71	Accepted
2	I use e-resources to identify new research areas	209(38.9)	272(50.6)	48(8.93)	10(1.7)	3.26	0.68	Accepted
3	I use e-resources to determine research methods	209(38.9)	272(50.6)	48(8.93)	10(1.7)	3.26	0.68	Accepted
Academic Collaboration								
4	I use e-resources to collaborate with other researchers	190(35.3)	258(40.0)	76(14.1)	15(2.80)	3.15	0.75	Accepted
5	I use e-resources to understand course contents	166(30.99)	271(50.4)	85(15.8)	17(3.0)	3.09	0.76	Accepted
6	I use e-resources to submit academic assignments	158(29.4)	264(49.1)	97(18.0)	20(3.7)	3.04	0.78	Accepted

7	I use e-resources to participate in online discussions	152(28.3)	257(47.8)	100(18.6)	30(5.70)	2.98	0.82	Accepted
RESEARCH OUTPUTS								
8	Using library e-resources has helped me in seminar presentations	178(33.1)	237(44.1)	100(18.6)	24(4.4)	3.05	0.82	Accepted
9	Using library e-resources helps me in writing theses and dissertations	198(36.8)	265(49.2)	16(2.97)	60(11)	3.15	0.81	Accepted
10	Using library e-resources has helped me in writing articles for publication	192(35.7)	265(49.3)	55(10.02)	27(5)	3.15	0.79	Accepted

Research question two investigated the level of perceived usefulness of LEIR by postgraduate students for academic activities. Table 2 revealed that 247 postgraduate students representing (45.9%) use e-resources to identify a gap in knowledge at a very high level, 238(43.3%) rated high, 41(7.63%) low and 13(2.3%) rated very low. Table 4.8 equally revealed that 209(38.9%) of the postgraduate students indicated that they utilise the library electronic information resources to identify new research areas at a very high level, 272(50.6%) high, 48(8.93) low and 10(1.7%) rated very low. In determining new research areas, 209(38.9%) also indicated very high and 272(50.6%) rated high, 48(8.93%) rated low and 10(1.7%) also rated very low. Under academic collaboration, 190(35.3%) accepted that the perceived usefulness of LEIR for collaborating with other researchers is very high, 258(47.9%) high, 76(14.1%) low and 15(2.8%) very low. 166(30.99%) agreed that the perceived usefulness of LEIR in understanding course contents is very high, 271(50.4%) high, 85(15.8%) low and 17(3.0%) very low. Using LEIR for submitting academic assignments, 158(29.4%) indicated very high, 264(49.1%) high, 97 (18.0%) low and 20 (3.7%) very low. Equally, 152(28.3%) indicated that the use of LEIR to participate in online discussions is very high, 257 (47.8%) high, 100 (18.6%) low and 30 (5.7%) very low. In the aspect of research output, 178 (33.1%) indicated very high, that using LEIR have helped

them in seminar presentations, 237 (44.1%) high, 100 (18.6%) low and 24 (4.4%) very low. In writing theses and dissertations, 198 (36.8%) indicated very high, 265(49.2%) high, 16(2.97%) low and 60 (11%) very low. Using LEIR in writing articles for publication, 192 representing (35.7%) of the respondents indicated very high, 265 (49.2%) high, 55(10.2%) low and 27 (5%) indicated very low.

Findings

Table 1 showed that all items relating to postgraduate students' accessibility of library electronic information resources have met the decision rule of 2.50 mean score. The highest mean score was discovered from the accessibility of e-books resources. This could be attributed to the fact that books were more elaborate in the discussion of concepts. The lowest mean score also came from the item on e-zines with a mean score of 2.53, it also showed that most of the postgraduate students don't access electronic magazines in the library collection.

Based on the mean responses, the Table, therefore, indicated that postgraduate students have access to e-books, films, e-newspapers, e-journals, e-theses, bibliographic databases, e-reports, CD-ROMs including e-zines. Having access to these vital resources will no doubt promote and enhance the academic activities of post-graduate students and increase their chances of quality academic performance. This conforms with the findings of Manda and Nawe (2008), who found that increased flow of information because of increased access to electronic information resources and its utilisation is related to increased research output and enhancement of quality research. Despite the indication of low access to some library electronic information resources, the respondents showed that they have access to the majority of the library electronic information resources to improve their academic activities and achieve outstanding performance in their different areas of study.

Table 2 revealed that all the items concerning research objective two met the decision rule of 2.50 mean score. Based on the ranking, the highest mean score was discovered from the item on perceived usefulness of library electronic information resources to identify a knowledge gap, followed by the perceived usefulness of library electronic information resources to identify new research areas and perceived usefulness of library electronic information resources to determine research methods. These may be attributed to the fact that there are quite a number of these resources in the university libraries for postgraduate students to consult to increase their research quality and methodology.

From the Table, it can be deduced that the postgraduate students highly consent to the use of library electronic information resources for academic activities except for their usefulness in participating in online discussions with a mean score of 2.98.

Conclusion

The research concludes that postgraduate students have access to e-books and e-journals among other relevant electronic resources. At a very high level, postgraduate

students perceive the usefulness of library electronic information resources for academic activities most especially in identifying a knowledge gap.

Recommendations

In line with the findings of the study, the following recommendations were made:

1. The study recommended that university library management should always grant maximum access to the postgraduate students on other relevant electronic resources which are not limited to only e-books and e-journals.
2. It was also recommended that effective orientation and training should be given to the postgraduate students upon admitted into the university with a view to ensuring better understanding of how to make use of these resources for the achievement of academic excellence.

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