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**ACCESS AND UTILIZATION OF INFORMATION RESOURCES BY DISTANCE
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Abstract

Globally, higher institutions of learning are embracing information resources because of its support for teaching and learning in the new e-learning academic environment. National Open Universities have also embraced digital library through various national and international initiatives. This study examined access and utilization of information resources by distance learners in North-West Study Centers' libraries of National Open University of Nigeria. The study was guided by five research questions. A Survey research design was adopted for the study with a target population of 12,614 and representative sample size of 936 using purposive sampling technique in the three Study Centres with functional library facilities namely: Kaduna, Kano, and Katsina. Questionnaire was the main instrument used in collecting data for this research. Data collected were analyzed using descriptive statistics of frequency counts and percentages scores. Among the findings of the study it was revealed that: the major types of information resources available to distance learners were: past students projects, thesis/dissertations, course materials, past question papers, text books, e-resources among others, that information resources were accessible mostly by visiting the libraries. There was a strong correlation between accessibility and utilization among the three centers under study ($r = 0.858$ at $0.001 < 0.05$). There was a significant correlation between accessibility and utilization among the programme level in the study centers. The result shows that $r = 0.856$ at $0.001 < 0.024$. It was recommended that library should focus on providing adequate resources to make regular library users access more current and relevant information resources and services across all the regional study Centres to meet the information needs of DLs.

**Keywords: Access Utilization, Information resources, Distance learners, National open
University**

Introduction

Provision of library services is an essential part of the learning process at any University community. Academic libraries in institutions of higher education play an important role in providing the main resources for teaching, learning and research for both on and off-campus education, the benefits of a library and provision of its services to its clients are crucial in attaining excellence in the learning process of the University community and to distance learning education. Distance Education is gaining lot of prominence in the country due to various socio-economic parameters and the rising demand for education. The campus based education system is not able to cope with the increased demand for training, education and updating knowledge. Distance learning has emerged as a viable option for lifelong learning and as a means for human resource development in the country. The importance of distance education is being realized by the educators and policy makers across the globe as it has the potential to provide access to higher education (Anyim, 2021).

It is obvious that the place of the library in supporting the distance education programmes through their services and resources cannot be overemphasized. This is the same with normal regular education programmes. The students of whichever form of distance education programme and institution should be entitled to have equivalent access to full range of library resources and services such as loan of books, reference and information services, user education and above all, computer-based or automated information services (Hamshri 2019). By implication, any originating institution offering any form of distance education should integrate library services in the planning, organization and management of the programmes. This is what Fufuri (2008) called distance librarianship which is concerned with planning and developing library and information services that support tertiary education programmes offered off- campus or on part-time basis. Undergraduates affirmed that the distancing learning program at Nigerian institutions include research and other learning tasks that necessitate the use of suitable information resources.

Electronic resources include all materials containing information that may be accessed digitally or online with the help of computer technologies. Except for the means of access, storage, and dissemination, the information contained in electronic resources is identical to that provided in printed copies. Subscription-based or free access to electronic materials is possible. Distance

learning and continuing education programs make use of virtual library resources and the technologies that allow them to be accessed. (Anyim, 2018).

Tawalbeh, Ahmed, Sulaiman and Sirhan (2015) affirmed that resources may be available in the library and even identified bibliographically as relevant to one's subject of interest, but the user may not be able to lay hands on them. One may identify citations in indexes, but may not have access to the sources containing the relevant articles. The more accessible information sources are, the more likely they are to be used. Readers tend to use information sources that require the least effort to access. It is noted that availability of an information source does not necessarily imply its accessibility, because the source may be available but access to it is prevented for one reason or the other. Availability of information resources must be distinguished from accessibility. Availability of information sources means ensuring their presence in libraries for immediate use (Tlakula & Fombad, 2017).

Learning materials might be available, i.e., the library has acquired them, but inaccessible to those who need them for whatever reason (uncataloged, miscataloged, misshelved, etc.). Accessible means that users can identify and use the resources. Both variables have a relationship with the use of library resources. Osundina (1974) as cited in Toyo (2017) studied the relationship between accessibility and library use by undergraduates in Nigeria and notes that the problem of Nigerian students is not the question of wanting to use the college library, but whether or not the University library can provide for their needs, and whether there is access to what is provided.

Library users make use of information resources provided for them in a library for a variety of reasons. Some use them for specific reading especially for those preparing for examinations, undergoing formal education and professional development, research and related needs, others, he asserted, use information resources for creation and entertainment, and yet a large number for meeting their current awareness, needs or solving personal information problem and improved job performance (Sharma, 2019). The problems of underutilization of information resources and services in various academic libraries have been a thing of concern which called for many users' studies. It was discovered that non-availability of information resources needed had led to staff

and students not using library resources and services, it was also discovered that inadequate collection for teaching and research was the problem of under-utilization (Anyim, 2018). .

Statement of the Problem

In the distance learning system, the library plays an important role in supporting the academics of distance learners. Though teachers in distance education provide sufficient content through self-learning package (Course Materials), if a learner wants to obtain more information in supporting his/her learning materials he/she has to explore the library resources and services available in the Study Centre library. The distance learners are permitted and encouraged to access and utilize the library resources and services such as text books, reference materials, Journals, newspapers, magazines, e- resources among others, but preliminary investigation by the researcher revealed that these resources and services are often not being used to their full extent by distance learners. The researcher observed that the level of access and use of the available information resources and services in the Study Centres libraries by distance learners in North-West Zone seems not encouraging. Having been working with the NOUN library and his formal and informal interactions with the librarians observed that only few distance learners access and utilize the information resources and services in supporting their programme of studies. This might be attributed to the physical separation between the learners and their institution of learning among other factors. It is against this background that the study examined access and use of information resources and services by distance in the Study Centres libraries of NOUN. The extent to which distance learners access and use the information resources and services in the Study Centres libraries.

Objectives of the Study

The main objective of the study was to investigate access and utilization of information resources by distance learners in north-western study centre libraries of national open university of Nigeria.

The specific objectives of the study:

- i. determine the types of information resources available to distance learners in North-West Study Centre Libraries of the NOUN.
- ii. find out the extent of accessibility to information resources by DLs in North-West Study Centre Libraries of the NOUN.

Research Questions

The following research questions guided the study:

1. What are the types of information resources available to distance learners in North-West Study Center libraries of the NOUN?
2. How accessible are these information resources to DLs in North-West Study Centre libraries of the NOUN?

Hypotheses

HO₁: There is no significant relationship between access and utilization of information resources services among study centers in North-West Study Centres libraries of NOUN.

HO₂: There is no significant relationship between access and utilization of information resources and services among programmes level in North-West Study Centres libraries of NOUN.

Review of Related Literature

The primary purpose of University libraries is to support teaching, learning, and research in ways consistent with, and supportive of, the institution's mission and goals. In addition, library resources and services should be sufficient in quality, depth, diversity, and currency to support the institution's curriculum. As a result of this, University libraries are often considered the most important resource centre of an academic institution. However, University education in Nigeria is facing a critical challenge in meeting new demands of the 21st century, with its ever increasing population growth, inadequate library facilities, resources and insufficient funding. Adequate library resources and services, at the appropriate level for degrees offered should be made available to support the intellectual, cultural, and technical development of students enrolled in Nigerian Universities (Uzoagba, 2019).

Halm (1978) as cited in Kenchakkanavar (2014) stated that “the strength of a special library is largely dependent upon its ability to collect relevant materials related to the area of its specialization and of its clients interest. The usefulness of a library’s collection to its clientele relates to the richness of the library’s materials, which is one reason why libraries have to keep acquiring new publications from time to time so as to meet up with changing patterns and new information. It is always imperative to discuss adequacy and efficiency of library stock. This is so because, it is only when a collection is sufficient and relevant that maximum utility is likely to be made of it.

Several studies have revealed the access and utilization of electronic resources by undergraduates and distance learners. Ayi (2021) examined the relevance of electronic resources and improvement of access for effective distance learning and continuing education programme using 7,125 registered students of the National Open University of Nigeria. A convenience sampling technique was used to select a sample size of 379 respondents. Result showed that e-journal, e-books, multimedia, OPAC among others were the types of electronic resources used the students. The author concluded that electronic resources are relevant learning tools for distance learning and continuing education process, which users can access through computer devices to obtain information. Students in distance learning mode do most of their studies online, which required unhindered access to online resources. In another similar study conducted by Nfodu (2017) on electronic resource librarianship and Digital Information in Open and Distance Learning Universities in Nigeria and revealed that electronic resources in digital libraries go a long way in the provision of digital information for the benefits of users; especially distance learners.

In a related study conducted by Fowowe (1989) as cited in Damilola (2013) on students use of an academic library; a survey of University of Ilorin library discovered that 94.8% of the students used the facilities while only 5.2% have never use the facilities. It also showed that of all the library materials; indexes, abstracts, microfilms and government publications are the least used even though these are most important sources for literature review especially when conducting research. Aguolu (2002), revealed that efforts are being made worldwide to promote access to information in all formats. They lament the attendant features of underdevelopment such as power failure, machine breakdowns, and lack of spare part, maintenance technicians, which intermittently stall the performance of the modern gadgets of information storage and transfer in developing countries.

Iyoro (2004) examine the impact or serial publication in the promotion of educational excellence among information professional receiving further training at the University of Ibadan. The study looked at perception of how serial accessibility has contributed to students' learning process, serial were found to play a significant role in the acquisition of knowledge, because the serial collection was easily and conveniently accessible. In a similar study by Oyedira-Tidings (2004)

at Yaba College of Technology, Lagos, the author revealed that low use of the library by students was observed. This was attributed to accessibility problems.

Aguolu and Aguolu (2002) noted that availability of information resources may not necessarily implies its accessibility because the source may be available but access may be obstructed for one reason or the other. Osundina (1974) as cited in Viswanathan and Sasireka (2016) studied the relationship between accessibility and library use by undergraduates in Nigeria universities and notes that the problem of Nigerian students is not the question of wanting to use the University libraries, but whether or not the University libraries can provide for their needs; and whether there is success to what is provided.

Theoretical framework

Technology Acceptance Model (TAM)

The model adopted for this study was based on the Technology Acceptance Model (TAM) of Davis (1986), which emphasized the use of Theory of Reasoned Action (TRA). Theory of Reasoned Action, according to Davis, assumed that attitude of a person towards a system is controlled by his/her belief on that system.

Similarly, Technology Acceptance Model also deals with the acceptability of an information system (Adeyemo, Adedoja and Adelore 2013) and how it can be applied to determine level of acceptability of the system. Futhermore, TAM model assumes that level of acceptability or actual use (AU) is mainly determined by two factors, namely; Perceived Usefulness (PU); and Perceived Ease of Use (PEU). The Perceived Usefulness (PU) of a system can be described as the level to which an individual believe that using the new technology or system will boost his/her performance (Bhatti 2015), while Perceived Ease of Use (PEU) refers to the extent to which a person believes that making use of a particular system or technology to perform a task will be easier or require little effort (Lu et al 2014). Moreover, Davis (1986), through his TAM model, clarified that an individual's attitude towards a system is not the only factor that influences him/her to use the system, the effect that the system will have on the person's performance is another significant factor that determines level of acceptance.

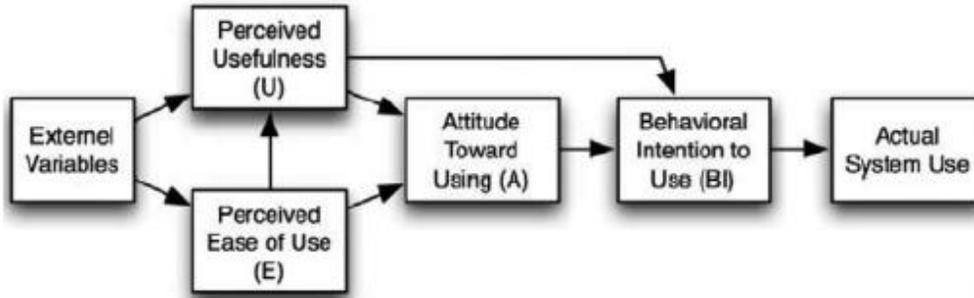


Figure 2.2: TAM Model Showing the Association between PU, PEU and Actual Use

Source: (Davis in Adeyemo, Adedoja and Adelore 2013).

Methodology

The study adopted the descriptive method of the quantitative research. Descriptive survey design best suit this study as a large sample can be selected from the total population to describe a characteristic of that population. The population of the study comprised all 12,614 distance learners of National Open Universities in the three study centres in North-West zone of Nigeria, which are Kano, Kaduna and Katsina (see Table 1). One thousand and forty two (1,042) samples were randomly drawn using the Krejcie and Morgan, (1970) table for determining sample size for research activities educational and psychological measurement. A purposive sampling technique was used based on the proportionate sample size of registered DLs per each Study Centre selected for this study. A questionnaire titled “*Access and of Information Resources and Services Questionnaire (AUIRSQ)*” was used in the collection of data. It was divided into two parts, part A elicited for demographic information from the respondents, part B seeks to get information based on access and utilisation of information resources by distance learners using a different response format: (1) find out the types of information resources available to distance learners, accessible (2) not accessible (1) was used to answer accessibility to information resources in study centre Libraries, Strongly agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) to answer questions on challenges facing DLs in accessing and using information resources. The questionnaire was subjected to both face and content validity to check if the items are in-line with the major purposes of the research by two lecturers from the Department of Library, Archival and Information Studies, Oyo State College of Education, Oyo after they deemed it fit to be validated. The researcher with the aid of two research assistants visited the

libraries chosen for the study to administer copies of the questionnaire to the undergraduates having sought for permission from the various authorities involved. Nine-hundred and thirty-six questionnaires were duly filled and returned. Descriptive statistics of frequency counts, percentages and mean were used to answer research questions 1-4 while inferential statistics of Pearson product moment correlation (PPMC) was used to test hypotheses 1 and 2 at 0.05 level of significance.

Table 1: Population and sample size

N	Libraries	Population	Sample size
1.	Kaduna Study Centre, Kaduna State	6,495	361
2.	Kano Study Centre, Kano State	3,952	354
3.	Katsina Study Centre, Katsina State	2,167	327
	TOTAL	12,614	1,042

Results

Research question I: What are the types of information resources and services available to distance learners in North-West study Centers' libraries of NOUN?

Table 2: Types of Information Resources available in NOUN Library

Statement:	Available	Partially Available	Not Available
Text books	581(64.6)	284(31.6)	35(3.9)
Course materials	611(67.9)	218(24.2)	71(7.1)
Reference materials	516(57.3)	291(32.3)	93(10.3)
Journal (hard copies)	428(47.6)	338(37.6)	134(14.9)
Newspapers/Magazines	397(44.1)	312(34.7)	191(21.2)
Past Questions Papers	571(63.4)	262(29.1)	67(7.4)
Past students project, thesis/dissertation	666(74.0)	186(20.7)	48(5.3)
NOUN e-resources	541(60.1)	285(31.7)	74(8.2)
Internet resources	543(60.3)	249(27.7)	108(12.0)

Source: Field work, 2017

Table 2 above sought to answer research question I, which sought to find out the types of information resources and services available to distance learners in north – west study centers'

libraries of NOUN. The result revealed that among the types of information available are past students project, thesis/dissertation which rated 74.0%, Course materials rating 67.9%, text books rated 64.6%, internet resources rating 60.3% and NOUN e-resources rating 60.1%. Other resources that are available include; reference materials and hard copies of journal.

Therefore, from this result, it can be concluded that the types of information resources and services available to distance learners are; Past students project, thesis/dissertation, Course materials, Text books, Internet resources and NOUN e-resources.

Research question II: How accessible are these information resources and services to DLs in North West Study Centers’ libraries of NOUN?

Table 3: Accessibility to Information Resources and Services in Study Centres

Statement	Accessible		Not accessible	
	SA	A	D	SD
By visiting the library	395(43.9)	469(52.1)	22(2.4)	14(1.6)
Through home delivery	317(35.2)	376(41.8)	139(15.4)	68(7.6)
Through remote access electronically	184(20.4)	361(40.1)	229(25.4)	126(14.0)

Source: Field work, 2017

Table 3 above describes the accessibility of the information resources and services available to distance learners in North – West study centers. This table sought to answer research question II. From this results, it is revealed that 43.9% strongly agreed that they access information resources by visiting the library, 52.1% agreed to that while only 2.4 and 1.6% of the respondents disagreed and strongly disagreed that they do not access information resources in the centers by visiting the library. Also the result shows that 35.2% strongly agreed that they access information resources through home delivery, 41.8% agreed that they access it through home delivery. Lastly, the 20.4% and 40.1% strongly and agreed that they access information resources though remote access electronics, whereas only 25.4% and 14.0% strongly disagreed and disagreed to that. Therefore result, revealed information resources and services are accessible always and everybody can access the resources by visiting the library.

Table 4: Relationship between access and utilization of information resources services based on centers

N = 900					
Variables	Mean	Standard deviation	Correlation coefficient	Significant level	Decision
Kano	2.1029	1.783	.858	0.001	p<0.05
Kaduna	3.9680	.8678			
Katsina	2.8712				

Table 4 above describes the relationship between accessibility and utilization of information resources among the study centers. From the study three study centers were used, these are Kano, Kaduna, Katsina of the northwestern Nigeria. From which the result reveals that there is a strong correlation between accessibility and utilization among the three centers under study. The analysis shows that there is a correlation $r = 0.858$ at $0.001 < 0.05$. Hence from this result, it is clear that the null hypothesis which states that; there is no significant relationship between accessibility and utilization of information resources services among study centers in North-West Study Centres is hereby rejected, while the alternate hypothesis is thereby accepted. Therefore, by implication, this has established that there is significant relationship between access and utilization of information resources services among study centers in Northwest Nigeria.

Table 5: Relationship between access and utilization of information resources and services among Programme Levels

N = 900					
Variables	Mean	Standard deviation	Correlation coefficient	Significant level	Decision
Graduate	1.0912	.583	.856	0.024	p<0.05
Undergraduate	1.0929	.432			

Table 5 describes the relationship between accessibility and utilization of information resources among programme level in various study centers. The research studied three study centers which are; Kano, Kaduna, and Katsina of the northwestern Nigeria. From which the result reveals that there is a correlation between accessibility and utilization among the programme level in the study centers. The result shows that $r = 0.856$ at $0.001 < 0.024$. Therefore, from this result it is clear that the null hypothesis which states that; there is no significant

relationship between access and utilization of information resources and services among programmes level in North-West Study Centres libraries of NOUN is hereby rejected, while the alternate hypothesis is thereby accepted. Hence by implication, this implies that there is significant relationship between access and utilization of information resources services among programme level in the study center within the Northwest Nigeria.

Discussion of Findings

The finding of this study revealed that the among the major types of information resources and services available to distance learners are; past students project, thesis/dissertation, Course materials, Text books, Internet resources and NOUN e-resources, which concurred with the study of Unomah (1987) who conducted a study at the former Bendel State University to determine the unavailability rate in the library and to find out its causes. The survey revealed an unavailability rate of 34 percent. One effect on the use of library service was that 300 users (71.4%) gave up and went away frustrated. The finding also supports that of Ayi (2021) who examined the relevance of electronic resources and improvement of access for effective distance learning and continuing education programme using 7,125 registered students of the National Open University of Nigeria and found that that e-journal, e-books, multimedia, OPAC among others were the types of electronic resources used the students. The author concluded that electronic resources are relevant learning tools for distance learning and continuing education process, which users can access through computer devices to obtain information. Students in distance learning mode do most of their studies online, which required unhindered access to online resources.

Result revealed that information resources and services are accessible always and everybody can access the resources by visiting the library, which is in agreement with Aguolu and Aguolu (2002), resources may be available in the library and even identified bibliographically as relevant to one's subject of interest, but the user may not be able to lay hands on them. One may identify citations in indexes, but may not have access to the sources containing the relevant articles. The more accessible information sources are, the more likely they are to be used. Readers tend to use information sources that require the least effort to access. The finding also agrees with a similar study by Okiy (2000) who showed an unavailability rate of only 7.5%. Iyoro (2004) found that

availability of serials at the University of Ibadan was 94 percent, with 242 of 256 respondents agreeing that serial publications are available and readily accessible.

Conclusion

The provision of quality library services to distance learning students will continue to experience global change as long as the need to provide effective and quality services that meet the needs and aspiration of citizens, decision-makers and distance learners is a long standing goal of the information profession. Suffice to say that the use of information technology is one of the proactive ways through which libraries can deliver their services more effectively so as to enhance users' satisfaction.

Recommendations

The following recommendations were made based on the findings of the study:

1. Library should focus on providing adequate resources to make regular library users access more current and relevant information resources and services across all the regional study Centres to meet the information needs of DLs.
2. Library should make it a point to give library orientation at the beginning of the every semester. A comprehensive information literacy programmes should be adequately put in place. These would enable DLs to be aware, access and explore the resources and services available in the library to the fullest via User education, bibliographic instruction, library orientation, User training ,library's Website, e-mail lists, blogs, podcasts; posters, handouts, giveaways; orientation tours and workshops; and other tools such as library publications, contests, brochures, direct mail, Web 2.0 applications and displays.
3. It is not possible for a single library to acquire all the information that are generated and disseminate them hence NOUN should move towards resource sharing concept with other libraries and become effective and efficient on its service toward its users.
4. Establishment of radio stations by the institutions providing open and distance learning programmes which will be used purposely for information dissemination. This is because radio has been found to be the commonest, cheapest and most powerful means of communicating ideas and disseminating information to a large group of people at the same time.

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