Digital literacy of Unversity students as a pointer to use of Library Database E-Resources in Nigeria

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Abstract

The study investigated digital literacy of university students as a pointer to use of library database e-resources in Nigeria. Two objectives and two hypotheses where formulated which are: Find out the relationship between digital literacy and use of library electronic resources, to find out the relationship between digital literacy of undergraduate students in federal university and their use of library electronic resources, there is no significant relationship between digital literacy of undergraduate students and their use of library electronic resources and there is no significant relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources. The design of the study is correlational survey. The population of this study is 18,862 undergraduate students who are registered library users of the three selected universities for this study. The sample for the study comprised one thousand eight hundred and eighty-seven (1,887) undergraduate students. Purposive sampling was used to select one federal, state and private university in Edo state. Descriptive statistics (frequency count, percentages and pearson coefficient, weighted response average) was used to answer all the research questions and Pearson correlation was used in testing the hypotheses. The null hypotheses were tested at 0.05 level of significance. The decision rule was: reject null hypotheses if probability value (Sig-value) is less than 0.05, otherwise, do not reject null hypotheses. Findings show that … There is a significant low positive relationship between digital literacy of undergraduate students and their use of library electronic resources and there is a significant low positive relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources. Recommendations are… Orientation services should be organized for fresh students on how to effectively access the available electronic digital resources in the university. The orientation should be aimed at improving students' digital literacy and helping them to acquire the requite abilities needed to effectively use e-resources and librarians in Federal universities should guide students and other library visitor in the use of library electronic resources. Standby librarians should be allotted to the digital section of the library for such purpose.

Introduction

The use of electronic database resources provided by a university library is paramount to achieving quality success in research and development among undergraduate students. This is because the quality of content and ease of access of research queries via an electronic terminal (computer, tablet, mobile device) is more user friendly than the traditional method of paper research which is time consuming and limits a researcher to one book per time. The use of a library's electronic database resources gives the student access to millions of scholarly academic journals and

articles from various academic bodies and research institutions all over the world. The digital literacy and technical competence, however,required to use such information technology (IT) devices is as important as the acquisition of these capital intensive electronic databases in the first place, whether it is a re-occurring annual subscription access fee or a one-time access fee charge (Adeniran&Onuoha, 2018).

A library's acquisition of electronic databases resources (e-resource) must be objective and the adequate use of electronic databases leading to productive research and quality contribution to the body of knowledge is a necessity. The successful achievement however of the objectives depends on the digital literacy of the individual searching for quality and meaningful content (Akinseye, 2015). According to Adeyemi (2012) the research outcome every researcher gets is directly proportional to his/her ability to search for information with specific search criteria and understanding how electronic databases respond to those criteria.It also requires users to consider and evaluate the search results to determine if it is relevant to the user's needs and the ability to manipulate and harness the selected e-resource results to conform to the user's research objective (Abubakar&Adetimirin, 2015).

Electronic databases resources (e-resources) are a collection of reliable digital data stored and allowed to be easily accessed in order to quickly obtain the required information from the stored data (Nkanu, Ebaye&Ogar, 2010). For the purpose of this study, search engines are excluded from electronic database resources because it is mainly a collection of links pointing to online digital resource materials that are not necessarily grouped by any proprietary body and therefore, belong to the public domain. Electronic databased resources as conceived in this study are proprietary collections of digital materials grouped by subject, topic, author or other classified criteria that can be accessed online or offline freely or via paid subscription to the proprietary body that created and made such academic database available.E-resourcesaccording toEkwelem, Okafor and Ukwoma (2009), are information sources that are available and can be accessed electronically. Such access is achieved through such computer networked facilities as online library catalogues, the internet and the World Wide Web (WWW), CD-ROM databases.

The e-resources could either be subscribed to or be digitised in-house. Conyers (2006) in describing the importance of e-resources submitted that apart from the fact that e-resources are easily retrievable in university libraries, they also meet users' information needs. E-resources are found to be less expensive and more useful for easy access (Dadzie, 2005). The shift in collection and development in university libraries from print materials to e-resources has indicated the importance of e-resources in information retrieval and instructional delivery which support teaching and research activities acknowledged worldwide (Egberongbe, 2011).

Owing to information explosion, university libraries are increasingly becoming automated especially in Federal and state universities (Ani&Ahiauzu, 2008). Funds are now being provided for the operation of such libraries. In some states in Nigeria, state government have created libraries that are equipped with electronic databases and other electronic devices. Private owned universities are also doing their bid to meet these standards as it is one of the requirements by National Universities Commission (NUC). The implication is that more information is digitised. It is, therefore, expedient for undergraduates to have digital literacy to facilitate their search of electronic database resources.

Research around digital literacy according to Kajder (2010) is concerned with wider aspects associated with learning how to effectively find, use, summarize, evaluate, create, and communicate information while using digital technologies, not just being literate at using a computer. Digital literacy encompasses computer hardware, software (particularly those used most frequently by businesses), the internet, cell phones, PDAs, and other digital devices. A person using the knowledge

of all the aforementioned devices to interact with society may be called a digital citizen (Plunkett, 2010).While electronic database is the resource of value, digital literacy is the proficiency to acquire that resource using modern day computer devices and gadgets such as smart phones and mobile tablets and computers. Therefore the availability of electronic database in a library environment is as important as the necessary and requisite literacy and knowledge to access the electronic database resource. Enhancing library resources and services therefore, depends also on improving of the digital literacy of the undergraduates meant to access the resources else the objective of the library is defeated. It is important therefore, to investigate the relationship between digital literacy and usage of library electronic database in Nigerian institutions.

Objective of the Study

The objective of this study is to investigate the relationship between digital literacy and use of electronic database resources by undergraduate of universities in Edo state. Specifically, the study sought to:

1. Find out the relationship between digital literacy and use of library electronic resources.
2. Find out the relationship between digital literacy of undergraduate students in federal university and their use of library electronic resources.

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant relationship between digital literacy of undergraduate students and their use of library electronic resources.
2. There is no significant relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources.

Literature review

Level of undergraduate students' digital literacy

Digital literacy simply refers to a set of abilities requiring individuals to locate, evaluate, and use effectively different digital technology (Adomi, 2013). It is focused on content, communication, analysis, information searching, and evaluation. It is a vital ability to effectively use different digital technologies for the modern information-intensive world, enabling personal, economic, social and cultural development. In the midst of the information explosion, ability to access, retrieve and evaluate information from different digital technologies has constituted a significant part of today's definition of digital literacy (Okoh, 2010). Isesele (2015) defined digital literacy as a term that enables people to recognize the value of digital technology and use it to get information from their personal, professional and academic lives. A digital literate person can effectively access, evaluates, organizes, synthesizes and apply information from a variety of digital sources and formats in a variety of contexts.

Also, Bawden (2008) opined that digital literacy which includes all sets of specific abilities and competences needed for searching, finding, evaluating and handling information in computerized form is mostly possesses by students in the science and social science discipline. Bawden further noted that digital literacy of science students is slightly higher than those in social sciences as most science students have a framework for integrating various other illiteracies and skill-sets, though it does not need to encompass them all.

In determining the level of undergraduates digital literacy, Ala-Mutka, (2011) observed that students of Ahaly University possess high level of digital literacy, as they tend to understand it as a connection with the competencies needed for effective use of the Internet and digital technologies and are able to use different digital technology effectively to meet their information needs. Martin

(2015) opined that an average American undergraduate students possess digital literacy which involves the convergence of several types of literacy: IT literacy, information literacy, technological literacy, media literacy, and visual literacy.

In recent years, many students are increasingly becoming digital literate as they have become more and more skilled in the use of digital technology in meeting their information needs (Ala-Mutka, 2011). This has led to the campaign among many African information professionals on the need for undergraduate students to look beyond the basic abilities of using the information and digital literacy tools and resources and developing strategies for a critical and efficient use of the various digital technology.

Furthermore, Grafstein (2012) stated that digital literacy of students in African Universities is poor as investigation revealed that many of the students lack the knowledge about specific subjects, contents, research practices and information retrieval systems that apply generally across disciplines. They are also unable to effectively use new and emerging technologies in information retrieval. Also, Abiodun (2013) explained that students in Nigeria lack the knowledge of how to clearly define a subject or area of investigation; select appropriate technology and terminology that expresses the concept under investigation; formulate a search strategy that takes into consideration different information sources and the various ways information is organized; analyze the data collected for value, relevancy, quality and suitability; and subsequently turn them into knowledge. Abiodun also noted that many of the students have anxiety about the complexity of digital technology which requires that one possesses computer and searching abilities. This pose a great challenge to its effective utilization of electronic database resources by undergraduate students. In other words, successful search and retrieval of information in digital form could be dependent on the digital literacy level of the students.

Conclusively, students' lack of information research abilities is one of the contributory factors to the need to expand library instruction. Oberman (2011) addressed this in her study on American students, whereby their inability to match subject relevance with appropriate sources of information and their unfamiliarity with the online environment led to an information excess that caused considerable amount of anxiety. Candy (2012) linked digital anxiety with the impact of information explosion, or data smog, which Bruce (2012) associated with poor digital literacy competencies, as learners cannot use digital technology needed to retrieve information, thereby relying on others for its retrieval. Lack of digital literacy is a general phenomenon among undergraduates in developing countries like Nigeria. Hepworth (2014) study on undergraduates in Nigeria found that students were unable to use digital technology effectively as they always stare at the technology without knowing how to navigate the system.

Various electronic database resources available to undergraduate students

Several studies have been conducted on the availability of electronic database resources in higher institution of learning, research centers and organization. Reitz (2014) asserted that they are resources (online) consisting of data and/or computer programs encoded for reading, learning and manipulation by a computer connected to the internet. Similarly, Appleton (2016) described electronic database resources as those kinds of documents in digital format which are made available to users through computer-based information retrieval systems. The category includes electronic texts, bibliographic databases, e-newspapers/magazine, e-books, e-journals theses/dissertations collections etc.

There are online electronic resources available free of charge and some are fee based that require licensing and authentication before users can access it. Ahiauzu (2009) defined electronic

database resources as a collection of electronic journals, books and other study materials available through the computer and the internet. Some can be accessed free of charge, while others are subscribed to by universities or organizations before users can have access to these resources online. Hundies (2012) said that most of this information in the databases are accessible free of charge while some are fee-based. Libraries need to pay subscription fees in order to have access to these resources. But there are large numbers of databases that can be searched for at no cost an example of this is the Directory of Open Access Journal and many others. Some universities in developing nations, foundations and international organizations provide free access to electronic database resources to higher institutions and research centers in developing nations to support teaching, learning and research work. The World Health Organization (WHO) is one of such international agencies that subsidize payment of online databases such as HINARI, AGORA and OARE to research centers, hospitals, non-governmental organizations, colleges, universities and government ministries (Research4life, 2012). In a study conducted by Ani and Ahiauzu (2016) it was observed that there are available electronic database resources in some Nigerian university libraries either through free based access or fees based subscription.

In India, the libraries are subscribed to e-journals database such as Elsevier Science, Springer, American Institute of Physics, Blackwell, American Chemical Society, John Wiley, Cambridge University Press, Oxford University Press, Royal Society of Chemistry and Engineering databases (Patra, 2016). It must be noted here that it is what the library subscribed to that they get. The e-journals that are relevant to the institutions' curricular are what they focus on. Anthony and Shell (2008) noted that the CUSAT Central library subscribe to the following database: Elsevier Science, Taylor and Francis, Portland Press, Emerald, EBSCO, Oxford University Press, SpringerLinks, Chemical Abstract on CD and American Physical Society.

Similarly, Otokunefor and Kari (2008) and Nok (2009) noted that the libraries in Nigeria are gradually developing their electronic resource databases collection and the major databases that could be found are Access to Global Online Research in Agriculture (AGORA), Health Internetwork Access to Research Initiative (HINARI) and Online Access to Research in the Environment (OARE), Directory of Open Access Journal (DOAJ) and EBSCO host resources. It could be possible because they are free access databases that are made available by for developing nations like Nigeria. Each of these electronic databases consist of different titles of peer reviewed journals, books and other educative resources.

According to Paines and Kwachi (2013) the majority of the databases subscribed to by university are HINARI, JSTOR, OARE, AGORA, Ebsco host resources, TEEAL, DOAJ, MIT Open Course ware, Proquest, ScienceDirect and Elsevier EIR databases in Kurukshetra University library, India. It was also discovered that the duration of subscription of these resources 2- 3 years, while some of these databases were free. Akinseye (2014) observed that many university libraries have subscribed 2-3 years online databases for lecturers and students in order to have access to information and to updating their knowledge for the purposes of teaching, learning and reach work. According to Kinengyere, Kiyingi and Bazirake (2012) and Fagbami (2014) most of the resources available in African universities like Nigeria are open access resources which are free to libraries in developing nations that have internet connectivity to support teaching, learning and research work. The open access resources are made free courtesy of Directory of Open Access Journals (DOAJ) which includes 3,622 free quality controlled journals, covering all subjects and languages. There are few universities in developing nations that subscribe to fees databases in their libraries. A publication of Queen`s University (2013) revealed that the university library had 1750 electronic databases

resources. Newcastle University Online Publication (2014) stated that there are 450 e-resources available for teaching, learning and research work. It could be seen that in both universities there is a high level of availability of EIR databases in their library. In South Africa a developing nation like Nigeria, University of Johannesburg had 160 electronic databases, Nelson Mandela Metropolitan University had 40 and Cape Peninsula University of Technology had 100 e-database resources in their university (James, 2014).

In Nigeria, the National University Commission (2010) reported that Educational Trust Found (ETF) now known as Tertiary Education Trust Fund (Tetfund) have been able to subsidized the payment of online databases such as Ebsco host resources for Universities, Polytechnic and Colleges of Education. The electronic database resources in libraries is an opportunity open for university libraries in developing nations like Nigeria to bridge the knowledge gap and move toward a digital knowledge based society. However, Okiy (2005), Tiemo and Ateboh (2015) showed that lack of funds have limited university libraries in Nigeria in providing electronic database resources and other facilities to users. As a result of this, libraries in developing countries opt for free electronic database resources on the internet, such as the open access journals.

Usage of library electronic database resources

Students, especially those in the universities use the electronic database resources for various academic purposes. These purposes include; doing class assignments, writing term papers, augmenting class works, retrieving current literature for studies, following blog discussions on subject area of interest, searching for scholarship opportunities, searching for internship placement and for research purposes (Ifidon, 2012). Considering the fact that universities are institutions of higher learning where researches of various magnitude take place and similarly, research requires the use of current and up-to-date literatures, it then becomes very necessary that electronic database resources are greatly used by the students in the universities. Ellis and Oldman (2015) noted that through the use of electronic resources, researchers and students; now have access to global information resources, particularly the Internet for their scholarly intercourse. The death of current and up-to-date information for research in University libraries is attributed to poor levels of developing electronic information resources, (Afolabi, 2007; Faborode, 2007; Bozimo, 2007).According to Oyegade (2010), the Internet is a feature of online databases. The internet as an electronic information resource is regarded as the best Channel for information retrieval for students research work because it is the gateway to the globe. Oyegade (2010) opined that internet allows different group of people, especially students and researchers to create channels of communication and self-expression. Ekhaguere, Olayinka, Taiwo, Alonge and Obono (2015) asserted that limited access to up-to-date journals and books in the different disciplines had been a great challenge to students and researchers until the development of electronic database. To him, the Internet is the visa to retrieving up-to-date information from the database.

The research and other academic activities that go on in the universities involves collating and processing of data and a good research work depends greatly on a student's ability in retrieving current and relevant information. With the availability of electronic information resources, research is no longer complicated. This is due to the fact that most of the documents to be consulted for research are available in electronic formats like the Internet, online database, OPACs, electronic journals, electronic books, etc.

The use of electronic database resources encourages collaboration among students and researchers. Magara (2012) opined that the emergence of the World Wide Web (www) enhances scholarly communication and a rise in computational science. Presently, many university students

rely on electronic resources for their assignments, term papers, research and communication with their teachers. Students through the web also exchange ideas and information which can help their academic activities.

A study carried out by Raza and Upadyay (2016) to measure the usage of e-journals from electronic databases by students at Aligarh Muslim University (AMU, Aligarh, India) revealed that most of the students used e-journals. Borrego, Anglada, Barrios and Comellas (2007) stated that majority of the respondents from the consortium of Academic libraries of Catalonia indicated that they exclusively use e-journals for their work. The use of electronic journals and e-books is vital for academic and research activities. Despite the gains of the use of electronic resources for general academic activities, many students still possess some characteristics that hinder them from optimally utilizing these resources. This may adversely affect their academic performance as well as their research outpour. It is also worthy to note that the gains and benefits accruable from the use of electronic information resources can only be obtained if the resources are not just only made available but, also accessible to users (White, 2014).

The importance and wide ranging scope of electronic resources for general communication, information retrieval and research activities in tertiary educational institutions for academic activities is acknowledged worldwide. General user opinion towards the use of electronic resources, in particular CD-ROM, has been positive, with students enjoying using these sources and finding relatively few problems while using them (Ray & Day, 2008). However, the same cannot be said in relation with the use of electronic information resources such as Online databases subscribed to by university libraries in Nigeria. Ojo and Akande (2015) noted that the level of usage of the electronic information resources by students for academic activities is not high. A major problem however identified is lack of information retrieval abilities for exploiting electronic resources, thus making the level of usage of the resources by undergraduate students very low. According to Emerole and Ogugua (2007) there is low patronage of library services especially in the area of use of electronic database resources as many users have not fully realized the potentials of the library in this information age.

Studies on relationships between digital literacy and e-resources

Abubakar and Adetimirin (2015) carried out a study on influence of computer literacy on undergraduates use of e-resources in Nigerian university libraries. The purpose of the study was to identify the students' level of computer literacy and the extent to which it influences students' use of e-resources. The design of the study was survey. The population of the study comprised all undergraduate students in Nigerian Universities. The sample for the study was 2, 726 undergraduate students from 16 Nigerian universities. The instrument for data collection was a questionnaire and computer test validated by the experts. Data obtained from the study was analysed using percentages and Pearson's product moment correlation. The findings of the study showed that the undergraduates' computer literacy level was average. They used only few of the e-resources in their libraries and the frequency of usage was low. Computer literacy had positive relationship with undergraduates' usage of e-resources.

The methodology used for this study is related to the present study. The reviewed study used undergraduate students from 16 Nigerian Universities while the present study focused on undergraduate students in 3 universities in Edo State. They focused on e-resources and computer literacy for their study while the present study focused on electronic database resources and digital literacy.

Oduwole and Akpati (2003) surveyed the accessibility and retrieval of electronic information

in University of Agriculture Library, Abeokuta. The purpose of the study was to identify accessibility and retrieval of electronic information by students and staff of University of Agriculture Library. The design of the study was descriptive survey. The population of the study comprised 5, 030 users of the electronic information in the library. The total sample for the study was 1,000 users. The instrument for data collection was a three-part questionnaire validated by experts. Data from the study was analysed using simple percentage and frequency count table. Findings revealed that non-final year undergraduates use mainly the automated library catalogue (OPAC) while final year and postgraduate students as well as academic staff regularly use bibliographic databases tools such as TEEAL, e-Granary and CAB abstracts. A majority of users were satisfied with the information obtained and requested that they find these automated services to a greater or lesser extent easy to use. Other findings observed that the major constraints to information accessibility and retrieval of automated library services at the university of Agriculture library: were infrastructural; the limited number of terminals available for use and power supply outages, lack of abilities among students to use the automated library.

The methodology used for this study is related to the present study. The method of data analysis is related the present study. Both studies are also similar in content but they differ significantly in scope and population. The reviewed study focus on users in university of Agriculture library, Abeokuta, while this present study is focused on 3 different universities in Edo State. Both studies used questionnaire as instruments for data collection. However, the present study adopted correlational survey design and not descriptive survey design.

Ekwelem, Okafor and Ukwoma (2009) carried out work on students' use of electronic Information Resources (EIRS) at the University of Nigeria, Nsukka. The purpose of the study was to determine the students' level of use of EIRS. The design of the study was survey. The population of the study comprised all students of the University of Nigeria, Nsukka. The total sample for the study was 600 students. The instrument for data collection was a questionnaire administered to student's users of the Cybercafes on the university campus. Data from the study was analysed using simple percentage and frequency count. Results from the study showed that 52.3% of the respondents agreed that electronic Information Resources (EIRS) provide reliable access to information resources, while 92.5% of them rated that information literacy skill is needed for the utilization of electronic Information Resources (EIRS). Another finding from the study is that 3.7% of the students preferred CD-ROM, and almost all the students spent about 40-60 minutes which is about 31.2% in searching for EIRs. Finally, the study found out that the main barriers to the use of EIRs by students includes- finance, inadequate skill; and inadequate bandwidth and epileptic power supply.

METHOD

The design of the study is correlational survey. According to Nworgu (2015), a correlational study is one which seeks to establish the relationship between two or more variables. This research design is considered appropriate for this study because the study correlated digital literacy with undergraduates' usage of electronic database resources in Universities in Edo State.

The population of this study is 18,862 undergraduate students who are registered library user of the three selected universities for this study. This figure consists of full-time undergraduate students of the three selected universities in Edo state.

The sample for the study comprised one thousand eight hundred and eighty-seven (1,887) undergraduate students. Purposive sampling was used to select one federal, state and private university in Edo state.

The instruments for data collection are a Digital Literacy Test (DLT) and Usage of Library

Electronic Database Resources Questionnaire (ULEDRQ).

DLT was made up of two parts: Part A and Part B. Part A sought information on the demographic data of the respondents. The second part made up of 20 multiple choice questions which generated information on digital literacy of the students. Each questions has four options lettered A-D

The data obtained from retrieved copies of the questionnaire were analyzed using descriptive and inferential statistics. Descriptive statistics (frequency count, percentages and pearson coefficient, weighted response average) was used to answer all the research questions and Pearson correlation was used in testing the hypotheses. The interpretation of the correlation coefficient was according to Nworgu (2015), who provided a 3-way guide for interpreting correlation coefficient values. They are as follows: ±0.30 and below, low relationship, ±0.30 – below 0.80, moderate relationship; ±0.80 and above, high relationship. The null hypotheses were tested at 0.05 level of significance. The decision rule was: reject null hypotheses if probability value (Sig-value) is less than 0.05, otherwise, do not reject null hypotheses.

PRESENTATION AND ANALYSIS OF DATA

Research Question 1: What is the relationship between digital literacy of undergraduate students and their use of library electronic resources?

Table 1: Relationship between Digital Literacy and use of Library Electronic Resources

Source of Variation	N	E-resources r	Remark
Digital Literacy	1887	0.048	Low positive relationship

Table 1 shows that a low positive relationship of 0.048 exists between undergraduate students' digital literacy and their use of library electronic resources.

Research Question 2: What is the relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources?

Table 2: Relationship between Digital literacy of Undergraduate Students in Federal University and use of Library Electronic Resources

Source of Variation	N	E-resources r	Remark
Digital literacy	608	0.096	Low positive relationship

Table 2 shows that a low positive relationship of 0.096 exists between digital literacy of undergraduate students in Federal university and their use of library electronic resources.

Hypothesis 1: There is no significant relationship between digital literacy of undergraduate students and their use of library electronic resources.

Table 5: Test of Significance of Relationship between Digital Literacy and Library Electronic Resources

Source of Variation	N	E-resources r	*P-value*	Remark
Digital literacy	1887	0.048*	.037	Significant

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows that with r value of 0.048 with a pvalue of .037 which is less than 0.05, the relationship between digital literacy and e-resource usage is significant. The null hypothesis was

therefore rejected. Thus, there is a significant relationship between digital literacy of undergraduate students and their use of library electronic resources.

Hypothesis 2: There is no significant relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources.

Table 6: Test of Significance of Relationship between Digital literacy of Undergraduate Students in Federal University and use of Library Electronic Resources

Source of Variation	N	E-resources r	P-value	Remark
Digital literacy	608	0.096*	.018	Significant

*. Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows that with r value of 0.096 with a pvalue of .018 which is less than 0.05, the relationship between digital literacy of undergraduate students in federal university and e-resource usage is significant. The null hypothesis was therefore rejected. Thus, there is a significant relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources.

Discussion of Findings

Relationship between digital literacy of undergraduate students and their use of library electronic resources

The findings of the study showed that a significant low positive relationship exist between digital literacy of undergraduate students and their use of library electronic resources. The observed significant positive relationship could be attributed to the fact that the use of electronic resource by its nature requires knowledge, abilities, and behaviours involving the effective use of digital devices such as smartphones, tablets, laptops and desktop, personal computers for purposes of communication, expression, collaboration and advocacy. Thus, students who possess these abilities and knowledge find the use of electronic resource a great tool in their academic pursuit.

In the face of the ever growing and critical advancement in technologies relating information e-resource databases, students have to be digitally literate to be able to filter and obtain the needed information. The dawn of semantic digital webs which is an advancement from web 2.0 to web 3.0 seeks to reduce the information relayed to the finder when a search engine is queried. The essence of semantic digital web is to reduce the information to the extent that what is actually needed do not require much filtering before it is gotten. It conducts its search through strict adherence to semantics. This feature of e-resource cannot be used if students do not possess the requisite digital literacy. The feature in some search engine connected to library e-resources is displayed as advanced search.

When students are digitally literate, they possess wide range of knowledge of the basic principles of computing devices, use of computer networks, having the ability to engage in online communities and social network with adherence to behavioural protocols, capture and evaluate information based on critical thinking abilities. These abilities help them to effectively filter information received when conducting a search through the e-resources. Possessing these abilities therefore, dispose the students to use library digital resources. Students who do not possess these abilities or have high digital literacy may not want to use the e-resources. This is one of the reasons there existed a positive and significant relationship between digital literacy.

The finding of the study is also in line with that of Adeleke and Emeahara (2016) that there was significant relationship between digital literacy and use of electronic information resources. The finding by Adeniran and Onuoha (2018) that that there was a significant positive correlation between

information literacy skills and use of electronic resources also support the finding of the study.

Relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources

The finding of the study also showed that there is a significant low positive relationship between the digital literacy of undergraduate students in federal universities. No significant relationship was found between the digital literacy of undergraduate students in state and private universities and their use of library electronic resources. In all the school however, there exist a low positive relationship between digital literacy and undergraduates' use of e-resources. This shows that students need to possess a good level of digital literacy to be able to effectively access library electronic resources.

The finding of the study is in line with that of Abubakar and Adetimirin (2015) that computer literacy had positive relationship with undergraduates' usage of e-resources. The findings of the study also support those of Ekwelem, Okafor and Ukwoma (2009) who reported that 92.5% of the study involved in the study rated that information literacy skill is needed for the utilization of electronic Information Resources (EIRS).

Summary of Findings

1. There is a significant low positive relationship between digital literacy of undergraduate students and their use of library electronic resources.
2. There is a significant low positive relationship between digital literacy of undergraduate students in Federal university and their use of library electronic resources.

Conclusion

The conclusion that can be drawn from the findings of the study is that digital literacy influence students' usage of electronic database resources. When students are not digital literate, they may shy away from the use of available electronic database in their school, but when they are digitally literate, they explore the electronic resources to their own benefits.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Orientation services should be organized for fresh students on how to effectively access the available electronic digital resources in the university. The orientation should be aimed at improving students' digital literacy and helping them to acquire the requite abilities needed to effectively use e-resources.
2. Librarians in Federal universities should guide students and other library visitor in the use of library electronic resources. Standby librarians should be allotted to the digital section of the library for such purpose.
3. The provision and installation of digital electronic resources in state and private university libraries should be accompanied by a corresponding awareness rally to intimate students of the school's e-resources.

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