Full Length Research

Use of Electronic Information Resources by Undergraduates of Ahmadu Bello University library in Nigeria

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The study evaluated the use of electronic information resources by undergraduates in Ahmadu Bello University Library, Zaria. The study adopted a survey design with a study population of four thousand one hundred and eighty nine (4,189) undergraduate students who registered with the university libraries between 2017-2019 academic session of Ahmadu Bello University, Zaria (*Student's registration record provided in the reader's services section of the university library*), from which a sample of 838 respondents based on Wimmer and Dominick's formula. The researcher considered 20% of the study population appropriate from each unit of the library using a simple random technique. Data was analyzed using the SPSS software, frequency distribution and percentages. The findings revealed that most of the undergraduates of Ahmadu Bello University Library, Zaria used electronic information resources for research and academic purposes.

INTRODUCTION

Emergence of electronic information resources (EIRs) has greatly transformed information handling and management in Nigerian university communities (Adeleke & Emeahara, 2016). EIRs (e-resources) are information documents stored in electronic format, in computer or computer related facilities such as CD-ROMs, flash drives, digital libraries or the Internet. EIRs are materials in digital format that are accessible electronically. EIRs are also defined as information materials which require computer access that a library provides for their students. EIRs provide easy access to vast amount of information remotely which is becoming more popular globally (Tinio, 2013). EIRs offer potential advantages and benefits over

the print in an electronic information environment. EIRs connect millions of undergraduate students globally with up-to-date literature. Electronic resources have been embraced by the academic community. It is used for general communication, information retrieval and instructional delivery to support teaching, learning and research activities in tertiary institutions.

Electronic information resources are information documents that can only be accessed electronically using information communication technologies (ICT) facilities (Obuh, 2011). Examples of EIRs that are frequently accessed by students include: Internet, CD-ROM databases, online databases, online public access catalogue (OPAC), electronic journals, electronic books and digitized documents. These resources are gradually

replacing the printed information resources because of their ability to deliver to users with current and up-to-date information. Saye (2011) stated that EIRs are information resources that are generated through the electronic medium which have been made accessible to a large group of viewers, whether inside or outside the place, through electronic transmission or the Internet. Swain and Panda (2013) stated that EIRs are information materials that are accessed through computers, or other types of electronic devices, and installed locally or remotely over the Internet.

Electronic information resources are needed for undergraduate students especially because they make information available, easier and provide faster access to information than information accessible via printed media (Ukachi, 2011). They serve as motivators for learners, as they give them the opportunity to deliver, obtain, transfer and circulate information resources on any topic of interest. EIRs help to develop access, increase usability and efficiency, and create new ways for students to use the available information in the university library. EIRs give users reliable information, and right information for the right user. In addition, the use of EIRs helps students to be well-informed and up-to-date in their respective thematic areas, unlike print information resources that are not updated regularly (Fabunmi, Paris & Fabunmi, 2016).

EIRs have many advantages over printed materials because they can be accessed anytime, anywhere and they do not occupy much space like printed materials. As Varghese (2008) asserted, the availability of information in electronic media has created opportunities for global access to information, enhanced the speed of service, increased the number of users served, increased the quality of information provided, and offered new opportunities for undergraduate students to find relevant information. Undergraduates' are able to access current international literature as soon as it is published on the Internet from the libraries, student information technology (IT) centers, internet cafes, work places and their homes. It is therefore important that university students be equipped with the research tools necessary to access EIRs. Moreover, Yalman, Basaran and Gonen (2016) averred that knowledge of EIRs and related skills plays an important role in today's educational activities. Therefore, every undergraduate should possess these skills in order to be able to participate effectively and successfully as they make use of EIRs in university libraries.

Use of EIRs in this new global economy implies that as information continues to grow exponentially, universities cannot remain mere avenues for the transmission of prescribed set of information from teacher to student over a fixed period of time but must promote learning as knowledge in more dynamic ways. The world is currently living in an information society where there is exponential growth in information accessible through Information and Communication Technology (ICT) especially the Internet which helps undergraduate students to use EIRs effectively. As a result, the use of electronic EIRs by undergraduate students in universities has become indispensable in this digital age where globalization of education is made possible through ICT. This development has given rise to global, current and up-to-date information with the advent of these technologies which aid the transmission of information through EIRs. Tofi (2019) averred that the use of EIRs and technological change have created a new global economy that is powered by technology, fueled by information and driven by knowledge.

Uses of EIRs afford researchers and undergraduate students the opportunity to have access to global information resources, especially the Internet for their scholarly work. Undergraduate students in university libraries make use of EIRs for many purposes mostly for academic purposes that is, retrieving current literature for studies and preparing for examinations, doing class assignments, carrying out research projects, and communicating and collaborating with peers and teachers via the Internet on e-mail or by following blog discussions (Adeniran, 2013). Undergraduate students use e-books and e-journal articles to acquire knowledge and carry out research work (Ajayi, Shorunke & Aboyade, 2014). Course materials are provided on CD-ROM for students' use which helps them to use EIR at their convenient time. With the emergence of ICT, EIRs have become widely used and accepted among scholars and have increased tremendously in volume around the globe (Oyedapo & Ojo, 2013). All these resources have really improved the quality of education as this is evident in the literature. However, literature has revealed low usage of EIRs by undergraduates in Nigeria (Omoike, 2013).

The uses of EIRs have become necessary in the academic environment (Ku, 2008). They serve as motivating factors to users as they provide them with opportunities to share, acquire, transfer and disseminate information on any subject of concern. Electronic information resources provision makes it possible for users to access new tools and applications for information seeking and retrieval. E-resources have become invaluable research tools that complement the print collection in the traditional library setting. These resources serve as veritable sources of information which students could tap into to aid their class assignments, write research and term papers, and search for information on their subject areas among other things. The manual system of searching for information resources does not permit multiple access and usage of the same information resources by different users unlike online services. It is worthy of note that, EIRs are of great importance to the academic and research needs of undergraduate students in university libraries since they are available in various formats (Fabunmi, Paris &

Fabunmi, 2016).

In the same vein, due to the several advantages of EIRs such as their timeliness, search facilities, remote access and up-datedness, they have become more indispensable after the arrival of the Internet in the academic environment. The provision of EIRs in tertiary institutions of learning is a new way of gaining quick access to a great number of research information globally (Aina, Okunnu, & Dapo-Asaju, 2014). As a result of the potential benefits offered, they have been embraced by university libraries. Undergraduates would benefit from the EIRs if they are well harnessed as they will provide excellent opportunities to access scholarly information which are beyond the reach of libraries due to geographical barriers and limited finances.

Ekenna and Ukapho (2016) noted that EIRs were very well accepted in other countries of the world, as against the situation in Nigeria. It is inevitable to conclude that perhaps the poor use of EIRs could be due to lack of or inadequate information literacy skills or poor computer self-efficacy. Studies have also shown that factors such as information literacy skills or computer self-efficacy are the determining factors that may influence users' ability to use EIRs (Prangya & Rabindra, 2017). Therefore, underutilization of electronic information resources could be attributed to the lack of information literacy skills which limits the ability to effectively locate and make ethical use of needed information or low level of computer self-efficacy which could hinder the zeal for making use of electronic information resources in the university library.

In the same vein, various studies have been carried out on the use of EIRs by different categories of users (Ekhanuere, Olayinka, Taiwo, Alonge & Obono 2015). Surveyed users include students, lecturers, researchers, expects of various profession and scientists. While some researchers claim that there are more studies that have reported high usage of electronic information resources, others have argued that the opposite is the case. Romanove and Aarnio (2016) have argued that there is low usage of EIRs on studies that have been undertaken mainly in Northern Nigerian. They have explained that factors that have led to the low usage of EIRs include lack of adequate ICT infrastructure, unaffordable online access and poor ICT skills of librarians to adequately serve their clients. Despite these differences between the two groups of researchers, most of them agree that online databases have not been equally patronized by students due to lack of awareness of the available EIRs, lack of time to access them and the use of passwords (Ani, 2015).

STATEMENT OF THE PROBLEM

The use of electronic information resources (EIRs) in learning and research by students has become indispensable in this digital age where globalization of education is made possible through Information and Communication Technology (ICT). EIRs are information documents that can only be accessed electronically using ICT facilities. Electronic information resources are of great importance to the academic and research needs of undergraduate students in university libraries. Use of Electronic information resources (EIRs) has become inevitable for undergraduates in the digital age, given the volume of academic materials that are available in EIRs. Even though university libraries conduct workshops and seminars to sensitize undergraduate students on the use of electronic information resources that are available in Ahmadu Bello University library, the literature has established that their use by undergraduate students have been very low.

The study conducted by Ekenna and Ukpebor (2016) showed that EIRs were very well accepted in other countries of the world as against the situation in Nigeria. One is curious as to why the situation should be different in Nigeria. In the light of the above, the present study investigated the use of electronic information resources in Ahmadu Bello University, Zaria.

OBJECTIVE OF THE STUDY

The main objective of this study is to investigate the use of electronic information resources by undergraduates in Ahmadu Bello University, Zaria. The specific objective is to:

•   determine the purpose for the use of electronic information resources by undergraduates in Ahmadu Bello University, Zaria.

RESEARCH QUESTIONS

The following research question guided the study:

•   For what purposes are electronic information resources used by undergraduates in Ahmadu Bello University, Zaria?

SCOPE OF THE STUDY

This study focused on the use of electronic information resources by undergraduate students that are registered with the university library in Ahmadu Bello University, Zaria. The study is restricted to the use of electronic information resources in the university library because the libraries are designed to meet the needs of users. Therefore, university libraries have the responsibility of providing necessary information resources and services for students.

SIGNIFICANCE OF THE STUDY

This study is envisaged to be of benefit to the following among others:

Governments: The findings of the study would encourage both federal and state governments to increase the budgets and subventions of university education; this would positively affect the university libraries as more funds would be made available to acquire more electronic information resources.

University management: This study would afford university managers with necessary information on the use of electronic information resources which would automatically boost the efficiency of undergraduate students in the university community. Besides, through the study, the university authorities would discover that the way to assist the undergraduate students in the university libraries is to effectively meet their basic needs.

University libraries: This study would enable university libraries to effectively meet the information needs of undergraduate students because it would create awareness on the electronic information resources that are available in the university libraries. The findings of this study would enhance the information literacy and technical skills of undergraduate students which in turn would enhance their use of electronic information resources in the university library.

Librarians: This study would afford librarians the benefit of knowing those factors that would enhance the use of electronic information resources in the university libraries. Also, librarians with the knowledge electronic information resources would be able to effectively assist students on how to search and make use of electronic information resources relate in the university library.

REVIEW OF LITERATURE CONCEPTUAL

Use of Electronic Information Resources

Electronic information resources (EIRs) are the bedrock of academic success (Ekenna & Mabawonku, 2013). They provide accurate and timely information for better educational outcomes and aid in the retrieval of huge amount of information for teaching, learning and research. According to Omoike (2013), electronic information resources (EIRs) comprise sets of instructional materials such as audio and video cassettes, CD-ROM, television and radio broadcast as well as multimedia components such as computer and satellites. Undergraduate students make use of e-books, e-journals, electronic reference materials like e-encyclopedias, e-theses/dissertations, CD-ROM databases, e-mail and e-news. Electronic information resources (EIRs) have become very important in academic work. Teaching,

learning and research have been made easier through the use of these resources. EIRs are vital to students learning and research as students have greater access to vast amount of information that is not easily available on print media. These resources can only be accessed using computers and other ICT devices. Electronic information resources that are available for use by students include e-journal, e-books, e-reference, e-news, e-mail, Compact Disk Read Only Memory (CD-ROM) databases, and Online Public Access Catalogue (OPAC).

According to Dadzie (2005) electronic information resources are invaluable research tools that complement the printed ones that are available in the traditional library. E-book has been described as a text similar to a book that is in digital form to be displayed on a computer screen. E-books can be read just like a paper book, using dedicated e-book reader such as Gemstar e-book or on a computer screen after downloading it. Access to articles in electronic journals (e-journals) can also be made through services which offer searchable databases of contents of e-journals from several publishers like Emerald, Sage, etc. and links to journal site for full text.

Brinkley, Lewin, and Cathy (2009) stated that use of electronic resources offers advantage for class activities. It makes users' preparation for their assignment and participation in group discussion more compelling, informative, and different. They recognized five techniques that librarians should consider using EIRs to gain benefit from technology. These five are: Administration: Use of EIRs can help in the administration of course delivery. EIRs can be advertised in home page of the course. Use of EIRs can decrease the amount of time and energy librarians spend in providing information resources. This includes savings for the teaching, photocopying and distributing the information resources (Brinkley, Lewin, & Cathy 2009). Reading/Sources: A wide range of secondary and primary electronic information resources can be 'used in teaching and research. These include electronics reading materials that help in exploring ideas and opinions of students and academic staff. EIRs can include visual and audio resources. Access to EIRs also helps undergraduate students and researchers to be more independent. Exam Papers/Presentation: EIRs help students to be more independent in gaining access to various exam papers and not rely on the lecturer offering past examination papers. Librarians: EIRs provide visual and audio services that can help in attracting students as well as in engaging them in class discussions. Discussions: One of the benefits of adopting use of EIRs in advanced educational institutions is to create, and motivate group discussion. This discussion can be achieved by using on-line chat and e-mails as examples.

REVIEW OF LITERATURE EMPERICAL

Electronic information resources are inseparable part of today's educational system. This is because electronic resources have increased in popularity and use. They can and do enable innovation in teaching, and they increase timeliness in research as well as increase discovery and creation of new fields of inquiry. Moreover, Ismaila (2019) and Akpovire, Olawoyin, Adebayo and Esse (2019) argued that low patronage of scholarly electronic journals in the library was largely attributed to lack of information literacy skills among library users, limited access points, low bandwidth and recurrent power supply. Furthermore, Ekong and Ekong (2018) found out that most undergraduate students lacked computer skills, searching skills, and sufficient training in the use of electronic resources and that lack of awareness, and lack of information literacy skills and computer self-efficacy contribute to the learners' negative attitude towards the use of electronic resources.

Alegbeleye, Madukoma and Sahabi (2019) conducted study on electronic information resources use by undergraduate students of Kaduna State University, (Kasu), Kaduna. They investigated the usage of electronic information resources by undergraduate students of Kaduna State University, (KASU) Kaduna. Survey research method was adopted to carry out the study; the simple random sampling was used to select participants among the undergraduate students that came to use the library. The instrument used for data collection was a questionnaire tagged usage of electronic information resources. A total of 74 questionnaires were administered, of which 54 were duly filled giving. The findings revealed that majority of the respondents had used electronic journal, with 70.3% of them being using them for the purpose of assignment and majority are frequently using electronic journals. The most used electronic resources by students were internet search engines and they use it for completing class assignments.

The study by Ekong and Ekong (2018) on impact of information literacy skills on the use of e-library resources among tertiary institution students in Akwa Ibom state was undertaken to determine the level of use of the resources, how students feel about various issues surrounding electronic resources and whether information literacy skills change was dependent upon subject studied. A total of 317 students across the universities completed the research questionnaire to determine level of use of various electronic information resources; ways in which they felt electronic resources had, either hindered or improved their academic career; if they perceived themselves capable of using the resources; would the standard of their work suffer without the use of these resources; and the various methods employed to acquire the skills necessary to use the sources. Simple

descriptive analysis (Frequency and percentage) was adopted for the study. The result showed that 83% of the students surveyed felt that using this resource saved them time, and found it relatively easy to use. Two thirds of those surveyed stated that if the CDROM was being used, they would wait for it to become free rather than use the print tool.

Ankrah and Atuase (2018) conducted a study on the use of electronic resources by postgraduate students of University of Cape Coast. The main purpose of this study was to examine the use of electronic resources by postgraduate students of the University of Cape Coast, and with a view of giving recommendations based on findings. The major objectives of the study are: (i) to determine postgraduate students' awareness of electronic resources in the library. (ii) To find out the frequency of usage of e-resources by students. (iii) To determine the computer literacy level of postgraduate students. And (iv) to identify the likely problems in the utilization of electronic resources by postgraduate students. The cross-sectional survey design was used for the study. The objectives of the study as depicted by the research questions guided the choice of questionnaire as the sole data collection instrument for the study. Total population for this study was 915 postgraduate. A sample size of 275 which is 30% of 915 postgraduate students was attained. Simple random sampling was used to sample the respondents. Quantitative analysis including frequencies, percentages, tables and charts were used as data analysis technique. The findings revealed that most of the postgraduate students were aware of the e-resources in the library. The findings of this study also revealed that most postgraduate students rather preferred to access information from Google scholar, and other web based databases more frequently than the databases in the library. Madukoma, Onuoha and Ikonne (2014) identified lack of awareness as major contributing factor to non-use of e-resources.

Fosnacht (2017) investigated the reliability and validity of the National Survey of Student Engagement's Experiences with Information Literacy module, an assessment instrument developed in collaboration with a group of instructional librarians. In the 2014 and 2015 NSSE administrations, 44,700 senior students responded to the Experiences with Information Literacy module. These students attended 128 U.S. bachelor's-granting institutions. The response rate for the sample was 27%. After identifying three information literacy related constructs in the module, it assessed the relationship between the constructs and students' engagement in Higher-Order Learning and Reflective and Integrative Learning activities and students perceived gains. The results from these analyses indicated that information literacy activities are positively and significantly correlated with student engagement and students' perceived gains.

Toyo (2017) conducted a study on undergraduates'

information literacy skills and the use of electronic resources in Delta State University, Abraka, Nigeria. The study revealed high level of information literacy skills of the undergraduates. From the previous studies on information literacy levels of undergraduate students, it was revealed that undergraduate students possessed low level of information literacy which could affect their ability to utilize required information resources for academic success and better decision making in life situations. This situation calls for a collaborative effort of university and librarians to improve the information literacy of undergraduate students as reiterated by Maughan (2011) who stated that information literacy is much more than library instruction, and requires an institutional involvement that extends far beyond the library.

Kumari and Mallaiah (2017) undertook a study to determine digital information literacy skills among faculty members of engineering colleges in Manalore, Karnataka: A study. Thestudy discussed the highlights the ways and means the faculty members search the information from different digital information sources. The survey method was adopted for the present study and a structured questionnaire was administered to collect the data. Totally 350 questionnaires were distributed among faculty members, out of which 240 filled in questionnaires were received. The study finds the digital information resources used by the faculty members to get information relating to their own areas. The study will definitely help to organize different information literacy programs in the college to promote and to develop the information literacy skills among faculty and to improve the teaching quality.

RESEARCH METHODOLOGY

Survey method was adopted for this study primarily because it was a suitable and efficient way of studying large populations. It allows only a sample population to be used to represent the entire population. The target population for this study was the undergraduates of Ahmadu Bello University Zaria. The population consisted of mainly 300 and 400 level students. This is simply because they tend to understand and use the library more because of their projects for the final year.

The questionnaire was used as an instrument for data collection. Questionnaire was the only instrument used for the collection of data for this study because it is capable of reaching a large number of respondents and provides privacy and confidentiality. The questionnaire was prepared on the basis of the objective of the proposed study and was distributed randomly among the target population under the study. Total 838 questionnaires were distributed and 600 were returned back after filling by the staff. The descriptive statistical technique made up of tables and percentages was used in analyzing the data collected.

Data Analyses and Presentation

Data was analyzed using descriptive statistics with frequency distribution tables and percentages.

RESULTS

Analysis of Research Question

The following data shown in Tables (1) were collected to enable the researcher provide answers to the research questions raised in the study. To this end, data gathered from the questionnaires were analyzed and presented based on the research questions.

Research Question: **For what purposes are electronic information resources used by undergraduate students in Ahmadu Bello University, Zaria?**

Table 1: Purposes of electronic information resources use

Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Mean	SD
I use the library's electronic information resources for research/writing project	30(4.8)	29(4.7)	186(30.0)	376 (60.5)	3.46	0.80
I use CD RM for discussions on the subject area of interest	26(4.1)	57(9.0)	227(35.9)	323 (51.0)	3.34	0.81

Table 1. Continuation

I use the Internet in the library to generally source materials and information	24(3.8)	66(10.4)	232(36.6)	312(49.2)	3.31	0.81
use the e-resources to retrieve current literature for studies	33(5.3)	81(13.1)	245(39.7)	258 (41.8)	3.18	0.86
I use the online database in the library for my assignments	50(7.9)	81(12.8)	223(35.2)	279 (44.1)	3.15	0.93
I use the Electronic catalogue (OPAC) for sourcing information in the library	43(6.8)	91(14.4)	232(36.8)	264 (41.9)	3.14	0.91
I use e-journal to do class assignments	23(3.6)	98(15.5)	291(46.0)	220 (34.8)	3.12	0.80
I use the electronic books provided by the library to complement my class notes	46(7.2)	112(17.7)	231(36.4)	246 (38.7)	3.07	0.92
I use the electronic journals provided by the library for my project writing	42(6.7)	104(16.6)	257(40.9)	225(35.8)	3.06	0.89
I use e-book to augment my class works	43(7.1)	107(17.6)	247(40.8)	209 (34.5)	3.03	0.90
I use it to search for scholarship opportunities	60(9.6)	106(17.0)	224(35.8)	235 (37.6)	3.01	0.97
use the Internet access in the library to send e-mail	68(11.0)	106(17.2)	223(36.1)	221 (35.7)	2.97	0.99
To search for internship opportunities	44(7.4)	129(21.6)	238(39.9)	186 (31.2)	2.95	0.91
I use the e-resources to write term papers	52(8.3)	152(24.3)	239(38,2)	182 (29.1)	2.88	0.92
I use the e-resources for augmenting class works	65(10.3)	179(28.5)	212(33.7)	173 (27.5)	2.78	0.96
I use the Internet access in the library to chat with friends	182(29.1)	161(25.7)	151(24.1)	132 (21.1)	2.37	1.11
Grand Mean Score = 3.05						

Field Survey, 2019

Decision Rule: The decision rule states that 1.0-1.49 = Strongly Disagree; 1.50-2.49 = Disagree; 2.50-3.49 = Agree; 3.50-4.0 = Strongly Agree. Criteria mean of 2.5 is calculated as follows: 4+3+2+1=10/4=2.5.

Respondent were asked to identify purposes of electronic information resources usage. The findings revealed in Table 1 indicates that undergraduate students in federal university libraries in Ahmadu Bello University, Zaria considered their overall purpose of electronic information resources usage to be high, making a decision by the overall mean score of 3.05 on the scale of 4. Of the sixteen items of electronic information resources usage investigated in the study, 15(93.8%), were highly considered used while only 1(6.3%) was not seen as a purpose of electronic information resources use. For instance, the research/writing project was seen as the top most reason for undergraduate students' use of electronic information resources, as indicated by the mean of 3.46. The implication that can be drawn from the table is that federal university libraries in Ahmadu Bello University, Zaria is a great source of support and reliefs for undergraduate students in the area of project writing/research. However, undergraduate students' do not consider using the internet access in the library to chat with friends (mean = 2.37). This implies that undergraduate students use their phones for chatting with friends during library time. It could also mean that undergraduate students' are unable to access social media on the federal university libraries as a result of

stringent library rule disallowing them to chat online.

DISCUSSION OF FINDINGS

This study investigates use of electronic information resources by undergraduates in Ahmadu Bello University library, Zaria Library. One research questions were tested. The discussion of findings was based on the results of the research question of the study, which were derived from the objective of the study.

Research question was formulated to establish the purpose for the use of electronic information resources by undergraduate students in federal university libraries in Ahmadu Bello University, Zaria. Findings in Table 1 show high level of use in all statements of purposes of electronic information resources use, except on the last item "I use the Internet access in the library to chat with friends in federal university libraries in Ahmadu Bello University, Zaria. Overall, it is derived from the study, that undergraduate students in federal university libraries in Ahmadu Bello University, Zaria use electronic information resources for various purposes namely research/writing project, discussions on the subject area of interest, to source materials and information, to retrieve current

literature for studies, for assignments, for sourcing information in the library, to do class assignments, to complement class notes, e-book to augment class works, to search for scholarship opportunities, to send e-mail, to search for internship opportunities, to write term papers, for augmenting class works and to chat with friends. The finding agreed with that of Omoike (2013) that electronic information resources such as e-journal, e-books, e-reference, e-news, e-mail, Compact Disk Read Only Memory (CD-ROM) databases, and Online Public Access Catalogue (OPAC) are vital to students learning and research as students would have greater access to vast amount of information that is not easily available on print media. The finding also corroborates that of Brinkley et al (2009) which found that use of electronic resources offers advantage for class activities and makes users' preparation for their assignment and participation in group discussion. Similarly, Haridasan and Khan (2009) submitted that electronic information resources were found to be very valuable for research and scholarly communication. The study is also in agreement with the finding of Oshilalu (2011) who reported that resources such as books, journals, indexes, dictionaries, encyclopedias and recreational materials are available for use in electronic form in the present electronic age.

SUMMARY OF THE FINDING OF THE STUDY

• Most of the undergraduates of Ahmadu Bello University Library, Zaria used electronic information resources for research and academic purposes.

CONCLUSION

Electronic information resources have indeed become very important to undergraduate students in Nigerian federal university libraries especially in accessing up-to-date information as they give access to quality information irrespective of place, time and space. The study also revealed high frequency of usage of electronic information resources among undergraduates in federal university libraries.

RECOMMENDATIONS

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

• The university library in the study area should make effort to organize more in-depth training for effective use of electronic resources by students. Though, information about the library electronic resources is presently included in the use of library which

is a compulsory course for all students, however, the teaching needs to be made more practical. The course should not only focus on how students should locate electronic resources, but should also include how they can use electronic resources to attain their academic goals.

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