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Undergraduate Students' Use of Electronic Resources in Academic Libraries in Selected Universities in Nigeria

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Background to the Study

Academic libraries are the bastion of education and learning in higher educational institutions. A well-established library is therefore essential for academic institutions to function as a focal point for teaching, learning and research, and to provide support required for efficient human resources development in the institution. Academic libraries serve as a main source of supply of diverse information and knowledge for the development of skilled human resources needed in various disciplines (Edem and Egbe 2016; Ugwu and Orsu 2017). Academic libraries no longer restrict themselves to print resources and physical services in their collection development, cataloguing and classification, circulation and reference services, current awareness, selective dissemination and bibliographic services, and others. They have since extended their efforts to the use of computer software and hardware and telecommunication technologies in meeting information needs of their clients. Campbell (2006) has observed that numerous creative and useful services have evolved within academic libraries in the digital age, providing quality learning spaces, offering virtual reference services, teaching information literacy, choosing and managing resources, collecting and digitizing archival materials and maintaining digital repositories. Academic libraries generally serve as an integral academic part of higher institutions and generally progress along with their parent institutions (Veletsianos 2016; Vestergaard 2020).

With the advent of ICT, the roles of academic libraries have changed dramatically. Ocholla and Bothman (2007) observed that the rapid pace of development in the field of information technology and the advent of networked information services have prompted a comprehensive review of the library and information science (LIS) profession. There is a fundamental shift from traditional information environment to an e-environment where emphasis is placed more on the acquisition of electronic resources (Solk 2016; Lowther 2017). All the same, traditional library and information services and functions are still much relevant in meeting the information needs of their clientele. The ongoing transition from traditional information environment to e-environment in academic libraries includes the way and manner in which information is provided electronically by academic libraries to their clients. Ani (2008) posited that the transition from print to electronic media, apart from resulting in a growth in information production, has provided users with new tools and applications for information seeking and retrieval. Through a number of ways, academic libraries embrace the provision of information in facilitating study programs and research.

Basumatary (2017:p454) said that “The electronic resources refer to those materials which require computer access, the access can be through mainframe computers, personal computer or handled mobile device.” “The access may be done remotely through the internet or locally.” Electronic resources encompass systems in which information is stored electronically and made available through electronic systems and computer networks. Electronic resources, due to their frequent update, provide access to current information and to information that might be

restricted to the user due to geographical location or finances. Okello-Obura and Magara (2008) revealed that users derive a lot of benefits from electronic resources, gaining access to a wider range of information and improved academic performance as a result of access to quality information. Through various search techniques electronic resources provide extensive links to explore additional resources of teaching, research, training and other scholarly processes. The main types of electronic resources a library might use include online databases, CD-ROM databases, DVD-ROM databases, and digitized resources such as reference works, journal subscriptions or electronic copies of documents, electronic books and all other resources in the WWW (Lowther 2017).

Rapid growth of the internet and ease in use of web means that libraries must subscribe to online information services and databases (Alleman 2018). Electronic databases are organized collections of information of a particular subject or multi-disciplinary subject areas which can be searched and retrieved electronically. These databases include full-text databases which contain a whole content of an article such as citation information, text, illustrations, diagrams and tables and bibliographic databases containing only citation information of an article, such as author name, journal title, publication date and page numbers (Adebayo, Fagbohun, Osayande and Owolabi 2015). Contents of online databases may include journal articles, newspaper articles, book reviews and conference proceedings. CD-ROM databases are increasing as the day goes by in almost all fields due to their various advantages in information storage and retrieval. Electronic resources in CD format include abstracting and indexing services, encyclopedias, dictionaries, directories, yearbooks, back volumes, standards, patents and many other reference works. Publishers, learned and commercial societies are hosting their products on the net just as academic libraries are sharing their internal and external information resources by means of web pages and electronic databases (Solk 2016; Alleman 2018).

Electronic resources are invaluable research tools which partner print-based resources in any academic libraries and provide access to current information as they are frequently updated and provide access to information which might be restricted to user due to geographical location or finances (Akussah, Asante & Adu-Sarkodee 2015; Alleman 2018). However, the cost incurred in the acquisition and maintenance of both the material and human resources required to provide electronic sources to students, staff and researchers may be enormous. It has been observed that despite the provision of electronic resources in academic libraries for the provision of information to their clientele much of these resources are underutilized. Academic libraries, being the brain behind the network of information provision for higher institution students, researchers, lecturers, management and other privileged users, have continuously invested heavily on the procurement, maintenance and management of electronic resources. Egberongbe (2011) had posited that the academic community has undergone tremendous changes, assuming new dimensions influenced by technology-driven applications. He further averred that libraries are using information technologies to improve the management of scholarly information.

There is a swift migration from offline to online. Nigerian universities have been part of this change; they are acquiring, implementing and training their staff to become capable of using the electronic resources to meet library users' information needs. They are also running library user education programmes for their students to acquaint them with the changes that have occurred in information services in the institutions. Students themselves are avid users of information technologies; they are also constantly acquiring skills they need to use electronic resources more effectively. Studies on how students are performing in this transition abound, but the changes are

ever ongoing and studies that track competency in adapting to these changes are necessary to ensure efficient information delivery by the libraries.

Many studies have focused on undergraduates' use of e-resources in different university libraries in Nigeria. For example, Olorunfemi and Ipadeola (2021), Ebijuwa (2018), Tukur (2019), Jamogha, Jamogha and Godwin (2019), Mani, Thirumagal, Vijayalakshmi and Priyadharshini (2019), Omosekejimi, Eghworo and Ogo (2015), and, Daramola (2016) have addressed the subject in different universities in Nigeria, and their findings were hardly ever comparable. A continuous generation of information from other universities is required to form baseline for planning and programming.

Objectives of the study

The objective of this study is to investigate the factors influencing the use of electronic resources by undergraduate students in academic libraries in selected Universities in Oyo State, Nigeria.

Hypotheses

Hypothesis 1

H₀: There is no significant relationship between types of electronic resources available in academic libraries and undergraduate students' use of the resources in the institutions.

Hypothesis 2

H₀: There is no significant relationship between purposes of use of electronic resources and actual use of the resources in the libraries by undergraduate in the institutions.

Hypothesis 3

H₀: There is no significant relationship between constraints and use of the electronic resources in the libraries by the undergraduate students.

Hypothesis 4

H₀: There is no significant relationship between perceived relevance of electronic resources in the libraries and actual use of the electronic resources by undergraduate students.

Hypothesis 5

H₀: There is no significant relationship between demographic factors of respondents and use of electronic resources by undergraduate students.

Literature Review

Levels of awareness and use of electronic resources in Nigerian academic libraries

In Nigeria, the emergence of electronic resources has tremendously transformed information handling and management in academic libraries and libraries generally. The call for frantic efforts to inform and sensitize library users and staff remains very imperative. To this view Broumas (2017) expressed that awareness campaign can help to address the inadequacies with the utilization of these electronic resources now available in academic institutions. Egberongbe (2011) asserted

that the created awareness and influence of electronic resources facilitate required information for re-strategizing the library electronic service provision can identify library patrons' expectations for an effective and responsive electronic library.

Burn's (2016) study showed that the use of electronic resources is very common among the research scholars and students. Showing that majority of students and research scholars are dependent on electronic resources to get desired and relevant information. It was however, revealed that practical uses of electronic resources are not up to the worth in comparison to investments made in acquiring electronic resources. He further posited that infrastructure and training programmes are essential for better use of electronic resources. It is evident from the analysis in the study that the availability of electronic resources is almost sufficient for all the existing disciplines but the infrastructure to use the resources are not adequate and is actually hindering the ability to meet the requirements of users (Vestergaard 2020).

Efforts have been made by many African countries to introduce electronic resources in their libraries which can be seen in many academic and research libraries in the continent. Omekwu (2002) revealed that African countries are in different stages of electronic resources development and use. The use of electronic resources has contributed to reshaping information retrieval process and access to information. In the past, information was transferred from librarians to the users. Presently, most of the communication and transfer of information is between the users and the computers and this is due to the storage of information in the electronic resources which are usually operated with use of computers. There are several electronic resources in the academic libraries which include the Internet resources, electronic databases like the e-granary, CD-ROM databases, electronic journals and electronic books, and digitized resources such as reference works, journal subscriptions or electronic copies of documents, and. electronic books.

Islam (2011) observed in his study a research on demographic influence concerned with inclusion of digital library on e-learning that demographic factors such as level of education and gender are major factors in understanding and appreciating e-learning. In his study it is presumed that students with high levels and strong educational backgrounds have a broader knowledge on the use of technology and its advantages on gaining scholarly achievement. They are exposed to the latest innovation that technology offers and are expected to be more computer literate to makes it easy for them to explore the Internet. The study observed that students with higher level of education tend to update their knowledge and information that can be easily gained thorough e-learning. Though the internet readily supply the information needed and importantly unmediated as the library do (Chen 2015; Chauhan 2017).

Benefits of electronic resources in academic libraries

The shift from print to electronic resources is as a result of advances in information and communication Technologies (ICT) which affords users the availability of a vast array of information. Okebukola (2002) expressed that the shift from print to electronic information means that both academic staff and students in a university system and elsewhere must use these resources for better quality, efficient and effective research more than ever. They should, however, be used with a high sense of evaluation because the information resources and services available in the institutional information systems must be capable of supporting research activities in the institutions (Chen 2015; Chauhan 2017).

According to Salaam (2008) attributed the popularity of electronic resources to the flexibility in searching them than the paper-based forms and that they can be accessed remotely at

any time. Tenopir (2003) in a major survey analyzed the findings of over 200 studies on the use of electronic resources in libraries that were published between 1995 and 2003. The results showed that electronic resources have been rapidly adopted in academic spheres and that behavior varies according to the discipline. Information technologies found in libraries can be divided into three categories: computers, storage media and telecommunications. These three aspects, working together have brought about great improvement in the quantity and quality of library services to users and an amazing reduction in the delivery time. Furthermore, the fusion between computers and telecommunications has enhanced the development of information networks around the world (Chen 2015; Chauhan 2017).

In analyzing the benefits of electronic resources, Sharma (2009) submits that the importance of electronic resources have convinced many libraries to move towards digital e-resources, which are found to be less expensive and more useful for easy access. This suggests that the trend now in the information sector is that, there is a gradual shifting from print resource collections to electronic resource collections in academic libraries in Nigeria. Dadzie (2007) explained that electronic resources are invaluable research tools that complements the print-based resources in a traditional library setting. The study identified the benefits of electronic resources to include: access to more current information, access to information that might be restricted to the user due to geographical location or finances and provision of extensive links to additional resources related contents. Navjyoyi (2007) informed that speedy publication and availability on the desktop are the key advantages that attract research scholars. Okello-Obura and Magara (2008) in a study on electronic information access and utilization revealed that users derived a lot of benefits from electronic resources gaining access to a wider range of information and improved academic performance as a result of access to quality information.

The quality of teaching, learning and research in any academic institution depend, to a large extent, on its library's information resources and services. Information availability, accessibility and use are essential to effective teaching and research in any given institution. Popoola (2008) explained that information is that message that changes the recipient's knowledge base. This means that information increases notably the existing knowledge of the user. Electronic resources and services available in academic libraries are therefore expected to be able to support the research activities of the parent institutions. Academic libraries are expected to acquire, organize in retrievable formats and make available needed information to the students, academic staff and researchers for teaching, learning and research purposes. The ability of academic libraries to effectively carry out this function depends on the availability and accessibility of print and electronic resources. Popoola and Zaid (2007) opined that the ability of libraries to render effective information services such as current awareness, documents delivery, photocopy service, internet and E-mail, facsimile, and selective dissemination of information (SDI). Others are bindery services, on-line database searching, translation, technical report writing, user education, current contents listing, consultancy has correlation with the availability of their resources (Cicchetti 2015; Emasealu and Umeozor 2016).

Use of electronic resources in academic libraries is inevitable due to enormous benefits they come with. These benefits include the fact that electronic resources are often faster than consulting print formats, especially when searching retrospectively, and they are more straightforward when willing to use combinations of keywords. They open up the possibility of searching multiple files at a time (Emasealu and Umeozor 2016). Electronic resources are often faster than consulting print indexes especially when searching retrospectively and they are more straightforward when wishing to use combinations of keywords. He further asserted that electronic

resources can be printed and searches saved to be repeated at a later date they are updated more often than printed tools.

Factors affecting electronic resources use in Nigerian academic libraries

The factors that affect the use of electronic resources by undergraduate students in academic libraries vary from availability of resources and materials, management and administration as well as student's attitude and disposition (Oyadonghan, 2011, Emasealu and Umeozor 2016). To support this view Ali (2005) found out that numerous problems faced while using electronic resources include lack of knowledge about the resources, lack of trained staff and inadequate terminals. Chisenga (2004) carried out a survey of the use of ICTs in ten African Public Library Services. The survey found that, although most libraries had internet connectivity, very few were offering web-based information services to their users. The study however, identifies four barriers to the effective provision of electronic resources in those libraries, namely: lack of strategic planning; lack of adequate or reliable funding; lack of use of Internet to provide information services to users and a lack of consistent training for users in new ICT services (Emasealu and Umeozor 2016).

Oketunji (2000) identified some factors militating against the use of information technology in Nigeria universities as access to adequate and reliable electricity which services are usually restricted to urban centers while most universities are usually situated in the rural areas. There are also the *laissez-faire* attitude of lecturers, students and libraries staff as other factors militating against the development and use of ICT in academic libraries in Nigeria. He further expressed student users should do something on their own to improve their IT skills. Similarly, Kamba (2008) discovered the problem of IT especially internet use in Nigeria libraries to include inadequate and poor information infrastructure, which the country Nigeria lies within the tropics where dust, humidity and heat reign supreme. He posited that problems of environmental control are compounded by the unreliable electricity supply which makes it difficult to maintain a suitable computer environment.

Shariful (2007) expressed that funding is critical in any library and that the rate of integration of electronic resources in academic libraries has been largely defined by the availability of funds in higher institutions. According to Nok (2006) observed in her study the challenges of computerizing university libraries in Nigeria, that many academic libraries in Nigeria have not initiated viable income generating strategies to supplement government findings. She further observed other factors as poor maintenance and update culture in academic libraries to handle the growth of library database and ensure fast data entry, retrieval and inquiry. She posited that this may be due to the fact that most staff in academic libraries in Nigeria were trained in tradition librarianship and are finding it difficult to cope with the requirements of the electronic age. This is a great set back in the use of electronic resources in academic libraries, as many staff of academic libraries are reluctant to jettison their old mindset which resists changed (Emasealu and Umeozor 2016).

As other scholars have stated above on the challenges faced by academic libraries in the process of making ICTs available and used, the report of Haliso (2011) pointed out that lack of government funding; limited and expensive Internet bandwidth; unstable power sources, and insufficient staff development affected job performance of academic librarians. Thanuskodi (2010) observed that majority of academic library users are not satisfied with availability of enough electronic resources followed by coverage of electronic resources which do not suite their research

areas. Other factors as observed include time consumption, non-provision of assistance by the information professionals and lack of training of academic library staff (Emasealu and Umeozor 2016).

Oyewusi and Oyeboade (2009) in their study of the use of academic libraries discovered that majority of academic library users do not have the requisite skills and as such shy away from the use of information technology. He further observed that lack of user education and time for practical work on the use of information technology was among the problem of students. ITU (2009) observed that poor and inadequate telecommunication facilities; poor level of computer literacy, even within the academic community; poor level of computer facilities; poor level of awareness of Internet facilities among policy makers, government officials and the ruling class in general; and minimum involvement of academic institutions in network building in Africa as challenges militating against the use of ICTs.

Low level of ICT skills; lack of functional ICT policy; economic barriers; ICT infrastructure; resistance to change; low capacity of communication facility; absence of digital or electronic libraries except in South Africa; lack of policy for manpower development etc. are common barriers mentioned as factors undermining the use of ICTs (Mani, Thirumagal, Vijayalakshmi and Priyadharshini 2019, Omosekejimi, Eghworo and Ogo 2015). Watts and Ibegbulam (2006) also examined some of the militating factors against the use of electronic information resources available at the medical library of College of Medicine, University of Nigeria, Nsukka. Their findings revealed that lack of an adequate ICT infrastructure and affordable online access, absence of in-depth ICT skills and information searching skills are barriers to the use of electronic resources.

Methodology

A descriptive survey research design was adopted for this study. The target population comprised registered undergraduate students in academic libraries of selected universities in Oyo State, Nigeria. The data presented in table 1 represent the statistics of the students. As at the time of data collection, there were 4009 registered undergraduates in Kenneth Dike library, University of Ibadan, 1995 undergraduates were registered in T.Y Danjuma Library, Ajayi Crowther University and 1300 undergraduates were registered in Lead City University library.

Table 1: Registered students in the academic libraries of selected Universities

<i>Institution</i>	<i>Number of Registered students in the library</i>	<i>Sample size</i>
Kenneth Dike library, U.I	4009	220
T.Y Danjuma Library, Ajayi Crowther University	1995	109
Lead City University library	1300	71
<i>Total</i>	<i>7,304</i>	<i>400</i>

A sample size of 400 was purposively decided for the study, a size that is considerably large enough to ameliorate any sampling errors. Proportionate to size sampling was used to enable the researcher balance the disparities in sample sizes selection due to the differences in population sizes of the institutions.

A questionnaire was used to collect the data during April to May 2019. The questionnaire was designed by the researcher, following a synthesis of the literature, and guided by the objectives stated for the study. A section (F) of the questionnaire was designed based on questions and scale used by Ofulue (2011) and Owoeye (2011). The researcher also paid preliminary visits to the libraries and inquired from the librarians about the resources that are available in their libraries. We also held series of informal meetings with students to generate opinions about factors that influence use of electronic resources in the libraries. The questionnaire was finally vetted by three professors from the University of Ibadan, Nigeria. The questionnaire was recast for clarity following observations about the content and structure of the questionnaire from the vetters.

The questionnaire was divided into 7 sections:

Section A: Demographic information: This section guided data collection on the socio demographic information of the respondents. The demographic characteristics on which data was collected include level of students, gender, age, religion, and marital status.

Section B: Availability of electronic resources: This section was used to collect data on the availability of electronic resources in academic libraries and the requirements for using the electronic resources.

Section C: Use of electronic resources: This section of the questionnaire collected data on the frequency of use of electronic resources in the academic libraries. Questions were asked to determine the frequency of use of electronic resources by undergraduate students and how long they have been making use of electronic resources available in their academic libraries.

Section D: Factors influencing use of electronic resources: This section collected information on factors influencing the use of electronic resources among undergraduate students.

Section E: Factors affecting use of electronic resources: To measure the factors affecting use of electronic resources, respondents were asked if they agree that the following factors affects their use of electronic resources in the academic libraries; too few computers with internet facilities, incessant power outage, slow internet connectivity, selecting search terms, non-connectivity, inability to use computer, finding relevant information, lack of IT and information retrieval skills.

Section F: Benefits of electronic resources: Measured the level of relevance of electronic resources; the questions and scale were derived from Ofulue (2011) and Owoeye (2011).

Section G: This section guided data collection on the suggestions of respondents regarding what their institutions should do to address the problems encountered by using the electronic resources in their libraries.

The researcher visited the institutions in the company of three research assistants. After obtaining written permission from the institutions, accidental sampling technique was applied to hand the copies of the questionnaire to undergraduate students in their classrooms during their break time. Four hundred copies of the questionnaire were distributed amounting to table 1, but 352 were retrieved, and they were all useful for analysis. The data collected was summarized, and analyzed with Statistical Package for Social Sciences (SPSS ver 23) software. The analysis plan was to examine how the factors identified influenced undergraduate students use or non-use of the electronic information resources listed, and the relationship between use of the resources and the demographic characteristics of the students. The first part of this plan makes binary logistic regression analysis very suitable. Pearson correlation was used to examine the relationship between demographic characteristics of the students and their use of the electronic resources.

Results

Demographic information of respondents

Table 2 shows the demographic characteristics of the respondents. A little more than half of the respondents 51.42% were females while 48.58% were males. Respondents also consisted low number of people under 18 years (6.25%), majority of them were with 18-22 years, while much less than this value were those aged 26-30 years (16.19). Just 3.13% were those aged above 30 years.

Table 2: Demographic information of respondents

<i>Demographic characteristics</i>		<i>Freq</i>	<i>%</i>
Gender	Male	171	48.58
	Female	181	51.42
Age	Under 18	22	6.25
	18 – 25	253	71.88
	26 – 30	57	16.19
	Above 30	11	3.13
	NR	9	2.56
Level	100	71	20.17
	200	90	25.57
	300	103	29.26
	400	81	23.01
	500	7	1.99

Those in 300 level were the highest in number (29.26%) while the number of students in other age categories ranged between 20% to 26%, except those in 500 level that were only 1.99%.

What types of electronic resources are available for use in the academic library?

Table 3 shows the electronic resources used by the students. The internet was the most used resource (77.56%), books are the most used resources (e-book 72.44%) and (reference book 75.28%) in the libraries.

Table 3: Types of electronic resources available in academic libraries

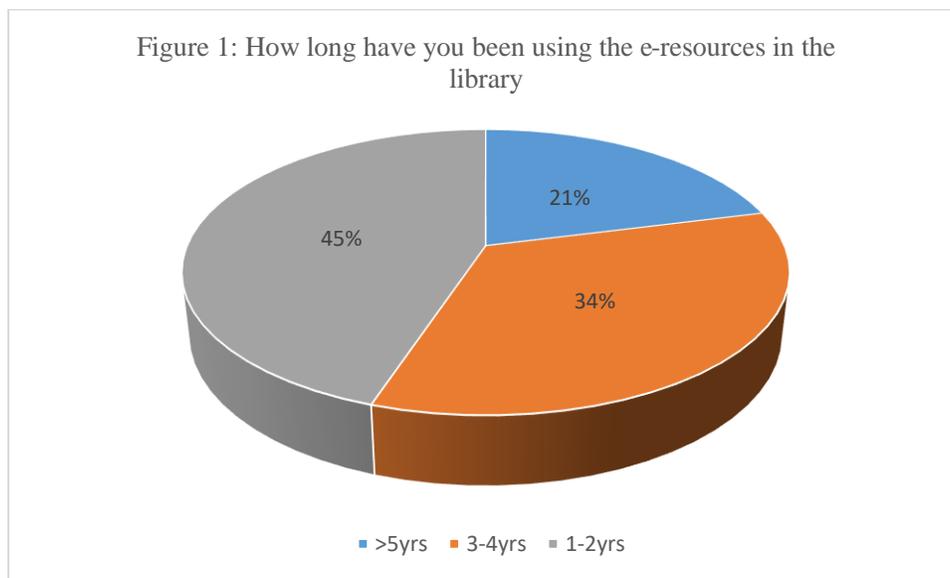
E-resource	Response	N	%
Electronic journal	Yes	160	45.45
	No	188	53.41
E-book	Yes	255	72.44
	No	92	26.14
Reference book	Yes	265	75.28
	No	83	23.58
Factual database	Yes	56	15.91
	No	291	82.67
Reference database	Yes	183	51.99
	No	165	46.88
Dictionaries	Yes	241	68.47
	No	107	30.40

Cd-Rom	Yes	187	53.13
	No	160	45.45
E-mail	Yes	96	27.27
	No	252	71.59
Internet	Yes	273	77.56
	No	75	21.31
OPAC	Yes	126	35.80
	No	222	63.07

Factual databases (15.91%) attracted the least number of users while emails (27.27%) and OPAC (35.80%) did not attract as many students to the library electronic services as other resources did.

How long have you been using the e-resources in the library?

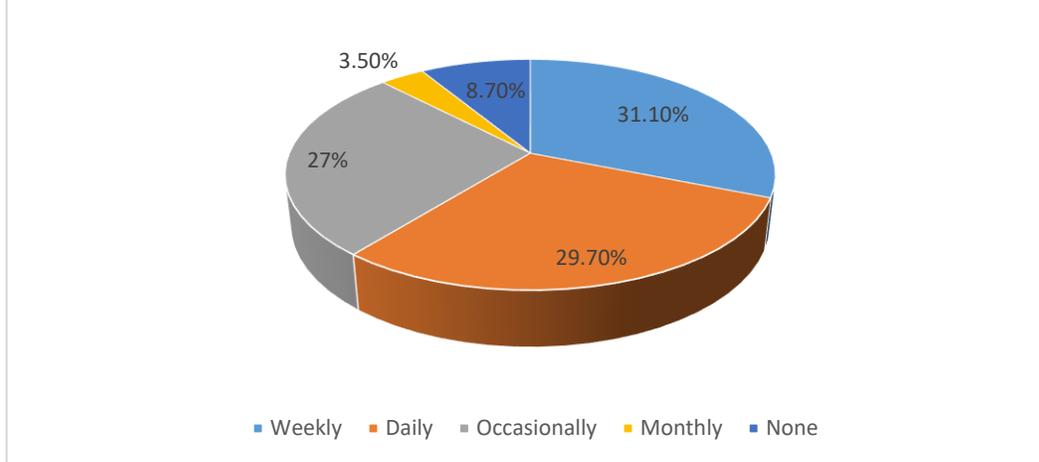
Figure 1 shows that 45% of the respondents have been using the e-resources in the libraries for 1-2 years while 34% and 21% respectively have been using them for 3-4 years and upward of five years respectively.



How often do undergraduate students use electronic resources in the academic library?

Figure 2 shows that 31.1% of respondents made use of electronic resources weekly, 29.7% of respondents made use of electronic resources daily, and 27% of respondents made use of electronic resources occasionally 3.5% of respondents monthly while 8.7% of respondents attested they do not make use of electronic resources in the academic libraries.

Figure 2: How often do you use the electronic resources in your library?



Test of hypothesis

Hypothesis one: There is no significant difference between types of electronic resources and use of electronic resources in academic libraries among undergraduate students in selected universities.

A binary logistic regression analysis was conducted to test the relationship between types of electronic resources and use or non-use of electronic resources in academic libraries. The model was statistically significant, $X^2(10, N=352) = 41.78, p < 0.05$, indicating that the model successfully distinguished between the types of electronic resources and use non-use of the e-resources. The model explained 26% (Nagelkerke R^2) of the variance and correctly classified 91% of cases. Table 4 shows that only three of the ten variables namely e-books, reference books and reference database made unique statistically significant contribution to the model. The strongest predictors were e-books and reference database, recording odds ratio of 0.263 and 0.216 respectively. Electronic journal, factual databases, dictionaries, CD-ROM, e-mail, internet, and OPAC did influence use or non-use of electronic resources in the academic libraries.

Table 4: Logistic regression analysis of relationship between types of electronic resources and use of electronic resources-

	B	S.E.	Wald	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
E-Journal	-0.817	0.591	1.911	0.167	0.442	0.139	1.407
E-Book	-1.335	0.515	6.726	0.010	0.263	0.096	0.722
Reference BOOK	1.035	0.525	3.890	0.049	2.816	1.007	7.876
Factual Database	1.222	0.644	3.606	0.058	3.395	0.962	11.989
Reference Database	-1.531	0.674	5.159	0.023	0.216	0.058	0.811
Dictionary	0.197	0.492	0.160	0.689	1.218	0.464	3.195
CD-ROM	-1.213	0.644	3.548	0.060	0.297	0.084	1.050
E-mail	-0.094	0.572	0.027	0.869	0.910	0.297	2.792
Internet	-0.238	0.488	0.238	0.626	0.788	0.303	2.052
OPAC	1.009	0.669	2.276	0.131	2.742	0.739	10.166

Hypothesis 2: There is no significant relationship between purposes of using electronic resources and use of electronic resources in academic libraries by the undergraduate students.

The binary logistic regression model in table 5 was statistically significant, $X^2(10, N=352) = 53.089$, $p < 0.05$ indicating a successful distinction between purposes of use of electronic resources and use or non-use of the e-resources. The model explained 11.4% (Nagelkerke R^2) of the variance and correctly classified 91.20% of the cases.

Table 5: Logistic regression analysis of purpose of use of the e-resources and on use or non-use of electronic resources

	B	S.E.	Wald	Sig.	Exp(B)	95% C.I for EXP(B)	
						Lower	Upper
Pleasure	1.103	0.445	6.126	0.013	3.012	1.258	7.212
Research/project	-18.558	12.810	0.000	0.999	0.000	0.000	.
Searching for new things	0.164	0.876	0.035	0.851	1.178	0.212	6.565
Writing term paper	0.165	0.522	0.100	0.752	1.180	0.424	3.284
Doing course Assignment	-18.441	19.072	0.000	0.999	0.000	0.000	2.311
Quality of resources	-0.111	0.763	0.021	0.884	0.895	0.201	3.992
Assist others	-0.042	0.529	0.006	0.937	0.959	0.340	2.705
Currency of information	1.039	0.501	4.301	0.038	2.827	1.059	7.550
Less expensive	0.283	0.457	0.382	0.536	1.327	0.541	3.251
Quick access to information	-0.889	0.792	1.259	0.262	0.411	0.087	1.942
Availability of help	0.818	0.912	2.155	0.025	4.212	0.071	1.102

Pleasure predicted use or non-use of the electronic resources in the libraries ($B=1.103$, $SE 0.445$, $X^2=6.126$, $Exp(B) = 3.012$, $p=0.013$). The B is considerably low, but the odds ratio, $Exp(B)$, shows a relative high odd in favour of using the library electronic resources for pleasure purposes. The currency of information in the library e-resources predicted the odds of use or non-use of the libraries ($B=1.039$, $SE = 0.501$, $X^2= 4.301$, $Exp(B) = 2.827$, $p=0.038$). As in the immediate previous case, the slope (B) is low in comparison with the odds ratio (2.827), supporting a high odds that students used the e-resources in the library because they would access current information. A more interesting result than the previous is that students reported that the availability of help in the library predicted their use of e-resources in the institution library ($B=0.818$, $SE=0.912$, 0.025 , $X^2= 1.259$, $Exp(B) = 4.212$, $p=0.025$). With a high odds ratio (4.212) in comparison with other significant dimensions, getting help from library staff and others constitute the major odds for use or non-use of the library electronic resources.

Hypothesis 3: There is no significant relationship between constraints of use of electronic resources and use or non-use of electronic resources in academic libraries by undergraduate students.

The binary logistic regression model in table 6 was statistically significant, $X^2(10, N=352) = 111.23$ $p < 0.05$, an indication that constraints to use of electronic resources use of electronic actually successfully predicted use or non-use of the e-resources. Table 6 shows that the model explained 45% (Cox and Snell R squared) and 98% (Nagelkerke R^2) of the variance in the use of electronic resources in academic libraries, and correctly classified 91% of the cases.

Table 6: Logistic regression analysis of effects of constraints on use or non-use of electronic resources

Variables	B	S.E.	Wald χ^2	Sig.	Exp(B)	95% C.I for EXP(B)	
						Lower	Upper
Too few computers	0.094	0.601	0.024	0.876	1.098	0.338	3.569
Incessant power outage	-0.311	0.617	0.254	0.614	0.733	0.219	2.455
Slow internet connectivity	0.479	0.610	0.618	0.432	1.615	0.489	5.334
Selecting search term	1.268	0.556	5.207	0.022	3.553	1.196	10.558
Poor connectivity	-1.217	0.591	4.236	0.040	0.296	0.093	0.944
Inability to use computer	0.860	0.575	2.237	0.135	2.364	0.766	7.297
Finding relevant information	0.057	0.532	0.011	0.915	1.059	0.373	3.001
Lack of IT and information retrieval skill	-0.607	0.495	1.505	0.220	0.545	0.206	1.438

As shown in table 6, two of the variables namely selecting search term (B=1.268, SE 0.556, $X^2=5.207$, Exp(B) = 3.553, p=0.022), and poor connectivity (B= -1.217, SE 0.591, $X^2=4.236$, Exp(B) = 3.012, p=0.040) made unique statistically significant contributions to the model.

Hypothesis 4: There is no significant relationship between relevance of electronic resources and use or non-use of electronic resources.

Table 7 shows that the full model containing all the predictors was statistically significant $X^2(8, N=352) = 30.483$, df=9, p<0.05 which implies that the model was able to distinguish between relevance of the e-resources to respondents use or non-use of electronic resources academic libraries and those that were not. The model explained 97% of the variance in the use of electronic resources, and correctly classified 91% of the cases.

Table 7: Logistic regression analysis of relationship between relevance of electronic resources on use or non-use of electronic resources

	B	S.E.	Wald	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
Provide Desired information	-2.055	1.383	2.207	0.137	0.128	0.009	1.928
Helps to prepare me for examination	2.042	0.540	14.272	0.000	7.703	2.671	22.215
Give way for wide access of information	-1.164	1.084	1.155	0.283	0.312	0.037	2.610
Very fast and easy to use	1.062	0.643	2.730	0.098	2.893	0.820	10.202
Well located and easily accessible	0.190	0.548	0.120	0.729	1.209	0.413	3.542
Efficient and of high benefit in meeting academic and research needs	-0.584	0.664	0.774	0.379	0.558	0.152	2.049
Very conducive to use	1.486	0.607	5.986	0.014	4.419	1.344	14.528
Provide timely information	-1.880	1.038	3.278	0.070	0.153	0.020	1.168
Enhance my educational pursuit	0.465	0.717	0.420	0.517	1.591	0.391	6.484

Two factors namely very conducive to use (B=2.042, SE 0.540, $X^2=5.896$, Exp(B) = 4.419, p=0.014), and helps me prepare for examination (B=1.486, SE 0.607, $X^2=14.272$, Exp(B) = 7.703, p=0.000), made statistically significant contributions to the model.

Hypothesis 5: There is no significant relationship between demographic factors of respondents and use of electronic resources among undergraduate students.

Correlation analysis was used to gauge this relationship. Level of education has significant relationship with use of electronic resources (N=343, $p=0.017$, $r=0.074$), gender (N= 341, $r=-0.044$, $p=0.040$ and marital status (N=341, $r=0.082$, $p=0.013$). Although the relationship was significant for all the variables, the magnitude of r is very low and negative for gender.

Discussion of Findings

The main objective of this study is to investigate the factors influencing the use of electronic resources by undergraduate students in academic libraries in selected Universities in Oyo State, Nigeria. Besides basic data description, logistic regression analysis was conducted to determine the relationship between the types of electronic resources available for use in academic libraries, factors influencing the use of electronic resources and factors militating against the use or non-use of electronic resources in academic libraries.

The study involved students from both public and private universities, and their demographic variables here reflect what is known about undergraduate students in Nigerian universities in south west generally (Haruna 2021). As would be expected, the internet and e-books dominate the electronic resources the students patronize in the library. However, Omoosejimi, Eghworo & Ogo's (2015) study found that ebooks were the third most used resources, after databases and CD ROM. The students reported that the libraries have good connectivity in all the universities studied. Moreover, there is evidence of increasing presence and availability of electronic books in the internet. This finding is different from Daramola (2016) and Olorunfemi and Ipadeola (2021) finding who assessed use of library e-resources by undergraduate students of the Federal University of Technology, Akure, Nigeria. He found that undergraduate young male students visited the e-resources more than the female students. The students' major reasons for using the e-resources were to access emails, do assignments and carry out research. The study reveals the students were not motivated to use the e-resources and that the utilization of the e-resources did not provide a way of relaxation for the students.

With the fewest number of students reporting using the e-resources for more than five years, it would appear therefore that many of the students started using electronic educational resources when they came into the university. About one third of the respondents who reported using the resources on daily basis is considerably high, and those who reported weekly use also include those who use every two days, and so on. e-Books, reference books and reference database which were the most used resources were also the types of resources that predicted non-use of the electronic resources in the libraries. Tallying with the findings about e-resources attracting students to the library e-resources, one could state that when undergraduate students log into their university library e-resources, their primary purpose would be to consults book materials. A similar study by Malipatil and Mudda (2017) shows that 70.96% of the respondents in their study used e-books in the libraries, although those used the internet were high in number.

Currency of information and availability of help are the major reasons for which the students use the library e-resources. Help is a major attraction to many libraries, an aspect of library benefits that has not been properly investigated. Help is also one of the major reasons why respondents in Devi and Devi's (2017) study used the academic library. It is not clear how currency of information attracts students to the library e-resources except probably in conjunction with help

they obtain from library service providers. In a study that focused on knowledge commons, Matobako and Nwagwu (2021) have shown that "... cooperative and collaborative learning, mutual help and assistance were commonly reported by the participants, particularly in the area of helping others acquire various ICT skills" as a major attraction to the library. In another study in India, Arachchige, Niqreshand and Dweiri (2015) showed that a major constraint to maximal use of the library was related to poor library use education programme by librarians.

Two major constraints are in selecting of search terms and poor connectivity. Search term selection capability resonates regularly in various aspects of information management, for instance personal information management (Donkor and Nwagwu 2019, Nwagwu and Donkor 2021). Use of e-resources in the library constitutes an aspect of the myriads of issues in personal information practices. This issue becomes very prominent in the wake of increased call for expansion of information literacy curriculum in the high education institutions (Nwagwu 2021). The issue of connectivity must be connected with the power supply challenges that interrupt electronic based services. Tukur's study also identified poor connectivity as a constraint to use of e-resources by undergraduate students in a university in Nigeria. Yet the electronic resources in the library are conducive to use and they also help to prepare students for their examinations. Far from implying that the libraries are conducive for learning, students rather prefer the library irrespective of the challenges to other venues. The help which students get from the library must be related to meeting the need of preparing for examinations. They meet other students with whom they exchange information and knowledge relevant to learning.

In respect of the findings regarding relationship between demographic variables and use or non-use of e-resources in the libraries, Islam et al. (2011) have observed that demographic variables influence inclusionism of digital library on e-learning. Ebijuwu (2018) found a significant relationship between use of library e-resources in selected private universities in Nigeria but they did not proceed to establish which gender was using the library more than the other. In a university in Adamawa State, Bassi and Camble (2011) found a higher mean value of 23.53 for male students, greater than that of female 21.47 in respect of use e-resources in the library. Students with high levels and strong educational backgrounds have a broader knowledge on the use of technology and its advantages on gaining scholarly achievement. They are exposed to the latest innovation that technology offers and are expected to be more computer literate to explore the Internet.

Conclusion

The objective of this study was to investigate the factors influencing the use of electronic resources by undergraduate students in academic libraries in selected Universities in Oyo State, Nigeria. As would be expected, the internet and e-books dominate the electronic resources the students patronize in the library. With the fewest number of students reporting using the e-resources for more than five years, it would appear therefore that many of the students started using electronic educational resources when they came into the university. Currency of information and availability of help are the major reasons for which the students use the library e-resources. Help is a major attraction to many libraries, an aspect of library benefits that has not been properly investigated. Selecting of search terms and poor connectivity. Search term selection capability resonates regularly in various aspects of information management, for instance personal information management. Library user education provided to students at entry should find roles for students in

higher levels of their study. Also, such information literacy programmes should consider including information search and retrieval methods.

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