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DIGITAL LITERACY SKILLS AS CORRELATE OF ELECTRONIC INFORMATION
RESOURCES' (EIRs) USE BY UNIVERSITY UNDERGRADUATES IN SOUTH-
SOUTH, NIGERIA

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1. Introduction

The days where universities thrived only on print information resources are long gone. These days educational use of e-information resources has become very popular across diverse disciplines in universities such that the service qualities of university libraries are now measured in terms of electronic collections (Tamrakar and Garg (2016). So ubiquitous has become e-resources that no library can effectively deliver on its mandate without deploying e-information resources. Thus, this has made university libraries to now acquire and provide access to e-resources to effectively serve diverse users (Adeleke and Nwalo, 2017).

Electronic information resources, usually abbreviated as EIRs or e-information resources, are information in digital or non-print formats. They include but not limited to internet resources, e-books, e-journals, e-encyclopedias, online abstract, CD-ROM, online databases, e-mail and e-news (Adedokun & Fawole, 2018). With many found on the Internet, a common feature of EIRs is that they can be retrieved through computerised means. EIRs are useful to undergraduates as they can be used to build and enrich knowledge. Mole (2017) observed that Internet resources have the potential to provide information far beyond that which is available in the physical library's collection and undergraduates can't afford to ignore its capabilities. They serve an important purpose in learning, teaching, and research in any academic institution of higher learning including universities. Hence, these merits necessitate efforts by libraries to ensure availability of relevant e-information resources to efficiently meet the information needs of undergraduates (Salman et al, 2020).

However, the complexity of EIRs makes it imperative for undergraduates to acquire digital proficiencies to be effective in searching, accessing, retrieving and using information from a wide range of electronic sources. Alqudah (2021) opines that the emergence of the

Internet and other electronic sources of information has led to a shift from traditional methods of searching, retrieving, sharing and disseminating information, to the use of the digital methods, which depend on the use of devices and tools that are managed digitally. Undergraduates, therefore, are expected to be digitally literate, a prerequisite of the digital society, to effectively navigate and use electronic information for various academic activities. This brings to the fore the concept and necessity of digital literacy.

As describe by Yo, (2021), digital literacy is a term often used interchangeably with digital fluency and digital competencies. He added that digital literacy connotes the availability of knowledge and skills necessary for the safe and effective use of digital technologies and Internet resources by students. Bawden (2008) views digital literacy as an ability to understand how to use information from variety of digital sources. He further opines that digital literacy could simply be described as information literacy in the digital age. By inference, digital literacy the ability to access, use and evaluate information from a variety of electronic sources. Possessing digital literacy could mean an ability for undergraduates to solve the widest range of tasks associated with the use of electronic information resources for academic work, including but not limited to sharing information, research, project writing, assignment and study.

Goodyear (2012) agrees with the above and consequently, advised that in this age, students who will effectively use EIRs for study, research and other academic work must be critical and skilled users of online information resources. This is to say while EIRs offer enormous opportunities for undergraduates and continually exert pressure on the educational institutions and their libraries, it is therefore, pertinent for undergraduates in Nigerian universities especially in University Uyo and the Federal University Otuoke to be digitally literate so as to effectively savour the university learning experiences and opportunities especially with the use of EIRs for diverse academic activities.

University of Uyo (UNIUYO) which is located in Uyo, Akwa Ibom State and Federal University Otuoke (FUO) located in Otuoke, Bayelsa State are federal government owned universities established in 1991 and 2011 respectively. The two universities are located in the south-south geo-political region of Nigeria. Both universities offer degrees at undergraduate level and have functional university libraries established to cater for the information need of students at all levels, faculty and researchers. Hence, an empirical study of the digital literacy skills of undergraduates, who are often the predominant users of the library, is important to ascertain the assumption that digital literacy skills may influence the use of EIRs by undergraduates in universities in south-south, Nigeria.

State of the Problem

The digital age makes it desirable for undergraduates in Nigeria to use EIRs as they are confronted with the demanding task of seeking adequate knowledge and academic excellence. However, preliminary findings in university of Uyo and Federal university Otuoke revealed that despite efforts made by librarians in both university libraries to provide access and ensure effective use of EIRs, the patronage of electronic collections by undergraduates in both universities still leaves much to be desired. This birthed the assumption that lack of digital literacy skills by undergraduates may have caused this ugly trend.

This assumption is premised on the findings of previous literature that to adequately use EIRs one needs to be well versed in digital literacy skills to effectively identify information needs and consequently, search various electronic sources to satisfy these needs. Despite this important revelation, published literature that empirically ascertain how digital literacy level may influence the use of EIRs by undergraduates in Nigerian universities seems inadequate as most available works are predominantly descriptive and anecdotal. Therefore, this study aimed to bridge this gap by empirically investigating the influence of digital literacy skills on use of EIRs by university undergraduates in south-south, Nigeria.

Objectives

The objectives of this study were to:

1. investigate the purpose of e-information resources' use by undergraduates in South-south universities
2. ascertain the frequency of use of e-information resources' use by undergraduates in South-south universities
3. determine the level of digital literacy skills possessed by undergraduates in south-south universities
4. ascertain the challenges of acquiring digital literacy skills by undergraduates in south-south universities
5. find out the relationship between digital literacy skills and use of e-information resources by undergraduates in south-south universities

Research questions

1. What purpose do undergraduates in south-south universities use e-information resources for?
2. What is the frequency of use of e-information resources by undergraduates in South-south universities?

3. What is the level of digital literacy skills of undergraduates in south-south universities?
4. What are challenges of acquiring digital literacy skills by undergraduates in South-south universities?

Hypothesis

Ho.1 There is no significant relationship between Digital literacy skills and use of e-information resources by undergraduates

2. Literature review

Electronic information resources play a crucial role in the libraries' quest to meet their 21st century demands in the universities. As Ekenna and Mabawonku (2013) rightly stated, EIRs are the bedrock of academic success as they provide accurate, up-to-date and round-the-clock information for better educational outcomes and aid in the retrieval of huge amount of information for teaching, learning and research by students and staff in the ivory towers.

Some studies have indicated that undergraduates use EIRs in the course of their stay in universities (Toyo, 2017, Beetsha, Agena and Famaren, 2019) and opportunities offered by EIRs may have been a factor that motivates their use by undergraduates. Quadri, Adetimirin & Idowu (2014) investigated the purpose of use of e-information resources by 291 undergraduates in Babcock and Redeemer's universities in Ogun state, Nigeria. The study adopted descriptive survey design and questionnaire as the instrument of data collection. It was revealed that while 128 (64%) of the respondents in Babcock used EIRs for assignment, the result was not different in Redeemers' as most 49 (89.1%) respondents affirmed to have used e-information resources for assignment. By implication, EIRs seem to be useful to academic activities of undergraduates. This reason may have informed EIRs' status as important component in the information infrastructure of libraries as libraries now acquire and provide remote access to EIRs.

Undergraduates, who are mostly the major users of the library in the university community, use EIRs at different frequencies. Adeniran and Onuoha (2018) investigated the frequency of use of EIRs by 550 students in private universities in Ogun state, using questionnaire as instrument of data collections. It was found that that the Internet ($\bar{x} = 4.31$), OPAC ($\bar{x} = 3.43$), Online databases ($\bar{x} = 3.66$), e-journal ($\bar{x} = 3.34$), e-books ($\bar{x} = 3.16$) were the major EIRs used frequently by respondents while CD-ROM ($\bar{x} = 2.61$) was not frequently used by the respondents. This corroborated the findings by Tamarka and Garg, (2016) who

studied use of EIRs by 196 students in Guhawati, India and reported that majority of respondents 157 (39.84 %) preferred using e-journals and online databases 31 (7.86 %) to satisfy their academic/research needs more frequently. These results were as expected considering the fact that EIRs are essential for research and study and will always receive high patronage by students in the ivory towers. It is therefore, a matter of necessity for undergraduates to acquire and sustain the skills which will make them active users of EIRs as they face the ever-increasing demand to use information to complement their class instructions.

According to Adeleke & Emeahara (2016) the level of digital literacy skills possessed by students will enhance their quest to retrieve information from the Internet or the World Wide Web, online databases, e-books, e-journals, films, e- conversations, e-government reports, digital images or any number of other possible digital sources. This was buttressed by by Yo, (2021) who opined that the capacity to use e- information on the internet differs from the usual print and the way of reading on the Internet is branchy – a student can navigate to the right or left, based on what is needed more at this moment. This implies that for undergraduates to leverage adequately the EIRs provided by the library, they should be digitally literate.

Mole (2017) investigated the strategies for enhancing the academic use of EIRs. Using 2500 undergraduate students in University of Nigeria, Nsukka, the study adopted descriptive survey design and a self-developed questionnaire was used for data collection. Majority of the undergraduates strongly agreed (\bar{x} 3.56) that teaching advance searching digital skills will be significant in the quest to improve students use of EIRs in the universities. The reason for this strong agreement may not be far from the fact that EIRs are housed in a wide range of sources and will take one with adequate searching skills to navigate effectively across different sources for information. Corroborating the above findings, Jamorgha, et.al 2019 reported that there is every tendency that the capacity of students to exploit e-information resources in a university library will depend on the level of their skills, training and mastery of the digital technologies.

Salman et.al (2020) investigated the factors that affect acquisition of digital literacy skills by 278 undergraduates in Fountain University library, Osogbo and the extent digital skills affect their use of EIRs. The study which adopted social survey research design, used questionnaire as the main instrument of data collection. Results showed that 90 (32.4%) admitted that lack of digital skills hinder their use of EIRs. Majority 161 (57.9%) and 121 (43.5%) of the respondents identified low internet bandwidth and volatility of online information respectively as a major challenge to their acquisition of digital proficiencies. Hence, to encourage the use of EIRs, it was recommended that libraries and librarians should

take proactive steps in training and orienting users on digital skills as this has the potential of increasing the patronage of EIRs in the libraries.

In a study by Abrosimova (2020) conducted to determine the level of digital literacy skills of 163 students in Kazan Federal University, Russia. 100(63 %) of respondents admitted to having high digital literacy skills that are mostly sufficient for e-navigation though they indicated having some difficulties which they often resolve. This result was expected as Russia is a high-income country; hence, have been able to develop and implement policies that may have improved students' digital competencies. In a similar study, Yusuf and Endouware (2021) in their assessment of digital literacy skills of 100 academic librarians in Nigerian Universities, using a questionnaire as data collection instrument. The study revealed a low level of digital literacy skill possession by majority of the respondents. This result increases curiosity about digital literacy level of undergraduates as librarians are supposed to be digital literacy advocates to undergraduates in their quest to use EIRs. The study recommended that both librarians and students should scale up their level of digital literacy skills which is a necessary skill to effectively function in the information age.

Thus, literature have shown that studies have been conducted to assess the level of digital literacy of information professionals in Nigeria (Jibril, et al, 2018, Yusuf and Endouware, 2021). Some results indicated that that low search skills may hinder the use of EIRs. Other findings point to the fact that digital literacy has not been fully entrenched in Nigerian universities due some factors such as lack of digital facilities, poor network and low digital skills. Despite these revelations, there seem not to be sufficient empirical literature to ascertain the level of digital literacy skills and how it may influence use of EIRs among undergraduates. Therefore, to bridge this gap, this study is significant.

3. Methodology

To meet the stated objectives, this study adopted descriptive survey research design. This was necessary as the population was large. The population of study was 5,693 drawn from two public universities in south-south, Nigeria: University of Uyo (UNIUYO) and Federal University Otuoke (FUO). The study adopted multi-stage sampling technique. Two faculties common to the two universities were purposively selected which were faculties of Education and Science. Random sampling was adopted to select two departments from of the purposively selected faculties These selected departments were considered to have full representation of all departments, considering their population in the university. Finally, a sampling fraction of 10% was used to arrive at a sample size of 321 (Table 1).

A questionnaire was the data collection instrument. The points/items were adapted from Jibril et.al (2018) and validated by experts in the universities, before administration. The questionnaire was in English which is the language of instruction in Nigerian universities. It was administered face-to-face by the researcher to the respondents in UNIUYO and FUO. Respondents were asked to tick options as applicable to them. Data was analysed with the use of the Statistical Package for the Social Sciences and presented in form of descriptive statistics of frequency counts, percentages and correlation analysis.

Table 1. Population of the study

Table 1. shows the shows the study population of undergraduates as distributed across the selected faculties in UNIUYO and FUO

University of Uyo (UNIUYO)			
FACULTY	DEPARTMENT	POPULATION	SAMPLE SIZE (10%)
Education	Physics Education	797	38
	Chemistry Education	820	37
Science	Chemistry	686	43
	Computer science	700	43
	TOTAL	3,003	161
	Federal University Otuoke (FUO)		
Education	Chemistry Education	608	44
	Physics Education	700	38
Science	Chemistry	680	40
	Computer Science	702	38
	TOTAL	2,690	160
TOTAL POPULATION		5,693	321

Source: Faculty office(s) Registry 2018/2019

4. Results and Discussion

Table 1: Demographic Characteristics of the Respondents

Variables	Frequency	Percentage (%)
Age		
16-20 years	42	13.1%
21-25 years	141	43.9%
26-30 years	59	18.4%
31-35 years	53	16.5%
35 years above	26	8.1%
Level of Study		
100	16	5.0%
200	60	18.7%
300	141	43.9%
400	67	20.9%
500	37	11.55
Faculty		
Computer Science	164	51.1%
Education	157	48.9%
Chemistry	83	25.9%
Chemistry Education	81	25.2%
Computer Science	81	25.2%
Physical Education	76	23.7%
Total	321	100.0%

Result in Table 1 shows that 42(13.1%) of the respondents used in the study were within the age bracket of 16-20 years, 141(43.9%) within 21-25 years of age, 59(18.4%) were within the age boundary of 26-30 years, 53(16.5%) were 31-35 years of age while the remaining 26(8.1%) were 35 years and above. This implies that this study was dominated by respondents within 21-25 years and above. In terms of the respondents' level of study, 16(5.0%) were in 100 level, 60(18.7%) were in 200 level, 141(43.9%) were in 300 level, 67(20.9%) were in 400 level while the remaining 37(11.8%) were in 500 level. This implies that majority of the respondents used in the study were in 300 level. Computer Science is a five-year course in Nigeria; hence, the use of 500 level undergraduates as respondents.

RQ 1: What purpose do undergraduates in south-south universities use electronic information resources for?

Table 2: Purpose of Electronic Information Resources (EIRs) usage by Undergraduates

S/N	Items	CA %		RP %		SP %		EP %		WP %		Mean (\bar{x})	Std. Dev
1.	Internet	176	54.8%	6	1.9%	25	7.8%	12	3.7%	102	31.8%	2.56	1.826
2.	Electronic journals	6	1.9%	14	4.4%	34	10.6%	108	33.6%	159	49.5%	4.25	.941
3.	Electronic books	6	1.9%	23	7.2%	29	9.0%	209	65.1%	54	16.8%	3.88	.837
4.	CD-ROMs	3	0.9%	206	64.2%	8	2.5%	59	18.4%	45	14.0%	2.80	1.179
5.	Online Databases	6	1.9%	5	1.6%	42	13.1%	89	27.7%	179	55.8%	4.34	.898
6.	OPAC (Online Public Access Catalogue)	12	3.7%	174	54.2%	12	3.7%	58	18.1%	65	20.2%	2.97	1.299
7.	Online abstracts	12	3.7%	15	4.7%	192	59.8%	17	5.3%	85	26.5%	3.46	1.048

Key: CA=Class Assignment; RP=Research Purpose; SP=Seminar Presentation;

Table 2 shows the purpose of electronic information resources (EIRs) by undergraduate students in South-south universities, Nigeria. The result of item-by-item analysis as presented in Table 2 reveals that some of the readily used EIRs by the undergraduates for academic work include: online database (\bar{x} =4.34; std dev. =.898); electronic journals (\bar{x} =4.25; std dev. =.941); electronic books (\bar{x} =3.88; std dev. =.837); OPAC (\bar{x} =2.97; std dev.=1.299). The least available EIRs include: internet (\bar{x} =2.56; std dev. =1.826); and CD-ROMs (\bar{x} =2.80; std dev. =1.179).

It can be inferred base on the findings of this study that undergraduates use EIRs for Class Assignment, Research Purposes, Seminar Presentation, Exam Preparation, Writing Project among others. From the results it can be concluded EIRs are essential to undergraduates and this has reflected in their use for various academic. This corroborates the findings of Quadri and Adetimirin (2014) who studied the purpose of use of EIRs by undergraduates in two private universities in Ogun State and found that undergraduates used EIRs for class assignment, research and study. Hence, undergraduates used of EIRs for academic work is expected considering the fact EIRs are downloadable, sharable and easily available for use in their respective universities.

RQ 2: What is the frequency of use of electronic information resources by undergraduates?

Table 3: Frequency of Undergraduate use of Electronic Information Resources (EIR)

S/N	Items	D %		OW %		TW %		OM %		TM %		O %		NU %		Mean (x̄)	Std.Dev
1.	I use the Internet	115	35.8%	22	6.9%	35	10.9%	24	7.5%	19	5.9%	75	23.4%	31	9.7%	3.50	2.287
2.	I use online abstract for academic work	39	12.1%	11	3.4%	159	49.5%	37	11.5%	34	10.6%	31	9.7%	10	3.1%	3.46	1.489
3.	I access information from Electronic books	26	8.1%	128	39.9%	8	2.5%	29	9.0%	64	19.9%	49	15.3%	17	5.3%	3.60	1.867
4.	I use OPAC (Online public Access Catalogue)	28	8.7%	6	1.9%	3	0.9%	182	56.7%	46	14.3%	43	13.4%	13	4.0%	4.22	1.367
5.	I use CD ROM for academic work	32	10.0%	31	9.7%	142	44.2%	27	8.4%	41	12.8%	30	9.3%	18	5.6%	3.55	1.592
6.	I use electronic journals	25	7.8%	14	4.4%	50	15.6%	1	0.3%	32	10.0%	179	55.8%	20	6.2%	4.93	1.754
7.	I access and use information from Online databases	34	10.6%	121	37.7%	32	10.0%	32	10.0%	52	16.2%	34	10.6%	16	5.0%	3.35	1.785

Key: D=Daily; OW=Once a Week; TW=Twice a Week; OM=Once a Month; TM=Twice a Month; O=Occasionally; and NU=Not Used

Table 3 shows the frequency of usage of the available electronic information resources (EIR) by undergraduate students in South-south universities, Nigeria. The result of item-by-item analysis as presented in Table 3 reveals that the most used EIRs by the undergraduate students include: electronic journals (\bar{x} =4.93; std dev. =1.754); OPAC (\bar{x} =4.22; std dev. =1.367); electronic books (\bar{x} =3.60; std dev. =1.867); CD-ROMs (\bar{x} =3.55; std dev. =1.592); internet (\bar{x} =3.50; std dev.=2.287). The least used EIR include: online databases (\bar{x} =3.35; std dev. =1.785); and online abstracts (\bar{x} =3.46; std dev. =1.489).

As shown in Table 3, majority 155 (34.5%) used the Internet Daily and e-journals 179 (55.8%) occasionally. The reason for a Daily use of the Internet by majority of undergraduates may be because the Internet contains a potpourri of EIRs which can be accessible within and outside the libraries. The results also are a pointer that undergraduates find e-journals, Internet and other EIRs useful for academic work. This is in tandem with Adeniran and Onuoha (2018) who studied the frequency of use of EIRs by 550 students in private universities in Ogun state and found that the Internet, OPAC, e-journal and e-books were the major EIRs used frequently by undergraduates.

RQ 3: What is the level of digital literacy skills of undergraduates?

Table 4: Level of Digital Literacy Skills of Undergraduate Students

S/N	Items	HP	%	MP	%	LP	%	Mean (\bar{x})	Std. Dev
1.	Ability to search electronic sources with digital devices	220	68.5%	56	17.4%	45	14.0%	2.55	.728
2.	Using e-journals for academic work	53	16.5%	106	33.0%	162	50.5%	2.34	.746
3.	Effective operation of digital devices	35	10.9%	143	44.5%	143	44.5%	2.34	.665
4.	using internet search engines to search information for academic work	40	12.5%	116	36.1%	165	51.4%	2.39	.699
5.	Ability to evaluate a web page found online	38	11.8%	74	23.1%	209	65.1%	2.53	.698
6.	Using digital devices to download e-books for research and study	53	16.5%	128	39.9%	140	43.6%	2.27	.728
7.	Ability to develop successful search strategies to access information	57	17.8%	188	58.6%	76	23.7%	2.06	.642
8.	Online databases search for information	21	6.5%	187	58.3%	113	35.2%	2.29	.580
9.	Multimedia searching of e-resources	25	7.8%	82	25.5%	214	66.7%	2.59	.632
10.	Sharing resources online	30	9.3%	103	32.1%	188	58.6%	2.49	.662
Weighted mean=2.39; std. dev=0.68									

Key: HP=Highly Proficient; MP=Moderately Proficient and LP=Lowly Proficient

Table 4 shows the digital literacy skills possessed by undergraduate students in South-south universities, Nigeria. The result shows that some of the potent digital literacy skills possessed by the undergraduate students include: multimedia searching of e-resources (\bar{x} =2.59;

std dev. =.632); ability to search electronic sources with digital devices (\bar{x} =2.55; std dev. =.728); ability to evaluate a web page found online (\bar{x} =2.53; std dev. =.698); sharing online resources (\bar{x} =2.49; std dev. =.662); using internet search engines to search information for academic work (\bar{x} =2.39; std dev.=.699). The least digital literacy skill possessed by the students include: ability to develop successful search strategies to access information (\bar{x} =2.06; std dev. =.642) and using digital devices to download e-books for research and study (\bar{x} =2.27; std dev. =.728).

In order to establish the level of digital literacy skills possessed by the undergraduate students of South-south universities, Nigeria, a test of norm was conducted. Results showed that scale between 0.1 – 1.0 is low, 1.1 – 2.0 is moderate, while 2.1 – 3.0 is high. The overall mean for digital literacy skills possessed by the undergraduate students is “2.39” which falls between the scales “2.1 – 3.0”. It can therefore be concluded that the level of digital literacy skills possessed by the undergraduate students is high. A continuous pressure by lecturers on the need for students to acquire digital skills may have yielded the desired results among undergraduates. The high skills possession may also be attributed to the fact that digital literacy skills are important to undergraduates to effectively use EIRs; hence, their continuous use of EIRs may have enhanced their digital literacy skills. This supports findings by Abrosimova (2020) who carried out a study to determine the level of digital literacy skills of 163 students in Kazan Federal University, Russia and reported a high digital literacy skills possession by respondents.

RQ 4: What are challenges of acquiring digital literacy skills by undergraduates?

Table 5: Challenges of acquiring Digital Literacy Skills by Undergraduates

S/N	Items	SA	%	A	%	D	%	SD	%	Mean (\bar{x})	Std. Dev
1.	Technophobia	124	38.6%	175	54.5%	20	6.2%	2	0.2%	3.31	.615
2.	Cost of digital skills training	121	37.7%	186	57.9%	14	4.4%	0	0.0%	3.33	.557
3.	Lack of digital facilities in my university	109	34.0%	174	54.2%	31	9.7%	7	2.2%	3.20	.697
4.	Inaccessibility of facilities in my university	111	34.6%	177	55.1%	32	10.0%	1	0.3%	3.24	.634
5.	Poor network	81	25.2%	159	49.5%	59	18.4%	22	6.9%	2.93	.841
6.	Lack of money to subscribe my phone	53	16.5%	129	40.2%	96	29.9%	43	13.4%	2.60	.917
7.	Lack of electricity supply	66	20.6%	175	54.5%	72	22.4%	8	2.5%	2.93	.726
8.	No conducive environment	35	10.9%	143	44.5%	105	32.7%	38	11.8%	2.55	.840
9.	Attitude of information professionals	62	19.3%	147	45.8%	85	26.5%	27	8.4%	2.76	.860

10.	Absence of training on the use of digital resources	57	17.8%	160	49.8%	79	24.6%	25	7.8%	2.78	.829
11.	Complexity of online resources	74	23.1%	170	53.0%	72	22.4%	5	1.6%	2.98	.720

Key: SA=Strongly Agree; A=Agree; D=Disagree and SD=Strongly Disagree

Table 5 shows the challenges confronting students in acquiring digital literacy skills among undergraduate students in South-south universities, Nigeria. The result shows that some of the profound challenges impeding the acquisition of digital literacy skill by the undergraduate students include: cost of training (\bar{x} =3.33; std dev. =.557); technophobia (\bar{x} =3.31; std dev. =.615); inaccessibility of facilities (\bar{x} =3.24; std dev. =.634); lack of digital facilities in the schools (\bar{x} =3.20; std dev. =.697); complexity of online resources (\bar{x} =2.98; std dev.=.720); network problem (\bar{x} =2.93; std dev.=.720) and lack of electricity (\bar{x} =2.93; std dev.=.726). The least challenges against the acquisition of digital literacy skill by the students are: no conducive environment (\bar{x} =2.55; std dev. =.840) and lack of money for subscription (\bar{x} =2.60; std dev. =.917).

Thus, it can be concluded that from the above results, that some of the main challenges against the acquisition of digital literacy skills by the undergraduate students of South-south universities, Nigeria includes: cost of training, technophobia, inaccessibility of facilities, lack of digital facilities in the schools, complexity of online resources, network problem, lack of electricity among others. Despite the high possession of digital literacy skills by undergraduates in Nigeria, findings of this study have shown myriads of challenges continue to hinder acquisition of digital literacy skills. This implies that undergraduates are yet to adequately use EIRs because according to Adeleke & Emeahara (2016) the level of digital literacy skills possessed by students has the potential of enhancing their use of EIRs such as the Internet, online databases, e-books and e-journals

HO₁: There is no significant relationship between Digital literacy skills and use of electronic information resources by undergraduates

Table 6: Relationship between digital literacy skills and use of electronic information resources (EIR) by undergraduates

Variables	N	Mean	St. Dev	Df	r	P	Sig
Use of EIR	321	24.26	4.889	320	.143	.010	Sig
Digital literacy skills	321	23.84	3.969				

Table 6 shows the relationship between digital literacy skills and use of electronic information resources by undergraduate students in South-south universities, Nigeria. The

finding reveals that digital literacy skills ($r = .143$; $p < 0.05$) has significant positive relationship with use of electronic information resources by undergraduate in South-south universities, Nigeria. This implies that there is positive linear association between digital literacy skills and use of electronic information resources by undergraduate students in South-south universities, Nigeria. Thus, the null hypothesis stating that there is no significant relationship between digital literacy skills and use of electronic information resources by undergraduate students in South-south universities, Nigeria is hereby rejected. It can therefore be said that the digital literacy skills possessed by undergraduates will determine their effectiveness in the use of EIRs. This is in agreement with Mole (2017) who investigated the strategies for enhancing the academic use of EIRs by 2500 undergraduate students in University of Nigeria, Nsukka and majority (\bar{x} 3.56) of the undergraduates strongly agreed that teaching advance searching digital skills will significantly influence their use of EIRs in the universities. This is to say that any effort to improve use of EIRs by undergraduates should begin from teaching and training undergraduates digital search skills as has the potential to catalyse the use of EIRs.

5. Conclusion and Recommendation

Electronic information resources, over the years, have proven to be essential component of the information infrastructure in the ivory towers. Undergraduates often used them for diverse academic work. By implication, EIRs has a lot of advantages which is a major motivator to users, particularly, undergraduates. It is therefore germane for undergraduates to acquire adequate digital literacy skills which have proven to be a prerequisite for effective navigation and use information from a wide range of electronic sources. It is important that management of universities make concerted efforts to assist undergraduates to acquire and maintain high digital literacy skills that will enable them compete with their counterparts within and outside Nigeria. Curriculum of universities should incorporate digital training courses to help both students and staff acquire digital skills that are commensurate with the digital age for effective learning, teaching and research which form the cardinal objectives of all universities across the globe.

References

- Abrosimova, G. 2020. Digital Literacy and Digital Skills in University Study. *International Journal of Higher Education*, 8 (9),51-54
- Adedokun, T. & Fawole, O. (2018). Use of electronic information resources by Undergraduates of National Open University of Nigeria in Ilorin Study Center. *Journal of Applied information Science and Technology*, 11(1), 116-124

- Adeleke, S. and Nwalo, N. (2017). Availability, use and constraints to use of electronic information resources by postgraduate students at the university of Ibadan. *International journal of knowledge content development & Technology*, 4 (7),51-69
- Adeleke, D. and Emeahara, E. (2016). Relationship between Information Literacy and Use of Electronic Information Resources by Postgraduate Students of the University of Ibadan. *Library Philosophy and practice (e-journal)*
- Adeniran, P. and U. Onuoha (2018). Influence of Information Literacy Skills on Postgraduate Students' Use of Electronic Resources in Private University Libraries in South-West, Nigeria. *Communications and Network*,(10)164-179
- Alquda, M. (2021). Electronic Management and Its Role in Developing the Performance of E-government in Jordan. *Electronic Research Journal of Engineering, Computer and Applied Sciences*, 3, 65-82
- Beetseh, K; Agena, A. and Famaren, H. (2019). Information retrieval skills and the use of electronic resources in university libraries by undergraduate Students in Benue State University. *Library Philosophy and Practice (e-journal)*. 3775
- Deka, P. (2020). A study on accessing digital literacy skill of research scholars of Gauhati university, Guwahati, assam. *International peer reviewed E-Journal Of multidisciplinary research*,1(7),18-24
- Ekenna, M. and Mabawonku, I. (2013). Information retrieval skills and use of library electronic information resources by university undergraduates. *Information and knowledge management*,3 (9)
- Hassan, F. A., Aziz, N. A. and Lee, O.S. (2016). Profiling information-seeking behaviour of distance learning students in Wawasan open university. *Asian association of open University journal*,2 (11), 122-135
- Jamorgha, E., Jamorgha, O. and Godwin, L. (2019). Influence of ICT skills on library information resources utilisation by undergraduates in Two Universities in South-West, Nigeria. *Journal of Information and knowledge Management*, 2 (10), 68-80
- Jibril, A., Sabitu, S., Jamilu, M. & Liman, A. (2018). Assessment of digital literacy of academic librarians in Ahmadu Bello University library complex A.B.U. Zaria, Nigeria. *Journal of Nigerian Library Association*, 1(51), 1-9
- Meenambika, G., Manoharan & Maidhili, S. (2015). Digital information literacy in RRASI engineering college. *International journal of library science* (5)2,13-15
- Mole, A. (2017). Assessment of academic utilization of online information resources by undergraduate students in university of Nigeria, Nsukka. *International journal of knowledge content development and Technology*,3 (7),29-48

- Omoike, A., & Oke, T. A. (2014). Online Public Access Catalogue [OPAC] in Nigerian Libraries: A Case Study of the Kenneth Dike Library and University of Lagos Library. *Ozean Journal of Social Sciences*, 6(3), 18-26.
- Salman, A., Ahmed, A., Raheem, R. and Pelemo, G. (2020). Availability, accessibility, and Use of electronic information resources among Undergraduate students in Fountain University Library, Osogbo. *Journal of Library and Information Sciences*, 1(10), 100-110
- Tamrakar, A and Garg, R. (2016). User Perception towards e-resources and Services of IIT-Guwahati Library. *Journal of Library and Information Technology*, 1 (36),40-46
- Quadri, G, Adetimirin A. and Idowu, O. (2014). A study of availability and utilization of library electronic resources by undergraduates in private universities in Ogun state, Nigeria. *International journal of library and information science*, 6 (2), 28-34
- Yo, N. (2021). Digital mathematical literacy as a component of the life skills of students of modern educational institutions. *The American Journal of Social Science and Education Innovations*,378-384
- Yusuf, D. and Endouware, C (2021). An investigation of the level of Digital literacy skills possessed by academic librarians in Nigerian universities. *World Journal of Innovative Research*, 2 (10),1-8