



Awareness and Utilization of Electronic Information Resources Among Final Year Students of Clifford University, Abia State, Nigeria

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Abstract

This study examined the awareness and utilization of electronic information resources among final year students of Clifford University. Electronic information resources help students acquire information and enhance their learning and research capabilities. The need to explore online libraries and electronic databases for qualitative data and research output; the high financial involvement per database subscription and their actual utilization before expiration to justify the investment was the motivation for this study. Observations revealed that most students depended on Google uncoordinated download rather than utilize library databases. The survey design was used to carry out this research. This study consisted of 287 final year students in Clifford University and census method was used select all. Of the 287 copies of questionnaire distributed, 280 were retrieved and analysed using descriptive statistics guided by research questions. The findings confirmed that the electronic information resources that are highly available for the final year students were electronic mail (44.3%), internet search engine (38.9%), and internet (37.1%). For the level of awareness of electronic information resources, internet search engine, electronic mail, e-books, CD-ROM, electronic journals, and scholarly databases ranked high with 52.5%, JSTOR, Research4life, HINARI, EBSCO host, Science direct, OARE, MIT Open courseware (37.9%) was moderately aware. The degree of utilization of electronic information resources, electronic journals was highly utilized (57.9%) and internet search engines and e-book (36.8%). For the challenges faced while using electronic resources poor network and limited access to computer systems and other handheld devices had 63.9% and 63.2% respectively. The study concluded that most of the final year students were not aware of certain types of electronic information resources in the library and some don't know how to effectively manipulate the electronic resources. Poor electric power supply, inadequate ICT skills, limited access to computer systems and other handheld devices posed as challenges. It was recommended that Stable power supply, effective network services, more computers and other handheld devices such as tabs should be provided by the university administration to boost the number already in use at the e-library.

Keywords: *EIRs, electronic resources, electronic information resources, awareness, utilization, Clifford university, final year students*

1.1 Introduction

Electronic information resources (EIRs) are critical to research as they provide array of qualitative and quantitative

information that researchers and scholars rely on when carrying out a study. Also referred to as online electronic resources (e-resources), deals with all products provided by a resource

centre such as the library through a computer network, ranging from bibliographic databases, search engines-eBooks, web pages or digital collections of data among others, was noted to be key for scholars just as man cannot do without air, water, food and shelter (Thiyam& Nkosinathi, 2014). E-resources also include e- journals, e-books, online databases, OPAC, e-thesis and the whole internet infrastructure which provides an invaluable study tool for researchers and scholars especially university students to acquire relevant information and enhance learning and research capabilities. According Tofi and Fanfa (2019) electronic resources can be defined as materials made up of data or computer programs encoded for reading and manipulation by a computer with a directly or remotely connected peripheral device to a computer, computer network, or internet.

As opined by Akidi et al (2021), EIRs digitized information that can only be accessed electronically using computers or any electronic handheld devices. Due to their digitized nature, utilization is made possible electronically. Graduates and undergraduates alike are expected to avail themselves of the utilization of these e-resources especially those at the thesis or undergraduate project writing stage but the bad news is that not many undergraduate students know how to maximally utilise the e-resources. These e-information sources that have been provided for in the library have factors traceable to lack of knowledge, skill, type of studies, level, age, and religious bias as inhibitors (Ajiboye & Adeyinka, 2007; Uhegbu, 2007). Although, it is not likely that final year students have no experience in online information sourcing, howbeit observations have shown that some students are not aware of the benefits, more so the existence of these resources. In some cases, the utilization of e- resources apart from being intimidating were found to be uncoordinated and awkwardly used in addition to electronic library anxiety and poor users' perceptions as

inhibitors. Level of awareness, search skill and research habits were attributed as contributory to the degree of appreciation of e-resources by university students(Omeluzor&Omeluzor, 2021; Baskar, 2017).

Clifford University is a private university owned by the Seventh-day Adventist Church with the same proprietor as Babcock University. The university is located in Abia State, Nigeria. It was granted charter by the Federal government of Nigeria to run as a university in November 2016 but began full operation in March 2017. Currently, the university has six faculties with 32 fully accredited academic programs. The current students' population consists of about 1,500. But the study is focused on the final year students across the various departments whose figure stands at 287 (Registry Unit, December, 2023). Since the final year students engage in a compulsory research activity as part of the requirement before graduation, and they constitute the most advanced level of students currently on campus, it is assumed that they have high information resources need. But the various ways their predecessors accessed information resources for the past research works does not suggest that EIRs were maximally deployed. Hence the need for this study.

1.2 Statement of the Problem

Clifford University final year students are expected to maximally utilise electronic information resources as their key sources of information in their research work (final year project). However, noting from observation of previous sets and from previous studies conducted on other universities library use which suggested that students do not generally maximise the use of some electronic information resources. Could it be due to lack of awareness or unavailability of the electronic resources in the library? It is in this light that this study investigated the awareness and

utilization of EIRs among final year students of Clifford University.

1.3 Research Objective

1. Find out the types of electronic information resources available for use by final year students in Clifford University.
2. Find out the level of awareness of electronic information resources among Clifford university final year students.
3. Find out the degree of utilization of electronic information resources among final year students.
4. Identify the challenges confronting the utilization of electronic information resources by Clifford University final year students.

1.4 Research Questions

1. What are the types of electronic information resources available that are utilized by final year students in Clifford University?
2. What is the level of awareness of electronic information resources among Clifford University final year students?
3. What is the degree of utilization of electronic information resources by final year students of Clifford University?
4. What are the challenges confronting students' utilization of electronic information resources?

2.1 Literature Review

2.2 Awareness of Electronic Information Resources among Students

Awareness of electronic resources indicate user knowledge on the availability of the resources. It is having knowledge about the existence of EIRs in the library by student. This awareness was considered important by Egberongbe (2011) when he asserted that awareness of EIRs contributes to their

improvement and the development of library in the 21st century. Rehman and Ramzy (2004) investigated the awareness of e-resources among health academics in Kuwait University. Their assumption was that low awareness and poor skills were among the primary reasons for the under-utilization of e-resources. A questionnaire-based survey was conducted. The focus was to find out the nature and extent of use and the reasons for low use of these resources. Respondents reported that time constraints, lack of awareness, and low skills levels were among the primary constraints they experienced. A number of them proposed a variety of measures including formal orientation and training to become more effective users. Ahmad and Panda (2013) also carried out to find whether the faculty members of universities were aware of and fully utilize the library databases and other e-resources within and outside the libraries. Results revealed that majority of the faculty members were aware of and used e-resources. The study by Adenariwo (2022) in Osun State, Nigeria on awareness of undergraduates of EIRs in Fountain University revealed that majority of students were aware of the availability of various formats of EIRs in their library through library education (82%), seminars (91%) and through colleagues/classmates (91%). This suggests the high level of technology consciousness among students and as such the resources were highly appreciated. Can the same be true for other Universities as the study of Ahmad and Panda (2013) still suggest otherwise. The study confirmed some lack of knowledge and use of library specific resources such as e-theses, patents and CD-ROM databases. It was also found that all faculty members agreed that e-resources were very useful and important to their work.

2.3 Use of Electronic Information Resources among Students.

Soyizwapi (2005) conducted a research study among number of graduating students in the Faculty of Science and Agriculture at the University of KwaZulu-Natal, Pietermaritzburg. The study focused on the use students made of electronic databases which provided information needed for their studies. A questionnaire survey was used in the data collection. The findings of the study indicated that students used electronic databases, but that a few of the databases were not used. The researcher also found that a number of problems were experienced by the students when using the databases. They became aware of the availability of electronic databases from a variety of sources such as friends, library orientation programs and academic staff. It was also found that search engines were identified as resources that were very popular with almost all the students. There was a need for training in the use of databases and a need for improving access for all campus and off-campus users. On the other hand, the studies conducted in Nigeria by Aniedu and Uzuegbu (2014) revealed that gender, age, skill, personal attribute and environment were contributing factors to effectively utilizing e-resources since electronic resources were found to compliment print-based resources in any traditional library (Akidi *et al*, 2021). Furthermore, self-efficacy that translates into love for e-resources, ability to manipulate ICT devices, availability of electronic resources and other environmental factors were found to be significant determinants of EIRs effective utilization. As the research instrument of the present study was based on Soyizwapi's work as to domesticate the study.

2.4 Theoretical Framework

This study was guided by the TAM Model (Technology Acceptance Model). The technology acceptance model (TAM) is an

information system theory that models how users come to accept and use a technology. This model shows how users perceived information through the aid of using technology and their attitudes towards it. It also shows that when a new technology is available, there will be factors that will affect or influence their decisions to use or not to use. This can be determined by the perceived usefulness (PU) and perceived ease of use (PEOU). TAM was developed by Fred Davis and Richard Bagozi in 1992. The underlying principles of TAM is that new technologies are often times complex, and elements of uncertainty exists in the minds of decision makers with respect to their successful adoption. People's attitude and intentions to use may be ill-formed and lacking in conviction. These may improve only after preliminary efforts to learn to use the technology evolve. Thus, actual usage may not be a direct or immediate consequence of such attitudes and intentions. With the passage of time, technologies evolve and so do users attitude and intentions as determinants of level of acceptance of such technologies.

2.5 Empirical Framework

Rehman and Ramzy (2004) investigated the awareness of e-resources among health academics in Kuwait University. Their assumption was that low awareness and poor skills were among the primary reasons for the under-utilization of e-resources. Okiki & Asiru (2011) observed that electronic information resources are products of information and communication technologies and were found relevant to learning and research process in Universities Diyaolu, Okunlaya & Ibrahim (2012) carried out a study on the influence of demographic factors on digital library use by graduate students in private universities: case study of Babcock and Covenant Universities in Ogun State. Majority of the respondents were between ages of twenty-one (21) and thirty (30) which implied

that the respondents are in their prime age of learning. The study further revealed that based on gender, males were more at home with technology resources when compared with their female counterparts and most of them have income more than sixty-thousand naira (N60, 000) monthly. In the same vein, Isiakpona & Ifijeh (2012) conducted a study on the availability of electronic resources for service provision in university libraries in Ogun State Nigeria seek to find how they affect the effective provision of electronic information resources in selected University Libraries South West Nigeria. Findings revealed that the university libraries have electronic databases; however, the most common of the databases was AGORA while IEE was the least common. The study also revealed that majority of the University libraries have adequate basic infrastructure

for effective electronic information services. The major challenge involved in the provision of electronic resources among the university libraries was electricity power outage. It also revealed that there is a significant relationship between the availability of basic infrastructures and effective electronic resources provision ($r = 523^{**}$, $N = 414$, $P < .01$).

3.1 Methodology

Survey design was employed. The population consisted of all the final year students. The total population of 287 was studied with the use of census. Of the 287 copies of questionnaire distributed, 280 were retrieved and analysed using descriptive statistics based on the research questions. Below is table showing the six faculties:

Table 1 Respondents Across Departments

FACULTY	DEPARTMENT	STATISTICS	TOTAL
Sciences	Biochemistry	13	99
	Computer science	35	
	Cyber security	7	
	Microbiology	40	
	Industrial chemistry	4	
Social and Management Science	Accounting	20	72
	Business Admin/ Marketing	7	
	Economics	14	
	International Relations	12	
	Mass Communication	11	
	Public Admin/Political Science	8	
Humanities	Christian Religious Studies	15	27
	English	7	
	History & Diplomatic Studies	5	
Basic Medical Science	Nursing	89	89
Grand Total		287	287

4.1 Results and Discussion of Findings

Research Question One

What are the types of electronic information resources available at Clifford University?

Table 2: Types of Electronic Information Resources Available

Types of Electronic Information Resources	Not available	Moderately Available	Available	Highly available
	F (%)	F (%)	F (%)	F (%)
INTERNET SEARCH ENGINE	32(11.4)	45(16.1)	94(33.6)	109(38.9)
E- BOOKS	34(12.1)	62(22.1)	103(36.8)	81(28.9)
- - -	75(26.8)	82(29.3)	79(28.2)	44(15.7)
ELECTRONIC JOURNALS	17(6.1)	73(26.1)	114(40.7)	76(27.1)
RESEARCH-4-LIFE	48(17.1)	109(38.9)	89(31.8)	34(12.1)
JSTOR	69(24.6)	108(38.6)	76(27.1)	27(9.6)
PROQUEST	101(36.1)	97(34.6)	62(22.1)	20(7.1)
HINARI (Health Inter -Network Access to Research Initiative)	94(33.6)	103(36.8)	60(21.4)	23(8.2)
EBSCOHOST(Elbert B. Stephen company)	86(30.7)	113(40.4)	62(22.1)	19(6.8)
OARE	99(35.4)	107(38.2)	54(19.3)	20(7.1)
AJOL(African Journal Online)	63(22.5)	108(38.6)	79(28.2)	30(10.7)
SCI-FINDER SCHOLAR	107(38.2)	105(37.5)	50(17.9)	18(6.4)
DOAJ (Directory of Open Access Journals)	85(30.4)	111(39.6)	57(20.4)	27(9.6)
HEINONLINE	79(28.2)	93(33.2)	79(28.2)	29(10.4)
SCIENCE DIRECT	20(7.1)	53(18.9)	103(36.8)	104(37.1)
INTERNET	31(11.1)	81(28.9)	71(25.4)	97(34.6)
ELECTRONIC MAIL	22(7.9)	38(13.6)	96(34.3)	124(44.3)

Table 2 revealed the types of electronic information resources available. About 38.9% agreed that internet search engine was highly available, 36.8% agreed that E-books were available. Less than half (29.3%) agreed that CD-ROM was moderately available. Majority (40.7%) agreed that Electronic journals were available. 38.9% agreed that scholarly database was moderately available. Also, 38.6% agreed that JSTOR was moderately available. 36.1% agreed that PROQUEST was not available. 33.6% agreed that HINARI was also not available. 40.4%

agreed that EBSCOHOST was moderately available. Also, 38.2% agreed that OARE was moderately available. 38.6% agreed that AJOL was moderately available. Up to 38.2% agreed that SciFinder Scholar was not available while 36.8% agreed that Science Direct was available. Also, 39.6% of the participants agreed that DOAJ was moderately available. 33.2% agreed that Heinonline was moderately available. About 34.6% regarded Internet to be highly available. Specifically, 44.3% agreed that e-mail was highly available.

Research Question Two

What is the level of awareness of EIRs among Clifford University final year students?

Table 3: Level of Awareness of Electronic Information Resources

ITEMS	Highly aware	Aware	Moderately aware	Not aware
	F (%)	F (%)	F (%)	F (%)
Electronic Resources includes Internet Search Engines, E-mails, E-books, CD – ROM, E-Journals, Scholarly Data base	147(52.5)	89(31.8)	40(14.3)	4(1.4)
Electronic Databases used in CLU libraries include: Research -4-life, JSTOR, PROQUEST, HINARI, EBSCO, Science Direct, OARE, OER, MIT Open Courseware	51(18.2)	79(28.2)	106(37.9)	44(15.7)
CD-ROM databases allow users access to relevant databases without robust Internet connectivity in the Library	33(11.8)	79(28.2)	113(40.4)	55(19.6)
Clifford university has a unit in charge of EIRs in the Library	57(20.4)	116(41.4)	65(23.2)	42(15.0)
Online databases are collection of data organized for easy access and retrieval through the internet	75(26.8)	123(43.9)	52(18.6)	30(10.7)

Table 3 revealed the level of awareness of electronic information resources among final year students of Clifford University. More than half(52.5%) were highly aware that Electronic Resources includes internet search Engine, Electronic mail, E-books, CD – ROM, Electronic Journals, Scholarly Data base. Also, 37.9% were moderately aware that Electronic Databases used in CLU library includes: Research-4-life, JSTOR, PROQUEST, HINARI, EBSCO, Science Direct, OARE, OER, MIT Open Courseware. Two-fifth (40.4%) were moderately aware that CD-ROM

databases allow users access to relevant databases without robust Internet connectivity in library. About 41.4% were also aware that Clifford University has a unit in charge of Electronic Information Resources in the Library. Also, 43.9% were aware that online databases are collection of data organized for easy access and retrieval through the Internet.

Research Question Three

What is the degree of utilization of electronic information resources by final year students of Clifford University?

Table 4: The Degree of Utilization of EIRs

ITEMS	Highly utilized	Utilized	Moderately utilized	Not utilized
	F (%)	F (%)	F (%)	F (%)
I mainly use electronic journals for my assignment and research work	162(57.9)	79(28.2)	34(12.1)	5(1.8)
I make use of scholarly database like Research-4-Life and JSTOR	34(12.1)	74(26.4)	80(28.6)	92(32.9)
I make use of CD- ROM database	41(14.6)	48(17.1)	80(28.6)	111(39.6)
I read up on any class material using internet search engine and e-books	103(36.8)	105(37.5)	52(18.6)	20(7.1)
I consult the library e-resources frequently	57(20.4)	87(31.1)	80(28.6)	56(20.0)

Table 4 shows revealed the degree of utilization of electronic information resources by final year students of Clifford University. Interestingly more than half (57.9%) of the participants highly utilized electronic journals mainly for their assignments and research work. 32.9% did not make use of scholarly database like Research-4-life and JSTOR. Also, 39.6% did not make use of CD-ROM database. 37.5% read up on any class material using internet search engines and e-books. However, up to 31.1% consult the library e-resources frequently.

Research Question Four

What are the challenges confronting students’ utilization of EIRs?

Table 5: Challenges faced while using E-Resources

S/N	ITEMS	SD	D	A	SA
		F (%)	F (%)	F (%)	F (%)
1	Inadequate ICT skills/ Low Self efficacy	115(41.1)	57(20.4)	47(16.8)	61(21.8)
2	Poor electric power supply	69(24.6)	48(17.1)	56(20.0)	107(38.2)
3	Poor network	13(4.6)	18(6.4)	70(25.0)	179(63.9)
4	Limited access to computer systems and other hand-held devices	23(8.2)	58(20.7)	78(27.9)	121(43.2)
5	Lack of awareness to electronic information resources	55(19.6)	51(18.2)	65(23.2)	109(38.9)

Result in table5 presented the challenges confronting final year students' utilization of electronic information resources. It revealed that 41.1% strongly disagreed that inadequate ICT skills and low self-efficacy were limitations. About 38.2% strongly agree that poor electric power supply was a challenge. Majority, 63.9% strongly agreed that bad network was a challenge. Also, 43.2% strongly agreed that limited access to computer terminal. Moreover, 38.9% strongly agreed that lack of awareness to electronic information resources.

Conclusion

This study has shown level at which final year students are aware of the electronic information resources that were available as well as their degree of utilization. It also revealed the types of electronic information resources that were available in the library and the challenges students faced while utilizing the resources. Findings indicated that most of the final year students were not aware of certain types of electronic

information resources in the library and some don't know how to operate or manipulate the electronic resources and they also faced the challenge of electric power supply, inadequate ICT skills, limited access to computer systems and other handheld devices. These culminated to the reason why the electronic information resources were not well utilized.

Recommendations

Based on the above findings, the study recommended that:

- i. There is an urgent need to create more awareness of EIRs that are available in the library to the students both the final year students and the other levels through a robust Library resources use campaign or literacy programs by the E-Librarian and key stakeholders.
- ii. The librarian should create a tutorial session, weekly or fortnight workshop sessions purposely for the categories

of students writing or about to begin their research activities in the university and make it run in the yearly academic calendar.

- iii. An intentional and deliberate SMS alerting services on how to use the EIRs should be put in place coordinated by the E-librarian.
- iv. Library management should subscribe to more balanced databases that are not biased to few science programs but should cover the entire body of academic programs available in the university.
- v. Stable power supply, effective network services, more computers and other handheld devices such as tabs should be provided by the university administration to boost the number already in use at the e-library.

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