Effort Expectancy as Correlates of Electronic Information Resources use by Undergraduates of Ajayi Crowther University, Oyo State, Nigeria

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Abstract: The use of electronic information resources (EIRs) by undergraduates could impact positively on their academic activities. However, anecdotal and empirical evidences have shown that the use of some of these information resources by some undergraduates is low. Perhaps, this perceived observation might not be unconnected with the effort expectancy associated with the accessibility of EIRs which could affect their use by the undergraduates. The study therefore examines effort expectancy as correlates of use of electronic information resources by undergraduates in Ajayi Crowther University, Oyo, Nigeria. Descriptive survey research method was used and the study population comprised of 5663 undergraduates of Ajayi Crowther University, Oyo, Nigeria. The multistage random sampling technique was used to select a sample size of 140 and the questionnaire was used to collect data. Results revealed that a significant number of respondents (45.3%) and (37.4%) noted that e-news and e-encyclopedias were the most accessible EIRs. Majority of the undergraduates had a favorable expectancy of the use of EIRs. Results showed a significant positive relationship between effort expectancy and use of EIRs by the undergraduates (r=.277**; df=138; p<0.01). It was recommended that in order to sustain the favourable effort expectancy towards the use of EIRs by the undergraduates, librarians should introduce

periodic digital literacy programmes and ensure that all undergraduates are encouraged to participate in it.

Introduction

Universities are the intellectual pillars of societies. Apotiade, Oyewole and Belau (2015) noted that life changing ideas and philosophies are brought to fruition in the universities. These institutions ensure that individuals with the right qualifications who gain admission are taught in various fields of human endeavour for the benefit of societies. The researches carried out within these ivory towers could also help to assist in developing the society socio-economically. In addition, universities engage in community development through different intervention programmes. Societies that appreciate development do not toil with their universities.

Undergraduates are important stakeholders in the university. Oyewole (2017) stated that undergraduates form a critical mass of the learners in the ivory towers. This is because in most universities that are general in nature, undergraduates are usually higher in number, except for some universities that give priority to postgraduate education. In order for the undergraduates to be successful in their academic endeavours, they need to engage in various academic activities. These activities include; examination, continuous assessment, project writing, seminar presentations and lectures. However, it would be very difficult for undergraduates to engage in all these activities without information. The information sources available to undergraduates could be print or electronic in nature.

As a result of the advancement in Information and Communication Technology (ICT), electronic information resources (EIRs) have become prevalent. Thanuskodi (2012) defined electronic information resources as the electronic representation of information. Okore, Asogwa and Eke (2009) viewed EIRs as the information resources which the Internet provides access to. Moreover, some EIRs could also be accessed offline through other digital media like CD-ROMs. Examples of EIRs are e-books, e-journals, e-discussions, e-news, e-data archives, digital libraries, online journal magazine, e-learning tutors, online public access catalogue (OPAC) and the likes. Presently, undergraduates can access EIRs through the computer or smart devices that guarantee access to the Internet and applications that allow the use of memory cards and flash drives.

EIRs are very beneficial to the undergraduates. Ellis and Oldman (2005) noted that the scholarly activities of the undergraduates can be enhanced as a result the unlimited access to diverse electronic information resources on the Internet. Chiparausha and Sithole (2008) listed part of the benefits of the utilisation by undergraduates to include; access to current information and search facilities, opportunity to make hard copies from soft copies, portability and simultaneous usage. EIRs like journals report current research findings that undergraduates can make use of for project writing and personal development. Also, some electronic

databases provide the option for users to search their content which could help the undergraduates to have access to myriads of information contents.

Furthermore, for the undergraduates that still appreciate information in print form, EIRs can be printed out and used. In addition, the fact that EIRs can be downloaded on smart devices like Android phones in different formats like PDF (portable document format), PowerPoint and the likes makes it very easy to move with information wherever they go to. Another benefit of EIRs to undergraduates is that they can also be downloaded and used by many undergraduates at the same time without hindrances. These various benefits associated with the use of EIRs have made some undergraduates to view them as indispensible.

Adeniran, (2013) examined the use of electronic resources by undergraduates of Redeemer's University and discovered that a significant number of the respondents 90 (35.2%) used the Internet to access EIRs regularly. Omosekejimi, Eghworo and Ogo (2015) studied the use of EIRs by undergraduates of Federal University of Petroleum Resources, Effurun, Nigeria. The population of the respondents was 267 and the instrument for data collection was the questionnaire. They reported that a high number of the respondents 240 (89.9%) pointed out that they used the Internet on a regular basis. The results of these studies reveal that most of the undergraduates seem to consider the Internet as the most used EIRs that is indispensible. However, it is as if the other types of EIRs are not regularly used by some undergraduates. This could be a function of the effort expectancy as perceived by the undergraduates as regards EIRs use.

Effort expectancy is one of the determinants of behavioral intention towards the use of a technology in the Unified Theory of Acceptance and Use of Technology (UTAUT). Venkatesh, Morris, Davis and Davis (2003) defined effort expectancy as the degree of ease that is linked with the use of an information system. Ghalandari (2012) indicated that effort expectancy is similar to other constructs like perceived ease of use (technology acceptance model) and complexity (PC utilization model and innovation diffusion theory). Venkatesh et al (2003) also indicated that effort expectancy can be compared to ease of use in Innovation Diffusion Theory.

Wu, Tao and Yang (2008) averred that effort expectancy is of one of the key factors that could determine whether an EIR will be used or not. This was revealed in the study carried out by Omosekejimi, Eghworo and Ogo (2015) where they reported that a notable number of the undergraduates 179 (67%) affirmed that lack of required searching skills was a challenge that hindered their use of EIRs. Thus, even if these undergraduates realise that the use of EIRs is beneficial to their academic activities, their inability to search for these resources via the Internet could be perceived as stressful and as such might prevent them from even trying to access these resources. This indicates that effort expectancy is an important construct that could determine the use of electronic information resources. Thus, this study is set to examine the relationship between effort expectancy and use of electronic information resources by

undergraduates in Ajayi Crowther University, Oyo, Nigeria.

Statement of the problem
The use of electronic resources by undergraduates no doubt is very beneficial to their academics. However, anecdotal and empirical evidences have shown that the use of these information resources by some undergraduates is low. This is reflected in the seldom use of electronic databases and electronic journals by some of the undergraduates. This perceived observation might not be unconnected with the effort expectancy associated with the accessibility of these EIRs which could have a relationship with their usage. This is because some undergraduates might find it easy to retrieve information from websites and blogs through the Internet, while the retrieval of e-resources might present some form of complexity which could hinder their use. How empirical is this postulation? Thus, the study therefore examines effort expectancy as correlates of use of electronic information resources by undergraduates in Ajayi Crowther University, Oyo, Nigeria

Research questions
The research questions that will guide this study are:
1. What are the electronic information resources accessible to the undergraduates of Ajayi Crowther University?
2. What is the purpose of use of electronic information resources by undergraduates in Ajayi Crowther University?
3. What is the frequency of use of electronic information resources by undergraduates of Ajayi Crowther University?

4. What is the effort expectancy of electronic information resources use by undergraduates of Ajayi Crowther University?
5. What are the constraints militating against the use of electronic information resources by undergraduates in Ajayi Crowther University?

Research hypothesis
The null hypothesis that will be tested at 0.05 level of significance in this study is;
1. There is no significant relationship between effort expectancy and use of electronic information resources by undergraduates in Ajayi Crowther University.

Literature review
The review of literature will be divided into three sections. The first section will focus on the effort expectancy of electronic information use by students, the second section will be on use of electronic information resources by undergraduates and the last will focus on the relationship between effort expectancy and use of electronic information resources by undergraduates.

Effort expectancy of electronic information use by students
Effort expectancy refers to the anticipation of individuals towards the ease associated with the use of a particular system or otherwise. Ghalandari (2012) observed that the performance and the rewards that emanate from the use of an information system are linked with its effort expectancy. Some studies have been conducted that examined the ease of use and complexity (effort expectancy) associated with use of different types of EIRs by students.

Gakibayo, Ikoja-Odongo and Okello-Obura (2013) studied the use of EIRs by 266 undergraduate students of Mbarara University, Uganda. Results showed that apart from internet search engines, other EIRs like scholarly databases, electronic journals and e-books were not used often. The authors concluded that this could be as a result of the students' lack of computer and information literacy skills which might make the use of the other EIRs quite difficult for them. Thus, it can be deduced that the students might view the use of these EIRs as one requiring much efforts.

Similarly, Adetunla (2016) did a study that centred on the perceived ease and use of electronic information resources by 621 undergraduate students of private universities in Oyo State Nigeria. The technique used for the selection of the sample size was multistage in nature and findings revealed that majority of the respondents did not have a favourable perception of the effort expectancy associated with the use of EIRs. This conclusion was reached because most of the undergraduate students (62%) affirmed that they found it difficult to access EIRs as a result of lack of clarity and understanding. Though, close to two-fifths (39%) noted that their interaction with EIR was clear and understandable. However, some studies have also reported to the contrary.

Kodandarama and Chandrashekara (2014) surveyed the use of web OPAC by students and research scholars at Mysore University library in India. The study employed descriptive research and the research instrument was the questionnaire employed to collect information on the use of the library catalogue. About 200 questionnaires were randomly distributed out of which 180 were returned and used for the analysis. Results revealed that more than three-fifths of the respondents 96 (66.67%) indicated that they did not require any guidance before they can use the Web OPAC. Therefore, it can be deduced that as far as this set of students are concerned, they expected that their use of this electronic resource that provides access to information resources should be effort free.

Johnston, Berg, Pillion and Williams (2015) did a study that focused on the ease of use associated with the use of e-textbooks by undergraduates in a university in Canada. They evaluated ease of use in relation to students' ability to install, access, navigate and read online and results showed that about 80% of the undergraduates pointed out that they experienced no difficulty at all. On the other hand, 18% of the students reported that they experienced some difficulties when it comes to reading the text online.

Akpojotor (2017) also surveyed the perceived ease of use of electronic information resources among 329 postgraduate students of library and information science in Southern Nigerian universities. The study was descriptive in nature and the questionnaire was used to collect data. From the findings, a significant number of the students perceived the EIRs to be easy to use as the mean values of the responses of the students were greater than the criterion mean which was 3.00. For example, the mean values associated with perceived ease of use of e-journals, World Wide Web and e-mails were (mean=4.55), (mean=4.41) and (mean=4.43)

respectively. This implies that most of the respondents were of the view that accessing the EIRs would not require as much effort that could discourage them from using it.

The studies reviewed have shown that students have different expectancies regarding the efforts required to use the different electronic information resources. This could be a function of the category of students, and the prevailing circumstances in their various universities.

Use of electronic information resources by undergraduates

Literature is quite replete with studies on the use of electronic information resources by undergraduates. A review of some of these studies will provide empirical insights into the purpose, frequency and constraints to the use of EIRs by undergraduates. Dhanavandan, Esmail and Nagarajan (2012) examined the use of electronic resources by undergraduate students at Krishnasamy College of Engineering, India. They reported that a little over two-fifths of the respondents 38 (44.2%) noted that they made use of EIRs for study, while 25 (29%) used them for project and others. The challenges that hindered the effective use of the EIRs as identified by the undergraduates included lack of training and slow speed of the Internet as observed by some of them 25 (29.1%) and 19 (22.1%).

Quadri, Adetimirin and Idowu (2014) studied the availability and utilisation of library electronic resources by undergraduates in Babcock University and Redeemers University, both private universities in the South-west of Nigeria. The results of their study revealed that most of the respondents 128 (64.0%) and 111 (55.5%) used

EIRs for assignment and research/project respectively. The Internet as an EIR was used daily by a significant number of the undergraduates 84 (42%), while the respondents 78 (39.0%) affirmed that they never used CD-ROMs. The major challenges identified by majority of the undergraduates were poor internet connectivity, erratic power supply and the malfunctioning of computers that are used to access the EIRs.

Bankole, Ajiboye and Otunla (2015) carried out a study on the use of electronic information resources by undergraduates of Federal University of Agriculture, Abeokuta, Ogun State, Nigeria. The questionnaire was administered to the students who visited the library and it was reported that close to all of them 157 (92.4%) indicated that they used search engines such as Google. E-lecture notes and e-books were also used by a significant number of the respondents 125 (73.5%) and 71 (41.8%) respectively. Findings also revealed that a notable number of the undergraduates 123 (72.4%) and 103 (60.6%) pointed out that they used the EIRs for assignment completion and also to obtain course related information/study materials. The prominent constraint to the use of EIRs as identified by the respondents 65 (38.2%) was insufficient skills to retrieve needed information. Others are; lack of time and frequent power outages.

In another study carried out in Nigeria, Owolabi, Idowu, Okocha and Ogundare (2016) surveyed the use of EIRs by undergraduates of the University of Ibadan. One hundred and eighty eight students participated in this descriptive study of which data was collected also through the use of

the questionnaire. The entire students 188 (100%) noted that the most used EIRs were the Internet and email services. Almost all the respondents 170 (93.7%) and a little above four-fifths 158 (84%) agreed that they used email services and the Internet often. All the undergraduates 188 (100%) revealed that they made use of the EIRs for academic purpose/course works and for online application/registration. In addition, 170 (90.4%) and 122 (64.9%) also noted that they used EIRs for assignment completion and project writing. Most of the respondents 156 (83%) and 148 (78.7%) indicated that inadequate power supply and poor network/internet connectivity were the major challenges they faced in the use of EIRs.

In a recent study, Madondo, Sithole and Chisita (2017) researched into the use of electronic information resources by undergraduates in Zimbabwe. The study employed the mixed method of quantitative and qualitative research as the questionnaire was used and also the authors carried out an observation on how the students used online databases, e-journals and the Internet. Findings showed that four-fifths (80%) made use of the e-resources for individual assignment, while 40% used the EIRs for research paper. The factors that hindered the use of EIRs as noted by the respondents (70%) and (50%) were unreliable internet connection and insufficient number of work stations.

The studies reviewed have showed the benefits associated with the use of EIRs, as undergraduates used them for diverse purposes and at different intervals. It has also become clear that infrastructural challenges still affect the use of EIRs especially on the African continent.

Relationship between effort expectancy and use of electronic information resources by undergraduates

It is as if much focus has not been given to the nexus between effort expectancy and use of electronic information resources by undergraduates. However, the findings of few of the studies cited earlier could present information on the correlation that could exist between effort expectancy and use of electronic information resources by undergraduates. Attuquayefio and Addo (2014) noted that there is a nexus between effort expectancy and behavioural intention. Thus, complexity or any form of difficulty in the use of EIRs could influence the undergraduates to develop a negative behaviour towards the use of EIRs.

The study by Dhanavandan, Esmail and Nagarajan (2012) carried out among undergraduates in India revealed that some of the respondents 29 (33.7%) were of the view that whenever they had reasons to use EIRs, it took long to view and download web pages. This difficulty constituted a challenge to the respondents and could also discourage them from using the EIRs. Similarly, in the study done by Bankole, Ajiboye and Otunla (2015) among undergraduates of Federal University of Agriculture, Abeokuta, Ogun State, Nigeria, some of the respondents 56 (33.0%) identified difficulty in finding relevant information as a challenge that affected their use of EIRs. This shows that the students did not find the needed information easily as extra efforts were required. In a situation

where this difficulty persists, it could hinder the use of EIRs.

In addition, Quadri, Adetimirin and Idowu (2014) also reported in their study carried out in two private universities in South-west of Nigeria, that a significant number of their respondents noted that they had technological constraints in their use of EIRs. This shows that it would have been quite difficult for the undergraduates to access EIRs due to the technological issues. The fact that the undergraduates identified this as a constraint is an indication that if the use of EIRs is not perceived as easy to use, it could serve as a clog in the wheel for actual use of the EIRs by the undergraduates. Thus, revealing the significance of effort expectancy.

Theoretical framework

The Unified Theory of Acceptance and Use of Technology (UTAUT) (see fig. 1) is the theory that guides this study. The theory was developed by Venkatesh, Morris, Davis and Davis in the year 2003. It is a unification theory that combined eight unique models that are applicable to acceptance and use of technology. These are; Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivation model (MM),

Theory of Planned Behaviour (TPB), a combination of TAM and TPB, Innovation Diffusion Theory (IDT), Model of PC Utilisation (MPCU) and Social Cognitive Theory (SCT) (Venkatesh et al. 2003). The theory identifies the direct determinants of behavioural intention as performance expectancy, effort expectancy, social influence and facilitating conditions. These are moderated by gender, age, experience and voluntariness to use. Behavioural intention and facilitating conditions have direct relationship with use behaviour. UTAUT has been used by different researchers in predicting factors that influence the use of technology. Venkatesh, Thong and Xu (2016: 331) also noted that this theory has been used in different contexts and have even been expanded by researchers.

This theory is relevant to this study because of one the precursors to the use of technology is effort expectancy (EE) which is the explanatory variable in the study. EE is viewed as the expected complexity and the degree of effort required in making use of a given technology (Vermaut, 2017). Thus, the anticipated complexity of EIRs use could determine if the undergraduates would use them or not.
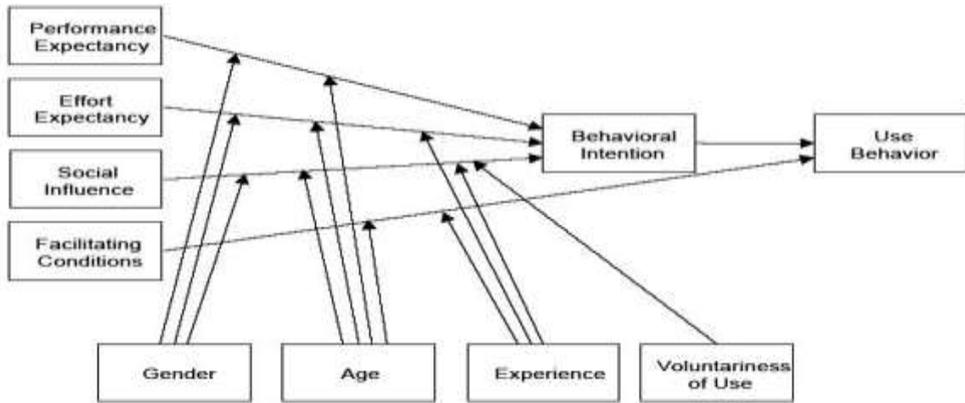
Fig 1: (UTAUT) Source: Venkatesh et al. (2003)

Methodology

Descriptive survey research design was used for this study. The undergraduates of Ajayi Crowther University Oyo, Nigeria constitute the population of the study. According to the data collected from the institution, there are 5,663 students in 4 faculties. The sampling technique used for the study is the multistage technique. At the first stage, the balloting technique was used to select two out of the four faculties at random. For the second stage, two departments that have the highest population of students in the two faculties were purposively selected. Lastly, a sampling fraction of 7% was used to arrive at a sample size of 140 (Table 1). A self developed questionnaire constructed based on the review of the relevant literature was the data collection instrument. It was validated by experts in the Department of Library, Archival and Information Studies, University of Ibadan, before administration. Data was analysed with the use of the Statistical Package for the Social Sciences (SPPS) and presented in form of descriptive statistics of frequency counts, percentages and correlation analysis.

Table 1 Sample size for the Study

Faculty	Departments	No. of undergraduates	Sample size (7%)
Natural sciences	Computer science Biological science	530 438	37 31
Social and management sciences	Mass communication Accounting	520 511	36 36
Total			140

Results and discussion

One hundred and forty (140) copies of the questionnaire were distributed to undergraduates in Ajayi Crowther University. However, 139 copies were duly filled and used for analysis. Thus, the response rate is 99%.

Demographic characteristics of respondents

Table 2 captured the demographic information of the undergraduates.

Findings showed that female undergraduates 85 (61.2%) responded to the questionnaire more than their male counterparts 51 (38.8%). Majority of the respondents 66 (47.5%) were between the age 16-20, while the least 3 (2.1) were above 30. From the findings, 46 (33.1%) were in their final year as they were in departments where the duration of study is four years. However, quite a few 7 (5.1%) were in 100 level. Comparing the result of their age with their level of study, it can be deduced

that most of the respondents came into the university at a very young age, probably in their very early teens. This is quite understandable as the university is a private university. A very significant number 118 (84.4%) of the students sampled were Christians and just 5 (3.5%) noted that they practiced African Traditional Religion. The result is not surprising as the university apart from being a private university is also a Christian University.

Table 2 Demographic characteristics of respondents

Demographic variables	Frequency	Percentage
Gender		
Male	54	38.8
Female	85	61.2
Age		
16-20	66	47.5
21-25	62	44.6
26-30	8	5.8
>30	3	2.1
Level		
100	7	5.1
200	43	30.9
300	43	30.9
400	46	33.1
Religion	118	84.9
Christianity	16	11.5
Islam	5	3.6
African Traditional Religion		

N=136

Research question one: What are the electronic information resources accessible to the undergraduates of Ajayi Crowther University?
Table 3 revealed that all the EIRs were accessible to the majority of the respondents. As 63 (45.3%) expressed that the e-news was very readily accessible, while 52 (37.4%) and 51 (36.7%) also noted that e-encyclopedias and e-newspapers were also very accessible to them. This implies that apart from the fact that the

university makes the electronic information available, they also ensure that they are accessible. This agrees with the findings of Bankole, Ajiboye and Otunla (2015) who reported that most of the undergraduates of the Federal University of Agriculture, Abeokuta, Ogun State, Nigeria used search engines, e-lecture notes and e-books. Owolabi, Idowu, Okocha and Ogundare (2016) also corroborated the results of this study as all the respondents in the University of

Ibadan noted that they used email services among other resources. This is an indication that these EIRs were

accessible, if not the undergraduates cannot use them.

Table 3 Accessibility of electronic information resources to undergraduates in Ajayi Crowther University

Electronic Information Resources	VRA		RA		A		NRA		NA	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
E-books	36	25.9	30	21.6	43	30.9	15	10.8	15	10.8
E-journals	19	13.7	35	25.2	39	28.1	30	21.6	16	11.5
E-databases	20	14.4	34	24.5	45	32.4	28	20.1	12	8.6
E-dictionaries	49	35.3	33	23.7	29	20.9	13	9.4	15	10.8
E-encyclopedias	52	37.4	24	17.3	32	23.0	16	11.5	15	10.8
E-newspapers	51	36.7	42	30.2	18	12.9	18	12.9	10	7.2
E-magazines	37	26.6	47	33.8	24	17.3	20	14.4	11	7.9
CD-ROM	26	18.7	35	25.2	36	25.9	24	17.3	18	12.9
E-news	63	45.3	41	29.5	21	15.1	9	6.5	5	3.6
E-discussions	25	18.0	37	26.6	39	28.1	28	20.1	10	7.2
E-images/sounds	52	37.4	35	25.2	31	22.3	16	11.5	5	3.6
E-theses/dissertations	17	12.2	30	21.6	33	23.7	32	23.0	27	19.4

Key VRA *(very readily accessible)* RA *(readily accessible)* A *(accessible)* NRA *(not readily accessible (NA) not accessible*

Research question two: What is the purpose of use of electronic information resources by undergraduates in Ajayi Crowther University?

Results presented in table 4 showed that the undergraduates used the electronic information resources were used for different academic purposes. Interestingly, all the respondents 139 (100%) agreed that they utilized the electronic information resources for learning, a very number, 133 (95.7%)

for research and 132 (95.0%) for assignment completion. This proves that the EIRs that are used contributed meaningfully to the academics of a significant number of the undergraduates. This supports the findings of Quadri, Adetimirin and Idowu (2014) and Madondo, Sithole and Chisita (2017) where they reported that undergraduates in two private universities in Nigeria and Zimbabwe respectively used EIRs for assignment completion and research activities.

Table 4 Purpose of use of electronic information resources by undergraduates in Ajayi Crowther University

Statement: I use electronic information resources for;	Agree		Disagree	
	Freq	%	Freq	%
Learning	139	100.0	-	-
Examination Preparation	123	88.5	16	11.5
Assignment Completion	132	95.0	7	5.0
Continuous Assessment Preparation	111	79.9	28	20.1
Group Discussion	108	77.7	31	22.3
Research	133	95.7	6	4.3
Seminar Preparation	119	85.6	20	14.4
Term Paper	97	69.8	42	30.2

Research question three: What is the frequency of use of electronic information resources by undergraduates of Ajayi Crowther University?

Table 5 showed that a notable number 69 (49.6%) indicated that they made use of the e-news on a daily basis, 61 (43.9%) also used e-dictionaries at the same frequency. On the other hand, electronic journals and e-books were used occasionally by most of the respondents as indicated by 56 (40.3%) and 54 (38.8%). The undergraduates still utilize most of the electronic information resources at appreciable frequencies. This aligns with the findings of Bankole, Ajiboye and Otunla (2015) who reported that majority of the respondents pointed out they used EIRs quite frequently.

Table 5 Frequency of use of electronic information resources by undergraduates in Ajayi Crowther University

Electronic Information Resources	Daily		Weekly		Monthly		Occasionally		Never	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
E-books	33	23.7	30	21.6	10	7.2	54	38.8	12	8.6
E-journals	14	10.1	29	20.9	19	13.7	56	40.3	21	15.1
E-databases	22	15.8	25	18.0	21	15.1	51	36.7	20	14.4
E-dictionaries	61	43.9	36	25.9	10	7.2	21	15.1	11	7.9
E-encyclopedias	44	31.7	30	21.6	15	10.8	45	32.4	5	3.6
E-newspapers	54	38.8	28	20.1	13	9.4	36	25.9	8	5.8
E-magazines	36	25.9	27	19.4	27	19.4	34	24.5	15	10.8
CD-ROM	18	12.9	22	15.8	22	15.8	50	36.0	27	19.4
E-news	69	49.6	30	21.6	18	12.9	18	12.9	4	2.9
E-discussions	32	23.0	27	19.4	20	14.4	40	28.8	20	14.4
E-images/sounds	50	36.0	25	18.0	19	13.7	32	23.0	13	9.4
E-theses/dissertations	12	8.6	21	15.1	27	19.4	42	30.2	37	26.6

Research question four: What is the effort expectancy of electronic information resources use by undergraduates of Ajayi Crowther University?

Table 6 showed that quite a significant number of the respondents had a very high expectation as regards the ease of use of electronic information resources. Results revealed that over three-fifths 93 (66.9%) indicated to a very high extent that they expected accessibility to the electronic information resources to very easy. Also, 80 (57.6%) acknowledged that to a very high extent they expected the electronic information resources interface to be easy to browse and navigate. Similarly, 79 (56.8%) noted that they also expected the interface of electronic information resources to be friendly to use.

This expectation may be as a result of the ICT skills possessed by majority of the undergraduates. They expected easy access to EIRs because they had the skills that will enable them to retrieve the needed electronic information. In a situation where undergraduates lack the relevant ICT skills, it would be difficult for them to access electronic information resources and as such might not expect easy access to the EIRs. This agrees with the study of Akpojotor (2017) where most of the respondents in library and information science in Southern Nigerian universities perceived the EIRs to be easy to use. On the other hand, this is at variance

with the findings of study by Adetunla (2016) that was carried out in Oyo State, Nigeria, where most of the

undergraduates noted that EIRs usage was not devoid of some complexities.

Table 6 Effort expectancy of electronic information resources use by undergraduates in Ajayi Crowther University

Statement	VHE Freq %	HE Freq %	A Freq %	LE Freq %
I expect it to be very easy to access electronic information resources	93 66.9	40 28.8	4 2.9	2 1.4
I expect the interface of electronic information resources to be friendly to use	79 56.8	45 32.4	14 10.1	1 0.7
I expect electronic information resources interface to be easy to browse and navigate	80 57.6	46 33.1	13 9.4	- -
I find it easy to access electronic information resources	56 40.3	54 38.8	16 11.5	13 9.4
I find it easy to upload electronic information on the internet	43 30.9	47 33.8	42 30.2	7 5.0
Accessing and use of electronic information resources is a good idea	74 53.2	43 30.9	18 12.9	4 2.9
I find it difficult to download electronic information resources	23 16.5	46 33.1	39 28.1	31 22.3
It is not easy for me to print out electronic information for later use	25 18.0	37 26.6	50 36.0	27 19.4
Access instructions on how to retrieve electronic information resources are not always clear	38 27.3	36 25.9	41 29.5	24 17.3
Too many login instructions required for some electronic information resources	29 20.9	61 43.9	38 27.3	11 7.9
Website design of electronic information resources is too complex for me to access	31 22.3	32 23.0	40 28.8	36 25.9
It is difficult to save electronic information resources for later use	22 15.8	41 29.5	40 28.8	36 25.9
It is difficult to use search engines to retrieve electronic information resources	27 19.4	38 27.3	38 27.3	36 25.9

Key: VHE (very high extent) HE (high extent) A (average) LE (low extent)

Research question five: What are the constraints militating against the use of electronic information resources by undergraduates in Ajayi Crowther University?

Table 7 identified the challenges facing the use of electronic information resources by undergraduates. The greatest constraint militating against the use of electronic information resources by a significant proportion of the students 87 (62.6%) was erratic power supply, 66 (47.5%) slow Internet network and high cost of

access as noted by 59 (42.4%). On the other hand, majority of the undergraduates 58 (41.7%) and 54 (38.8%) disagreed that they faced the challenge of lack of information retrieval skills and insufficient training. This shows that the challenge faced by most of the respondents was infrastructural in nature, as they indicated that they had a high Information and Communication Technology (ICT) competence. This agrees with the study of Madondo, Sithole and Chisita (2017) where the

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major constraint affecting the use of EIRs was unreliable internet connection.

Table 7 Constraints militating against the use of electronic information resources by undergraduates of Ajayi Crowther University

Constraints	SA Freq %	A Freq %	D Freq %	SD Freq %
Lack of Information and Communication Technology Skills	38 27.3	34 24.5	45 22.4	22 15.8
Computer phobia	15 10.8	30 21.6	50 36.0	44 31.7
Slow internet network	66 47.5	57 41.0	13 9.4	3 2.2
Erratic power supply	87 62.6	29 20.9	16 11.5	7 5.0
Lack of relevant electronic information resources	29 20.9	61 43.9	42 30.2	7 5.0
Slow downloading	62 44.6	42 30.2	31 22.3	4 2.9
Lack of access to computer and other devices that can access the internet	31 22.3	37 26.6	50 36.0	21 15.1
Lack of information retrieval skills	33 23.7	31 22.3	58 41.7	17 12.2
High cost of internet access	59 42.4	40 28.8	33 23.7	7 5.0
Insufficient training	26 18.7	38 27.3	54 38.8	21 15.2
Low level of awareness of relevant electronic information resources	27 19.4	48 34.5	38 27.3	26 18.7

Test of hypothesis
Hypothesis: There is no significant relationship between effort expectancy and use of electronic information resources by undergraduates of Ajayi Crowther University
Table 8 showed that there is a significant positive relationship between effort expectancy and use electronic information resources by undergraduates in Ajayi Crowther University (r = .277**; df = 138; p< 0.01). This means as the degree associated with the ease of use of electronic information resources increases, the use of electronic information resources by undergraduates also increases. On the contrary, if the undergraduates realise that it would require much effort to make use of the EIRs, they might be discouraged from using them. This aligns with the submission of Attuquayefio and Addo (2014) who opined that effort expectancy has a relationship with behavioural intention and actual use of a technology like EIR.

Table 8 Relationship between effort expectancy and use of electronic information resources by undergraduates in Ajayi Crowther University

Variables	Mean	Std. Deviation	N	r	df	Sig (p)	Remark
Effort expectancy	27.65	6.162	139	.277**	138	000	Significant
Use of EIRs		36.32	9.864		139		

Conclusion
Undergraduates will be encouraged to use electronic information resources for their academic activities if they find it easy to access information from these resources. The situation whereby undergraduates perceive that a particular electronic information

resource is too difficult to access might create a barrier. Majority of undergraduates in Nigeria rely on EIRs for most of their academic activities, because the print resources in most university libraries that are government owned are not adequate and current. Electronic information resources have changed the world of information accessibility and provision and as such their impact will be more felt if undergraduates can utilize them effortlessly. Thus, this study validates UTAUT, as effort expectancy significantly determines the use of EIRs by undergraduates.

Recommendations
1. Management of the university should look into their internally generated revenue and provide alternative sources of electricity in the library. Alternatives like solar, inverters and power generating sets should be available in order to ease the access to EIRs by the

undergraduates on the university campus.
2. In order to solve the challenge of high cost of Internet access, the school management should subsidize the cost of access to the Internet for the undergraduates. A token can be paid for this and included in the tuition.
3. In order to sustain the favourable effort expectancy towards the use of EIRs by the undergraduates, librarians should introduce periodic digital literacy programmes and ensure that all undergraduates are encouraged to participate in it.
4. The university library should be equipped with subject based electronic information resources so that undergraduates can have access to electronic scholarly articles in their different fields of study. This will address the problem of irrelevant EIRs.

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