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Perceived Ease and Use of Electronic Information Resources (Eir) By Undergraduate  
Students of Private Universities in Oyo State Nigeria

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## Perceived Ease and Use of Electronic Information Resources (Eir) By Undergraduate Students of Private Universities in Oyo State Nigeria

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### Abstract

**Purpose:** University libraries are investing huge amount of money to provide useful and accessible information services to users in electronic format to enhance learning and research activities. In order to justify the investment made on electronic information resources, this study examined awareness, perceived ease and use of EIR by undergraduate students of private university in Oyo state, Nigeria.

**Methodology:** The study adopted a descriptive survey design with a study population of 2,171 undergraduate students. Multi-stage sampling technique was used for selecting the sampled respondents for the study. Questionnaire was used for data collection which was analyzed using descriptive statistics and Pearson product moment correlation.

**Findings:** The findings revealed that EIR was perceived to be complex, non-flexible and not easy to use. More so, the use of EIR does not meet the information needs of the students. The major challenge faced by student when using EIR was found to be frequent power cut with 75% respondent rate. The finding also revealed a positive relationship between perceived ease and use of EIR at ( $p=0.00$ ;  $p<0.05$ ).

**Study Conclusions and policy recommendations:** The study concluded that the students perceived EIR as complex and not flexible to use. Therefore, the study recommended that libraries should do more by providing technical support and training to ensure optimal use of EI.

**Keywords:** *Electronic Information resources, perceived ease to use, use of electronic information resources, undergraduates, private universities.*

## 1.0 Introduction

The new age of information offers possibilities for the future with information delivered in different formats, limited only by the boundaries of our imaginations. Also, the potentials of the electronic network are breathtaking. Education is one of the key sectors that have been profoundly transformed by the application of the technological advancement offered by the digital revolution that is rocking the globe because computer have been integrated into the education system more than four decades ago (Yushau, 2006).

In any educational or research institution, the library plays a pivotal role. A well-stocked academic library according to Yusuf and Iwu (2010) is a store house of information or a record of human experience to which users may turn to for information. The paper library, also referred to as the traditional library, is characterized mainly with the provision of information in print format. Information provision is usually in the form of monographs, journals, pamphlets, magazines and so on. Traditional libraries though guided by the objective of linking users who needed information to the sources that had the information had most of their work done without the use of information technology which is rather time consuming. Nowadays the scenario has changed for many libraries with greater use and application of information and communication technology (ICT). As more and more information sources become available online, many university libraries are introducing electronic resources

The term electronic resources according to Olarongbe and Ibrahim (2009) is taken to refer to library's information bearing materials that are in electronic form which include electronic books (e-books); electronic newspapers (e-newspapers); electronic journals (e-journals) as well as Internet resources. These resources are stored electronically and made accessible through electronic systems and computer networks. Das, Anushandhan, Odisha and Maharana (2013) affirmed that the features of electronic information resources (EIR) include: multiple access points, speed, rich content and timeliness. The creation of EIR has no doubt, made an essential impact on teaching and learning process. Some of the major benefits of EIR according to Bagudu and Sadiq (2013), include accessing resources in digital format, which allows online access to users at numerous locations at anytime and anywhere, it can be at home, in the library, in the class, laboratories etc. Considering the advantages, it is not surprising that most libraries endeavour to provide electronic information resources for research. However with in risen consciousness of adopting and providing information resources in electronic format, the extent of use among undergraduate students remains a major consider to the library management.

Studies have revealed critical factors that affect students' use of computer which include; computer attitudes, (Jawahar and Elango, 2001), computer knowledge, perceived usefulness of computer knowledge, computer self-efficacy Saleh, 2008); early computer training (Leuthold, 1998); rich home computing environment (Mc Cade, 2001) and cognitive and affective attitudes. Baylor and Ritchie (2002) noted that the amount of technologies and its sophistication will not be put into use unless students have the skills, knowledge and attitude necessary to maximize its potentials in education, hence, student should acquire strong computer competence, if they wish to be successful in any academic careers in the future. Students' personal factors have brought about digital divide and mix feeling about the ease of use of electronic information systems. The literature has shown that users' perception of an information system can be explained by several factors some of which are students personal factors such as students attitude towards computer,

computer efficacy, computer experience, anxiety, inadequate instructor's training and support, early computer training, socio-economic background of student, age, gender, course of study, perceived usefulness and computer knowledge etc. All these have been found to strongly influence user's perception of the ease of using any electronic information systems.

It is however important to understand that EIR are technology dependent resources hence the prediction of Technology Acceptance Model (TAM) becomes imperative. Technology Acceptance Model devised by Davis (1986) theorized the acceptability and usage of information system/technological tool via the prediction of two (2) constructs i.e. Perceived Usefulness and Perceived Ease of Use. This study is more interested in the perceived ease of use of EIR because it has been argued in literature that difficulty of use can discourage adoption of a useful EIR, no amount of usefulness can compensate for EIR that does not give ease of function. Perceived ease of use is an important factor of user acceptance and should not be ignored by those attempting to design or implement successful electronic information system (Davis, 1989). EIR will be perceived easy to use by undergraduate student if it becomes easy to learn, if interaction with it becomes clear and understandable, if it's flexible to interact with and however, undergraduate student must be able to become skillful at using it. Furthermore, the TAM model has been used exclusively in educational settings to determine the actual usage of information technology into educational institution.

In providing information resources in electronic format university libraries spend huge sum of money in an attempt to do so, it is necessary therefore for universities to make student aware of such resources by is, their perception of ease of use and the extent to which they make use of them might be affected positively. Without adequate understanding of EIR perceived ease and usage, university libraries would not only be unable to justify the investment made on EIR but may also be spending scarce resources in futility. It is based on the above, that this study investigates students' perceived ease and use of EIR in private universities in Oyo State.

### **1.1 Objective of the Study**

- i. To determine the extent of perceived ease of use associated with use of EIR among undergraduate students of private universities in Oyo State.
- ii. To ascertain the extent to which the use of EIR meets the information needs of undergraduate student of private Universities in Oyo State.
- iii. To ascertain the relationship between perceived ease of use and use of EIR
- iv. To find out the challenges faced by undergraduate students of private Universities in Oyo State. in the use of EIR

### **1.2 Research Hypothesis**

H<sub>01</sub>: there is no significant relationship between perceived ease and use of EIR by undergraduate student of private universities in Oyo state, Nigeria.

### **2.0 Theoretical Framework**

This study is based on the Technology Acceptance Model (TAM) developed by Fred Davis in 1989. This theory has been used to explain computer usage behaviour. The goal of TAM is to provide an explanation of determinants of computer acceptance across a broad range of end-user computing technologies. The model has two key sets of constructs namely: perceived usefulness and perceived ease of use. The perceived usefulness is defined as the user's subjective

probability that using a specific application system will increase his or her job performance. The perceived Ease of use refers to the degree to which the user expects the target system to be free of effort.

TAM emphasizes that user' perceptions about how useful an information system is and how easy it is to use are powerful factors that influence the adoption of technology and are fundamental determinants of a user's acceptance. The TAM has been used by various researchers including Zhuang (2002), Oyelekan (2008), ijeoma, Joseph *et al.* (2010) among others. The TAM model was adopted in this study based on its emphasis on end user computer usage behaviour determined by their perception to the usefulness and ease of using the adopted information system. Form literature, it has been understood that users personal traits plays a major role in influencing students perception level of any information system they are exposed to. In view of this, this model helps to form the key construct to measure undergraduate students' perception on the ease of use in using electronic information resources. Further, the theory will help predict the usability of electronic information resources and to identify further modifications which must be made in order to enhance the use of EIR among undergraduate students.

## **2.1 Literature Review**

### **2.1.1 Electronic Information Resources in libraries.**

The traditional library is characterized mainly with the provision of information presented in hard formats such as paper, microforms in contrast with the digital library that presents soft formats mainly in electronic form. Hard format information can be regarded as print forms of information such as monographs (books), journals, pamphlets and soon. While soft information can be regarded as information available electronically this may include CD-ROM, e-journal, e-book, Internet and so on. Das *et al.* (2013) affirmed that electronic resources are systems in which information is stored electronically and made accessible through electronic systems and computer networks. These resources include OPAC, CD-ROMs, Online-Databases, E-journals, E-books, Internet resources etc.

Kaur and Verma (2009) reported the use of electronic information sources in Thapar University by revealed that maximum number of user are accessing e-resources for the intended purpose. The impact of e-resources is visible from the decrease in number of printed journals in comparison to increase in number of electronic journals. Information stored electronically constitutes electronic resources and these shall be discussed in this section: E-journal, OPAC, Internet, Online databases, CD-ROM. Khan (2008) in a similar study "Use of e-journals by research scholars at Aligarh Muslim University and Banaras Hindu University" reveals that most of the research scholars are aware of the availability of e-journals and largely use them for reference purpose in their research work.

Achonna (2008) in a study examined students' awareness, access, usage and problems faced in use of e-journal resources at the Yaba College of Technology library. Use of e-journal resources was found low and reason for this was linked to lack of skills, inadequate provision of computers, power outage etc. were the problems faced in use of resources. The Study concluded by noting the need for training skills, provision of adequate computers; need to popularize the information technology and its usage and to motivate the students to use e-journal resources.

Bayugo and Agbeko (2007) reported on a survey of convenient access to, and use of, electronic databases (CDROM and online) with full-text journals and their effect on information seeking

behavior of health sciences academics at the College of Health Sciences of the University of Ghana. The survey documented academics preferences of print and electronic resource, and the specific databases and full-text journals. The results showed that Academics were unaware of the two full-text journal databases (HINARI and PERI) available at the Library. Ansari (2008) reveals that a high percentage of library users in five academic libraries in New Delhi use OPAC as a search tool for retrieving documents. His study also shows that most of the users handled the OPAC themselves. One can conclude here that users of those five academic libraries have gone through the training offered by the libraries which help information searchers to use OPAC without requesting for the assistant of the library staff.

### **2.1.2 Perceived ease of use of Electronic Information Resources**

Educational value could potentially be improved by information technology but could be obstructed by users' unwillingness to accept and use available systems (Davis, 1986). Davis' research aims to pursue better measures for predicting and explaining use through its technology acceptance model (TAM). The model focuses on two theoretical constructs: perceived usefulness and perceived ease of use, which are theorized to be fundamental determinants of system use (Davis, 1989). Perceived usefulness - the degree to which a person believes that using a particular system would enhance his or her job performance; Perceived ease of use - the degree to which a person believes that using a particular system would be free of effort.

Davis found that perceived usefulness plays a greater role in user acceptance. Users are willing to cope with some difficulty of use in a system that provides critically needed functionality. Difficulty of use can discourage adoption of an otherwise useful system, no amount of usefulness can compensate for a system that does not give ease of function. The prominence of ease of use over usefulness has important implications for designers, who have tended to overemphasize usefulness over perceived ease of use. Perceived ease of use is an important factor of user acceptance and should not be ignored by those attempting to design or implement successful electronic information system (Davis, 1989).

Perceived ease of use is the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). The easier it is for a user to interact with a system, the more likely he or she will find it useful (Thong *et al.*, 2004). In this digital era, Hong *et al.* (2002) submitted that electronic resources in libraries need to be both easy to learn and easy to use. The result of a study carried out by Yusoff, Muhammad, Zahari, Pasah and Robert (2009) on Individual Differences, Perceived Ease of Use, and Perceived Usefulness in the E-Library Usage shows significant and positive relationship between perceived ease of use (PEOU) and E-library usage. This indicates that if undergraduate students find the e-library resources easy to use, they will be more willing to use it for information retrieval in order to improve the quality of their assignments and research.

### **2.1.3 Use of Electronic Information Resources in Universities**

According to Shuling (2007), electronic information has gradually become a major resource in every university library in recent years. The growth and diversity of electronic resources, especially e-journals, has led many to predict the extinction of the printed journal. It has been suggested that a new paradigm is sweeping scholarship. Rehman and Ramzy (2004) carried out a study at Kuwait University considering electronic resources at the Centre for Health Sciences among health professionals. They found that most respondents agreed to lack of time (37.1%),

lack of familiarity with computerized searching (22.6%) and satisfaction with printed sources (20.2%) as the main reasons for not using the electronic resources.

Further, a study conducted by Renwick (2005) investigating the Faculty of Medical Sciences' (FMS) knowledge and use of electronic resources provided by the Medical Sciences Library (MSL) at the University of the West Indies and the need for training in use of these resources. Finding revealed that academic staffs were quite knowledgeable about the electronic resources available at MSL. In addition, reasons for using electronic resources were for communication (86%), professional (79%), and personal research (77%), supporting teaching activities (74%). In another study carried out by Ibrahim (2004) which measured the use and perception of the United Arab Emirates University (UAEU) academic staff members of electronic resources. It was revealed that frequency of use of electronic resources was low. Significant low usage was reported for e-books bibliographic databases and e-journals. Reasons for the low use of electronic resources were lack of time because of the time needed to focus on teaching; lack of awareness of electronic resources; ineffective communication channels; and language barrier. Finally, Dadzie (2005) investigated the use of electronic resources by the students and academic staff of Ashesi University Ghana, in order to determine the level of use, the type of information accessed and the effectiveness of the library's communication tools for information research. The researcher found that one of the barriers to electronic resources was the inadequate number of computers.

### **3.0 Methodology**

This study adopted survey research design which enabled the researcher gain insight into the research problem at hand. The design was considered appropriate since it helps collect and analyze data that is generated from sample population. The year four (4) undergraduate students of private universities in Oyo State Nigeria formed the population for this study. A total of two thousand one hundred and seventy one (2,171) undergraduate students made up the population of this study.

A multi-stage sampling technique was used for this study to have a representative sample. Multi-stage sampling technique allows for randomization at different stages. The first stage was the purposive selection of two faculties from each university. At the second stage, a Simple Random Sampling Technique was used to select two departments from each of the selected faculties. The departments are Biochemistry and Computer Science in the faculty of science while in the faculty of social sciences; Accounting and Business Administration were selected. A total enumeration sampling technique was used at the final stage of the sampling procedure to select all the year four (4) undergraduate students in the selected departments in order to obtain the sample size for this study. The total number of the year four [4] undergraduate students summed up a total of 621 respondents which formed the sample size for this study.

The instrument used to collect data was a structured questionnaire. The data collected was analyzed using descriptive statistic such as percentage, mean and standard deviation. The hypothesis for this study was analyzed using Correlation.

#### 4.0 Results

Table 1 shows the distribution of demographic characteristics of the respondents. The category of institution indicated that Ajayi Crowther University has 268(45.3%) respondents while Lead City University has 324(54.7%) respondents. The result from the table above indicates that Lead City University has the highest number of respondents in this study.

The gender distribution of respondents shown in table 1 indicates that out of the 592 undergraduate students who were part of this study, 263 (44.4%) are male respondents while 329 (55.6%) are female. This implies that majority of the respondents are female.

The frequency of respondents by age shows that 288 (49%) of the respondents are below 20years, 264 (45%) are within the ages of 20-25 years and 40 (7%) are of the age gap 26-29 years. This indicates that most of the respondents are less than 20 years old followed closely by respondents within the age range 20-25years while age range 26-29 has the least respondents in this study. This result is not surprising considering the kind of universities under this study. Such result might differ, if this study was conducted in a federal or state university.

Finally, table 1 shows the distribution of respondents in each department. The result shows that 182 (31%) of the respondents are from business administration, 144 (24.3%) are from accounting, 169 (29%) are from computer science, while 97(16.4%) from Bio-chemistry. Hence most of the respondents are in Business Administration while Bio-chemistry has the least respondent.

**Table 1: Demographic information of respondents**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Category of Institution</b>		
Ajayi Crowther	268	45.3
Lead City	324	54.7
<b>Gender</b>		
Male	263	44.4
Female	329	55.6
<b>Age</b>		
Below 20 years	288	48.6
20-25 years	264	44.6
25-29 years	40	6.8
<b>Department</b>		
Biochemistry	97	16.4
Computer science	169	28.5
Accounting	144	24.3
Business Administration	182	30.7



**Research Question 1: What is the extent of ease of use associated with the use of EIR by undergraduate students of private universities in Oyo state?**

Specifically, the finding revealed that 39% respondent agreed that their interaction with EIR is clear and understandable while 62% disagreed. This revealed that majority of the respondents disagreed that their interaction with EIR is clear and understandable.

**Table 2: Perceived ease of use of EIR**

Statement	SA	A	D	SD	Mean	Std. Dev
My interaction with EIR is clear and understandable	223 (37.7%)	3 (0.5%)	109 (18.4%)	257 (43.5%)	2.32	1.36
I find EIR to be flexible to interact with	222 (37.5%)	3 (0.5%)	109 (18.4%)	251 (43.6%)	2.31	1.36
It is easy for me to become skillful using EIR	187 (31.6%)	38 (6.0%)	110 (18.6%)	257 (43.4%)	2.26	1.30
I find it easy to use EIR for the purpose i want	39 (6.6%)	187 (31.6%)	184 (31.1%)	182 (30.7%)	2.14	0.93
Learning to use EIR is easy for me	79 (13.3%)	77 (13.0%)	104 (31.1%)	252 (42.6%)	1.59	1.14

**SA=Strongly agree, A=Agree, D=Disagree, SD=Strongly Disagree**

Followed closely are 39% respondents who agreed that they find EIR to be flexible to interact with while 62% disagreed. this result shows that majority of the respondents disagreed with finding EIR flexible to interact with. Also, 38% of the respondents agreed that It is easy for them to become skillful using EIR while 62% disagreed. This result shows that majority of the respondent disagreed with becoming skillful using EIR. Further, the result from the table shows that 39% of the respondents agreed that they find it easy to use EIR for the purpose they want while 62% respectively disagreed. The finding revealed that majority of the respondents dont find it easy to use EIR for the purpose they intended. Conclusively, as evident in result, 26% respondents agreed that Learning to use EIR is easy for them while 74% disagreed. The finding revealed that majority of the respondents does not find learning to use EIR easy.

**Research Question 2: To what extent does the use of EIR meet the information needs of undergraduate students of private universities in Oyo state?.**

The result from the table revealed that 39% of the respondents respectively agreed that the use of EIR has been helpful in research while 62% respondents disagreed. The finding shows that majority respondent disagreed with the use of EIR being helpful in research. Followed closely, is the result that shows that 39% agreed that they use EIR for assignments while 62% respondents disagreed. it is evident that majority respondents don't use EIR for assignments. Also result on the table shows that 39% respondents agreed that they use EIR to update subject knowledge while 62% respondents disagreed. The finding shows that majority of the respondents don't use

EIR to update subject knowledge. Furthermore, the table shows that 44% respondents agreed that they use EIR to keep abreast of latest development while 56% respondents respectively disagreed. The finding shows that majority of the respondents don't use EIR to keep abreast with latest development. Finally, 38% respondents agreed that EIR helps to study course work while 62% respondents' disagreed. The finding further shows that majority of the respondents disagreed that don't use EIR to study course work.

**Table 3: Extent to which the use of EIR meets information needs**

Statement	SA	A	D	SD	Mean	Std. Dev
The use of EIR has been helpful in research	222 (37.5%)	3 (0.5%)	184 (31.1%)	183 (30.9%)	2.45	1.27
I use EIR to do assignments	222 (37.5%)	3 (0.5%)	184 (31.1%)	183 (30.9%)	2.45	1.27
I use EIR to update subject knowledge	222 (37.5%)	1 (0.2%)	186 (31.4%)	183 (30.9%)	2.44	1.27
Using EIR helps me keep abreast with latest development	184 (37.1%)	41 (6.9%)	184 (31.1%)	183 (30.9%)	2.38	1.22
The use of EIR helps me study course work	109 (18.4%)	116 (19.6%)	184 (31.1%)	183 (30.9%)	2.26	1.09

**SA=Strongly agree, A=Agree, D=Disagree, SD=Strongly Disagree**

**Research Question 3 : What are the challenges faced by the undergraduate students in the use of EIR in private universities in Oyo state?.**

Result from the table revealed that 74% of the respondents agreed that frequent power cut is a major challenge, followed by lack of relevant information on how to use EIR (69%), lack of knowledge to use the EIR (67%) came third in the ranking of challenges. Further, respondents agreed (62%) that library staffs are not supportive. Also Slow internet bandwidth was found to be another challenge. Finally, the least challenges indicated by the respondents is that Library time is not suitable (56%) respondents agreed that library time is suitable.

**Table 4: Challenges faced using EIR.**

Statement	SA	A	D	SD	Mean	Std. Dev
Frequent power cut	257 (43.4%)	191 (32.3%)	35 (5.9%)	109 (18.4%)	2.19	1.28
Lack of relevant information	220 (37.1%)	187 (31.6%)	76 (12.8%)	109 (18.4%)	1.94	1.33
Lack of knowledge to use	293 (49.4%)	109 (18.4%)	149 (25.2%)	41 (6.9%)	1.94	1.42
Library staff are not supportive	221 (37.3%)	150 (25.3%)	150 (25.3%)	71 (12.0%)	2.53	1.41
Slow internet bandwidth	222 (37.4%)	148 (25.0%)	113 (19.1%)	109 (18.4%)	2.18	1.23
Libraries time is not suitable	148 (25.0%)	113 (19.1%)	110 (18.6%)	221 (37.3%)	2.53	1.31

**SA=Strongly agree, A=Agree, D=Disagree, SD=Strongly Disagree**

### Hypothesis Testing

#### Hypothesis 1: perceived ease's relationship with use of EIR

In order to determine the relationship between perceived ease and use of EIR, the hypothesis which states that  $H^0$ : There is no significant relationship between perceived ease and use of EIR. Was formulated and the result is presented in table 5

**Table 5: Results of Pearson's Correlation showing the relationship between perceived ease of use of EIR and their use among students of private Universities in Oyo State, Nigeria**

Variables	N	Mean	Std. Dev	r-coefficient	P-value	Decision
Ease of use	592	12.83	6.81	0.392**	0.000	Sig
Use of EIR	592	11.67	5.77			

\*Significant at 0.05 level of significance

It is shown in table that a correlation of 0.392 exist between ease of use and use of electronic information resources at 0.05 level ( $r = .392$ ,  $N = 592$ ,  $P < .05$ ). This implies that there is a significant relationship between undergraduate students' perceived ease of use of EIR and their use of EIR. This was tested using correlation which P value is 0.000 and it is significant at  $p < 0.05$ . Based on the premises of the statistical result the null hypothesis  $H^0$  there is no significant relationship between perceived ease of use and their actual use of EIR was rejected in favor of the alternative hypothesis.

## **5.0 Discussion, Conclusions and Recommendations**

### **5.1 Discussion of Findings.**

Respondents' perception of ease of using EIR revealed that majority of the undergraduate students agreed that the EIR are very complex to use, their interaction with EIR is not flexible. This could be as a result of their level of IT competence which will make them perceive EIR complex and technical to use. According to Park and Chen, (2007) students with prior experience of using IT system would perceive information system as easy to use. Also, it shows that required technical assistance to be able to use EIR and lack of adequate training on how to use EIR by the institutions' library might affect student perception of the ease of using EIR. Ahearne et al (2005) found out in a similar study that the absence of the proper technical support and training influences user perception of any information system.

The study also revealed that the use of EIR does not meet the information needs of the undergraduate students of private universities in Oyo state, Nigeria. Majority agreed that EIR does not meet their assignment need, research need, course work need etc. this could be due to lack of awareness, underutilization and user unfriendliness of these resources. It is very important to put in mind that they result from this study shows that the undergraduate student are not really aware of the available resources which has caused an underutilization of these resources. This view agrees with Tyagi (2011), who affirmed that the ability of undergraduate students to use e-resources for the intended purpose depends on their awareness of electronic information resources also on the ease of use, Davis (1989), affirmed that no amount of usefulness can compensate for a system that does not give ease of function.

The finding revealed that library time is suitable but some of the major challenges faced by undergraduate students of private universities in Oyo state, Nigeria in the use of EIR are lack of knowledge, slow internet speed, frequent power cut and lack of training and technical support. This finding agreed with the findings of Ajuwon et,al (2003), Das et,al (2013), Oduwole &Apata (2003) and Chisenga(2004). The greatest challenge facing undergraduate students as revealed in this study is frequent power cut. Okiki (2012) also stated that the greatest challenge facing the use of EIR in developing countries is erratic power supply.

A test of hypothesis was conducted and perceived ease was found to have a significantly relationship with undergraduate students' usage of EIR. The result revealed a positive relationship between perceived ease and undergraduate students' usage of EIR. This finding contradicted previous study that examined relationship between perceived ease and actual usage of E-resources which found an insignificant relationship (Ramayah & Aafaqi's 2004).

### **5.2 Conclusion and Recommendation**

The introduction of electronic information resources to support and enhance teaching, learning and research process in Nigerian universities is a good innovation but some factors should be considered in order not to waste scarce resources in futility and to ensure intensive utilization of these resources especially among undergraduate students.

Perceived ease has been found to be a strong predictor of the appropriate usage of the available EIR provided. The provision of EIR in various universities does not determine students' usage of these resources but their perception on how easy it is to use and how user friendly these resources are determines actual use students make of them. Hence, it is necessary for higher

institution in Nigeria to put more emphasis on training and exhibition of the various electronic information resources is has subscribed and acquired in its library.

The major constraints against the use of EIR by undergraduate students of private universities under study are lack of knowledge, lack of relevant information, frequent power cut, slow internet speed and lack of support and training to students. Thus, this study offers the following recommendation;

- There should be adequate training of undergraduate students on how to use EIR. There is a need to update the curriculum on use of library course in the universities and introduce how to use EIR into the curriculum
- Those in charge of developing EIR packages should try to make the navigation and design layout to be easily understandable and less difficult to use.
- Furthermore, library staff must ensure they provide necessary technical support to ensured maximal use of EIR.

Finally the internet network server speed (bandwidth) should be increased to enable easy access to information. Also a functional e-library center should be set up of higher institutions in Nigeria to that enables students have access to EIR should be provided by respective universities.

## References

- Achonna, A.U. (2008). Awareness, access and usage of e-Journal resources of the library, by the students of Yaba College of Technology: Yaba –Lagos Nigeria. Samaru. *Journal of Information Studies*, 8(1); 26-33
- Ajuwon, G. A. (2003). Computer and Internet Use by First Year Clinical and Nursing students in a Nigerian Teaching Hospital. *BMC Medical Informatics and Decision Making*, Vol.3 no. 10 September, Available at *Biomed central*, 1472-6947/3/10 (accessed: 8th October, 2013).
- Ansari MA (2008). Awareness and use of OPACs in five Delhi libraries. *Electronic Libr.*26(1), 111-129.
- Bagudu, A.A. and Sadiq, H., (2013). Students' perception of digital library services: A case study of International Islamic University, Malaysia. *Library Philosophy and Practice (e-journal)*. Paper 894,available @ <http://digitalcommons.unl.edu/libphilprac/894>
- Baylor, A. & Ritchie, D. (2002). What factors facilitates teacher's skill, teacher morale and Perceived students learning in technology- using classroom? *Computer Education* 39(1): 395-414.

- Bayugo, S. S. and Agbeko, K. S. (2007). Information seeking behavior of health sciences faculty at the College of Health Sciences, University of Ghana. *Information Development* 23(1), 63-70.
- Dadzie, P. S. (2005). Electronic Resources: Access and Usage at Ashesi University College. *Campus-Wide Information Systems* 22(5), 290-297.
- Das, P., Anushandhan S.O., Odisha B., & Maharana R.K. (2013). Access, Awareness & Use of Electronic Information Resources by Research Scholar of Berhampur University: A Study. *American International Journal of Research in Humanities, Arts and Social Sciences*. pp 254-259
- Jawahar, I.M. & Elango, B., (2001). The effect of attitudes, goal setting and self-efficacy on end user performance. *Journal of End user computing*, 13(2), 40-45.
- Kaur, Baljinder & Verma, Rema (2009). Use of Electronic Information sources: A case study of the Thapar University. *DESIDOC journal of library and information technology*, vol 29(2)
- Khan, A.M. (2008). Use of e-journals by research scholars at Aligarh Muslim University and Banaras Hindu University, *The Electronic Library*, vol.27(4), 708-717.
- Leuthold, J.H. (1998). Building a homepage for your economic class. *Journal of Economics Education*, 247-261
- Mc Cade, J. (2001). Technology education and Computer literacy. *The technology teacher*, 9-13
- Oduwole A. A. and Akpati, C. B. (2003). Accessibility and retrieval of Electronic Information at the University of Agriculture Library Abeokuta, Nigeria 52(5), 228 – 233, Available @ <http://www.emeraldinsight.com/researchregister>
- Olarongbe, S. A. and Ibrahim, D. M. (2009). The Use of Electronic Resources by Academic Staff at the University of Ilorin, Nigeria. *PNLA Quarterly* 73(3), 42-54
- Rehman, S. & Ramzy, V., (2004). Awareness and use of electronic information resources at the health sciences center of Kuwait University. *Library Review*, 53(3), 150-156.

- Renwick, S., (2005). Knowledge and use of electronic information resources by medical sciences faculty at The University of the West Indies. *Journal- Medical Library Association*, 93(1), 21-31.
- Saleh, H.K, (2008). Computer self efficacy of university faculty in Lebanon. *Journal of Educational Technology Research and development*, 56(2), 229-240.
- Shuling, W. (2007). Investigation and Analysis of Current Use of Electronic Resources in University Libraries. *Library Management* 28(1), 72-88.
- Tyagi, S. (2011). Use and awareness of electronic information source at IIT Roorkey India: A case study. *Jlis*. vol 2 (1)
- Yushau, B. (2006). Computer attitude, use, experience, software familiarity and perceived pedagogical usefulness: The Case of Mathematics Professors. *Eurasia Journal of Mathematics Science and Technology Education*, 2(3).
- Yusuf, F and Iwu, J (2010). Use of academic library: a case study of Covenant University Nigeria. *Chinese Librarianship: An International Electronic Journal*. Available @ <http://www.iclc.us/cliej/cl30YI.pdf>