

Perception of Ease and Usefulness of Electronic Information Resources among Postgraduate Students of Library and Information Science in Southern Nigeria Universities

Lucky Oji Akpojotor Cln

Federal University of Petroleum Resources Effurun, Delta State, Nigeria
akpojotor.lucky@fupre.edu.ng

Abstract

Purpose: This study determined the perception of postgraduate students of library and information science toward electronic information resources in southern Nigeria universities.

Design/Methodology/Approach: This paper is a descriptive research which adopted a survey design to investigate the perception of electronic information resources among postgraduate students of library and information science in southern Nigeria universities. Sample size was 375 respondents which were the total postgraduate master degree students' of library and information science in the eight (8) universities made up of five (5) federal universities and three (3) state universities in southern Nigeria offering LIS at the postgraduate level. The questionnaire tagged: perception of electronic information resources among postgraduate students of library and information science questionnaire (PEIRPSLISQ) was the only instrument used for data collection while simple percent statistical tool was used to answer the research questions and Pearson Product Moment Correlation Coefficient (PPMCC) was used to test the research hypothesis

Findings: The results obtained revealed that postgraduate students' have a very high positive perception toward the ease of use and usefulness of electronic information resources. The study concluded that electronic information resources are essential tools for empowering postgraduate students' of library and information science in Southern Nigeria.

Implications: This study was limited to 2014/2015 academic session which is not enough. Thus it was recommended that more studies should be done in other academic sessions and institutions for authenticity and generalization

Originality/Value: The originality of the paper lies in its conclusion that electronic information resources are essential tools for empowering postgraduate students' of library and information science in southern Nigeria. In spite of the imperativeness of electronic information resources in empowering the information and academic need of postgraduate students of library and information science in southern Nigeria, certain impediments were identified preventing access to the use of electronic information resources. Some of the impediments are epileptic electricity supply, poor network, and information overload, high cost of access, download delay, and difficulty in accessing some websites. Therefore, if the identified impediments or challenges are not addressed there may be information gap and postgraduate students of library and information science perception toward electronic information resources in southern Nigeria universities may suffer set back.

Keywords: Southern Nigeria, Perception, Electronic Information Resources, Postgraduate LIS Students.

Paper Type: Research work

Introduction

Electronic information resources (EIRs) can be defined as the electronic representation of information which can be accessed via electronic system and computer network (Johnson, Evensen, Gelfand, Lammers, Sipe&Zilper, 2012) Electronic resources deliver the collection of information as full text (aggregated) databases, e-journals, image collections, multimedia in the form of CD, tape, internet, web technology, etc. E-resources

include e-journals, e-discussions, e-news, data archives, e-mail, online chatting, just to mention but a few.

Electronic information sources are a wide range of products going from electronic periodicals to CD-ROMs, from mailing list to databases, all having a common feature of being used and sometime modified by a computer (Thanuskodi, 2012). They are available in various forms like digital libraries, online journal magazine, e-

learning tutors and online testfull text databases, Emerald, Science Direct, Academic Search Premier, Ebscohost, TEEEL, Oare Sciences, Hinari, Virtual Library (VL), e-books collections, e-journals covering a variety of subjects, and major bibliographic databases like AGORA and MEDLARS. Besides these, there are collections of Internet resources indexed by subjects. Also, because of the effective presentation with multimedia tools, these e-resources have become the source of information in the 21st century.

According to Abinew and Vuda (2013), libraries have transformed into digital and virtual libraries where books, journals and magazines have changed into e-books, e-journals, and e-magazines. This has increased the global dissemination of information. Electronic resources such as e-journals, e-books, e-databases, web resources, e-serials amongst others are easily accessible in remote areas provided there is availability of internet or maybe offline database in the library. Jone (2008) opined that electronic information resources solve storage problems and control the flood of information. The rapid growth of new technologies has changed the communication process and reduced the cost of communication for individuals and organizations. Electronic information sources can be seen as the most recent development in information technology (Johnson, Evensen, Gelfand, Lammers, Sipe & Zilper, 2012). Electronic information sources are becoming more and more important for the academic community (Egberongbe, 2011).

Postgraduate students perception toward EIRs cannot be overstate because it state the base on his or her academic performance since the drive of information resources is on EIRs. According to Tyagi (2011) survey on scientists' perception of use of electronic information resources in India as a replacement for print in meeting student's information needs, it was revealed in terms of the extent to which they were replacing printed media in satisfying their information needs, (100%) marked that to a very high extent, electronic resources have become more substitute than printed materials. While 57.14%, 50.00% and 25.00% said that to a small extent, although using e-resources is good, printed materials are still the basic element. Kalbande, Shinde, and Ingle (2013) surveyed 108 faculty members at Mahatma Phule Agricultural

University, India and observed that the impact of e-resources was visible from the decrease in number of printed documents in comparison to the increase in number of electronic resources. This shows that the adoption rate for electronic information resources and the viability of alternatives to traditional print or electronic peer-reviewed system pace of change vary considerably by field. To buttress this Armstrong, Fenton, Lonsdale, Stoker, Thomas and Urquhart (2001) stressed that the pace at which information resources are being produced and converted into electronic form is greater today than in previous years.

Postgraduate students' perceived usefulness and ease of use of electronic information resources to a very large extent determines usage of electronic information resources. Ease of use can be defined as the degree to which a particular technology is less stressful to use while usefulness has to do with the extent to which a particular electronic resource helps the researcher to solve a particular problem. Hence, Venkatesh (2000) highlighted that Technology Acceptance Model (TAM) posits that perceived usefulness will be influenced by perceived ease of use because other things being equal, the easier a technology is to use, the more useful it can be. Donghua (2008) posited that in order to enhance acceptance and increase usage of e-resources, it is important to understand how users make decisions on selection and use of e-resources. He stress that perceived usefulness played a major role in determining students' intention to use e-resources while perceived ease of use fully mediated the impact that information quality and system quality had on behavior intention.

There are quite a few relevant studies on perception of students to electronic information resources but little deal on postgraduate LIS student's perception toward electronic information resources in universities. The present study is to investigate the perception of electronic information resources among postgraduate students of library and information science in Southern Nigeria universities.

Research Questions

- i. What is the perception of postgraduate students of library and information science towards the ease of use of electronic information

- resources in Southern Nigeria universities?
- ii. What is the perception of postgraduate students of library and information science towards the usefulness of electronic information resources in Southern Nigeria universities?

Research Hypotheses

- i. There is no significant relationship between postgraduate library and information science students perceived usefulness and ease of use of electronic information resources and their usage of electronic resources

Literature Review

Literatures were reviewed in line with the research questions.

Theoretical Framework: This study adopts Rogers' diffusion of innovations theory which is the most appropriate for investigating the adoption of technology in higher education and educational environments (Medlin, 2001; Parisot, 1995). According to Rogers (2003) an innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. The characteristic of an innovation, as perceived by the member of a social system, determine its rate of adoption. The characteristic are relative advantage, compatibility, complexity, trial ability and observability.

The second element of the diffusion of innovations process is communication channels. Rogers (2003) stressed that communication is a process in which participants create and share information with one another in order to reach a mutual understanding which occurs through channels between sources. A *source* is an individual or an institution that originates a message. A channel is the means by which a message gets from the source to the receiver. Communication involved two elements individuals or other units of adoption, and a communication channel. Thus, communication channel is further broken down to mass media and interpersonal communication channels. While mass media channels include a mass medium such as TV, radio, or newspaper, interpersonal channels consist of a two-way communication between two or more individuals.

Communication channels also can be categorized as localite channels and cosmopolite channels that communicate between an individual of the social system and outside sources. While interpersonal channels can be local or cosmopolite, almost all mass media channels are cosmopolite. Because of these communication channels' characteristics, mass media channels and cosmopolite channels are more significant at the knowledge stage and localite channels and interpersonal channels are more important at the persuasion stage of the innovation-decision process (Rogers, 2003). Individual decision-making process perceived their perception toward the use of a particular technology.

Perception of postgraduate students of library and information science towards ease of use of electronic information resources

Postgraduate students' perception of ease of use of electronic resources determines whether they are to use electronic resources or not. That is to say, that those who see e-resources as easy to use are likely to make do with the resources while those who see them as stressful or difficult to use are likely not to use them. Bashorun, Isah and Adisa (2011) examined the user perception of the electronic resources by postgraduate students of University of Ilorin. The sample consists of 250 students selected from eight (8) out of the twelve (12) faculties that made up of the university. Data were collected through an electronic resources user perceptual survey (ERUPS). Responses were received from 225 (90%) postgraduate students of the eight faculties. Analysis revealed frequency of use of electronic resources was low. Reasons alluded to were lack of time because of the time required to focus on teaching; lack of awareness to electronic resources provided by the library; power outage, ineffective communication channels, slow network and inadequate searching skills. These the authors highlighted as those factors influencing postgraduate students' perception of the electronic information resources.

According to Rahman, Jamaludin and Mahmud (2011) intention to use digital library refers to the strength of electronic information resources users' intensity to use e-resources for obtaining digital information resource for his/her study/research. Based on previous research, information systems usage is largely influenced by behavioural, hence intention to use digital

library play an important role in predicting future usage of e-resources. Effort expectancy (EE) is defined as the degree of ease associated with the use of the system. Three constructs from the existing models capture the concept of effort expectancy, namely perceived ease of use, complexity, and ease of use. Their study further found that female end users of new information systems such as digital libraries have higher level of computer anxiety and their level of effort expectancy tend to be lower than the male counterpart. Also, women are very concern in the ease of use of information systems, and perceived a stronger ease of use compared to men.

Yusliza, Zikri, Mohd, Pasah and Robert (2009) examined the usage of e-library among students in a public university in Malaysia using the Technology Acceptance Model. Data from a questionnaire survey of 201 students were analyzed using linear regression. The results show that individual differences (computer self-efficacy and knowledge of search domain) had a significant positive relationship with perceived ease of use. Perceived ease of use showed significant relationship with perceived usefulness but non-significant with the actual usage of the e-library. Knowledge of search domain is another individual difference that may positively affect PEOU of e-library. According to Thong, Hong and Tam (2004), in a study of information seeking behaviour in a hypertext environment, domain experts were found to conduct faster and more focused searches than did the novices (Marchionini, Dwiggins, Katz & Lin, 1993). Prior studies (Thong, Hong & Tam, 2004; Ramayah, 2006) have shown that knowledge of search domain does have a significant and positive relationship with PEOU.

PEOU (Perceived Ease of Use) has been extensively studied in the IS literature. PEOU is the “degree to which a person believes that using a particular system would be free of effort” (Davis, 1989; Dholakia & Dholakia, 2004). The easier it is for a user to interact with a system, the more likely he or she will find it useful (Thong, Hong & Tam, 2004). There is substantial empirical support for this view (Chau, 2001; Hong et al., 2002; Thong, Hong & Tam, 2004; Ramayah & Aafaqi, 2004). In the digital libraries setting, Hong, Thong, Wong and Tam (2002) submitted that digital libraries need to be both easy to learn and easy to use. Davis (1989) in his study posited the research developed and validated new scales for two

specific variables, perceived usefulness and perceived ease of use, which are hypothesized to be fundamental determinants of user acceptance. Definitions of these two variables were used to develop scale items that were pretested for content validity and then tested for reliability and construct validity in two studies involving a total of 152 users and four application programs. The measures were refined and streamlined, resulting in two to six-item scales with reliabilities of .98 for usefulness and .94 for ease of use. Perceived ease of use was significantly correlated with current usage $r = .45$, Study (1) and future usage $r = .59$, Study (2). That is to say that, the ability and perception of ease of use of e-resources influences the usage of the resources.

Okiki and Akiru (2011) examined the factors that influence the use of electronic information sources among postgraduate students. The study covered six Universities in the South West, Nigeria namely; University of Ibadan, University of Lagos, Olabisi Onabanjo University, Ogun State; Federal University of Technology, Akure; University of Agriculture Abeokuta and Lagos State University. The results show that males seem to enjoy browsing on the internet for enjoyment while female tend to only use it for work related purpose. Ford, Miller & Moss (2001) also found that females tended to experience more difficulty finding information online, to feel competent and comfortable using the internet, to use the internet less frequently than males and to make use of a less varied set of internet application, though found a similar result in studying faculty members; while males tended to have computing skills than females, age and year of obtaining highest educational qualifications were also important factors in establishing computers skills. Hence the males use electronic information resources because they see them as easy to use while females see the technologies as difficult and as such their use is limited.

Perception of postgraduate students of library and information science towards usefulness of electronic information resources

The use of any information resource depends on its usefulness to the user. Also, the perception of the user towards the usefulness of such resource determines if the resource is to be used or not. Yusliza, Zikri, Mohd, Pasah and Robert (2009) in their study found that for perceived usefulness, it showed a significant relationship

with the actual usage of the e-library's electronic information resources. Davis (1989) asserted that perceived usefulness can be defined as the degree to which a person believes that using a particular system would enhance his or her job performance. Within the organizational context, a system that is high in perceived usefulness is one that the user believes will have a positive use-performance relationship. In fact, IS adoption research suggests that "a system that does not help people perform their jobs is not likely to be received favourably" (Nysveen, Pedersen & Thornbjomsen, 2005). The ultimate reason that users exploit digital libraries is that they find the systems useful to their information needs or search tasks (Hong et al., 2002). Past researches (Ramayah & Aafaqi, 2004; Davis, 1989) have shown that PU influences computer usage directly.

There are lots of reasons why electronic information resources are important especially for postgraduate students course work, assignments, research so that they can do their academic work more efficiently and faster. Chen (2000) pointed out that librarians use the internet to create and store massive amounts of digital media information. To satisfy the demands of library users, e-library provides highly efficient and consistent methods for the search and retrieval of information. Furthermore, e-library is the integration of materials, collection, information, services and operation (Chen, 1999). Ke (2000) in his study found that e-libraries are characterized by their ability to disseminate electronic information resources, and that the perceived usefulness of e-resources determines users' patronage of the resources.

Yusliza, Zikri, Mohd, Pasah and Robert (2009) in their study found that perceived usefulness (PU) was also found to be positively related to actual usage of the e-library. It implies that if students feel that a system is useful; their usage level will be higher. This finding support prior research that has found a direct positive relationship between PU and actual usage (Ramayah, 2006; Ramayah&Aafaqi, 2004; Davis, 1989). Ray and Day (1998) also conducted a study to determine the level of use of electronic information resources, how students feel about various issues surrounding electronic resources and whether attitude change is dependent upon the subjects studied.

In a study by Herman (2006), he investigated the use, perceived usefulness and satisfaction with

electronic resources among the Kulliyyah of Islamic Revealed Knowledge (KIRK) and Kulliyyah of Information and Communication Technology (KICT) postgraduate students. Among the objectives of the research were to investigate the nature of electronic resources use, to evaluate the e-resources use in terms of user satisfaction and perceived usefulness, and to identify problems encountered by respondents when using such services. The study used a survey questionnaire to get information from selected respondents of this research. A written close-ended and open-ended questionnaire was used in this research as an instrument in collecting data and information required. About 83 respondents were selected from KICT and KIRK. The sample consists of 46 respondents from KIRK and 37 samples from KICT. The overall results shows that OPAC was the most regularly used e-resources provided by the library. The respondents also perceived e-resources as useful and the level of satisfaction with e-resources was reasonably high. Further investigation on perceived usefulness of electronic resources influence positive use of electronic resources among students to a large extent (Miller, 2000; Schaffner, 2001; Zhang, 2002; Ndahi, 2003; Waldman, 2003). Also, Ibrahim (2004) investigated the use and perception of the United Arab Emirates University (UAEU) faculty members of electronic resources. Questionnaires were sent to a sample of 140 faculty members. Responses were received from 125 (89%) faculty members. Analysis confirmed frequency of use of electronic resources was low since their perception toward the usefulness of electronic resources very small to a large extent. Reasons cited were lack of time because of the time needed to focus on teaching; lack of awareness to electronic resources provided by the library; ineffective communication channels, and language barrier.

Tyagi (2011) in his study found reasons as to why postgraduate students use electronic information sources but based on choices fixed by the scientists, pharmacopoeia associates and scientific assistants. Various professional purposes for which electronic information sources was used were elicited from the respondents. The finding from the study indicates the purpose of using the electronic information sources. All the respondents study use EIS for writing research paper for publication and subject specific information. In

case of Scientists from GOI departments they marked (100%) to ongoing research work, for thesis/projects, writing a research paper for publication, and for subject specific information. Scientific assistants use the EIS mostly for subject specific information (100%) and for writing a research paper for publication (62.50%). Another question sought to ascertain the impact of all e-resources on the members in terms of the extent to which they were replacing printed media in satisfying their information needs was responded to be respondents (scientist) marking (100%) to a very high extent electronic resources have become a substitute for printed materials. While 57.14%, 50.00% and 25.00% said that to a small extent: although using e-resources, printed materials are still the basic element. The findings further showed that as postgraduate students perceived e-resources as very useful to their academic work, the postgraduate students therefore used the resources based on perceived usefulness.

Sharma (2009) further elaborated that majority of postgraduate students prefer to use e-resources in comparison to traditional resources because 39 (75%) of them feel that e-resources are time saving, followed by easy to use, i.e. 34 (65.38%), further followed by more useful and more informative, i.e. 27 (51.92%) and 25 (48.08%) respectively. 60% of research scholars prefer to use e-resources because they feel that e-resources are time saving, more informative and more useful. 80% of research scholars use e-resources due to their easiness. 6 (11.54%) postgraduate students and 12 (40.00%)

researchers use e-resources because they are less expensive. Only 3 (5.77%) postgraduate students think that e-resources are less useful. These reasons according to the author attracts the postgraduate students need to use electronic information resources.

Methodology

The study is a descriptive research that adopts the survey method. A sample size was 375 which is the total postgraduate master students' of library and information science in eight (8) universities, made up of five (5) federal and three (3) state universities offering library and information science at the postgraduate level in Southern Nigeria. The questionnaire tagged: perception of electronic information resources among postgraduate students of library and information science questionnaire (PEIRPSLISQ) was the only instrument used for data collection while simple percent statistical tool was used to answer the research questions and Pearson Product Moment Correlation Coefficient (PPMCC) to test the research hypothesis. A total of 375 copies of the questionnaire were distributed and 329(87%) copies were returned. The response rate of (87%) is considered adequate for the study because the standard and acceptable response rate for most studies is 60%.

Discussion of Findings

Data were analyzed and results were presented in line with the study research questions and hypotheses.

Analysis of the Respondents' Demographic characteristics

Table 1: Gender Distribution of the Respondents

Gender	Frequency	Percentage (%)
Male	193	58.7
Female	136	41.3
Total	329	100.0

Table 1 above shows that there are more male postgraduate library and information

science students than their female counterparts.

Table 2: Age Distribution of the Respondents

Age	Frequency	Percentage
Below 23 years	22	6.7
26-29 years	91	27.7
30-34 years	138	41.9
35-39 years	70	21.3
40 years and above	8	2.4
Total	329	100.0

Table 2 above shows that there are more postgraduate library and information science students 138(41.9%) within the ages of 30-34

years. This is followed by those within the ages of 26-29 years, 91(27.7%) and 35-39 years, 70(21.3%).

Table 3: University/Library school of the Respondents

University/Library school of the Respondents	Frequency	Percentage (%)
University of Uyo, Uyo	18	5.5
NnamdiAzikiwe University, Awka	37	11.2
University of Calabar, Calabar	22	6.7
University of Nigeria, Nsukka	50	15.2
University of Ibadan, Ibadan	117	35.6
Delta State University, Abraka	36	10.9
Abia State university, Uturu	26	7.9
Imo State University, Owerri	23	7.0
Total	329	100.0

Table 3above shows that there are more postgraduate library and information science students in the University of Ibadan 117(35.6%). This is followed by University of Nigeria, Nsukka 50(15.2%) and Nnamdi Azikiwe University, Awka 37(11.2%).

Research Question One: What is the perception of postgraduate student of library and information science towards the ease of use of electronic information resources in Southern Nigeria Universities? The data used to answer this research question are presented in table 4

Table 4: Perception of postgraduate LIS students towards ease of use of EIRs

S/N	Perceived ease of use of EIRs	Mean	Standard Deviation
1	E-journals	4.57	0.77
2	E-books	4.40	0.79
3	E-databases	4.21	0.83
4	E-magazines	4.21	0.83
5	E-serials	4.16	0.92
6	E-dissertations and theses	4.17	0.87
7	WWW	4.41	0.76
8	E-mails	4.43	0.72
9	CD-ROMs	4.23	0.84
10	Online Public Access Catalogues	4.17	0.87
11	Reference Databases	4.06	0.97
12	E-Images	3.90	1.11
13	E-audio visual resources	3.91	1.06
Aggregate Mean		4.22	0.12

Criterion Mean

3.00

From Table 4, with an average calculated mean of 4.22 and standard deviation of 0.12, it shows that the postgraduate library and information science students perceived the use of electronic information resources to be very easy. This is because both the aggregate/item calculated statistical mean are greater than the criterion mean of 3.00. They perceived e-journals (mean = 4.55), www (mean = 4.41) and e-mails (mean = 4.43) and others electronic information resources to be very easy to use. This implies that the perception of postgraduate library and information science students in Southern Nigeria towards the use of electronic information

resources is very easy. This finding seems to agree with Rahman, Jamaludin and Mahmud (2011) in their survey found that women are very concern in the ease of use of information systems, and perceived a stronger ease of use compare to men. This finding disagreed with that of Bashorun, Isah and Adisa (2011) that majority of postgraduate students do not use electronic resources reasons alluded were lack of time (because of time required to focus on teaching), lack of awareness to electronic information resources provided by the library, power outage, ineffective communication channels, slow network and inadequate

searching skills. These they highlighted as the factors influencing postgraduate student's perception toward the ease of use of electronic information resources.

Research Question two: What is the perception of postgraduate students' of library and information science towards the usefulness of electronic information resources in Southern Nigeria universities? The data used to answer this research question are presented in table 5

Table 5: Perception of postgraduate LIS students towards the usefulness of EIRs

S/N	Perceived usefulness of EIRs	Mean	Standard Deviation
1	E-journals	4.64	0.66
2	E-books	4.53	0.66
3	E-databases	4.39	0.69
4	E-magazines	4.36	0.69
5	E-serials	4.38	0.68
6	E-dissertations and theses	4.36	0.74
7	WWW	4.51	0.69
8	E-mails	4.52	0.58
9	CD-ROMs	4.38	0.71
10	Online Public Access Catalogues	4.51	0.84
11	Reference databases	4.07	0.77
12	E-Images	3.75	0.97
13	E-audio visual resources	3.88	0.99
Aggregate Mean		4.33	0.74

Criterion Mean

3.00

From Table 5, with an average calculated mean of 4.33 and standard deviation of 0.74, it shows that the postgraduate library and information science students perceived usefulness of electronic information resources to be very high. This is because both the aggregate/item calculated statistical mean are greater than the criterion mean of 3.00. They indicated that their perception towards the usefulness of e-journals (mean = 4.64), e-books (mean = 4.53), www (mean = 4.51), e-mails (mean = 4.52), OPAC (mean = 4.51) and others electronic information resources is very high. This implies that the perception of postgraduate library and information science students in Southern Nigeria towards the usefulness of electronic information resources is very high.

This finding is in line with that of Sharma (2009) who stressed that majority of postgraduate students' prefer to use electronic resources because 39 (75%) of them feel that e-resources are time saving, followed by easy to use 34 (65.38%), followed by more useful and more informative 27 (57.92%) and 25 (48.08%)

respectively, only 3 (5.77%) postgraduate students think that e-resources are less useful. While 60% of the research scholars prefer to use e-resources because they feel that electronic resources are time saving, more informative and more useful, 80% of research scholars use e-resources due to their easiness, 6 (11.54%) postgraduate student and 12 (40%) researchers use e-resources because they are less expensive.

Hypothesis: There is no significant relationship between postgraduate students of library and information science perceived usefulness and ease of use of electronic information resources and their usage of the resources.

To ascertain whether there is any significant relationship between postgraduate students of library and information science perceived usefulness and ease of use of electronic information resources and their usage of the resources, the scores of perceived usefulness and ease of use were cross tabulated with the usage of electronic information resources and the result is shown in Table 6 and 7 respectively.

Table 6: Summary table of significant relationship between perceived usefulness and ease of use of EIRs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678 ^a	.460	.457	.46675

a. Predictors: (Constant), perceived usefulness, Perceived ease of use

Table 7: ANOVA table showing significant relationship between perceived usefulness and ease of use of EIRs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.479	2	30.239	138.804	.000 ^b
	Residual	71.021	326	.218		
	Total	131.500	328			

a. Dependent Variable: Usage of EIRs

b. Predictors: (Constant), perceived usefulness, Perceived ease of use

Table 7 shows the regression (0.678). This indicates that the variation is very high, which indicate a high level of prediction. The R² value (the coefficient of determination), which is the proportion of variance in the dependent variable (perception of electronic information resources) that can be explained by the independents variables (Perceived ease of use and perceived usefulness) is = 0.460. This value explains that 46% of the variability of the dependent variable (perception of electronic information resources) was accounted for by the independent variables (perceived ease of use and perceived usefulness) while the remaining 54% was due to chance but by other factors not accounted for in this study. Adjusted R² = 0.457.

Table 6 shows the F-calculated value F (2,326) = 138.804, P > 0.05 (P = 0.000) (i.e. the regression model is a good fit of the data). The null hypothesis is therefore rejected. This implies that there is a significant relationship between perceived ease of use and perceived usefulness of electronic information resources. This means that both perceived ease of use and perceived usefulness predict the usage of electronic information resources. That perceived ease of use and perceived usefulness of electronic information resources may bring about an increase in the usage of electronic information resources by postgraduate library and information science students in Southern Nigeria. This hypothesis conform with the findings of Yusliza, Zikri, Mohd, Pasah and Robert (2009) in their study found that perceived usefulness and ease of use showed a significant relationship with the actual usage of the e-library's electronic information resources by students.

Conclusion

The study concluded that:

1. There is significant relationship between postgraduate students' of library and information science perceived usefulness and ease of use of electronic information resources.
2. Postgraduate students' of library and information science perception towards the ease of use of electronic information resources is very easy to a large extent.
3. Postgraduate student's of library and information science perception towards the usefulness of electronic information resources is very high.

Recommendation

The study recommended that electronic information resources are essential tools for empowering postgraduate students' of library and information science in southern Nigeria. In spite of the imperative of electronic information resources in empowering the information and academic need of postgraduate students' of library and information science in Southern Nigeria, certain impediments were identified preventing access to the use of electronic information resources. Some of the impediments are epileptic electricity supply, poor network, and information overload, high cost of access, download delay, and difficulty in accessing some websites.

It therefore means that, if the identified impediments or challenges need to be addressed to aviod information gap on postgraduate students of library and information science perception toward electronic information resources in southern Nigeria universities.

Reference

Abinew, A.A. &Vuda, S. (2013)A case study of acceptance and use of electronic library services in universities based on SO-UTAUT model.

- International Journal of Innovative Research in Computer and Communication Engineering*, 1(4), 903-910. Retrieved from: http://ijircce.com/upload/2013/june/17_A%20Case%20Study.pdf
- Armstrong, C., Fenton, R., Lonsdale, R., Stoker, D., Thomas, R. and Urquhart, C. (2001) A study of the use of electronic information systems by higher education students in the UK. *Aslib*, 35(3). Retrieved from: <http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=Published/EmeraldAbstractOnlyArticle/Articles/2800350303.html>
- Bashorun, M. T., Isah, A. & Adisa M. Y. (2011) User perception of electronic resources in the University of Ilorin, Nigeria. *Journal of Emerging Trends in Computing and Information Sciences*, 2(11). Retrieved from: http://cisjournal.org/journalofcomputing/archive/vol2no11/vol2no11_1.pdf
- Chau, P. Y. K. (2001) An empirical assessment of a modified technology acceptance model. *Journal of Management Information Systems*, 13(2), 185-204.
- Chen, Y. N. (1999) Another type of overview of electronic libraries. *Journal of Information, Communication in Library Services*, 5(3), 141-150.
- Chen, C. C. (2000) Theory and practice of integrated searches at libraries. *Wenhua*, Taipei, 4-5.
- Davis, F. D. (1989) Perceived usefulness, perceived ease of use, and user acceptance of information technology, Graduate School of Business Administration. *MIS Quarterly*, 13(3), 319-340.
- Dholakia, R. R. & Dholakia, N. (2004) Mobility and markets: Emerging outlines for m-commerce. *Journal of Business Research*, 57(12), 1391-1396.
- Donghua, T. (2008) Understanding intention to use electronic information resources: A theoretical extension of the technology acceptance model (TAM). Retrieved from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2656102/>
- Egberongbe, H.S. (2011) The use and impact of electronic resources at the University of Lagos. *Library Philosophy and Practice*. Retrieved from: <http://www.webpages.uidaho.edu/~mbolin/egberongbe.htm>
- Ford, N., Miller, D. & Moss, N. (2001) The role of individual differences in internet searching: An empirical study. *Journal of the American Society for Information Science and Technology*, 52(12), 1049-1066
- Herman, H.C.H. (2006) The use perceived usefulness and satisfaction with electronic resources in the IUM library: A descriptive study of postgraduate students. Retrieved from: <http://www.lib.iium.edu.my/mom2/cm/content/view/view.jsp?key=EBi9zJ6hfvSDvF2oagahnHLI5GVTmfkc20070329135531234>
- Hong, W., Thong, J. Y. L., Wong, W. M., & Tam, K. Y. (2002) Determination of user acceptance of digital libraries: An empirical examination of individual difference and system characteristic. *Journal of Management Information System*, 18(3), 97-124. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.151.280&rep=rep1&type=pdf>
- Ibrahim, A. E. (2004). Use and user perception of electronic resources in the United Arab Emirates University. *Libri*, 54, 18 -29
- Johnson S, Evensen O. G, Gelfand J, Lammers G, Sipe, L. & Zilper, N. (2012) Key issues for e-resource collection development; A guide for libraries. *International Federation of Library Associations and Institutions*. http://www.ifla.org/files/assets/acquisition-collectiondevelopment/publications/IFLA_ELECTRONIC_RESOURCE_GUIDE_DRAFT%20FOR%20COMMENT.pdf.
- Jones, P. H. (2008) Turning the page: Learning about the future of electronic books from students today. Toronto: *University of Toronto Libraries*, 38.
- Kalbande, Dattatraya, T., Shinde, P. A. & Ingle, R. N. (2013) Use of e-resources by the faculty members: A case study. *International Research Journal of Library & Information Science*, 3(3), 459-469
- Ke, H. R. (2000) Discussion of experience in establishing an electronic library: The example of National Chiao Tang University, *ShuFah Quarterly*, 47, 10-33.
- Marchionini, G., Dwiggins, S., Katz, A., & Lin, X. (1993) Information seeking in full-text end-user-oriented search systems: The roles of domain and search expertise. *Library and Information Sciences Research*, 15(1).35-69.
- Medlin, B.D. (2001) The factors that may influence a faculty member's decision to adopt electronic technologies in instruction (Doctoral dissertation, Virginia Polytechnic Institute and State University, 2001). ProQuest Digital Dissertations. (UMI No. AAT 3095210)

- Miller, R. N (2000) Electronic resources and academic libraries: Historical perspectives. Rice library, University of Southern Indiana. *Library Trends*, 48 (4), 645-670. Retrieved from: https://www.ideals.illinois.edu/bitstream/handle/2142/8303/librarytrendsv48i4c_opt.pdf?sequenc
- Ndahi, H. (2003) Use and documentation of electronic information: A survey of eastern regional technology education collegiate association students. *Journal of Technology Education*, 14(2) 19-27. Retrieved from: <http://scholar.lib.vt.edu/ejournals/JTE/v14n2/pdf/ndahi.pdf>
- Nysveen, H., Pedersen, P. E. & Thornbjomsen, H. (2005) Intentions to use mobile services: Antecedents and ross-service comparisons. *Journal of Academy of Marketing Science*, 33(3), 330-346.
- Okiki, O.C. & Akiru, S.M. (2011) Use of electronic information sources by postgraduate students in Nigeria: Influencing factors. *Library Philosophy and Practice*. Retrieved from: <http://www.webpages.uidaho.edu/~mbolin/okiki-asiru.pdf>
- Parisot, A. H. (1995) Technology and teaching: The adoption and diffusion of technological innovations by a community college faculty (Doctoral dissertation, Montana State University, 1995). ProQuestDigitalDissertations.(UMI No. AAT 9542260)
- Rahman, A.A., Jamaludin, A. & Mahmud, Z. (2011) Intention to use digital library based on modified UTAUT model: Perspectives of Malaysian postgraduate students. Retrieved from: <http://waset.org/publications/2983/intention-to-use-digital-library-based-on-modified-utaut-model-perspectives-of-malaysian-postgraduate-students>
- Ramayah, T. (2006) Doing e-research with e-library: Determinants of perceived ease of use of e-library. *International Journal of Technology, Knowledge and Society*, 1(4), 71-82.
- Ramayah, T. & Aafaqi, B. (2004) Role of self-efficacy in e-library usage among student of a public university in Malaysia. *Malaysia Journal of Library and Information Science*, 9(1), 39-57.
- Rogers, E.M. (2003) Diffusion of innovations (5th ed.). New York: Free Press
- Ray K. & Day, J. (1998) Student attitudes towards electronic information usage. *Journal of Information Research*, 4(2), 123-140. Retrieved from <http://www.shot.ac.uk/Is/publications/intres/paper54.html>
- Schaffner, B. L. (2001) Electronic resources: A wolf in sheep's clothing. *College & Research Libraries*, 62 (3), 239-249
- Sharma, C. (2009) Use and impact of e-resources at Guru Gobind Singh Indraprastha University (India): A case study. *Electronic Journal of Academic and Special Librarianship*, 10(1), 1-8. Retrieved from: http://southernlibrarianship.icaap.org/content/v10n01/sharma_c01.html
- Thanuskodi, S. (2012) Use of e-resources by the students and researchers of faculty of Arts, Annamalai University. Retrieved from: <http://article.sapub.org/10.5923.j.library.20120101.01.html>
- Thong, J. Y. L., Hong, W. & Tam, K. Y. (2004) What leads to user acceptance of digital libraries? *Communications of the ACM*, 47(11), 79-83.
- Tyagi, S. (2011) Scientists' perception of use of electronic information resources: A case study of pharmacopoeia laboratory for Indian medicine (PLIM). *Library Philosophy and Practice*. Retrieved from: <http://unllib.unl.edu/LPP/tyagi3.pdf>
- Venkatesh, V. (2000) Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. Available at: [http://vvenkatesh.com/Downloads/Papers/fulltext/pdf/2000\(4\)_ISR_Venkatesh.pdf](http://vvenkatesh.com/Downloads/Papers/fulltext/pdf/2000(4)_ISR_Venkatesh.pdf)
- Waldman, M. (2003) Freshman's user of library electronic resources and self-efficiency. *Information Research*, 8(2), 12-27. Retrieved from: <http://WWW.informationr.net/ir/8-2/paper150.html>
- Yusliza, Y.M., Zikri, M. Mohd, S.M.Z., Pasah, E.S. & Robert, E. (2009) Individual differences, perceived ease of use, and perceived usefulness in the e-library usage. Retrieved from: <http://www.ccsenet.org/journal/index.php/cis/article/download/1859/1766>
- Zhang, Y. X. (2002) Comparison of internet attitudes between industrial employees and college students. *Cyber Psychology and Behavior*, 5(2), 59-92