INFLUENCE OF SELF-EFFICACY ON E-LIBRARY USAGE BY SOME SELECTED UNDERGRADUATE STUDENTS OF A NIGERIAN UNIVERSITY

Olaojo, P. O.
Abadina Media Resource Centre,
Faculty of Education,
University of Ibadan, Ibadan
tunjiolaojo@yahoo.com

Gbotosho, A. S.
The Library College of Humanities and Culture,
Ikire Campus, Osun State University, Osogbo
gbotoshoajibola@gmail.com

Abstract
This study focused on the influence of self-efficacy on e-library usage by undergraduates of a Nigerian university. One hundred and fifty copies of questionnaire were administered with 87.3% returned for analysis. The study revealed that undergraduates make use of the e-library (70.2%) mainly for journal search (55.7%), textbooks search (58.8%) and research topic search (43.5%). Also, at 0.05 level of significance, undergraduates' self-efficacy has influence on their e-library use (F=0.387, df=2, P=0.542) and there is a significant positive relationship between students' self-efficacy and e-library use (F=0.778, df=2, P=0.461). It was recommended that quality e-resources should be acquired by the library and provided for use without any form of restrictions and state of the art e-resources should be procured and easily accessible for use of the undergraduates like their postgraduate counterparts.

Keywords: Self-efficacy, E-library usage, Undergraduates, Nigerian university

Introduction

The world is fast becoming a global village. This is as a result of the developments in information and communication technology (ICT) and one of the major sectors that has been most affected by the advances in ICT is the education sector. Teaching and learning has witnessed

several transformations from rote learning to chalk and talk to white board and mediated learning rooms commonly used nowadays. The rapid development of ICT had greatly influenced the delivery of education just as the education sector is reacting to the emergence of the information society. Today's education system faces the challenge to prepare individuals for the information society in which one of the most important aims is to handle information. The library happened to be one major unit that has witnessed extreme permeation of ICT. Information and communication technology is influencing Library operations more than ever before.

Any nation or institution that wishes to participate in and profit from the advantages of the information revolution must seek to exploit the resources organized therein. Libraries have the major responsibility of making information resources available to meet the information needs of users (Aina, 2004).

However, libraries have begun to experience a shift in the production of both popular and scholarly books from paper-only to a combination of paper, print-on-demand, and electronic versions while library users are quickly adopting new ways of information dissemination from Personal computers (PCs) to Personal Digital Assistants (PDAs). University libraries in Nigeria, like their counterparts in developed countries support the functions of their parent institutions by making available information resources for learning, teaching and research. They are central to all academic efforts, as both students and faculty need information. However, any library that seeks relevance cannot afford to ignore the developments taking place in the field of information and communication technology (ICT) which allows for access to diverse electronic resources and utilisation of such resources. The rapid growth of information and communication technologies has brought a new dimension to the process of information management and service delivery in libraries. (Ansari, 2003).

In this era of information and communication technology (ICT), there is a need for students at various higher institutions of learning to be more receptive and adaptive to new technology. These students should be able to understand the importance of new technology adoption and exploitation. When the adoption habit is instilled in students from an early age, their receptiveness later on will be much more enhanced. There are a lot of ways whereby institutions can

encourage students to use new technology and one of the easiest ways to introduce the adoption of new technology is through encouraging students to use 'e-library' in doing their course work assignments. Electronic or online library (e-library) can be defined as the digital library that requires technology to link the resources of many libraries and information services (Akla, 2002).

An electronic library consists mainly of materials and services in electronic format transmitted over networks. It is a collection of full text and bibliographic information sources. It may be perceived as an information service or a collection of electronic information resources, in which all the information resources are available in computer processable form (Mutula and Ojedokun, 2008). It consists of electronic services and materials that are stored, processed and transferred via digital devices and networks. Hardly can any modern day student consolidate his teaching learning programme without the use of e-learning resources. Proliferation of information has made e-library a veritable tool. However, effectiveness and efficiency of any user of ICT generally, and e-library in particular depends on individuals self efficacy, among other considerations. Undergraduates should possess the ability to interract the e-library, easily use it and maximize the use for educationally relevant purposes with little or no frustration. An electronic library provides resources, both human and material, to select, structure, offer intellectual access, to interpret, distribute, preserve the integrity and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community, or communities.

Moreover, electronic library allows information to be accessed over the Internet and unlike traditional library it is not limited by location. It represents the digital face of traditional libraries that include both digital collections and traditional fixed media collections. An electronic library can provide students with access to educational materials by opening up the information resources for access by library users. In order to encourage university students to use e-library, there is need to understand what factors influence students to seek out information from online sources (e-library). This entails for educational administrators to know what factor influences and enhances the usage of 'e-library'. The electronic library was aimed at helping in increasing the quality of research and development through the acquisition and

the utilization of the highest quality of specialized electronic information as well as the design of custom-made training seminars to ensure that staff and students are able to fully utilise and benefit from the advanced information platforms.

Members of academic community, that is students, staff and researchers need information on a variety of activities which the library is to cater for. The limitations of the traditional library and the need to have access to more information by users have prompted universities to embark on the development of an electronic library. However, many users find it difficult retrieving relevant information from e-library. Sometimes, they are not satisfied with the performance of the e-library, because they could not get relevant materials from the e-library. Norton (2005) noted that the performance of e-library in Africa is very low due to reasons such as low information literacy level of users and perception of users about electronic library. Hence, there is the need to find out about the performance of the e-library and factors that aid their performance.

Among the major factors that could affect the use of e-library by students is their computer self efficacy as well as the possession of adequate and relevant computer skills in the use of e-library. Self-efficacy is defined as the belief that one has the capability to perform a particular behaviour. Perceived self-efficacy plays an important role in affecting motivation and behaviour towards actual use (Bandura, 1999). However, despite the provision of the enabling environment for e–library use by students in their course work, observations revealed that many students are still not able to maximally utilize these facilities due to lack of self efficacy. Students' personal competency also affects their use of e-library. Personal competency deals with skills, knowledge and understanding of when, when not, and how to use the e-library effectively in learning a particular discipline. It encompasses skills in the function, use and capability of e-library in supporting learning and research. This competency is required for effective use of e-library. The study focuses among others, the influence of self-efficacy on the use of e-library by the undergraduates of University of Ibadan. A review of range of e-resources available at University of Ibadan e-library would form the basis of this study.

Statement of Problem

There has been a strongly expressed opinion that many academic libraries pay lip service to provision of e-resources. Many opined that these resources only exist in locked up zones of the library and are scarcely utilized by students. Others were of the opinion that only post graduate and higher degree researchers do have access to the e-library section of academic libraries. By extension, since there is restricted access, usage is hampered and needs may not be met. It is often assumed that since access is controlled, the e-library may not have any significant role to play in the learning process of undergraduates. Where e-library resources are provided, do the undergraduates possess requisite skills and confidence that would boost their self-efficacy thereby influencing undergraduates' use of e-library particularly in University of Ibadan, Nigeria.

Objectives of the Study:

i. identify the pattern of use of the e-library;
ii. determine the adequacy of University of Ibadan e-library in meeting the information needs of undergraduate students; and
iii. determine the influence of self-efficacy on e-library use by the undergraduate students of University of Ibadan.

Research Questions

- What types of e-resources are available at University of Ibadan e-library?
- What is the extent of use of the e-library by undergraduate students?
- To what extent does the e-library meets the needs of undergraduate students of University of Ibadan?
- Does self-efficacy has any influence on e-library use by the undergraduate students of University of Ibadan?

Research Hypotheses

H_{O1}: There will be no significant relationship between undergraduates' internet self-efficacy and use of e-library at the Kenneth Dike Library, University of Ibadan.

H_{O2}: Relationship between self efficacy and e-library usage is not mediated by undergraduates' perceived ease of use of the e-library at the Kenneth Dike Library, University of Ibadan.

Literature Review

Utilisation of Electronic Libraries for Academic-Related Programmes in Universities among Undergraduates:

Information professionals have long sought to comprehend what factors encourage a person to seek information. More recently, a particular focus of inquiry has been on those factors that play a role in deciding to use the library and its resources as a place to seek information (whether physically or virtually) as opposed to just surfing the Internet. The electronic library is a learning tool that differs from other tools used in education because users require skills and knowledge in its use. Kuiper, Volman and Terwel (2008) submitted that electronic library has certain characteristics that are complicated for users and require specific skills. Marchiovini and Komolodi (1998) concluded that users of electronic library use both single and multiple search terms, depending on the type and complexity of the assignment and used scanning techniques when reading digitized texts, as well as close reading. These submissions point to the fact that users' attitudes and behaviours are not the same even when similar e-resources are deployed for use.

More importantly, self-efficacy of an individual user becomes visible through adequate use of electronic library which affects its performance. Nicholas and Debowski (2001) reasoned that inflexibility, that is not being able to alternate electronic library search strategies, appears to affect users' adequacy negatively. This suggests that one cannot enjoy the use of e-library more than the skills of manipulation possessed. Do it your own way becomes the order of the day and the library staff is free from users' queries. Though, effectiveness of library services is thus more difficult to judge than in a conventional print-based environment. However, Sheperd (2003) and Flynn (2005) have provided solutions in their separate studies. Searching for relevant citations in a traditional bibliographic database also differs from searching for relevant nodes in a hypertext / hypermedia database, with regard to the process of the search (Duy, 2004). Varying search

strategies by users guarantee successful use of e-library. The attribute of navigation patterns (such as, loopiness or spikiness) have been defined based on users' routes through the data structure by Franklin and Plum (2004). Also, Shim and Mclure (2002) in a study of high school students searching on a CD-ROM version of an encyclopedia, where half of the students were trained in browsing techniques and half were trained to do Boolean searches reported that no statistically-significant differences were found in the groups' search behaviours.

Duy (2004) has indicated that the construct of searcher proficiency in the context of a traditional database includes such observable behaviours as the precision and recall achieved in the search results (evidence of the searcher's success in retrieving relevant records) while Flynn (2005) sees searcher proficiency as an attribute that is dependent on observable behaviours of the user / searcher. It can also be viewed as quality of searcher's selection of terms or his efficiency. All these terms are synonymous to self-efficacy.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was developed by Davis to explain computer-usage behaviour. It presents the reality that knowledge and communication is unlimited and can take place anywhere without any limitation once individuals involved have what it takes to be reached at any point in time. The theoretical basis of the model was Fishbein and Ajzen's Theory of Reasoned Action (TRA). The Technology Acceptance Model (TAM) is an information systems (System consisting of the network of all communication channels used within an organization) theory that models how users come to accept and use a technology considering factors such as Perceived usefulness (PU) and Perceived ease of use (PEU). Simply put, these terms suggest believe that using a particular technology will make the process easier and effortless, (Davis, 1989). The goal of TAM with reference to perceived usefulness and perceived ease of use is user acceptance which is seen as "the demonstrable willingness within a user group to employ information technology for the tasks it is designed to support" (Dillon and Morris, 2001). Studies on information technology continuously report that user attitudes are important factors affecting the success of the system. Notable amongst them are Woelfel (1995) and Davis, (1989) which supported positive attitude for that matter.

Adapted from TRA, TAM was developed specifically for explaining and predicting individual acceptance of computer technology (Davis, 1989). Broadly, TAM posits that the intensity of an individual's intention to use a technology can be explained jointly by his or her perception about the technology's usefulness and attitude towards the technology use. Several recent studies that used TAM as a theoretical basis or framework suggested the exclusion of attitude from the model. For instance, Venkatesh and Davis (1996) removed attitude from their revised model because attitude did not appear to mediate fully the effect of perceived usefulness and perceived ease of use on behavioural intention as originally anticipated. The revised model (i.e., TAM without the attitude construct) has been applied and tested in several subsequent user technology acceptance / adoption investigations, including Venkatesh (2000), and Venkatesh and Davis (2000).

The Self Efficacy Theory and Technology Acceptance

The self efficacy, theory, derived from social cognitive theory (Bandura, 1986), has received considerable empirical support for its exploration of individual behaviour across life domains. Self efficacy is the individual's belief in his or her ability to successfully perform a specific behaviour. Information system research has demonstrated the significant role of self efficacy in technology skill training (Johnson and Marakas, 2000) and technology acceptance (Venkatesh, 2000). More specifically, studies have shown that technology skill training increases self efficacy which in turn influences technology acceptance (Alhajri, 2007, Godwin, 2004). There exists a nexus among flow of behaviours from decisions to receive training to technology skill development and subsequent technology acceptance.

Compeau and Higgins (1995) defined computer self-efficacy construct as "an individual judgement of one's capability to use a computer. Marakas, (2000) used the definition to investigate a decision to use computers and computer skills acquisition; Venkatesh and Davis, 2000; Venkatesh 2000 reported the importance of computer self-efficacy on performance and technology acceptance. Other studies have reported contradicting findings. Gallivan, Spitler and Koufans (2005) found that computer self efficacy was not related to usage behaviour. Marakas, Johnson and Clay (2007) suggested that such mixed results were attributed to the lack of appropriate theorizing of

the self-efficacy construct. Consequently, Marakas (2007) proposed that computer-self efficacy operates at two interrelated levels: the general computing behaviour level (an individual's judgement of efficacy across multiple computer domains) and the specific computer task or application level (an individual's perception of efficacy in performing specific computer-related tasks (such as e-library use) within the domain of general computing). Empirical evidence abounds to support the fact that possession of application-specific computer self-efficacy can easily be explained and predicted than the general construct which may be difficult to evaluate (Marakas, 2007; Johnson and Marakas, 2000). Consistent with the recent theorizing on computer self efficacy this study intends to investigate the influence of self-efficacy on technology acceptance and usage.

Bandura (1977a, 1997) opines that personal judgements of one's capabilities to organize and execute courses of action to attain designated goals is needed before an individual could make good use of e-resources having assessed its level, generality, and strength across activities and contents. When related to this study, it means the students' belief in their capabilities to use e-library resources and applications in their academic work to ensure excellent outcome. It involves a self–evaluation that influences decisions about what behaviours to undertake, the amount of effort and persistence put forth when faced with obstacles, and finally, the mastery of the behaviour. Self efficacy is not a measure of skill rather it reflects what individuals believe they can do with the skills they possess. For example, in discussing computer self-efficacy, Compeau and Higgins (1995) distinguished between components skill, such as formatting disks and booting up the computer and behaviours individuals can accomplish with such skills, such as using software to analyse data. Thus, computer self efficacy focuses on what a person believes he or she can accomplish with computer resources now or in the near future, It does not relate to the actual skill level, but, are relevant in determining how long an individual persevere in a task and whether the task will be engage in at all.

Ren (2000) concluded that students with high self-efficacy will be more likely to take advantage of what is around them because people are generally more interested in performing activities in which they have high self efficacy. That is, if they are familiar and feel

comfortable with computers and other related technologies, they will use them, and if they feel that using e-library in their academic work will make learning easy and improve their academic performance they will learn about them. Research has demonstrated that "computer use and their technology acceptance are positively related to computer self–efficacy. Computer self-efficacy has a direct effect on the person's perception of the ease of computer use, which in turn, affects the frequency and time of computer use (Ren, 2000). He added further that people who have little confidence in their ability to use computers, who are dissatisfied with their computer skills or who are uncomfortable using computer resources may be said to have weak self-efficacy beliefs. Those with low self efficacy should be less likely to perform related behaviours in the future (Bandura, 1997), in this case, would be less likely to adopt and use computer resources, than those with high degree of self-efficacy.

Research Methodology

The survey research design of the *ex-post facto* type was adopted for this study while the questionnaire was adopted as the major instrument for data collection. The simple random sampling method was used to select a total of One hundred and fifty (150) undergraduate students spread across various departments and units that constituted the Faculty of Education, University of Ibadan.

Results and Discussion

A total of One hundred and fifty (150) copies of questionnaire were administered on the selected undergraduate students out of which only 131 copies were retrieved with useful responses, which makes a response rate of 87.3%. The respondents were chosen among the undergraduate students from the Faculty of Education, University of Ibadan and were spread over the eight departments, and one centre that make up the faculty.

Table 1: Availability of e-resources at University of Ibadan e-library

e- Resource	Frequency	Percentage
e-journals	89	67.9
e-books	76	58.0
Multimedia resources	55	41.9
e-magazines/newspaper	34	25.9
e-photographs	21	16.0
e-database	73	55.7
CD-ROMs	63	48.1
Internet e-mail facility	106	80.9
Charts	57	43.5
e-catalogue	76	58.0

Table one presented information on the e-resources available at Kenneth Dike e-Library, University of Ibadan. It revealed Internet/e-mail facility as the most commonly available as attested to by 106 (80.9%) of the respondents. This is closely followed by e-journals (89 or 67.9%), e-Books (76 or 58.0%), e-catalogue (76 or 58.0%) and e-database (73 or 55.7%). The least commonly available e-resources as indicated by the respondents as e-photographs with 21 or 16.0% response rate. This implies that Internet e-mail facility, e-Journals, e-Books and e-Catalogue are the e-resources commonly available for students' use.

Table 2: Students' use of e-library resources

e-resources	Frequency/Percentage		
	Always	Occasionally	Never
e-Journals	84 (64.1%)	23 (17.6%)	24 (18.3%)
e-Books	79 (60.3%)	33 (25.2%)	19 (14.5%)
Multimedia resources	16 (12.2%)	34 (25.9%)	81 (61.8%)
e-Magazine/Newspaper	23 (17.6%)	56 (42.7%)	52 (39.7%)
e-Photographs	21 (16.0%)	19 (14.5%)	91 (69.4%)
e-Databases	79 (60.3%)	47 (35.9%)	5 (3.8%)
CD-ROMs	82 (62.6%)	49 (37.4%)	-
Internet e-mail facility	92 (70.2%)	39 (29.8%)	-
Charts	21 (16.0%)	23 (17.6%)	87 (66.4%)
e-Catalogue	19 (14.5%)	33 (25.2%)	79 (60.3%)

The study further probed into the use of the available resources by the students. Information gathered from the data analysis revealed the regular use of Internet e-mail facility (70.2%), e-Journals (64.1%), CD-ROMs (62.6%), e-Books (60.3%) and e-database (60.3) as indicated by 92 or 70.2%, 84 or 64.1%, 82 or 62.6% 79 or 60.3% and 79 or 60.3% respectively. This implies that the students make regular use of only Internet e-mail facility, e-Journals, e-Books, CD-ROMs and e-Database. The university authority should possibly increase the bandwidth of the Internet if more students still visit the library to use Internet e-mail facility more than the e-Journals, e-Books and e-Catalogue. Efforts should be concentrated in finding out the relevance of available e-resources and strengthen the quality where there appears to be observed inadequacies.

Table 3: Students' use of e-library for Academic and Research activities

Activities	Use	Not Use	No response
Journal search	73 (55.7%)	25 (19.1%)	33 (25.2%)
Research topic search	57 (43.5%)	43 (32.8%)	31 (23.7%)
Search for textbooks	77 (58.8%)	33 (25.2%)	21 (16.0%)
Electronic theses search	47 (35.9%)	59 (45.0%)	25 (19.1%)

Table three presented information on respondents use of e-library for academic and research activities and it revealed that majority of the respondents use the e-library for textbooks search (77 or 58.8%), Journal search(73 or 55.7%) and research topic search (57 or 43.5%). Only few of the respondents use the e-library for electronic theses search with 47 or 35.9% response rate. It can thus be deduced that students use the e-library mainly for textbooks and journal searches.

Table 4: Adequacy of KDL e-library to students' academic and research related activities

Research Related Activities	Adequate	Inadequate	Can't say
Journal search	85 (64.8%)	19 (14.5%)	27 (20.6%)
Search for textbooks	59 (45.0%)	43 (32.8%)	29 (22.1%)
Research topic search	23 (17.6%)	73 (55.7%)	35 (26.7%)
Electronic theses search	65 (49.6%)	29 (22.1%)	37 (28.2%)

Table four revealed that the degree of use of e-library for specific academic and research related activities varies. More than half of the respondents (85 or 64.8%) attested to the fact that the e-library is adequate for journal search. This is closely followed by 65 or 49.9% and 59 or 45.0% of the respondents that attested to adequacy of the e-library for electronic theses search and textbook search respectively. On the other hand, majority of the respondents attested to the inadequacy of the e-library for research topic search. This implies that students found e-library adequate for journal search, textbook search and electronic theses search.

Table 5: Influence of Self-efficacy on e-library use

	Response	**Frequency**	**Percentage (%)**
Self efficacy	Strongly agree	42	32.1
	Agree	45	34.4
	Disagree	27	20.6
	Strongly disagree	17	12.9

Table five presented information on the influence of self-efficacy on e-library usage by the undergraduates and it showed that majority of the respondents (87 or 66.5%) attested that their self-efficacy influence their use of e-library.

Research hypothesis 1: There will be no significant relationship between undergraduates' internet self-efficacy and use of e-library at the Kenneth Dike Library, University of Ibadan.

Table 6: Relationship between undergraduates' internet self-efficacy and use of e-library

e-Library use	**N**	**Mean**	**Std D**	**Std E**	**Sum of S**	**Df**	**M.Sq**	**F**	**Sig**
Strongly Agree	42	1.33	0.914	0.097	40.766	2	0.255	0.387	0.542
Agree	45	1.25	1.441	0.083	87.051	129	0.659		
Disagree	27	1.25	0.866	0.250	87.816	131			
Strongly Disagree	17	1.00	0.000	0.000					
Total	131								

M = Means value; Sd = Standard deviation; SS = Sum of Square; Ms = Means square; F = Ratio
P = Probability

The Analysis of Variance (ANOVA) is used to test the relationship between students' self-efficacy and e-library usage. It showed significant relationship (F =0.387, df =2, P=0.542>0.05 level of significance) between the two constructs. Therefore, the hypothesis is not accepted.

Research hypothesis 2: Relationship between self efficacy and e-library usage is not mediated by undergraduates' perceived ease of use of the e-library at the Kenneth Dike Library, University of Ibadan.

Table 7: Relationship between self-efficacy and e-library usage mediated by undergraduates' perceived ease of use

Model	Sum of Squares	Df	Mean square	(F) Value	R^2	Prob.
Regression	1.016	2	0.508	0.778	0.012	0.461
Residual	86.800	129	0.653			
Total	87.816	131				

The hypothesis is not accepted as the data from Table 7 showed that the relationship between self-efficacy and e-library usage will be mediated by perceived ease of use.

Discussion of Results

The library authority should pay particular attention to sources of electronic information not well developed at present so as to bring equity to play. This will avail other users the opportunity to consult other numerous available options. It would no doubt reduce the intensity of use of some readily available sources. Quality waiting time of users would be saved when more sources are provided for more evenly distributed opportunities. In addition, researchers would have several alternative sources to locate useful resources for their study. Arising from results in table 3, the e-library policy of the University of Ibadan library may be reviewed to be sure that research topics and electronic theses in the database can be adapted for degree studies.

Efforts should be made to stock robust research topics and previous projects that could be of assistance to upcoming researchers and emerging scholars like the undergraduates. Relevant and up to date textbooks editions as well as journal titles and volumes must be subscribed so as to sustain the interest of undergraduates that have occasionally or never consulted the e-library.

Evaluation needs to be done in the area of available database for research topic search. Since the service is available, it makes no meaning if it is not usable. Whatever accounts for its non-consultation should be reviewed and addressed. Every material in the library must be used according the first rule of librarianship by S. R. Raganathan which says 'Books are for use.' If the problem is traceable to timing or inadequate personnel or location of the service centre or other logistics, immediate action should be taken to ensure effective patronage of the e-library section since our stock in trade is nothing but information. That undergraduates self-efficacy influences their use of e-library implies that students' possess required level of skills, competence and ability to use the resources. It is not unlikely that the library also allows them to fully navigate freely using the e-library resources. One may not be wrong to feel that the e-library is also meeting specific needs hence the interest of the undergraduates has been sustained and that stimulates them to be bold and have assurances of efficient service delivery.

It can thus be inferred that there is significant relationship between students' self-efficacy and e-library usage. It suffices to say that anything one knows how to do, one would like to do and there is tendency to enjoy doing it. That suggests satisfaction and confidence which means that needs are being met. It can be further concluded that the essence of being of the e-library is fulfilled and everything should be done not to allow undergraduates' use of the e-library to wane. Perceived ease of use would bring real usage into the limelight. There can never be usage if an individual does not activate the perceived ease of use in him or her. The actual use demystifies the fear or reservation that brings withdrawal and inability to want to try use of e-library.

Conclusion

It can be concluded that majority of the undergraduates make use of most of the e-resources available at the e-library while they also

attested to the adequacy of the e-library in meeting their needs as far as their academic and research activities are concerned. Since library is a growing organism, the management of Kenneth Dike Library should always expand their facilities to allow for more contemporary technological realities as they are invented. This would further ensure the viability of the library in terms of service delivery. The study further established that self-efficacy has a significant influence on the e-library use by the undergraduates and that self-efficacy immensely meditated use of e-library in University of Ibadan.

Recommendations

The following recommendations are made:

The library has capacity to accommodate more occasional users and non-users of the e-library. Hence, the library should think out of box to embark on steps that would naturally attract these individuals into the e-library for optimum services. If reaching out many users has made the library recorded great achievement then, talking to much more users would lead to greater attainment.

Relevant and modern day marketing strategies should be employed to bring other e-resources at the KDL e-library to the undergraduates so that they can fully adopt the use as vital resource of inestimable value in learning.

The contents of the electronic library should be regularly reviewed and observed gaps filled to accommodate e-resources that can always meet the academic and research needs of the undergraduates in particular and other scholars in general.

Relevant authorities should embark on infrastructural upgrade to ensure service delivery at a speed of electricity with particular reference to surfing the net, sending of messages and download of documents and other similar or related activities. If quality service delivery time is reduced considerably, more users would be attracted to the e-library and existing users would be constant.

References

Aina, L. O. (2004). *Librsary and information science text for Africa*. Ibadan: Thirld World Information Services Limited, 328-329.

Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. NJ: Prentice-Hall.

Akla, W. I. (2002). *Perpustakaan Digital@ Marya@Elektronik,* Jendela, Buletin Perpustakaan USM, Buletin Bil. 1.

Alhajri, F. (2007). Innovative practice using ICT in schools: findings in two case studies. *Management in Education*, 16(1), 31-35

Bandura, A. (1986). *Social foundations of thought and action.* Englewood Cliffs, NJ: Prentice-Hall,

Bandura, A. (1997). *Self-efficacy: the exercise of control.* New York, NY: W.H. Freeman.

Compeau, D. R. & Higgins, C. A (1995). Computer self-efficacy: development of a measure and initial test. *MIS Quarterly*. 19(2), 189-211.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(4), 319-40.

Debowski, M. (2001). Library Usage Patterns in the Electronic Information Environment. *Information Research*, 9(4), 11

Dillon, S. T. & Morris, M. (2001). Improving the retrieval of information from external sources. *Behavior Research Methods, Instruments and Computers* 23:229-236.

Duy, J. (2004). *Usage data: Issues and challenges for electronic resource collection management: transitions, trends and technicalities.* Binghamton: Haworth Press, 111-138

Flynn, A. (2005). *Performance indicators for electronic library services*. Sidney: University of Sidney, 1-12

Gallivan, M.J., Spitler, V.K., & Koufaris, M. (2005). Does information technology training really matter? A social information processing analysis of co-workers' influence on IT usage in the workplace. *Journal of Management Information Systems*, 22(1), 153-192

Godwin, L. (2004). *How performance and self-efficacy influence the ease of use of object-orientation: The moderating effect of prior training*. Proceedings of the 36th Hawaii International Conference on System Sciences (HICSS'03)

Jacobson, B. 2005. *Performance measures for 21st libraries. Performance measurement for libraries and information services*, 2nd Annual Conference, Sydney, March 21-22

Johnson, A & Marakas, M. (2000). Freshmen's use of library electronic resources and self-efficacy. *Information Research*. 8 (2), paper no. 150.

Killough, T. & Koln, Y. (2001). Browsing functions in three-dimensional space for digital libraries. *International Journal on Digital Libraries* 2 (2-3), 68 – 78.

Kuiper, F., Volman, S. & Terwel, S. (2008). *Making information more accessible: a survey of information visualisation, application and techniques*. Retrieved from http//www.ils.unc.edu/geisg/ infovis/paper.html on 27/02/2010

Marakas, G. M. 2000. The evolving nature of the computer self-efficacy construct: an empirical investigation of measurement construction validity, reliability and stability over time. *Journal of the Association for Information Systems*, 8(1), 16-46

Marakas, M. Johnson, A. & Clay, Y. 2007. *Role of computer self-efficacy in predicting user acceptance and use of information technology.* Retrived from: http://hsb.baylor.edu/ramsower /ais.ac96/papers/mun.html on 20 /02 /2017.

Marchionim, G. Plaisant, C. & komlodi, A. (2003). The paper in digital libraries: Multifaced approaches to accessing needs and impact. In A.P. Bishop, N.A. van House and B.P. Battlefield (ed). *Digital library use: social practice in design and evaluation*. Cambridge: The NIT press, 112

Mutula, S. & Ojedojun, A. (2008). Digital libraries. In: Aina, L.O., Mutula, S.M., & Tiamiyu, M.A. (eds). *Information and knowledge management in the digital age: concepts, technologies and African perspectives*: Ibadan: Third World Information Services Limited, 101-121

Norton, L. 2005. *Building attitudes: how a technology course affects preservice teachers' attitudes about technology*. Retrieved from http://www.math.byu.edu/Ifrancis/tims-page/attitudesite.html on 27/ 02/ 10

Ren, W. H. 2000. Library instruction and college student self-sufficiency in electronic information searching. *Journal of Academic Librarianship*.26 (5):323-328.

Shim, M. F. & Mclure, P. 2002. *Human computer interaction issues.* ERCIM News No. 46, July 2001. Retrieved from: http://www.ercim.org/publication/Ericm-News/enw46/costabile.html on 14 September 2006

Venkatesh, V. & Davis, F. D 2000. Modeling the determinants of perceived ease of use. Abstract from: International Conference on Information Systems. Available at: http://webfoot.csom.umn.edu/faculty/phds/venki/cse2.htm

Venkatesh, V. 2000. *A model of the antecedents of perceived ease of use: Development and test*. Decision Sciences. Retrieved from: http://www.CSE1ai.htm on 22 / 02/ 10

Woefel, J. E. 1995. Locus of control and student teacher computer attitudes. *Computers & Education*, 14(5), 421-432