

SELECTED FACTORS THAT INFLUENCE EFFECTIVE UTILIZATION OF ELECTRONIC LIBRARIES BY STUDENTS. A CASE STUDY OF FEDERAL COLLEGE OF AGRICULTURAL ISHIAGU, IVO LGA OF EBONYI STATE, NIGERIA.

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ABSTRACT

The study examined selected factors that influence effective utilization of electronic libraries by students in higher institutions using Federal College of Agriculture Ishiagu in Ivo L.G.A., Ebonyi State, Nigeria as a case study. The sample size of this study was three hundred and thirty two (332) undergraduate students derived from the application of Yaro Yammane statistical formular for deriving sample size from finite population. The data used for the research were obtained by means of a structured questionnaire administered as interview schedule. Data were analyzed using descriptive statistics such as frequency distribution, mean scores and tables and t-test statistical tool. The result on influence of skill, personal attributes and environmental factors x-rayed that all the response items had mean values greater than the t-test threshold mean value of 2.5. This indicated that skill, personal attributes and environmental factors have significantly influenced the utilization of e-library at FCAI by the users. The research made the following conclusions; that skill has a positive influence on the use of e-library, to make use of the growing range of electronic resources, students must acquire and possess the skills necessary to exploit them; That personal attribute has a positive influence on the use of e-library, self efficacy which translates to love of e-resources, ability to manipulate ICT and the like had significant influence on the use of FCAI e-library; That the environment has a positive influence on the use of the e-library, the environmental factors such as availability of cyber cafés in users area of residence significantly influenced use of FCAI e-library. Based on the findings, the following recommendations were made: Lecturers should give students term papers to write on every course they study such that they can only source information from the Internet. This will enable them develop the skill of ICT, the educational sector should introduce courses on ICT that students must study and do practicum on no matter your faculty. This will in no small measure make students become more ICT friendly, finally, automation and good internet connectivity in Nigeria universities/colleges' libraries by the Federal Government with the corresponding training and re-training of librarians and information scientists by the school authorities to enable librarians and information scientists acquire adequate computer skills and potentials for the effective provision of high quality library services especially in areas of research and reference to her users.

Keywords: Influence, Factors, Utilization, E-Library, Students.

INTRODUCTION

An information user is a person who demands for information, receives it and puts it into use irrespective of the person's age, gender and occupation. A user is one who needs information and would use a certain medium to satisfy his or her information need. Aniedu, Nwaneri, Chinaka, Anozie, Chukwu and Uka (2018) categorized information users in terms of profession, gender, need, education, location and language. Each user category has its own definite and different approach towards information acceptance and utilization. Every information user, no matter the category, has a background and such a background is what Hornby (2000) refers to as profile. A user profile can be referred to as the brief biography of the user. Waldman (2003) argues that information professionals have long sought to comprehend what factors are relevant in encouraging a person to seek

for information. To encourage students' use of the library, especially its electronic resources, there are factors that influence it. These factors are what are referred to as user characteristics. Waldman (2003) posits that demography, age, gender, immediate environment influence, frequency of library use and self-efficacy are some of the user characteristics. Ozoemelem (2009) adds skills and experience as type of user characteristics. Researches by Enochsson (2005) and Kember (1996) reveal that user characteristics have effect on library use. The characteristics of age, skills, education among others determine how proficient a library user would be in the use of the library. The ability to find and retrieve information effectively is a transferable skill useful for future life as well as enables the positive and successful use of the electronic resources. As Brophy (1993) argues, libraries must reach a position where the acquisition of information skills is acknowledged

as one of the key learning objectives for every student entering the university, so that no student leaves without being fully equipped to cope with the information intensive world -the information society- as an end-user. Information literacy is rooted in the concepts of library instruction and bibliographic instruction. It is the ability to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information (Nwaneri, Anozie, Chinaka, and Aniedu, 2016). Thus, it is the basis for life-long learning. Nwaneri², (2013) observes that information literacy is the ability to make efficient and effective use of information sources and that an information literate person today should possess specific online searching skills, which include the ability to select appropriate search terminology, construct a logical search strategy, and evaluate information appropriately. It also entails individual's ability to know when there is need for information, how and where to get the information and using such information effectively to accomplish a specific purpose. Wikipedia (2007) states that an information literate person is one who, amongst others, recognizes that accurate and complete information is the basis for intelligent decision making; recognizes the need for information; knows how to locate needed information; formulate questions based on information needs; identifies potential sources of information; develops successful search strategies; access sources of information including computer based and other technologies; evaluate information no matter what the source; organizes information for practical application; integrates new information into an existing body of knowledge; uses information in critical thinking and problem solving; uses information ethically and legally. Students need some level of these skills to make decisions about academic matters and other aspects of their daily lives. The skill domains that are involved can be cognitive, affective and physical i.e. thought, attitude, and operation (Nwaneri², 2013). Experience here means web experience and web experience can be considered to be an act where users engage in applications that are often centered on the web. In addition, web experience can also be defined in two different ways, as perceived use and variety of use. While perceived usage refers to the amount of time spent interacting with the web and frequency of use, variety of use refers to the importance of use and the collection of web package/programme use (Igbaria, Guimares and Davis, 1995). Essentially, the web would often be a tool for wider and more diverse use. Users are increasingly using the web for information retrieval. The degree of self-efficacy is another characteristic that appears to influence use of the library's electronic resources. Self-efficacy is part of an individual's belief in ones capacity to organize and execute the course of action required to accomplish prospective situations. Students' library

use is another characteristic that influences the use of electronic resources. It is reasonable to assume that the more an undergraduate uses the library, the more familiar the student will be with its resources, including its electronic resources. Studies have shown that frequent users of the library tend to make greater use of computer applications and the library databases than infrequent users. Gender has to do with sex - male and female. Research regarding computer use has more generally highlighted the significance of interest and stereotyping about computer, as well as self perception of ability (self-efficacy) in explaining gendered patterns of behaviour vis-à-vis this technology. Utilization is the actual putting into appropriate use of acquired information. Nwaneri² (2013) and Aniedu., *et al* (2018) identified accessibility as one of the pre-requisites of information utilization. They argued that information generation, collection, organization, recording and distribution, accessing and utilization operate imperfectly. Availability and accessibility are other determinants of information utilization. Availability in this context does not only mean that information is provided but it entails accessibility. Availability of information is meaningless if those who want to make use of it cannot have access to it. To effect proper and effective utilization, information must not only be available in the right quantity and time, but also be accurate and its resource credible, reliable and received within the closest proximity to the user. Above all, it must be accessible and devoid of socio-economic and environmental impediment. It is when available information is easily accessible that information utilization is possible (Uhegbu, 2007). The channel or medium of information communication is another critical pre-requisite for effective utilization. The way information is passed to the people to a large extent determines its way of use by the seeker. Communication channel should be in consonance with the language of the people, their location, their sociology and must provide them at an appreciable cost. Unlike the traditional library, the E-library is promising limitless opportunities for open access to information. Aina (2004) defines e-library as a library that consists of materials and services in electronic formats rather than the print format. In another dimension, Abdulmumin (2010) defines e-library as those electronic information resources and services that users access electronically via a computing network from inside the library or remote to the library. Arms (2005) defines e-library as managed collection of information with association services where the information is stored in digital formats and accessible over a network. Lynch (1994) says that e-library is a replica of a traditional library role but in a digital format. Cleveland and Gibson (1999) agree but add that the e-library is a collection of knowledge electronically and maintained in order to meet the totality of information needs for a given population. Electronic library resources are

invaluable research tools which complement print-based resources in any traditional library. E-library can mean the use of various information communication technology (ICT) in gathering, processing, storing and dissemination of information resources in a library. There are different types of e-libraries for diverse information needs of the targeted group of users. Some are developed by groups or organizations, higher education institutions, research centers, national libraries as well as public libraries. E-library resources are widely used in universities. This is a direct result of certain characteristics which influence the users utilization of e-library. Hence the broad objective of this study was to examine the influence of user characteristics on utilization of FCAI e-library by undergraduate students. The specific objectives of the study were to; determine the influence of skill and personal attributes of the undergraduate students on the use of the e-library and the influence of environment on the use of the e-library by undergraduate students in FCAI.

Hypotheses

- i. There is no significant influence of skill on the use of ABSU e-library by undergraduate students.
- ii. There is no significant influence of personal attributes on the use of ABSU e-library by undergraduate students.
- iii. There is no significant environmental influence on the use of ABSU e-library by undergraduate students.

METHODOLOGY

The study was conducted in Federal College of Agriculture, Ishiagu formerly school of agriculture, umudike. The college was established on 29th October 1955 to meet the need of training agricultural extension agents to cope with the increasing need for extension agents to educate the farmers and man the various agricultural development projects. In 1993, the college relocated to Ishiagu following the establishment of Federal University of Agriculture Umudike presently Michael Okpara University of Agriculture, Umudike on its campus. The population of the study was one thousand, nine hundred and sixty six (1,966) undergraduate students of FCAI comprising various disciplines. This population did not however indicate the gender characteristics of the undergraduate students as obtained from the library user's register. The sample size of this study was three hundred and thirty two (332) undergraduate students derived from the application of Yaro Yammane (1969) statistical formular for deriving sample size from finite population. The statistical formular is thus expressed;

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n	=	the sample size required
N	=	total known population of the study
E	=	level of significance (or limit of tolerable error)
	=	0.05
1	=	constant
n	=	$\frac{1,966}{1+1966(0.05)^2}$
n	=	332 sample size

To select each respondent from the sample of 332 undergraduate students, simple random sampling technique was adopted. This sampling technique gave each element in the sample equal chance of being represented in the study. As the researcher entered the e-library, any user found there was selected as a sample member. The data used for the research were obtained by means of a structured questionnaire administered as interview schedule. Data were analyzed using descriptive statistics such as frequency distribution, mean scores and tables and t-test statistical tool. A 4 point Likert rating scale was used to measure the level of agreement of e-library using strongly agree (4), agree (3), disagree (2) and strongly disagree (1). Respondents with mean score of 2.5 and above imply they are in agreement that the response questions are important while respondents with mean score of less than 2.5 were not in agreement, (this was used in testing the hypotheses). To determine the mean values t-test statistical tool was adopted.

RESULTS AND DISCUSSION

Table 1 shows the significant influence of skill on use of FCAI e-library. The result x-rayed that all the five response items had mean values greater than the t-test table values of 2.5. The response items were "skill enables me to manipulate the e-library" 3.31, "equips me with the knowledge on how to access the e-library" 3.41, "makes me to understand search strategies of the e-library" 3.32, "gives me confidence to locate whatever I want" 3.29 and "makes it easy for me to indicate what I want" 3.22. This implies that skill has significant influence on the use of e-library at FCAI by the users. The implication of this is that the more skilled a person is in electronic resources, the better for the use of electronic facilities and resources like the FCAI e-library. This is in congruence with the findings of Tella, Ayeni, and Omoba (2007) who argued that students' ability to find and retrieve information effectively is a transferable skill useful for their future life as well as enabling the positive and successful use of the electronic resource whilst in school. To make use of the growing range of electronic resources, students must acquire and possess the skills necessary to exploit them (Okello-obura and Magara, 2008).

Table 1: Test of Significant Influence of Skill on Use of FCAI E-library.

Factors	Num.of Respondent	Total	Test of hypothesis (Mean)	Decision
a Skill enables me to manipulate the e-library	278	921	3.31	Accept
b Equips me with the knowledge on how to access the e-library	283	966	3.41	Accept
c Makes me to understand search strategies of the e-library	273	907	3.32	Accept
d Gives me confidence to locate whatever I want	274	904	3.29	Accept
e Makes it easy for me to indicate what I want	262	844	3.22	Accept

Source: Field Survey Data, 2019

The result of significant Influence of Personal Attributes on the Use of E-Library by Users is shown in Table 2. The table revealed that “personal love for electronic resources” had mean value of 3.46, “competence to use the e-library resources” had mean value of 3.22, “can always manipulate any electronic facility” 2.89 and “know how to locate materials in the e-library” had 3.19. This implies that

personal attributes have significantly influenced utilization of FCAI e-library. Self efficacy translates to love of e-resources, ability to manipulate ICT and the likes. According to Bandura (1997), self efficacy is part of an individual’s belief in ones capability to organize and execute the causes of action required to manage prospective situations.

Table 2: Test of Influence of Personal Attribute on use of FCAI E-Library

Factors	Num. of Respondents	Total	Test of hypothesis (Mean)	Decision
A I have personal love for electronic resources	285	987	3.46	Accept
B Have competence to use the e-library resource	275	887	3.22	Accept
C Can always manipulate any electronic facility	267	772	2.89	Accept
D Know how to locate materials in the e-library	275	879	3.19	Accept

Source: Field Survey Data, 2019

The result of significant Influence of environmental factors on the Use of E-Library by Users is shown in Table 3. The table showed that “I live in an urban centre” had mean value of 3.40, “used to e-resources where I live” had 3.20, “developed interest on e-resources through my family” had 3.0, “have many public cyber café in my area of residence” had 3.35 and “got used to electronic facilities during my primary and post-primary school days” had 2.84. Analysis indicates that environmental factors significantly influenced the use of e-library at FCAI.

For instance, a student that is brought up in an enlightened environment like the urban area, academic community, civil service environment and the like is most likely to be at home with the use of computer than the student that hails from a typical rural setting. Peer group influence is also a factor; somebody that mingles with friends who play around with personal laptops and even desk tops at their homes will in less than no time become computer literate automatically without going for any formal computer training.

Table 3: Test of Environmental Influence on Use of FCAI E-Library.

Factors	Number of Respondents	Total	Test of hypothesis (Mean)	Decision
a I live in an urban centre	257	876	3.40	Accept
b Used to e-resources where I live	262	840	3.20	Accept
c Developed interest on e-resources through my family	270	810	3.0	Accept
d Many public cyber café in my area of residence	273	917	3.35	Accept
e Got used to electronic facilities during my primary and post-primary school days	266	756	2.84	Accept

Source: Field Survey Data, 2019

SUMMARY

The study sought to identify the influence of user characteristics on utilization of Abia State University E-library by undergraduate students. Since the focus of the study is on user characteristics and use, the study took time to explain the concept user, covering user characteristics and utilization. The meaning and types of electronic libraries were examined. The study also x-rayed resources of electronic libraries, uses of electronic libraries as well as theoretical frameworks on utilization.

The population of the study was six thousand five hundred (6,500) undergraduate students of ABSU comprising various disciplines. The sample size of three hundred and eighty two (382) undergraduate students was derived using Yaro Yammane (1969) statistical formula for deriving sample size from finite population. To select each respondent from the sample of 382 undergraduate students, simple random sampling technique was adopted.

Adopting a survey research design, the questionnaire was the main instrument for data collection, which was validated, administered and analyzed. The findings show that: users of ABSU e-library were mainly female registered users who constituted more than 56% of the respondents, age had significant influence on the utilization of ABSU e-library, gender of users did not significantly determine utilization of ABSU e-library even though females were more in number as users than males, possession of ICT skill greatly influenced the utilization of ABSU e-library, self efficacy which translates to love of e-library, ability to manipulate ICT and the like had significant influence on the use of ABSU e-library and finally that environmental factors such as availability of cyber cafés in users area of residence significantly influenced use of ABSU e-library. Conclusions and suggestions for further studies were made.

CONCLUSION AND RECOMMENDATION

The research made the following conclusions; that skill has a positive influence on the use of e-library, to make use of the growing range of electronic resources, students must acquire and possess the skills necessary to exploit them; That personal attribute has a positive influence on the use of e-library, self efficacy which translates to love of e-resources, ability to manipulate ICT and the like had significant influence on the use of FCAI e-library; That the environment has a positive influence on the use of the e-library, the environmental factors such as availability of cyber cafés in users area of residence significantly influenced use of FCAI e-library. For instance, a student that is brought up in an enlightened environment like the urban area, academic community, civil service environment and the like is most likely to be at home with the use of computer than the student that hails from a typical

rural setting. Based on the findings of this study, the following recommendations were made: Lecturers should give students term papers to write on every course they study such that they can only source information from the Internet. This will enable them develop the skill of ICT, the educational sector should introduce courses on ICT that students must study and do practicum on no matter your faculty. This will in no small measure make students become more ICT friendly, finally, since ICT has come to stay in Nigeria Educational sector, more especially now that we are in a digital age, the researcher strongly recommends automation and good internet connectivity in Nigeria universities/colleges' libraries by the Federal Government with the corresponding training and re-training of librarians and information scientists by the school authorities to enable librarians and information scientists acquire adequate computer skills and potentials for the effective provision of high quality library services especially in areas of research and reference to her users.

REFERENCES

- Abdulmumin, I. (2010). Electronic library use by academic Staff at the University of Ilorin, Nigeria: *Journal of Library and information science*, 7 (1&2): 16 – 24.
- Aina, L. O. (2004). *Library and information science text for Africa*. Ibadan: Third World Information Services.
- Aniedu, O.N., Nwaneri. T.C., Chinaka, G.I., Anozie, S.N., Chukwu, O.A and Uka, C.C and Chukwu, M.F (2018) Selected Factors that Influence Access and Usability of Information and Communication Technologies by Farmers in Ivo LGA, Ebonyi State, Nigeria. *International Journal of Agriculture, Management and Technology* 2(1): 66 – 76
- Arms, W. Y. (2005). A Viewpoint analysis of the digital library. *D-lib Magazine* 11(7/8) Available: [Http://www.dlib.org/dlib/july05/arms/07arms.html](http://www.dlib.org/dlib/july05/arms/07arms.html).
- Armstrong, C, Fenton, R, Lonsdale, R., Stoker, D, Thomas, R. F. and Urguhart, C. (2001). A study of the use of electronic information systems by higher education students in the UK. *Aslib* 35 (3): Available:<http://www.emeraldinsight/viewcontentServlet?filename=published/emeraldAbstract/onIvArticle/Articles/2800350303.Intml>. (Accessed 1st August 2008).
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: W. H Freeman.

- Brophy, P. (1993). Networking in British Academic Libraries. *British Journal of Academic Librarianship*, 8 (1): 49 – 60.
- Cleveland, A. D and Gibson, I. E. (1999). Outlines and preliminary evaluation of the classical digital library model. In the Proceedings of the fall 1999 Annual Meeting of the American Society for Information Science.
- Enochsson, A. (2005). A gender perspective on Internet use-consequences for information seeking on the net. *Information Research* 10(4). Available at [http:// information R. net/ir/10-4/paper 237. html](http://information.R.net/ir/10-4/paper.237.html).
- Hornby, A.S. Quoted in Uhegbu, A. N. (2009). *Information user: issues and themes*. Okigwe: Whytem Prints.
- Hornby, A.S. (2000). *Oxford advanced learner's dictionary of current english*, 7th ed. New York: Oxford University Press.
- Igabaria, M.T., Guimares, T and Davis, G.B. (1995) Testing the determinant of microcomputer usage via a structural equation model. *Journal of Management Information System*, 4: 87-114.
- Julien, H. (2002). *Use of information Encyclopedia of Communication and Information: USA: Macmillan*.
- Kember, S. (1996). Feminism, technology and social representations. In: J. Curran, D Morley & V. Walkerdine (eds), *Cultural studies and communications*. London: Arnold.
- Lynch, C.A. (1994). *The integrity of digital information: mechanism and definitional issues*. ASIS: Silver Spring, MD.
- Nwaneri T.C. and Nwaneri J.A (2013): *Essentials of Information and Communication Technologies on Rural Farmers Activities in Nigeria. Proceedings of 47th Annual Conference of Agricultural Society of Nigeria."Ibadan 2013" Pp 823-827*
- Nwaneri, T.C., Anozie., S.N., Chinaka, G.I and Aniedu, O.N.(2016) *Evaluation of Information and communication Technology Accessibility and It's Relevance Among Agricultural Personnel in Ebonyi State, Nigeria. Ebonyi Journal of Library and Information Science*. 3(1):234 – 242.
- Okello-Obura and Magara, E. (2008). *Electronic information access and utilization by makerere students in Uganda. Evidence Based Library Information Practice* 3(3). Available at [http://creativecommons.org/licenses/by 12 - 0](http://creativecommons.org/licenses/by/12-0)
- Ozoemelem, O. A. (2009). *Use of electronic resources by postgraduate students of the Department of Library and Information Science of Delta State University, Abaraka, Nigeria. Library Philosophy and Practice*. Available at: <Http://webpage.vidaho>.
- Tella, A. Ayeni, C. O and Omoba, R. O (2007). Self efficacy and use of electronic information as predictors of academic performance. *Electronic Journal of Academic and Special Librarianship*, 8(2). Available at [http://southernlibrarianship.icap.org/context/v08noz/ tellaa01.html](http://southernlibrarianship.icap.org/context/v08noz/tellaa01.html). Accessed 12th May 2008.
- Uhegbu, A. N. (2007). *The information user: issues and themes*, 2nd ed, Okigwe: Whytem Publishers.
- Whitmire, E. (2001). *The relationship between undergraduates' background characteristics and college experiences and their academic library use. College and Research Libraries*, 62(6),: 528-540.