

Research

Use of Electronic Resources for Academic Activities among Undergraduates: A View into Faculty of Agriculture, University of Jos, Nigeria

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This study investigated the use of electronic resources for academic activities among the undergraduates in University of Jos, using the undergraduates of faculty of Agriculture, as a study population. The research was guided by four research questions and four hypotheses. The targeted population for the study was all the students in the faculty of Agriculture, University of Jos. The instrument used in data collection was a questionnaire. The data collected were sorted, coded and input into the Statistical Package for Social Sciences (SPSS) for production of graphs, tables, descriptive statistics and inferential statistics. This study used Pearson product moment correlation statistics at 0.5 significance level to test the statistical significance of the various independent variables on the chosen dependent variables. The study revealed among others that undergraduate Students of the faculty of Agriculture at the University of Jos were aware of the existence of different types of electronic information resources available in the university library; It was further discovered that a large proportion of the respondents made use of the electronic resources mostly for research, assignment, current awareness, information acquisition, and e-mail and news. It was therefore, recommended among others that the university library should conduct sensitization on available electronic resources available in the library and how to access them. This will further increase the awareness and use of the electronic resources available in the university library.

KEY WORDS: Undergraduates, Use, Electronic, Resources, Academic, Activities, University, Jos, Nigeria

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BACKGROUND TO THE STUDY

Information is key to the wellbeing of humanity and stand as the major determinant of decision making. It could be equated to other economic resources such as capital and labor in which an increased investment leads to enhanced productivity. Ukoha (2005) posited that

information is the pivot on which the survival of any society rests. Nowadays, information could be accessed through a range of information and communication technology tools.

Information and communication technology has transformed all human activities dependent on information, particularly in the area of poverty reduction,

healthcare delivery and education. It has made a significant impact on teaching and learning in higher education and has improved the flow of information to academic communities. It has changed the philosophy of information from unitary to global access (Ajakaye, 2004). The electronic resources are completely immersed in our environment. The world becomes the world of technology and students are well aware about the use of electronic information resources. They prefer World Wide Web resources for different educational and research purpose.

The growth of information resources has become a global phenomenon, most especially in developed societies due to technological advancement in information technology (IT). Undergraduate students in developed countries are getting access to digital information and creating their information electronically. Academics now have access to global digital information resources, particularly the Internet for their scholarly communication (Obaseki & Momoh, 2010). Interestingly, the Internet represents different things to different people depending on what is being sought. In the academia, it facilitates the extension of the frontiers of knowledge and constantly enhances the drive to keep abreast of scholarly publications (Adomi, 2005).

Brief History of Faculty of Agriculture, University of Jos

The department of Agriculture Economics and Extension was established in 2014 under the leadership of professor P.S. Amaza as the pioneer Head of the Department, along with other departments in the newly established faculty of Agriculture. The Department comprises two disciplines: Agricultural Economics and Agricultural Extension. The primary objective of the Department is to equip students at the undergraduate level with sound knowledge of the following

1. Fundamental principles of economic theory and its application to Agricultural sector.
2. Fundamental principles involved in Agricultural Extension, methods and process of enlightening and dissemination of agricultural technologies.

The Department key into the vision of the University and Faculty by striving to become a Centre of Excellence for training and research in Agricultural Economics and Agricultural Extension , with capacity for research for development and consultancy in: improving agricultural productivity, food security studies, livelihood improvement, poverty studies, baseline studies, adoption for agricultural technologies , impact assessment , evaluation of agricultural projects/ programs agricultural marketing and so on.

The Department key into the vision of the University and Faculty by working towards production of graduates

in Agricultural Economics and Agricultural Extension that are equipped with theoretical knowledge and practical skills for productive and economic Agricultural activities in both public and private sector of the economy such as: Farm Management, Agricultural Marketing, Monitoring and Evaluation of agricultural projects/ programs, Agricultural Extension, Programme planning and Management, Community Development, Credit Officers , Investment Officers , Agricultural research and so on. Professor Patrick V. Kwaghe, Head of Department (Agricultural Economics and Extension)

STATEMENT OF THE PROBLEMS

The mission of academic libraries is to support learning and research activities, stimulate creativity and intellectual development and acquisition of knowledge. The University of Jos Nigeria library in living up to this expectation has devoted a substantial part of its budget to libraries" collection. The library has an electronic library where students could have access to electronic resources such as CDROM databases, e-books, e-journals, online database, and Online Public Access Catalogues. The understanding of users need, perceptions of the usefulness, satisfaction and constraint would guide library in building appropriate and relevant electronic resources collection. According to Agaba (2005), "library services ought to be user-centered and not data-centered." And that: "Only when substantially more research and development has been completed from the library user's perspective can the digital library environment begin to have the look and feel of good library service. Ogunsola (2004) posited that the understanding by producers and providers of electronic resources of users" demands is vital to improve the efficiency and value of the utilization of e-resources. Electronic resources are very costly to acquire especially considering the diminished budget of university libraries in developing countries. Premised on the fore-going, gaining an understanding on the extent to which these resources are being utilized by library clientele is of critical importance to justify the huge investment in their acquisition. It is against this background that the study seeks to investigate the use of electronic information resources by undergraduate students of Jos, Nigeria

RESEARCH QUESTIONS

1. What is the students" level of use of electronic information resources for Academic activities at the Faculty of Agriculture, University of Jos?
2. What is the level of computer proficiency of undergraduate students of Faculty of Agriculture, University of Jos?

3. What is the location of student's access to electronic information resources for academic activities?
4. What are the students' constraints in accessing and using electronic information resources for academic activities?

HYPOTHESIS

The following hypotheses were formulated for this study:

- Ho1: there is no significant relationship between students' level of use of electronic information resources and academic activities at the faculty of agriculture, university of Jos.
- Ho2: there is no significant relationship between computer proficiency and academic activities
- Ho3: there is no significant relationship between location of student and access to electronic information resources
- Ho4: there is no significant relationship between student constraints in accessing electronic information and academic activities

LITERATURE REVIEW

Informed library users know that libraries have resources that are more comprehensive and scholarly than most web sites and databases provided often in higher schools such as colleges and university libraries. Information professionals have long sought to comprehend what factors are relevant in encouraging a person to seek out information. Recently, a particular focus has been on those factors that influence the decision of patrons to use the library and resources as a place to seek information whether physically or virtually. Obaseki (2010) asserted that novel practices in university libraries such as digital information interfaces of information resources presently acts as a vibrant tool in information resources control and use. This is because the digitization of library print materials affords the librarians an opportunity to easily acquire and retrieve needed information especially for users' consumption. Furthermore, Kaura (2005) asserted that these inquiries have assumed an even greater importance in the light of the fact that more people are increasingly using the internet to find information they need, information that is unmediated by the library.

Expatriating on the relationship between the internet and electronic information resources, Adomi (2005) opined that internet is the avenue through which

electronic information resources are provided. He further stated that the use of internet is growing in Africa, particularly in Nigeria due to the proliferation of cyber cafes in major towns and cities. Earlier findings from a study by Waldman (2003) showed that 73% out of a population of 340 college students of the University of New York use the internet daily. So also is the situation in Nigeria as was stated by Adomi in (2005). Ochogwu (1992) stated that even where these resources are available, empirical evidence has shown that this does not necessarily guarantee access to them, therefore, availability of resources is not conterminous with accessibility to resources". In the same vein, Kling and Mckim (1998), and Covi (1999) stated, that the availability of electronic resources do not correlate with the use of these resources. Hence, these studies went ahead to prove that disciplinary factors have influenced the use of electronic information resources. This means that some disciplines or faculties are more amenable to utilizing electronic based information resource than others.

In addition, the studies of Eason, (2000) and Tenopir (2003) showed that users discipline and institutional context strongly affect the use of electronic resources. It was revealed in these studies that electronic resources are typically more widely used in natural and technical sciences than in the humanities and social science. Earlier study corroborating this finding above: Abel (1996) explored factors that affect the adoption and use of electronic networks and network services by science and engineering faculties in small universities and colleges. They found that the perceived usability of the network and services correlated significantly with intensity of use by these categories of users. This revealed that usability might be influenced by factors such as academic discipline and task. Furthermore, Eason (2000) in a study (Super Journal Project) showed that academic library users perceptions of the contents (including both coverage and relevance) of electronic journals revealed that ease of use of the system were the most significant factors affecting patterns of use. This is an indication that disciplinary differences in the use of electronic journals were in part associated with the differences in the coverage of super journal and other websites. Thus, there is indirect evidence that both scholars' discipline and availability of relevant material interact with the use of electronic resources in libraries.

In the same vein Tajia and Maula (2003) in a case study of the patterns of use of electronic networks by researchers in four disciplines found that "the provision of materials in scholars' research topics had a greater influence on the use of networked resources than other disciplines. In addition, Coffman (2006) buttressed in a study conducted on libraries in India reported that students used internet extensively. To further amplify the above Karins, Madden and Fulton (2004) in their study of undergraduate engineering and law students in Ireland

reported that majority(90%) of the participants in the study indicated that the Internet was the first source of information they used for a project. Also Torma and Vakkari (2004) revealed through a study that there is a high rate in the use of electronic information in Finnish National library (FINLIB). This is because their study showed that the perceived availability of electronic resources central to researchers' needs in FINLIB was a stronger predictor of the frequency of use of its services than users' discipline.

Interestingly, observations and findings from surveys have revealed that library users' view of what electronic resources has been generally linked with the availability of only CD-ROM. Similarly, Burk (2006) undertook a study meant to determine the use of electronic resources and how students feel about various issues surrounding electronics. They observed that the general opinion towards the use of electronic resources, especially the CD-Rom has been positive. They discovered in the study that CD-Rom database were the most popular electronic resources being used. Also, the same survey by Burk (2006) "using a respondent rate of 317 students across three universities revealed 91% of respondents acknowledging access to networked computer based electronic resources via the university". Similarly, Obaseki (2010) investigated the use of CD-Rom database in Nigerian academic libraries, "reporting that the use of CD-Rom database have had a large impact on academic library development in Nigeria. It was discovered that 83% of users find it easier to use the source, using the source saves them time. This corroborates majority of findings and reports that indicate the use of electronic resources in libraries. Incidentally, Ibrahim (2004) conducted a survey intended to measure the use and perception of United Arab Emirates University (UAEU) Faculty members of electronic resources. Analysis revealed that frequency of electronic resources use was low. Reasons cited were lack of time, lack of awareness of electronic resources and language barrier.

Smith (1997) stated that the success or failure of an information technology (IT) application such as an online public access catalogue (OPAC) system often depends on acceptance by the users. In the same vein, Hackbarth, Grovers and Yi (2002) argued that IT users are likely not going to adopt or use a system if they perceive it to be difficult to use. In this regard, Szajna (1996) had earlier recalled the technology acceptance module prediction, that external variables will definitely influence technology adoption indirectly via perceived ease of use and perceived usefulness. This assertion, however juxtaposes the observations in majority of university libraries where electronic resource services are made available to some selected library patrons. This indicated that the use of the electronic libraries is often times restricted to undergraduate researchers and post

graduate students, while in most institutions' the user community are not aware of the presence of electronic information resource in libraries. This trend as stated above is negative, even with the much clamoured usefulness ascribed to electronic information resources when properly put to use. Buttressing this fact of electronic information resource usefulness, Khan (2009) stated that "hundreds of thousands of monographic materials, journals, learning resources, databases, etc, electronic information resources can be accessed from the remote corner of a country and literature and the efficiency of information service".

These facts above have convinced libraries to move towards digitized resources (e-resources) which have been found to be less expensive and more useful for easy access. Contrarily, Seman (2001) reported from the study conducted on the use of electronic resources that "majority (49%) of the respondents were satisfied with online services provided by the library. The survey indicates that the use of e-resources in Jamia Milialslamia (university) is not satisfactory and users need constant guidance/ orientation to enhance their usage". In addition, Ochogwu (1992) stated that "lack of training is a major de-motivating factor in the usage of e-journals that need to be improved". These revelations juxtapose the fact that the presence of resources in libraries does not automatically mean their utilization. It also shows that for electronic resources to be adequately used to satisfy the information yearnings of library patrons there is need for adequate training of library patrons vis-a-vis adequate enlightenment campaign program.

Interestingly, in Nigerian Universities, the use of electronic resources is not without challenges. Reporting a survey on the effect of information literacy skills on the use of e-library resources among students of the University of Ilorin by, Abdulwahab, Amusan and Umma (2009) revealed "that the use of electronic library resources is poor; patrons do not use them because they lack the skill". Thus the survey revealed that they have not been taught the use of e-library resources, which is an embedded course in the "General studies" programme (GNSIII). Only librarians are responsible for teaching information literacy contents in the university. Furthermore, American library Association (2005) in Abdulwahab... et al (2009) sees the deal as collaborative efforts between faculty members, librarians and academic administrators. Similarly, an empirical study by Eqbal and Kahan (2007) on the use of electronic journals by the research scholars of Faculty of Science and Engineering revealed high extent of use. Majority (67.64%) of research scholars of faculty of science and (69.23%) of faculty of engineering use e-journals for research work on a daily basis. This is an indication of high rate of usage of electronic information resources for information services. The frequent use of the electronic

resources is however attributed to the speed and ease at which information needed is being retrieved and the availability of current and up-to date information online.

Interestingly, Obaseki et al (2010) revealed from a study on the use of electronic resources by post graduate students of the Department of Library and Information Science, Delta State University that “students’ usage of electronic resources was quite high”. The study showed that majority of the respondents (61.54%) and (65.38%) indicating that they often utilize the library informational database and full text article database. These findings have however indicated that patrons of university libraries make use of electronic information resources either moderately, averagely or exhaustively. In submission, Sharma (2009), measuring the use and impact of e-resources at Guru Gobind Singh Indraprastha University, India, revealed that “Practical use of e-resources is not up to the worth in comparison to investment made in acquiring these resources. Similarly, Igun (2005) in a survey study of three oldest university libraries in Ghana on the use of internet facilities revealed that majority (49%) of the participating graduate students and undergraduate respondents use the IT Services once in a while. In addition, Salami (2001) on the accessibility and use of library resources by undergraduates in a Nigerian University of Technology, revealed that though majority 82.9% of 393 respondents agreed that they found the library resources accessible for their academic pursuit, none of them indicated that they use the available electronic resources which is CD-ROM. Thus, this finding contravenes earlier assertions, such as that of Oduwole and Akpati (2003), that availability of ICTs does not connote the use of electronic information resources, meanwhile, Seth and Parida (2006), and Nnadozie and Nnadozie (2008) cautioned that availability of information

resources and services do not automatically translate to information accessibility and use.

RESEARCH METHODOLOGY

Introduction

This chapter deals with the research design, research population, sampling technique, and sample size, methods of data collection and method of data analysis

Research Design:

Survey Research Design was adopted for this study. According to Busher and Harter (1980), survey research design enables specific issues to be investigated through information gathering on people’s opinions and believes over a wide population. Busher and Harter (1980) further claimed that survey research techniques can “save time and money without sacrificing efficiency, accuracy, and information adequacy in a research process”. This technique is relevant to this study because it enabled the researcher to properly sample opinions of Undergraduates on their use of online resources.

Population of the Study

The target population of the research comprised of all undergraduate students of Faculty of Agriculture in the University of Jos, which includes Crop Production Department Students, Animal Production Department Students, and Agricultural Economics and Extension Department Students.

Table 1: Population of the three Departments

Departments	Number of respondents
Crop Production Department	135
Animal Production Department	121
Agricultural Economics and Extension Department	146
Total	402

Source: Field Survey, 2019

Sample and sampling procedure

Sample is the set of people or items which constitute part of a given population sampling. Due to large size of the target population, the researchers used the Taro Yamani formula to arrive at the sample population of the study.

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

$$n = \frac{402}{1 + 402(0.05)^2}$$

$$= \frac{402}{1 + 402(0.0025)}$$

$$= \frac{402}{1 + 1.005} = 200.498$$

Instrument for data collection

The major research instrument that was used was the questionnaires. This was appropriately moderated. The questionnaire was administered to undergraduate students of each department to complete, with or without disclosing their identities. The questionnaire was designed to obtain sufficient and relevant information from the respondents. The primary data contained information extracted from the questionnaire in which the respondents were required to give specific answers to questions by ticking in front of an appropriate answer. The questionnaire contained about 18 structured questions which were divided into sections A and B.

Validation of the research instrument

The questionnaire used as the research instrument was subjected to face validation. This research instrument (questionnaire) was adequately checked and validated by the supervisor, his contributions and corrections were included into the final draft of the research instrument that was used.

Method of data analysis

The data collected was not be an end in itself but serves as a means to an end. The end being the use of the required data to understand the various situations it in view of making valuable recommendations and

contributions. To this end, the data collected had to be analyzed for any meaningful interpretation to come out with some results. It is for this reason that the following methods were adopted in the research project for the analysis of the data collected. For a comprehensive analysis of data collected, emphasis was laid on the use of absolute numbers, frequencies of responses and percentages. Information was sorted, coded and input into the Statistical Package for Social Sciences (SPSS) for production of Graphs, Tables, Descriptive Statistics and Inferential Statistics. This study used Pearson product moment correlation statistics at 0.5 significance level to test the statistical significance of the various independent variables on the chosen dependent variables.

PRESENTATION OF DATA

The result obtained is presented in a table showing the class of response and contingency table from where the final result was composed. After the analysis and of data collected, the responses to each question were taken for brief analysis and possible interpretation. Most of the responses are presented tabular form.

200 questionnaires were administered to undergraduate students of faculty of Agriculture in the University of Jos and out of the 200 questionnaires administered, 153 respondents filled and answered their questionnaires while 47 were unable to fill and return their questionnaires.

Table 1: Descriptive of respondents

Gender	No. of Respondents	Percentage (%)
Male	84	54.8
Female	69	45.2
Total	153	100
Level		
100	20	13
200	26	17
300	29	19
400	35	23
500	43	28
Total	153	100

Source: Field Survey (2020)

Research Question 1: What is the students' level of use of electronic information resources for academic activities at the faculty of Agriculture, University of Jos?

Table 2: What is the students' level of use of electronic information resources for academic activities at the faculty of agriculture, university of Jos?

S/N	Students level of use of electronic information resources for academic activities	Mean(X)	SD	Remarks
1	I use the electronic resources in the library	3.50	0.83	Agreed
2	I have access to electronic resources in the library	3.28	1.07	Agreed
3	The electronic resources at the library has proven to be of great help	3.36	0.75	Agreed
4	I use electronic resources at the library mostly for my academic activities	3.40	0.76	Agreed
Grand Mean		3.37	0.85	Agreed

Source: Field Survey (2020)

Table 2 shows the Students level of use of electronic information resources for academic activities. Items 1-4 yielded the means 3.50, 3.28, 3.36, and 3.40. Since 3.37 is above the criterion mean, it can be concluded that Electronic information resources is used for academic activities by undergraduates at the faculty of Agriculture, University of Jos.

Research Question 2: What is the level of computer proficiency of undergraduate students of faculty of agriculture, university of Jos?

Table 3: What is the level of computer proficiency of undergraduate students of faculty of agriculture, university of Jos?

S/N	Level of computer proficiency of undergraduate students of faculty of agriculture, university of Jos	Mean(X)	SD	Remarks
5	I have basic computer knowledge	2.99	1.17	Agreed
6	I don't need computer knowledge to access electronic resources at the library	3.55	0.65	Agreed
7	I have trained on how to access electronic resources	3.11	0.93	Agreed
8	Inadequate computer in the library	3.31	0.82	Agreed
Grand Mean		3.24	0.89	Agreed

Source: Field Survey (2020)

Table 3 shows the Level of computer proficiency of undergraduate students of faculty of Agriculture, University of Jos. Item 5-8 yielded the means 2.99, 3.55, 3.11, and 3.31. Since 3.24 is above the criterion mean of 3.00, computer proficiency of undergraduate students of Faculty of Agriculture, University of Jos is high.

Research Question 3: What is the location of student's access to electronic information resources for academic activities?

Table 4: What is the location of student's access to electronic information resources for academic activities?

S/N	Location of student's access to electronic information resources for academic activities	Mean(X)	SD	Remarks
9	I don't need to be inside the library to access electronic information from the library	3.33	0.81	Agreed
10	Wi-fi is always available at the library for use by students	3.39	0.89	Agreed
11	The wi-fi connection is always accessible to students	3.15	0.79	Agreed
12	I can't access the through my phone	3.20	0.85	Agreed
Grand Mean		3.27	0.84	Agreed

Source: Field Survey (2020)

Table 4 shows Location of student's access to electronic information resources for academic activities. Item 9-12 yielded the mean 3.33, 3.39, 3.15, and 3.20. Since 3.27 is above the criterion mean 3.00, location does not really have effect on student's access to electronic information resources for academic activities.

Research Question 4: What are the students' constraints in accessing and using electronic information resources for academic activities?

Table 5: What are the students' constraints in accessing and using electronic information resources for academic activities?

S/N	Students' constraints in accessing and using electronic information resources for academic activities	Mean(X)	SD	Remarks
13	Poor internet connectivity	3.23	0.96	Agreed
14	Epileptic power supply	3.80	0.52	Agreed
15	Lack of information on how to use e-resources	3.30	2.02	Agreed
16	Inadequate number of computers to access digital information resources in my library	3.42	0.80	Agreed
Grand Mean		3.42	1.06	Agreed

Source: Field Survey (2020)

Table 5 shows students constraints' in accessing and using electronic information. Item 13-16 yielded the means 3.23, 3.80, 3.30, and 3.42. Since 3.42 is above the criterion mean 3.00, there are constraints in accessing and using electronic information resources for academic activities by the students of faculty of agriculture of university of Jos.

TESTING OF THE HYPOTHESIS

Ho1: there is no significant relationship between students' level of use of electronic information resources and academic activities at the faculty of Agriculture, University of Jos.

Table 6: Relationship between students' level of use of electronic information resources and academic activities at the faculty of agriculture, university of Jos.

Variables	N	Mean	SD	DF	P-value	r -cal	r-cri	Remarks
Electronic Information Resources	97	13.54	6.42	278	0.001	0.7180	0.195	Significant
Academic activities	97	13.48	6.83					

$P < 0.05$; not significant at 0.05 level of significance

Table 6 shows that the calculated r-value of 0.718 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that the students' level of use of electronic information resources has a significant effect on academic activities at the faculty of Agriculture, University of Jos

Ho2: there is no significant relationship between computer proficiency and academic activities

Table 7: Relationship between computer proficiency and academic activities

Variables	N	Mean	SD	DF	P-value	r -cal	r-cri	Remarks
School environment	97	12.96	6.42	278	0.001	0.829	0.195	Significant
Academic performance	97	13.29	6.83					

$P < 0.05$; not significant at 0.05 level of significance

Table 7 shows that the calculated r-value of 0.829 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that the level of computer proficiency of undergraduate students of faculty of agriculture, university of Jos determines the level of academic resources they will be able to access through electronic resources.

Ho3: there is no significant relationship between location of student and access to electronic information resources

Table 8: Relationship between location of student and access to electronic information resources

Variables	N	Mean	SD	DF	P-value	r -cal	r-cri	Remarks
School environment	97	13.07	6.42	278	0.001	0.861	0.195	Significant
Academic performance	97	13.21	6.83					

$P < 0.05$; not significant at 0.05 level of significance

Table 8 shows that the calculated r-value of 0.861 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that the location of student does not really affect the students' accessibility to electronic resources for academic activities.

Objectives 4: To determine students' constraints in accessing and using electronic information resources for academic activities.

Ho4: there is no significant relationship between student constraints in accessing electronic information and academic activities

Table 9: Relationship between student constraints in accessing electronic information and academic activities

Variables	N	Mean	SD	DF	P-value	r-cal	r-cri	Remarks
School environment	97	13.75	6.42	278	0.001	0.541	0.195	Significant
Academic performance	97	13.51	6.83					

P<0.05; not significant at 0.05 level of significance

Table 9 shows that the calculated r-value of 0.541 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that the students have constraints to accessing electronic information and this can reduce academic activities of the students.

DISCUSSION OF MAJOR FINDINGS

The first objective of this study is to ascertain students' level of use of electronic information resources for academic activities at the faculty of agriculture, university of Jos. Table 2 indicates that students' level of use of electronic information resources for academic activities at the faculty of agriculture, university of Jos. Findings revealed that the students use the electronic resources in the library; have access to electronic resources in the library; electronic resources at the library has proven to be of great help; use electronic resources at the library mostly for my academic activities. This finding therefore, shows that a large proportion of the respondents made use of the electronic resources mostly for research, assignment, current awareness, information acquisition, and e-mail and news acquisition it also revealed that the respondents even though were aware of the different types of electronic information resources available in the university; their use rate of these resources is low. This is in line with the findings of Kaaur (2005), who stated that the user awareness is prerequisites to efficient and effective use of e-resources. therefore, when users of a library are exposed to information resources available in a particular library, they stand a better chance and are also more motivated to utilize them judiciously to satisfy their information needs.

The second objective of this study is to assess the level of computer proficiency of undergraduate students of faculty of Agriculture, University of Jos. Table 3 shows the Level of computer proficiency of undergraduate students of faculty of agriculture, university of Jos. Item 5-8 yielded the mean 2.99, 3.55, 3.11, and 3.31. This is an indication that undergraduates' students of the faculty have good level of computer proficiency. This is in line with findings of Tella and Mutula (2008) who admitted that most students today are computer literate due to high number of cyber café available on our streets today. Hence, the students may have acquired their computer skills through the cyber café.

The third objective of this study was to find out the location of students access to electronic information resources for academic activities. Table 4 shows

Location of student's access to electronic information resources for academic activities. Also, it was discovered that most undergraduate students of the faculty access electronic information resources only at the faculty or other faculties that have Wifi connection and are accessible. This could be because the library computer lab is not too large to accommodate all the students on campus, hence the students prefer to use other places they can find network access. This finding is in line with Gbaje (2017) and Nwokedi, Nwokedi, Chollom, & Adah, (2017) who asserted that undergraduate students often look for where they can easily gain access to the computer network with little or no struggle.

The fourth objective of this study was to determine students' constraints in accessing and using electronic information resources for academic activities. Findings revealed that various factors that militate against effective utilization of electronic resources by undergraduate students of the Faculty of Agriculture were discovered during the course of the study. Among the factors are: large mass of irrelevant information, the need to filter the results from search, download delay, failure to find information, inadequate or lack of search skills, high cost of access, inaccessibility of some electronic resources, difficulties in navigating through electronic resource etc. In consonance with this findings was a study by Obaseki (2010) who found out that the absence of basic infrastructure like constant electricity necessary for ICT growth, lack of facilitation for network resources sharing, inadequate professionals with requisite ICT skills and above all, inadequate fund to support development in their direction were impediment to the use of electronic resources.

The analyses of the hypotheses

Table 6 shows that the calculated r-value of 0.718 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that the students' level of use of electronic information resources has a significant effect on

academic activities at the faculty of Agriculture, University of Jos. This finding is in line with the work of Gbaje (2007), who submitted that the students' use of electronic resources has a significant effect on their academic performance.

Table 7 shows that the calculated r-value of 0.829 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that there is a positive relationship between computer proficiency and academic activities. This finding is in line with the work of Obaseki (2010), who pointed out that computer proficiency is directly promotional to the academic activities of undergraduates.

Table 8 shows that the calculated r-value of 0.861 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that the location of student does not really affect the students' accessibility to electronic resources for academic activities. This observation corroborates with the findings of Ukoha (2005), who asserted that with new technologies, distance learning has been boosted and students at times do not need to be in the library to use its resources.

Table 9 shows the relationship between student constraints in accessing electronic information and academic activities. This shows that the calculated r-value of 0.541 is greater than the r-critical value of 0.195 at degree of freedom of 278 and 0.05 level of significance. This implies that the students have constraints to accessing electronic information and this can reduce academic activities of the students. This finding is in line with the submission of Igun (2005), who claimed that there are many obstacles to accessibility of electronic resources by undergraduates. Among the obstacles are: poor electricity supply; low internet bandwidth and lack of adequate computers, just to mention but few.

CONCLUSION

Based on the findings of this study, the researcher concluded that the use of electronic resources had tremendous impact on the academic activities of the undergraduate students of faculty of Agriculture at the University Jos, however, there was need for them to acquire more skills in the use of electronic resources. The students used e-resources for completing their class assignments, to get course related materials and to update knowledge. Lack of skills, difficulty in finding relevant information, lack of time and frequent power outage were the major factors militating against effective use of electronic resources. Furthermore, results of this study confirmed that majority of students didn't get any training related to electronic resources but they are willing to get trained. Some of them are eager to get trained for

some specific contents like to enhance their searching skills and for using electronic resources in a better way.

RECOMMENDATIONS

In the light of the findings and conclusion of the study the following recommendation are made:

There should be more awareness programs by the University to market the different types of electronic resources available in the university. The library should put in place strategies that will promote and, monitor on a regular basis the use of electronic resources by members of the university community.

The university and the library should make effort to organize more in depth training for effective use of electronic resources by students. Though, information about the library electronic resources is presently included in the use of library which is a compulsory course for all students, however, the teaching needs to be made more practical. The course should not only focus on how students should locate electronic resources, but should also include how they can use electronic resources to attain their academic goals.

The university lecturers should be involved in creating an awareness of the importance of electronic resources to their learning. That they should encourage the students to use electronic resources by giving those assignments that will compel them to use electronic resources in the library or within the school premises.

This study has shown high level of acceptance of electronic resources by undergraduates in the faculty of Agriculture, University Jos. The University management should as a matter of importance acquire, subscribe and create access to more electronic resources.

The management of the library should acquire generators to power the ICT facilities in case of power failure.

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