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**Awareness and Perceived Availability as Correlate of Electronic Resources Usage in
Academic Libraries in Kwara State**

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ABSTRACT

Objective- This study investigated the awareness and perceived availability as correlate of electronic resources usage in academic libraries in Kwara State.

Method- The study employed survey research method. A sample size of 377 was drawn from a population of 17,336 students. A self-designed and validated questionnaire was used with a reliability co-efficient of $r=0.76$ using split-half method. Both descriptive and inferential statistic were used to analyze the data.

Result- Among others it was found that a significant relationship exists between awareness and use and perceived availability and use of EIR. Most student were aware and use e-resources in the following order: Internet, e-journals and e-books. E-databases available in the libraries are not popular and underutilized by the students. Students uses EIR for assignment, research/project work, preparation for examination, compliment lecture notes and personal development. Some of the challenges hindering use are electricity interruption, insufficient ICT skills, slow internet connectivity, difficulty in accessing e-resources off-campus. Recommendation were made based on the findings.

Introduction

A library as a social institution that serves as a store house and repository of knowledge, preserving and providing access to a variety of information and information sources. This is the reason why Onohwakpor (2006) described library as a store of knowledge, indispensable to the success of any functional education. Therefore, libraries are indispensable in the achievement of functional education in any Nation. In academic environment, academic libraries occupy prominent positions in the facilitation of university education. Khan and Bhatti (2012) noted that academic institutions such as university could not achieve their mission of spreading knowledge and extending its research progress without first enriching and enhancing library resources and services. Library resources and services should be sufficient in quality, quantity and diversity to effectively support the information needs of the users (Olajide & Fabunmi, 2011).

In recent years, libraries all over the globe, have witnessed a great transformation both in the collection and service, the convergence of Information and Communication Technologies (ICT) have impacted enormously on the quality of collection and services provided by libraries. ICT and advances in computer applications during the past few decades have brought enormous changes in the way information is accessed, gathered, organized, stored, retrieved and communicated. ICT consists of the hardware, software, networks, telecommunication lines and media for accepting, processing, storing, producing, disseminating and communicating information. With the application of ICT to the library operations, the amount of electronic information resources available in academic libraries and the diversity of tools to locate and access this information have increased tremendously and with the internet playing a prominent role in the wide availability and use of electronic resources (Olle & Borrego, 2010). Over the years, electronic information resources have become more popular for meeting the instant desire of users, having quick access to information and efficient retrieval facilities through the internet. Therefore, libraries no longer refer to the physical buildings located in a specific geographical location but also to electronic or virtual libraries that can be accessed from anywhere.

The concept of electronic information is described as computer technology media in which information is retrieved. Electronic resources are easily accessible in remote areas and solve storage problems and control the flow of information. Anunobi and Okoye (2008) affirmed that, academic libraries in Nigeria acquire and disseminate electronic databases to their library users through consortium and independent subscription. The Consortium of Nigerian University Libraries (NULIB) has subscribed to EBSCOHOST. Other online databases that can be subscribed to include Access to Global Online Research in Agriculture (AGORA), Health InterNetwork Access to Research Initiatives (HINARI), Online Access to Research in the Environment (OARE), Database of African Theses and Dissertation (DATAD), MEDLINE and many more. Thus, to make effective use of these electronic information resources, one must be versatile in the usage of computer and available search engines. Ojedokun (2007) also identifies some examples of electronic information resources such as Online Proprietary databases, electronic books and journals, Compact Disk – Read Only Memory (CD-ROM), internet and the World Wide Web (WWW) among others. Electronic resources also include e-books, e-journals, e-databases, newspapers, dictionaries, encyclopedias, theses/dissertations.

The acquisition and availability of electronic resources in academic libraries do not necessarily translate to effective usage of the resources. There are variables that may influence the effective utilization of electronic resources by students, awareness of electronic resources and perceived availability seems to be among the variables that would influence the effective utilization of electronic resources in an academic library. According to Akpojotor (2016),

awareness referred to as knowledge or perception of a situation, fact, consciousness, recognition, realization, grasp and acknowledgement concern about and well-informed interest or familiarity in a situation or development. It can be said that awareness of resources is almost tantamount to demand or use of the resources. On the other hand, availability has been defined by Oxford Dictionary as the quality of being able to be obtained or used. This definition means that, for electronic resources to be perceived by the users as being available, it has to be accessible and usable to its users. Therefore, perceived availability of electronic resources refers to how the users view electronic resources in terms of usability upon demand and for the desired purpose. Therefore, it is against this background that the study is designed to examine the correlation between awareness, perceived availability and usage of electronic resources in academic libraries in Kwara State.

Statement of the Problem

The benefit attributed to use of ICT for library operations has prompted its adoption in most academic libraries. Academic libraries in Nigeria, like their counterpart of the globe have invested enormous fund in the acquisition of different types of electronic information resources coupled with provision of the ICT facilities necessary to access the resources. However, studies conducted by Okiki and Asiru (2011); Jonathan and Udo (2013); and Aina (2014) have shown that students have failed to maximize the benefit of electronic resources provided by academic libraries. Also, preliminary investigations by the researcher suggests that electronic resources particularly electronic databases are under-utilized by undergraduate students. To achieve return on investment, there is need for greater utilization of electronic resources, particularly by undergraduate students who constitute a significant fraction of the university community. In addition, it is important for university students to access and use e-resources in this information age with a view to enabling them to compete favourably in global market. Most importantly, to the best knowledge of the researchers no study has been conducted on the awareness and perceived availability as correlate of electronic information resources usage among undergraduate students in Kwara State. It is against this backdrop that this study attempt to determine the level of awareness, perceived availability and the usage of e-resources in academic libraries in Kwara State.

Research Questions

This study aims to answer the following research questions below:

- i. What are the levels of awareness of electronic resources by undergraduates in University of Ilorin and Kwara State University?
- ii. What are the levels of perceived availability of electronic resources by undergraduates in University of Ilorin and Kwara State University?
- iii. What is the frequency of use of electronic resources by undergraduates in University of Ilorin and Kwara State University?
- iv. What are the purpose of use of electronic resources by the undergraduate students in the University of Ilorin and Kwara State University;

- v. What are challenges hindering the use of electronic resources by undergraduates in University of Ilorin and Kwara State University;

Hypotheses

- H₀₁ There is no significant relationship between awareness of electronic resources and the use of electronic resources among undergraduate students in University of Ilorin and Kwara State University.
- H₀₂ There is no significant relationship between availability of electronic resources and the use of electronic resources among undergraduate students in University of Ilorin and Kwara State University growth

Literature Review

Many researchers (Abinew & Vuda, 2013; Aina, 2014; Okiki, 2012; Tyagi, 2011), have investigated use of e-resources. For example Abinew and Vuda (2013) studied the acceptance and use of electronic library services in Universities in Ethiopia. They found that majority of the respondents were only aware of the existence of the e-library services to some extent while 20.65 % do not know anything about the existence of the e-library services. Tyagi (2011) examine the use and awareness of electronic information sources at IIT Roorkee, India. The researcher used questionnaire-based, observations and informal interviews to gathered data for the study. Respondents include 37 faculty members, 63 research scholars, 71 post graduate students and 112 undergraduate students. The response shows that 100% of faculty members and research scholars were aware of the library's E-resources/services while 97.18% of post graduates were aware. Nevertheless, majority of the undergraduate students were not aware of the e- information resources. The study also revealed that most users are aware of the availability of online journals through the library, and they can make maximum use of it for various purposes. Aina (2014) investigated awareness, accessibility and use of electronic databases among academic staff of Babcock University The researcher found that about seven in ten (69.4%) of the faculty members were aware of Academic Journal, more than half (56.5%), (54.1%) and (50.6%) of respondents were aware of JSTOR, Dissertation and Theses and EBSCOHOST respectively. However, majority of the respondents were not aware of Bookboon, World Bank Open Knowledge Repository and National Virtual Library.

Umme and Salma (2012) studied the use of electronic resources and its impact in Dhaka university library. They noted that majority of users find web search engines easy to use and therefore mostly used to access electronic resources, respondents also indicates e-journals and e-books as the most used electronic sources. The study also identified limited number of titles, limited access to computers, slow download speed, difficulty in finding relevant information, limited access to back issues as some of the challenges encountered in the use of electronic resources. Okiki (2012) conducted a study on awareness, attitude and use of EIR by the academic staff of University of Lagos, Nigeria. The researcher found that 55% of academic staff were not aware of the e-resources. However, the academic staff that uses the resources for research activity,

Paper writing for publication, and teaching. Ibrahim's (2014) confirms high level of unavailability of library and information science (LIS) collections in most Nigerian university libraries, which had a negative effect on the use of IR in the libraries studied.

Adeniji, Babalola and Ajayi (2015), examined the awareness and utilization of electronic resources by Librarians of Olabisi Onabanjo University, Nigeria. The study revealed that internet facilities, e-journals, e-books, OPAC, CD-ROM are commonly available for use in the library and that librarians' use ER regularly for daily routine and research work, article search, LC online catalogue and OPAC largely for in-house official duty. Jonathan and Udo (2015), studied the categories, availability and awareness of EIR by postgraduate student library users in South East Nigerian federal universities, the study confirmed availability of e-journals, e-books, etc., through the digital library for academic staff's and research student's use. They attributed the finding to the universities policy to drive all their activities with information and communication facilities.

A research conducted by Tiemo (2016) on availability of electronic information resource Databases in University Libraries in South- South Nigeria. He noted that there are more open access than fee-based EIR databases in the federal and state university libraries in South-South, Nigeria. A study conducted by Bhukuvhani, Chiparausha and Zuvalinyenga (2012) revealed that 86.7% of the respondents indicated that they used at least one or more electronic information resources to find information for use for their teaching and/or research.

Methodology

This study adopted descriptive research design. The population of this study comprises of undergraduate students of four faculties (Agricultural Sciences, Sciences, Engineering Technology and Communication and Information Sciences) in the University of Ilorin and four colleges (Agricultural Sciences, Sciences, Engineering and Technology and Information and Communication Technology) in the Kwara State University. These four faculties/colleges were selected because the two institutions understudy has these faculties/colleges in common. As at 2016/2017 academic session, the records obtained from the academic planning unit of the University of Ilorin and Kwara State shows that the total number of undergraduate students in the selected faculties 15,011 and 2,325 respectively given a total of 17,336. Out of this, the study use proportional purposive sampling technique to select 326 and 51 in University of Ilorin and Kwara State University respectively given a total of 377. A questionnaire titled "Awareness and Perceived Availability as Correlate of Electronic Resources Usage in Academic Libraries in Kwara State" was used to for data collection. The instrument was validated using face and content validity by giving three copies of the questionnaire to three research experts in the Department of Library and Information Science, with a reliability co-efficient of $r=0.76$ using split-half method. The researchers administered a total of 377 out of which 346 were retrieved and found valid for analysis. This gives a response rate of 91.8%.

Data Analysis

Demographic Information of the Respondents

Table 1 shows that gender distribution is skewed in favour of male n= 181 (52.3%) while female constitutes less than half n= 165 (47.7%). This implies more male than female participated in this research, which indicates that more males than females' participated in this study. The results revealed that more than half (52.3%) of the respondents are between ages of 21-25, over a quarter (27.7%) are between the ages of 16-20. Table shows that more than one-third (34.1%) of the respondents were in 300 level, this is followed by 200 level with 30.3%. Nevertheless 500 level students constitute the least 2.6% of the respondents. Overall faculties/colleges distribution of the respondents' shows that distribution is not even, but disparities is small particularly between Life Sciences/ Pure and Applied Sciences (28.9%) and CIS/CIT (27.5%). Nonetheless, Agricultural Sciences constitute the least (19.1%) represented faculty/college in this study.

Table 1: Demographic Information of the Respondents

Gender	Frequency	Percent (%)
Male	181	52.3
Female	165	47.7
Total	346	100
Age		
16-20	96	27.7
21-25	181	52.3
26-30	60	17.3
30 above	9	2.6
Total	346	100
Level of Study		
100	63	18.2
200	105	30.3
300	118	34.1
400	51	14.7
500	9	2.6
Total	346	100

Faculties/Colleges		
Agricultural Sciences	66	19.1
CIS/CIT	95	27.5
Engineering Technology	85	24.6
Life Sciences/Pure and Applied Sciences	100	28.9
Total	346	100

Research Question 1: What is the level of awareness of electronic resources by undergraduate students in University of Ilorin and Kwara State University?

Table 2: Levels of awareness of electronic resources

E-Resources	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
Internet	73.5	23.6	2.6	0.3
E-books	53.8	28.0	12.1	6.1
E-journals	52.6	28.6	12.1	6.7
EMERALD	21.1	25.7	22.5	30.6
HINARI	24.3	20.2	21.7	33.8
AGORA	25.9	20.0	20.3	33.8
SCIENCE				
DIRECT	22.4	20.7	23.1	33.7
DOAJ	15.0	15.9	28.9	40.2
TEEAL	15.3	16.5	32.9	35.3
JSTOR	15.3	22.8	26.3	35.5
EBSCOHOST	15.5	17.2	32.3	35.0
OARE	14.4	17.3	35.8	32.4

Strongly Agree + Agree = Agree, Disagree + Strongly Disagree = Disagree

Table 2 shows the respondents' level of agreement/disagreement with awareness of electronic resources. 97.1% of the respondents is aware of the Internet followed by e-books with 81.8% and e-journals with 81.2%. On the other hand, 70.2% were not aware of TEEAL database. This result suggests low level of awareness of electronic information databases in the academic libraries in Kwara State.

Research Question 2: What is the level of perceived availability of electronic resources by undergraduates in University of Ilorin and Kwara State University?

Table 3: Perceived availability of electronic resources

E-resources	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
Internet	57.8	35.8	5.8	0.6
E-books	55.5	25.7	14.2	4.6
E-journals	52.7	23.6	16.5	7.2
EMERALD	19.7	27.0	20.7	32.7
HINARI	12.7	29.2	37.9	20.2
AGORA	12.9	28.0	35.9	23.1
SCIENCE				
DIRECT	17.1	25.5	33.3	24.1
DOAJ	3.5	23.1	46.3	27.1
TEEAL	2.6	24.3	48.0	25.1
JSTOR	6.8	24.3	42.4	26.6
EBSCOHOST	4.6	24.9	46.2	24.3
OARE	3.8	23.1	48.6	24.6

Table 3 shows the level of perceived availability of electronic resources by undergraduate students, 93.6% perceived internet to be available only 2.9% perceived internet as unavailable. 80.2% and 76.3% indicated that e-books and e-journals were available respectively, while between 53% -73% of respondents perceived the various e-database as unavailable.

Research Question 3: What is the frequency of use of electronic resources by undergraduates in University of Ilorin and Kwara State University?

Table 4: Frequency of use of e-resources

E-resources	Daily (%)	Twice a week (%)	Occasionally (%)	Not at all (%)
Internet	82.1	8.2	3.9	5.8
E-books	30.0	12.5	48.8	8.7
E-journals	31.4	6.8	46.7	15.1
EMERALD	19.9	15.6	12.3	52.1
HINARI	10.7	8.0	21.4	59.1
AGORA	11.2	7.8	20.1	60.9
SCIENCE	4.0	7.2	16.2	72.5
DIRECT				
DOAJ	4.6	3.2	12.1	80.1
TEEAL	2.3	4.3	9.0	84.4
JSTOR	2.0	2.6	20.5	74.9
EBSCOHOST	4.6	3.2	8.1	84.2
OARE	1.2	1.5	8.0	89.3

Table 4 shows the undergraduate frequency of use of electronic resources. Internet records the highest frequency of use with daily use of 82.1%. The table also shows daily use of e-books and e-journals at 30.0% and 31.4% respectively. Electronic databases like EMERALD, HINARI, AGORA, SCIENCE DIRECT, DOAJ, TEEAL, JSTOR, EBSCOHOST, OARE with daily

frequency of use between 1-20% and 50-90% of respondents don't make use of electronic resources at all.

Research Question 4: What are the purpose for which undergraduates make use of electronic resources in University of Ilorin and Kwara State University?

Table 5: Purpose of use of e-resources

Purpose	Frequency	Percentage (%)
Assignment	332	96.0
Compliment class note	304	87.9
Research	323	93.4
Personal development	304	87.9
Exam preparation	322	93.1

Table 5 shows the purpose of use of electronic resources. Overall the Table shows substantial number of the respondents make use e-resources for all academic activities. Specifically the table reveals that more (96.0%) of the respondents, than any other activity, uses e-resources for class assignment. It can be said that the results is impressive because majority of the respondents have embraced e-resources for their activities which is in line with global trend.

Research Question 5: What are challenges hindering the use of electronic resources by undergraduates in University of Ilorin and Kwara State University?

Table 6: Challenges in the use of e-resources

Challenges	Frequency	Percentage (%)
Inadequate e-resources	115	33.2
Electricity interruption	265	76.6
Inadequate computer system	113	32.7
Insufficient ICT skills	103	29.8
Inadequate seating space in e-library	116	33.5
Slow connectivity	245	70.8
Outdated e-resources	84	24.3
Difficulty in accessing e-resources off-campus	152	43.9

Table 6 shows that electricity interruption is a major challenge as indicated by over three-quarter (76.6%) of the respondents. Slow internet connectivity is another challenge indicated by a large

(70.8%) of the respondents. Insufficient ICT skills and outdated e-resources constitute less than 30% respectively.

Testing of Hypotheses

H₀₁: There is no significant relationship between the level of awareness and use of electronic resources among the undergraduate students in University of Ilorin and Kwara State University.

Table 7: Relationship between Awareness of E-resources and Usage of E-resources

Variable	Mean	SD	N	Df	R-cal	P-value	Remark
Awareness of Available E-resources	28.004	8.199	346	344	.316	.000**	Sig...
Usage of E-resources	18.908	6.041					

** Correlation is significant at 0.01 level (2-tailed)

Table 7 shows the summary of test for H₀₁. The table shows that a significant relationship exists between awareness of e-resources and the usage of the e-resources. This is confirmed in the table where r-cal= 0.316; df = 344 and P = 0.000 which is less than the level of significant (0.05). Therefore, the null hypothesis is rejected.

H₀₂: There is no significant relationship between perceived availability and use of electronic resources among the undergraduate students in University of Ilorin and Kwara State University.

Table 8: Relationship between Perceived Availability of E-resources and Usage of E-resources

Variable	Mean	SD	N	Df	R-cal	P-value	Remark
Availability of E-resources	26.829	9.139	346	344	.282	.000**	Sig...
Usage of E-resources	18.908	6.041					

** Correlation is significant at 0.01 level (2-tailed)

Table 8 shows the summary H₀₂. The Table shows that a significant relationship exists between the availability of e-resources and usage of the e-resources. Showing r-cal= 0.282; df = 344 and P = 0.000 which is less than the level of significant (0.05). Therefore, the null hypothesis is rejected.

Discussion of Findings

This study examined awareness and perceived availability as correlate of electronic resources usage in University of Ilorin and Kwara State University. It was discovered that the students that took part in the study were aware of the availability of internet services, this may be attributed to free access to the Internet on the campuses. Finding also reveals that a good number of the students

is aware of the availability of e-books and e-journals. However, awareness of electronic database is low. This is in line with the finding of Edem and Egbe (2016) who reported that awareness of electronic resources was low among the University of Calabar students. On the other hand perceived availability of electronic resources were found to be high among the undergraduate students. This finding corroborates Nwabueze and Urhiewhu (2015) study on availability and use of digital information resources by undergraduates of universities in Delta and Edo states, Nigeria. The study found that perceived availability of e-databases subscribed to in the schools is low amongst the undergraduate students.

This study found the Internet as the most frequently used e-resources among the undergraduate students. Similar finding was reported by Bassi and Camble (2011). They found that the Internet is the most highly used e- resource. The use of e-databases were generally found to be very low among the undergraduate students in this study. This is not surprising considering that most of the student were not aware of the databases. Concerning the purpose of use, this study found that the highest number of the students uses e-resources for assignments, research, preparation for examination, reading notes and personal development in order of importance. This agrees with the study of Daramola (2016) that majority of undergraduate student in Federal University of Technology, Akure utilize e-resources for the purpose of assignments and research. The challenges that hindered use of e-resources among the undergraduate students includes electricity interruption, slow connectivity, others are difficulty in accessing e-resources off-campus, inadequate computer system, inadequate seating space in the e-library, inadequate e-resources. The hypotheses of this study show that there is a significant relationship between awareness of electronic resources and their usage and there is also a significant relationship between perceived availability of electronic resources and usage. Therefore, the null hypotheses are rejected. This conforms to the study of Egberongbe (2011) who disclosed that unfamiliarity with electronic information resources is a major reason that discourages students from accessing and using electronic resources in the University of Lagos library.

Conclusions and Recommendations

It can be concluded from the findings of the study that undergraduate students in the two universities are aware of most of the e-resources available in the libraries. However, the level of perceived availability is not in consonant with the level of awareness. Internet resources are the most used e-resources by the undergraduate students followed by e-books and e-journals. Nevertheless, e-databases are the least used e-resources. Based on the conclusion of this study the following recommendation are offer with a view to promoting the use of e-databases among undergraduate students' in the two universities.

- i. Librarians should organize awareness program for the undergraduate students on the available e-databases.
- ii. The use of library program may be reviewed in such way that course content should incorporate information literacy skills and ICT skills
- iii. More computer terminals should be provided in the library to accommodate more students and subscribe to e-databases that have user friendly interface to facilitate ease of use of the resources by the undergraduate students.

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