

# User Perception of Electronic Resources in the University of Ilorin, Nigeria (UNILORIN)

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## ABSTRACT

This study examined the user perception of the electronic resources by the academic staff of the University of Ilorin. The sample consists of 250 academic staff selected from eight (8) out of the twelve (12) faculties that made up of the university. Data were collected through an electronic resources user perceptual survey (ERUPS). Responses were received from 225 (90%) academic staff of the eight faculties. Analysis revealed frequency of use of electronic resources was low. Reasons alluded to were lack of time because of the time required to focus on teaching; lack of awareness to electronic resources provided by the library; power outage, ineffective communication channels, slow network and inadequate searching skills. The study recommended adequate Information and Communication Technologies (ICT) training for all categories of academic staff and provision of adequate power supply.

**Keywords:** *User, Perception, Electronic resources, academic, library, communication channel, Information and Communication Technologies, University of Ilorin.*

## 1. INTRODUCTION

The electronic Library is committed to providing access to electronic and print resources to support the research and curricula as expressed in its mission statement: To provide world-class environment for learning, research and community service. To achieve that mission, the Library has effectively and consciously utilized IT applications leading to the rise of e- library within the entity of its conventional libraries.

Thus, library users are no longer obliged to visit the library at regular open hours to meet all their information needs. They may search the library online catalogue; use a subject guide or database to access a citation from the Internet or access a full text article from Web-based journals; they may browse an electronic journal; e-mail a reference question via the ask-a-librarian service or borrow an e-book all by remote access

### Unilorin-Wide ICT Network

After the 1996 implementation of the network in the University Library, networking activities would not be implemented again until 2002. This happened when the Academic Planning Unit networked all its computers- about 6 of them using the cheaper, much easier to install cat-5 cables. Other local area network (LAN's) were to follow in scattered cluster across the university including functional offices of the Bursary At about same time (2002), Internet service distribution across the university was made possible through the donation of a VISAT and bandwidth subscription for a year by the Education Trust Fund(ETF) to the then faculty of Health Sciences located at the mini-campus .With the VISAT in this location, transmitting signals to permanent site, some 30km away, meant implementing a wide area network(WAN) based

on wireless distribution system. Internet availability over the WAN was made possible by subscribing to the Internet Service Provider, Gilat Satcom in Israel, for an initial bandwidth of 1 megabyte/sec. The demand for bandwidth has grown constantly a more offices and computers connect to the network and more application are processed over the network. The present subscription is for 8 megabytes/sec. The University has used several ISP's in its quest for reliable and affordable bandwidth.

The University began a comprehensive project in 2008 to create a wireless network cloud on its campus and housing estates. The wireless cloud was meant to improve the reach of Internet access..A VISAT Ventures Management Committee has been responsible for the oversight of the VISAT Office which is responsible for managing the network infrastructure. As part of its commitment to deepening the teaching and research components of it mandate, the University of Ilorin is set to subscribe to the Germany Digital Library, online library facility that university will host on its network without any recourse to the internet. .The digital library will allow the University community to access over 250 academic and medical journals, over 30,000 e- books, 57 educational software programmes and 60 computer software applications. This will boost the availability of e-resources to faculty and students of the University of Ilorin, Nigeria.

## 2. OBJECTIVES OF THE STUDY

The major objective of this study was to examine users' perception of electronic resources at the University of Ilorin in light of the resources being spent. The specific-objectives of the study were to:

- appraise the frequency of e-resources use by academic staff of the university

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- examine the performance of library in satisfying academic staff information needs via e- resources
- identify barriers that hinder use of e-resources

#### Definition of Terms:

- E-resources are defined as those electronic information resources and services that users access electronically via a computing network from inside the library or remote to the library. (Shim et al. 2001)
- Use of e-resources is defined as searching, browsing, examining, and visiting an e-resource and/or service by a user.
- Satisfaction refers to the sense of being pleased with results.
- Ease of Use is referred to as the extent to which the e-resources is perceived to be user friendly. These include ease of navigation, training issue and feels of being in control.
- Barriers are impediments that obstruct users' access and/or use of e-resources and/or services.

The study intends to assess frequency of use, satisfaction with the use, and barriers to use of e-resources by UNILORIN academic staff as follows:

- E-resources include online databases, electronic (e-) journals, Electronic (e-) books, full text articles and Web sites.
- E-services include the online catalogue, electronic mail (Ask-a-Librarian), the online Inter-library Loan form, and online reference books (e.g. dictionaries, encyclopedias).

### 3. LITERATURE REVIEW

#### Background on University of Ilorin, Nigeria

Ilorin is the capital of Kwara State in the North central Nigeria and the gateway to the Northern and the Southern parts of Nigeria. The University of Ilorin is located in Ilorin, Kwara State, and is one of the seven third generation Universities established by the Federal government of Nigeria in August 1975. The University of Ilorin has grown from three faculties in 1976 to twelve faculties with over 60 academic departments today. And recently two new Faculties has been established (Faculty of Veterinary Medicine and Faculty of Pharmaceutical Sciences) The university is currently rated as the best(1<sup>st</sup>) university in Nigeria and 20<sup>th</sup> in Africa following the world university ranking released in January 2011. The university is striving to improve her e-learning capacity building. Part of these efforts is the donation of e-library by the management of United Bank of Africa (UBA) . Lots of resources and facilities have been put in place including 4 multipurpose building which housed about 1,500 computers with the internet connection.

A large number of research studies have been conducted on the use of electronic resources. Shuling (2007) analyzed the use of electronic resources in Shaanxi University of Science and Technology. The sample

consists of 909 respondents of all types of library users. The study found that nearly 80 percent of respondents knew little about electronic resources. Nearly half the respondents use both printed and electronic resources, followed by print periodicals.

Ali (2005) highlights the use of electronic information services (EIS) among the users of Indian Institute of Technology (IIT) library in Delhi, India. Data was collected from three hundred IIT library users. Results reveal that 95 percent of users have awareness about EIS provided by the library. Dadzie (2005) investigated the use of electronic resources by students and faculty of Asheshi University, Ghana, to determine the level of use, the type of information accessed and the effectiveness of the library's communication tools for information research and problems faced in using electronic resources. Results indicate that 85 percent of respondents used the Internet to access information, and that respondents mainly accessed information in the library by browsing the shelves. Rehman and Ramzy (2004) investigated the awareness and use of electronic information resources among health academics. Results show that libraries are extensively used for research needs, preparation of lectures, and for obtaining current knowledge. Lack of time is the main reason given for not using electronic resources (37 percent). Unfamiliarity with computerized searching comes next (22.6 percent). Palmer and Sandler (2003) found economics faculty to be the most enthusiastic users of electronic journals. On the other hand, faculty members in history, education and the arts have been slower to adopt electronic journals. Majid and Abazova (1999) explored the use of electronic information sources relevant to computer literacy among academic staff of the International Islamic University, Malaysia. Nearly all respondents considered themselves to have good or very good computer skill.

The literature of e-resources reports the following user-centred barriers to e-resources use: a lack of skills in how to use information sources, a lack of appropriate reward for electronic scholarly communication, a lack of consistent technical support and provision and a lack of time to be spent on searching for information (Macias-Chapula 1995; Borgman (1996; Tompsett and Alsop 1997 Ray and Day 1998). concludes that use of online e-resources and retrieval systems requires a basic knowledge of computing and searching skills. In a study related to the types and frequencies of references to online sources, Harter and Kim (1996) established that, the rate of e resources use was extremely low, only 1.9% and 0.2% respectively, for the e-journals out of the total articles examined. In a similar study (Tonta 1995) observed that out of a total of 97 articles, only two contained direct references to networked information sources. In a JSTOR survey, it was found that faculty members from humanities, economics and social sciences use online catalogues, full-text electronic journal databases and abstracting and indexing databases most frequently and they expect to use them more extensively in the future (Finholt and Brooks 1997). Studies of e-resources reveal

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differences in use. Faculty members and other professionals in the field of science, math and medicine were early adopters of electronic journals and other digital library resources and remain the heaviest and most enthusiastic users ( Voorbij 1999; Rowley 2001; Hiller 2002; Kidd 2002; Dillon and Hahn 2002). Based on the review of literature above, the study intends to assess frequency of use, satisfaction with the use and barriers to use of e-resources by academic staff of the University of Ilorin, Nigeria. To achieve this objective, the following research questions were developed to guide the study.

1. What is the frequency of the use of e-resources?
2. What are the lecturers' levels of satisfaction towards using e-resources?
3. What are the lecturers' perception of the impact of e-resources on their teaching and conducting research?
4. What are the problems lecturers' encounters in the use of e-resources?

#### 4. STATEMENT OF THE PROBLEM

The University of Ilorin Main Library witnessed remarkable changes in collections, services and access to resources since 1996. Computers and computer applications have been widely introduced, and an integrated library system has been installed. The United Bank of Africa (UBA) donated e-Library to the University in the year 2004 that was fully equipped with computers and necessary internet facilities to complement efforts of the main library, provides remote access to a remarkable wealth of e-resources. Among these are the following full text databases: Emerald, ScienceDirect, Academic Search Premier, Ebscohost, TEEEL, Oare Sciences, Hinari, Virtual library (NUC) etc., e-books collections, e-journals covering a variety of subjects, and major bibliographic databases like AGORA and MEDLARS. Besides these, there are collections of Internet resources indexed by subjects. Thus the University of Ilorin Library have experienced exceptional progress since the late 1996s from holding only traditional print materials to designing networked information. In fact, the dawn of a new era in library services and access to resources has risen in the UNILORIN in agreement with the worldwide information revolution in academia.

In a report on measuring the use of networked resources in American research libraries, issued by the Association of Research Libraries (ARL), it was stated that: *An ever-increasing portion of library collections dollars are [sic] committed to purchase of networked services. Yet relatively little is known about how these services are used, who uses them, and what the overall impact of these services is.* (Shim et al. 2001, 5).

The situation of e-resources use and measures in the UNILORIN Library is no exception. The UNILORIN Library had ongoing efforts to optimize the use of library resources. It had introduced various information programmes. Librarians and lecturers in the Department of Library and Information Science of the university conduct orientations for fresh students regularly including use of library classes at the beginning of session of every intake

and organize workshop for new staff (both academic and non-academic). There has been no study conducted to survey large number of academic staff so far, to measure the user perceptions of these e-resources in the UNILORIN Library and to evaluate factors that may influence the usage of these resources. Therefore, an investigation is considered necessary to examine the frequency of use of e-resources in the University of Ilorin and the barriers that control the effective use of these highly essential electronic- resources.

#### 5. METHODOLOGY

##### Research Design

To assess the frequency of use of, satisfaction with and barriers to the use of e-resources and services, a questionnaire instrument was designed based upon the *Questionnaire for Electronic Resources User Perception* (ERUP) along with Likert's Five-point Scale. The Statistical Package for the Social Sciences (SPSS) was used to analyze and manipulate the collected data. 225 respondents completed the 23-item questionnaire; it included questions on bio-data information, computer skills, frequency of use, satisfaction with e-resources, performance of the library in satisfying academic staff needs and barriers in use of e-resources

##### Population and Sample:

The target population of the study involves full-time academic staff of University of Ilorin, Nigeria. The targeted faculties were Agriculture, Art, Business & Social Sciences, Communication & Information Sciences, Education, Engineering & Technology, Law and Sciences. The Registry Department of the University of Ilorin was used to identify the population of this study. According to that source, the total population was 812 full-time academic staff as at 25/02/2011. A stratified random sample was drawn to represent not only the overall population but also the key faculties. A 25% sample was drawn from each faculty. 250 questionnaires were administered during a one day workshop on internationalization of University of Ilorin campus held at university auditorium on 24<sup>th</sup> February 2011. The total number of responses was 225, with a response rate of 90%. The questionnaire was self-administered.

**Instrument:** A self developed questionnaire tagged Electronic Resources User Perception Survey (ERUPS) was used for collection of data. The questionnaire, ERUP Survey was divided into two sections A and B. Section A required the participants' bio-data information while section B contained the items (this section B is further divided into five (5) parts).

Part1: Computer Knowledge-This part measured the respondents' computer knowledge. There are two items, where respondents were required to tick as applicable to them.

Part2: Frequency of use of e-resources-This part measure the frequency of use of e-resources in the library. There

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are three items, where respondents were required to tick as applicable to them.

Part 3: Satisfaction with e-resources-This part measured level of satisfaction with the use of e-resources in the library. There are three items, where respondents were required to tick as applicable to them.

Part 4: Performance of the library in satisfying users' information needs-This measured satisfactory level of the library to the users. There are three items. The response to the items in this part followed a five point's likert type ranging from Strongly Agree, Agree, Not Sure, Disagree and Strongly Disagree.

Part 5: Barriers in use of e-resources -This part measured the ease of electronic resources by the respondents. There are four items.

**Validity and Reliability:** The survey questionnaire was given to three experts in e-library for scrutiny. Based on the suggestions, comments and observations of these experts, some of the items were removed and substituted while other were modified. The fact that some items in the questionnaire were taken from the questionnaire used in the previous related studies in turn contributed to validity of the instrument. To ensure the reliability of the instrument, it was administered on twenty (20) lecturers on sabbatical who did not eventually take part in the study. Tests re-test reliability of two weeks interval was later conducted. The results obtained was subjected to a Cronbach alpha and the overall reliability of the questionnaire returned an  $r = 0.86$ . The reliability for each of the sub-parts in section B are as follows; Computer Knowledge  $r = 0.82$ , frequency of use of e-resources  $r = 0.87$ , satisfaction with e-resources  $r = 0.90$ , performance of library in satisfying users  $r = 0.84$  and ease of e-resources  $r = 0.85$ .

**Data Collection Procedure:** A 25% sample was drawn from all sampled faculties. 250 questionnaires were administered during a one day workshop on internationalization of University of Ilorin campus held at university auditorium on 24<sup>th</sup> February, 2011. The questionnaire was self-administered. Instructions were clearly read to the respondents and they were assured of the confidentiality of their response. Respondents were given 20 minutes to complete the questionnaire. Before administration, permission was sought from appropriate authority of the university. Informed consent of the respondents was also sought and the respondents were given opportunity to decide whether or not participate in the study. They were also assured of keeping their responses confidential. Completed questionnaires were collected immediately. Out of the 250 copies of questionnaire distributed, a total of 225 copies questionnaire were returned, properly filled and constituting 90% return rate. These were used for the data analysis on the study. (See table 1, for the sample distribution based on faculty).

**Data analysis:** Data collected from the questionnaire administration were coded and analyzed using statistical package for social sciences (SPSS). Descriptive statistics including mean, standard deviation, simple percentage and frequency count were performed. Qualitative data collected were analyzed thematically under each of the theme and variables focused in each of the research question.

## 6. RESULTS

### Respondents' profile

All 225 respondents were academic staff in the UNILORIN. Most respondents were male, 185 (82.2%) while female respondents were 40 (17.8%). The age of 84.7% of the respondents was less than 50 years. The academic rank of the respondents 42 (18.7%) were professors, 55 (24.4%) were senior lecturers and 45 (20.0%) were lecturer I. while 83 (36.9%) were lecturer II and Assistant-lecturers. The academic load for 47 (20.8%) of the respondents was between 4-9 hours, 88 (39.1%) of the respondents was between 10-12 hours a week, while 110 (48.9%) had a load of 13 or more hours a week. Respondents accessed the library's e-resources more from their offices (72.0%), from home (staff quarter's) (20.0%) and (8.0%) from cybercafé

**Table 1: Respondents Distribution by Faculties.**

Faculties	Frequency	Percentage (%)
Agriculture	32	14.2
Art	27	12.0
Business and Social Sciences	29	12.9
CIS	22	9.7
Education	33	14.7
Engineering and technology	25	11.1
Law	12	5.3
Sciences	45	20.0
Total	225	100.0

\*CIS=Communication and Information Sciences. N = 225

From table 1 above, it reveals that faculty of sciences had 45 (20.0%) of the respondents, Follow by faculty of education with 33(14.7%) respondents,32(14.2%) faculty of Agriculture,29 (12.9) from faculty of Art, 25 (11.1%) from Engineering and technology,22(9.7%) from faculty of CIS and faculty of law with12 (5.3%) had the least of the respondents

**Table2: Respondent's Qualifications by Faculties**

Faculties	Master	PhD	Total
Agriculture	13	19	32
Art	9	18	27
Business and Social Sciences	12	17	29
CIS	12	10	22

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Education	7	26	33
Engineering and Technology	14	11	25
Law	7	5	12
Sciences	9	36	45
Total	83	142	225

N=225

From the table 2 above, it reveals that 142 (63.1%) of the respondents held Ph.D.s and only 83 (36.9%) of the respondents held the Masters. 45 (20.0%), belong to the faculty of sciences, the largest faculty in the university with highest number of PhD holders (36). The remaining respondents were from the following faculty: 33 (14.7%) from Education, 32 (14.2%) from agriculture, 29 (12.9%) from Business and Social Sciences, 27 (12.0%) from art, 25 (11.1%) from Engineering and Technology, only 22 (9.7%) from CIS and at the least 12 (5.3%) from Law.

### Computer Knowledge

Computer skills and the attitudes of users towards computing are important factors towards use and non-use of e-resources cited in LIS literature (Borgman 1996; Tomsitt and Alsop 1997; Macias-Chapula 1995). Table 3 below clearly shown that academic staff of the university used Web browsers and Microsoft applications frequently ( $t = 4.49, p < 0.05$ ) and it reveals that they had positive attitudes towards the significance of computer literacy in the use of e-resources ( $t = 4.33, p < 0.05$ ). This explains that computer skills and computer literacy insignificantly influence the low use of e-resources in the UNILORIN. One can inferred that the high frequency of using Web and Microsoft software to the increased exposure of the UNILORIN community to the internet

**Table 3: One- Sample Test**

	Test value = 3		
	T	Mean	Sig (2-tailed)
Web browsers & micro-soft use	19.892	4.49	.000
Computer literacy	16.574	4.33	.000

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accordance with the university mission statement; to provide world-class environment for learning, research and community service.

**Table 4: Usage of e-resource**

Items	Frequency	Percentage (%)
I visit the library website	0	0
I search virtual library	125	55.6
I search the databases	57	25.3
I search the online catalogue	105	46.7
I use e-books	86	38.2
I browse e-journals	175	77.8
Access full text articles	111	49.3
Online reference works	138	61.3

N = 225

Table 4 shows that, the most used e-resources were e-journals with a frequency of 175 (77.8%) o online reference works with a frequency of 138 (61.3%) virtual library with a frequency of 55.6%), full-text articles at a frequency of 111 (49.3%), the online catalogue at a frequency of 105 (46.7%) , use of e-books at a frequency of 86 (38.2%) with less use reported for bibliographic databases with a frequency of 57 (25.3%) and library website is under construction.

Usage of e-resources

**Table 5: Descriptive Statistics**

Item	Mean
Frequency catalogue use	2.60
Frequency Bibliographic database use	1.68
Frequency e-journals use	2.82
Frequency e-books use	2.55
Frequency full text articles use	2.65
Frequency online reference works	2.75
Frequency virtual library use	2.70

The table 5 above shows that the most used e-resources were electronic journals with a mean of 2.82, online reference at a mean of 2.75, virtual library with a mean of 2.70, full text articles at a mean of 2.65, online catalogue with a mean of 2.60, e-books with a mean of 2.55 less usage observed for bibliographic databases with a mean of 1.68 as the least used e-resource.

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**Table 6; Frequency of use of e-resources by Faculties**

Item	Faculties							
	Agric	Art	BSS	CIS	Education	Eng. & Tech	Law	Sciences
	mean	mean	mean	Mean	mean	mean	mean	Mean
Freq. of Catalog use	2.75	2.39	2.38	2.90	2.35	2.05	2.15	3.20
Freq. of Biblio Database use	2.58	2.55	2.23	2.80	2.70	2.22	2.70	3.42
Freq. of e-book use	2.86	2.78	2.90	3.30	2.39	2.20	2.87	3.60
Freq. of e-journals use	3.02	2.90	3.62	3.60	3.10	2.16	2.92	4.00
Freq. full text articles use	2.64	2.58	3.25	3.80	2.48	2.44	2.65	3.80
Freq. of online reference work	1.84	1.44	2.23	4.00	1.88	1.25	1.70	3.76

Table 6 shows that the frequency of use of e-resources was higher in the faculty of Sciences and Communication & Information Sciences (CIS) than other faculties. Respondents from the faculty of Business and Social Sciences (BSS) used e-resources more frequently than those in Art.

Furthermore, the respondents from faculty of Engineering and Technology reported less usage of e-resources in the UNILORIN. That may be a result of the high academic load of more than 12 hours by 68.2% of the participants from the faculty of Engineering and Technology. Some participants from Engineering and

Technology expressed their feelings that library doesn't subscribe to the full text journals in the areas of their interests.

**Table 7: Importance of e-resource**

	Not important	Important	Very important	Not very important	Not sure
Online databases	0	40	185	11	05
Electronic journals	0	75	150	07	03
Electronic books	45	105	35	8	7
Online catalogue	58	52	17	5	6
Online reference	68	22	135	5	9
Internet websites	15	85	125	3	2
Electronic mails	0	107	118	2	0

N=225, Important + Very important = Important, Not very important = not important

Table 7: shows that the importance of online databases was mostly used, then followed by electronic journals, online reference, internet websites, electronic mails, electronic books is less important being difficult to download with constraint and online catalogue was not important because large numbers of respondents made use of e-library only and that they have PCs that are connected to the Internet in their offices therefore, they access the Internet from their offices.

**Table 8: Performance of Library in Satisfying Faculty Information Needs via e-resources**

One- Sample Test

Item	Test value =3		
	t	Mean	Sig (2-tailed)
Adequacy of e-resources	8.146	3.80	.000
Adequacy of bibliographic databases	7,135	3.75	.000
Adequacy of training	3,648	3.32	.000

The performance of the library in satisfying lecturer's information needs via e-resources and services. Majority of respondents (62.7%) agreed to a certain extent that the library provided an adequate range of e-resources at a mean of 3.80, and that librarians provided bibliographic instruction at a rather adequate level with a mean of 3.75 but less satisfied (3.32) by the training their library provided to enable academic staff to use e-resources effectively. The inference of the latter finding elicits the need for more extensive and effective training for academic staff in the future to facilitate their capabilities in e-resources utilization.

As shown in the table 8 above, the libraries provided adequate access to a range of e-resources ( $t=3.80$ ,  $p<0.05$ ) librarian provided an adequate level of bibliographic instruction and training that enabled academic members to use e-resources effectively ( $t=3.75$ ,  $p<0.05$ ) and ( $t=3.32$ ,  $p<0.05$ ) respectively.

Table 8 shows that inadequate training and librarian's bibliographic instruction were not obviously significant factors in the low use of e-resources yet there is a slight need for extensive training workshops for academic staff members to facilitate effective and efficient use of e-resources.

**Table 9: One-sample Test.**

Item	Test Value = 3		
	T	Mean	Sig. (2tailed)
Frequency of e-journals use	-2.273	2.80	0.020
Frequency of online reference works	-1.088	2.79	0.275
Frequency of full-text articles use	-1.922	2.73	0.068
Frequency of e-books use	-7.468	2.05	0.000
Frequency of Bibliographic database use	-5.129	2.48	0.000
Frequency of catalog. Use	-3.162	2.44	0.003

### Usage and Factors Influencing Use of e-resources

The following are the results of the study regarding usage patterns and factors that influence use of e-resources in the UNILORIN. As revealed in the literature, among the factors that might inhibit use of e-resources is the irrelevancy of search results from databases. Likewise are the low qualities and

authentication of the content of e-resources and slow response time when using e-resources (Ray and Day 1998).

A t-test analysis was carried-out to measure use of e-resources and ascertains factors that prevent effective and frequent use. A criterion of less than 0.05 was used to determine the significance of use. Table 9 shows that frequency of use of e-resources was significantly low for most types of e-resources. The least frequently used e-resources were e-books ( $t=2.05$ ,  $p<0.05$ ), the online catalogue ( $t=2.44$ ,  $p<0.05$ ) and bibliographic databases ( $t=2.48$ ,  $p<0.05$ ). For comparison, online reference works ( $t=2.79$ ,  $p<0.05$ ), e-journals ( $t=2.80$ ,  $p<0.05$ ) and full-text articles ( $t=2.73$ ,  $p<0.05$ ) were establish to be more accepted, however they still fell below the expected frequency.

**Table 10: Barriers to use of e-resources**

	Test Value = 3		
	t	Mean	Sig.(2-tailed)
Relevancy of search results	9.566	3.80	.000
Quality of e-resources	7.433	3.48	.000
Interface usability	10.122	3.70	.000
Typical access time	3.322	3.33	.003

From the table 10 above, it reveals that search results of e-resources (e.g databases and the results of this survey revealed that, the e-resources the respondents used were fairly relevant with a mean of 3.80. The virtual library interface usability was rather at ease with a mean of 3.70. The quality of e-resources content was relatively good quality with a mean of 3.48. Typical response time was reasonable with a mean of 3.33. This inference supports the hypothesis that relevancy of search result, quality of e-resources content and access time insignificantly influenced the low use of e-resources in the UNILORIN.

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## 7. DISCUSSION

This study revealed that the use of e-resources by the academic staff in the UNILORIN, was not at the expected level that would effectively enhance the learning and research process as stated in the mission statement of the University. Significant low usage was reported for e-books, bibliographic databases and e-journals. These attitudes might be a result of a lack of awareness about the e-resources provided by the library or due to ineffective channels of communication in campus as reported in earlier research. Some respondents have missing values in the question about frequency of use of e-resources; this might be explained as lack of awareness of the participants about the resources provided by the library coupled with inadequate training in ICT and searching techniques. However, the latter result was consistent with finding of previous research (Tomsitt and Alsopn1997, Macias-Chapula 1995).

Furthermore, the results of this survey clearly established the opinion that academic staff in the UNILORIN seem to be equipped with fairly good computer skills that enable them to search and utilize e resources. It emerges that the possession of computer skills only are not sufficient for efficient use of e-resources, hence more organized training programs are needed to familiarize some of the academic members with the e-resources, even though the results didn't overtly show there was a severe lack of training or that librarians offered insufficient bibliographic instruction at the e-library

In addition, results of this study established that neither irrelevancy of search results due to inadequate searching neither techniques nor the slow network were explanations for the low use of e-resources. It seems that the study has also discarded the likelihood that slow response time, and non-availability of the library Web site minimized the use of e-resources in the UNILORIN. The low use of e-resources in the UNILORIN may have a relationship with increasing academic teaching loads, since 90.4% of the respondents teach 10 or more than 12 hours a week. Such load may reduce the focus of academic members on research.

There was no significant difference in usage across the faculties of the campus, with the Faculty of Engineering & Technology and Art having the least usage. The latter finding was interesting and opens a window for further research to clarify this peculiar situation.

## 8. RECOMMENDATIONS

The University Library should increase bandwidth and online journal subscriptions, seeking more funds to do so. More bandwidth will also improve access time as the systems will work faster. Subscriptions to print journals should be maintained.

The University authority should provide more adequate ICT training; this will enhance utilization of internet services.

Incessant power supply should be tackled through provision of generating plant that will serve large number

of university communities, as a matter of urgency; government should provide regular supply of electricity.

Communication gap between librarian and academic staff should be bridged for timely flow of information.

There is need to employ more staff at Network Operation Centre (NOC) unit, this will facilitates quality services.

Finally, the University authority should expand and maintain subscriptions to print journals.

## Implications

Clearly the results of this study have implications for teaching and research generally, as well as for further research. Given the positive perception towards e-resources demonstrated by the respondents in this study, it implies that respondents in the study are suited for a full range of e-resources application. This is assumed that it will fast-track the process of transforming effective and efficient teaching and research at the university. The positive attitudes and satisfactory levels with the usage of e-resources may make respondents especially adept at creative applications of e-resources. The most important implication resulting from this study involves recognizing the extent of the perceived impact of e-resources and its effect on academic and research achievement, easy access and retrieval of information. It is believed that few respondents who are not skilful in usage of e-resources will allow the librarians and bibliographic instructors to assist them. In addition, regular training and seminar/workshop on effective usage of e-resources will serve as an opportunity to provide additional assistance for academic staff, who find using of e-resources an intellectual challenge.

## 9. CONCLUSION

Use of electronic resources recorded huge success among academic staff and they demonstrated the positive impact of the e-resources on teaching and research work. Information-searching skills are interrelated with the use of electronic resources, but the level of the basic PC skills plays not a major role in using of these resources.

## Limitation of the Study

Despite covering a large number of respondents, this study has some shortcomings. These include limited number of academic staff interviewed. This study was conducted during a one day workshop on internationalization of university of Ilorin campus. As a result, very few academic staff was ready to surrender themselves for interview.

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