

Enhancing proper use of Computer and Internet access by Academics in Nigerian Universities.

By

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Abstract

The paper reports the extent of use of the computer and access to the internet by academic staff in selected Nigerian Universities in South- South zone. Most academic staff in Nigerian Universities are aware of the resources of the Internet, but use them relatively infrequently. 50.8% and 53.0% use the computer and access internet "occasionally". The main reasons for this are lack of access to them and lack of proper training. Even though World Wide Web (www) is the most popular resource for teaching and research, its use is still very low due to lack of proper searching skills to retrieve current information. There is therefore the need to use the proper search engines for internet search. Findings showed that 337(81.2%) use search engines without the knowledge of proper metadata search keywords, 42(10.0%) use search engines with proper methadata search keywords, while other academic staff uses Web Directories 36 (8.8%). Recommendations were made to include intensive in –house computer trainings and internet access in various faculties in the institution with emphasis proper skills on internet use to access published research works and current information materials as well as enhance their capabilities in electronic resource usage.

Key words: Computer Usage, Internet Access, e- resources, Nigerian Universities South South Zone

Introduction

The greatest challenge for the world in the twenty-first century is keeping pace with knowledge and researchers finding it necessary to locate, apply and evaluate information for use. Today academics and scholars in Nigerian Universities have had difficulties in accessing publish research information in the form of journals, Newsletters, periodicals, mainly because of lack of skills and interest in such use.

In general, development in Information and Communication Technology (ICT) and the use of electronics resources in the internet will enhance research and also improve the flow of information to research and academic development (Patrick and Urguhart, 2001). The Internet has many resources to assist academics for good scholarly work. According to Adika (2003), lack of access to current materials in university libraries in developing countries is a major problem that hinders research and teaching. He concluded that the internet makes it easier for users to have access to large volumes of information irrespective of their geographical location. Thus, the internet is seen as a library that plays a significant role in education and for scholarly research work such as discussion groups, Telnet, file transfer protocol (FTP), e-mail, directories search engines, information gateways and the world wide web (www), among others. Ciolek (1998) confirmed that internet became a feature of scholarly information space in 1991, when WAIS (Wide Area Information Server), online database, PC-based e-mail software, and Gopher catalogues of links to information repositories and anonymous FTP archives of data were introduced. It therefore has a significant impact on academic work and became recognized in 1993 as a worthwhile tool for scholarly work. While the e-learning is facilitated by ICT tools such as internet, the World Wide Web (www) wireless mobile phones etc. In view of the foregoing, the purpose of this study is to:

1. To explore the awareness and extent of computer usage by academics in Nigerian Universities.
2. Find out the extent of use of the internet and its resources.
3. Ascertain the level and purpose of internet usage and its resources
4. What are the reasons for non-use of the internet?

This study will create greater awareness in the use of the Internet as a valuable scholarly tool. It will also prompt academic staff and the library to work together to exploit its resources for effective academic work. Finally, the study will explore the purposes for use of other Internet resources, thus contributing to knowledge in those areas.

REVIEW OF RELATED LITERATURE

Few studies have been published on how academics are using computers and Internet for research work. Applebee *et al* (1997) has it that some published works are on the area of development and impact of the Internet on libraries and library services especially on the area of the Internet and its effect on library services.

A number of academic user studies have reported that the e-mail facility is the most used Internet resources by staff and students (Applebee et al.,1997; Marklein, 1997; Jefferies and Hussain, 1998; Ojedokun and Owolabi, 2003; Edem 2008). Applebee et al has it that academic staff uses internet to access library catalogues for information, for teaching and research and to obtain messages for conference, meetings and job vacancies.

Marklein (1997) reported that the use of e-mail by college student is so common and over 6.1 million use it to enhance teaching and learning. Jefferies and Hussain (1998) in their findings has this to say that academic staff construct web pages to help structure

students' data gathering and to provide access to a variety of others resources. A number of academic user studies have also reported that the e-mail facility is the most used Internet resource by staff and students (Ojedokun and Owolabi, 2003).

Edem, (2008) opined that the major obstacles to effective use of computers by librarians include inadequate skills in the use of computers, incessant power failure and lack of awareness to computer potentials. Some respondents also complained of lack of personal computers in their homes. The researcher concluded that librarians have not taken adequate advantage of computers in relation to their work; she recommended that short term computer training and retraining programmes be organized from time to time to assist them in updating their knowledge and computer skills in this regard.

According to Ubogu (2000), organization of information materials that do not capitalize on the resource provided by the Internet would become irrelevant in the information era as the Internet provides access to these resources from all over the world. There is therefore the need for Internet for processing and for dissemination of information.

The use of computer and internet in Nigerian universities has come to stay. This is because computers have had significant influences on research outputs and information development. Ojo-Igbinoba (1997) advocated the need for Internet in universities in Nigeria, taking into consideration its versatility in information provision and dissemination. Internet is now the fastest medium for transferring and receiving information about on-going research, results of research output and publications of all kinds. From the foregoing, the use of computer and Internet by academics for scholarly work is very crucial and they should therefore develop positive attitude toward research such use for effective performance.

Research methods

Nine Federal and state universities in the South-South zone of Nigeria were selected for the study: these are university of Calabar, Calabar (UNICAL) University of Uyo, Uyo (UNIYO), University of Port Harcourt, Port Harcourt (UNIPORT), University of Benin, Benin (UNIBEN) Ambrose Alli University, Ekpoma (ABU), Bayelsa State University, Bayelsa (BSU, Cross River State University of Technology (CRUTECH), River State University of Science and Technology (RSUST), Port-Harcourt, Delta State University, Abraka (DSU).

Academic staff in the selected universities constitutes the sample for the study. This is shown in table I. The research method adopted for this study was the survey method. Questionnaires were administered in two categories: by post and personal to all the respondents in the nine universities. A total of 495 academic staff constitutes the sample of the study. out of these, only 415 (83.8%) responded accordingly which showed a good response rate. The data was analysed with descriptive statistics, using the statistical package for social sciences (SPSS/PC). This study was conducted in 2012/2013 academic session.

Data presentation and Analysis

Table I. shows the number of respondents per university

Universities	No. of Respondents	Percentage
Universities of Calabar	55	13.3
Universities of Uyo	55	13.3
Universities of Port Harcourt	45	10.8
Universities of Benin	40	9.6
Ambrose Ali Universities	40	9.6
Bayelsa State University of Technology	40	9.6
River State Universities	45	10.8
Delta State Universities	45	10.8
Cross River State University of Technology	50	12.0
	415	100.0

Table 2 indicates the percentage distribution of respondents in all the Universities understudy by some selected demographic characteristics of academic staff such as sex and academic status

Sex	Frequency	Percentage
Male	262	63.1
Female	153	36.9

Total	415	100
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Academic status	Frequency	Percentage
Graduate Assistant	19	4.6
Asst. Lecturer	82	19.7
Lecturer I/II	214	51.6
Snr Lecturer	85	20.5
Reader	5	1.2
Professor	10	2.4
	415	100

Male respondents account for 262 (63.1%) of the total respondents while 154(36.98%) are women. Of all the professional staff (academics), lecturer I/II respondents have a high response rate of 214 (51.6%) because of their frequent use and Interest in the use of computer/Internet for effective academic work. Other academic staff include senior lecturers 85 (20.5%) and Assistant lecturers 82 (19.8%) respectively.

AWARENESS AND EXTENT OF USE OF COMPUTER BY ACADEMICS.

In this study, the respondents were asked if they are aware of the computer and the extent of use of the computer for research work. The results showed that the awareness of the computer among respondents is universal. All the academic staff who responded to the questionnaire 415 (100.00%) indicated that they are aware of the computer.

In terms of frequency of use of computers, the results of this study (table 3) indicate that most respondents used computers "occasionally" (50.8%), weekly (19.3%) and monthly (12.5%).

Table 3: Frequency of used of computer by respondents

Frequency	Response	(%)
Daily	32	7.7
Weekly	80	19.3
Monthly	52	12.5
Occasionally	215	51.8
Rarely	20	4.8
Never	16	3.9
Total	415	100

Level of use of computers

In table 4, the results of computer experience of respondents are as follows. The majority of the respondents have below 6-10 years (76.0%) of computer experience.

Table 4: Computer experience of respondents

Frequency	Responses (%)
Below 5	10 2.4
Between 6 – 10	315 76.0
Between 11 – 15	50 12.0
Between 16 – 20	30 7.2

Above 20	10	2.4
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In the findings in Table 5 on accessibility to computer systems, the result show that, commercial computers (50.1%) were mostly used by the respondents. While other use their personal computers (22.9%)

Table 5: Computer systems used by respondents

Computer system	Responses (%)	
Personal computer	95	74.9
Departmental computer center	60	14.5
University's Computer	52	12.5
Commercial computer	208	50.1

Obstacle to effective use of computers by academics.

Lack of access to computers (38.1) has been identified as the major obstacles to effective use of computers by the respondents as shown in table 6. Other obstacles include inadequate skills in the use of computer (24.8) and incessant power failure (24.1)

Table 6: Obstacles to effective use of computers by respondents

Obstacles	Response %	
inadequate skills in the use of computer	103	24.8
Lack of/little awareness of	20	4.8

computer potentials		
Lack of access to computers	158	38.1
Non availability of computers	10	2.4
Poor maintenance culture	24	5.8
Incessant power failure	100	24.1

The respondents were also asked to choose from the list of activities in Table 8, which the respondents use computer to perform. The analysis shows that (38.6 %) of the respondents use computers for e-mail; (24.3%) for internet search; (24.1%) for statistical analysis and (12.8%) for word processing.

The inference drawn from this is that the activities for which computers are used are mostly related to teaching/research work.

Table 8: Activities performed with computers by Respondents

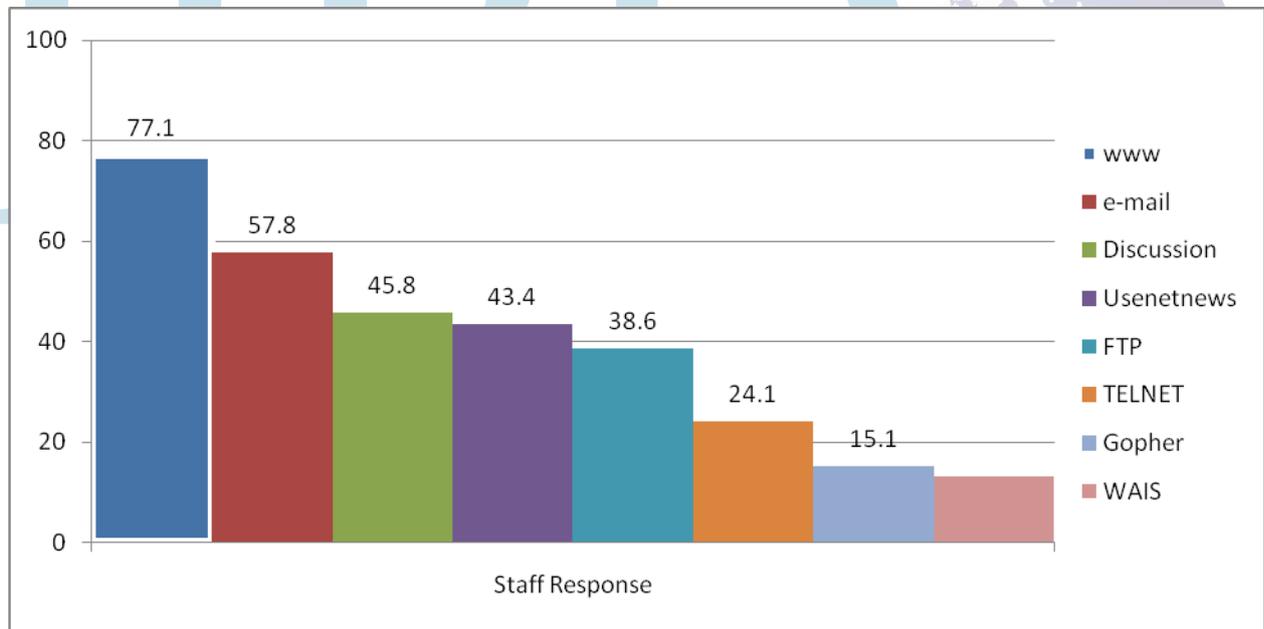
Activities	Response	Percentage
Word processing	53	12.8
e-mail	160	38.6
Internet search	101	24.3
Statistical analysis	100	24.1

Awareness and use of the Internet and its Services

In this study, the respondents were asked if they are aware of the Internet. The results showed that awareness of the Internet among respondents is encouraging. Out of a total of 415 respondents under study only 389(93.7%) responded positively which was

quite impressive while 26 (6.3%) responded negatively which shows their non-use of the internet. Respondents were asked to indicate the various Internet Services use for teaching / research work. The results are presented in Figure I.

The results show that www (77.1%) was the most well-known services for academic staff, followed by e-mail (57.8%), discussion groups (45.8%), use net news (43.4%), file transfer protocol (FTP) (38.6%) and Telnet (24.1%) in descending order. Other resources (Gopher and Wide area information server (WAIS)) were used by 20 percent of the respondents. The high rate of www is consistent with the general trend in the literature showing that it is the most common Internet services for research output. The low rate of Gopher and WAIS were not well know by academics due to lack of understanding of such terms and facilities.



Frequency of Use of Internet services

Respondents were asked to indicate their frequency of use of the internet services. (Table 9), show that most of the respondents used internet "occasionally" (53.0%), others used internet weekly (18.1%) and monthly (12.1%).

They were further asked to indicate the various Internet services used for research work as per the list in Figure 1. The results in Fig II show that www is the most used resource (91.7%), followed by e-mail (84.3%). Other resources (Discussion, use net news, FTP, Telnet, Gopher and WAIS) were used by less than 25 % of the respondents.

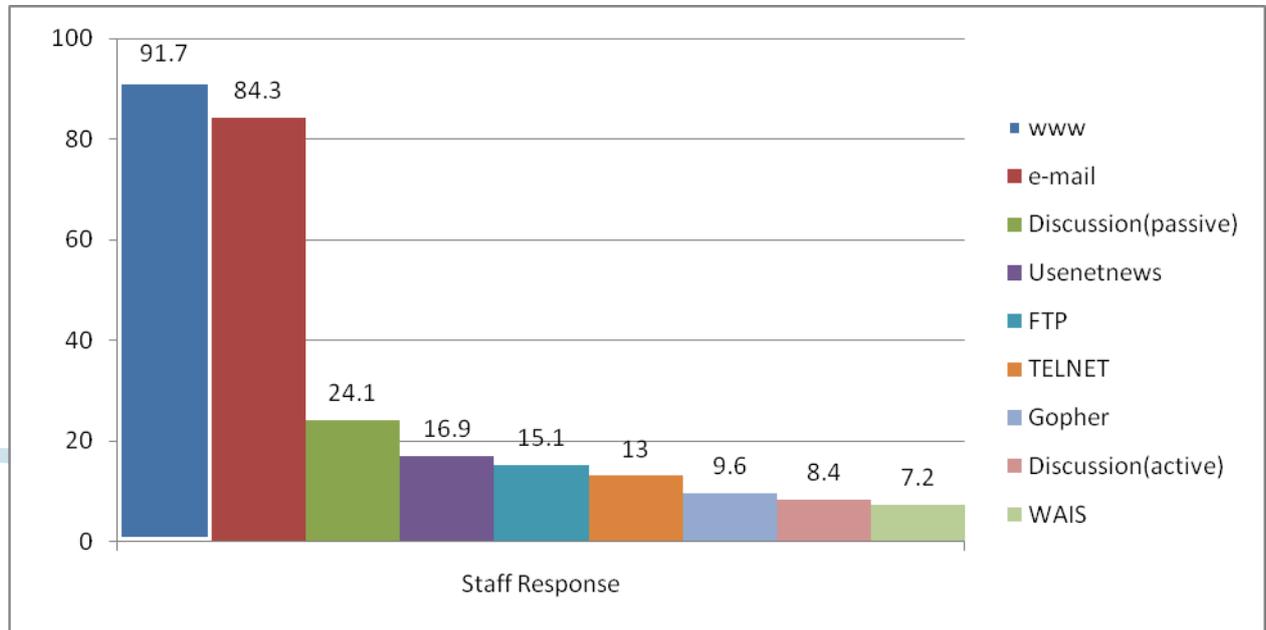


Table 9: Frequency of used of Internet service by academics

Frequency	Response	Percent
Daily	29	7.0
Weekly	75	18.1
Monthly	50	12.0
Occasionally	220	53.0
Rarely	27	6.5
Never	14	3.4

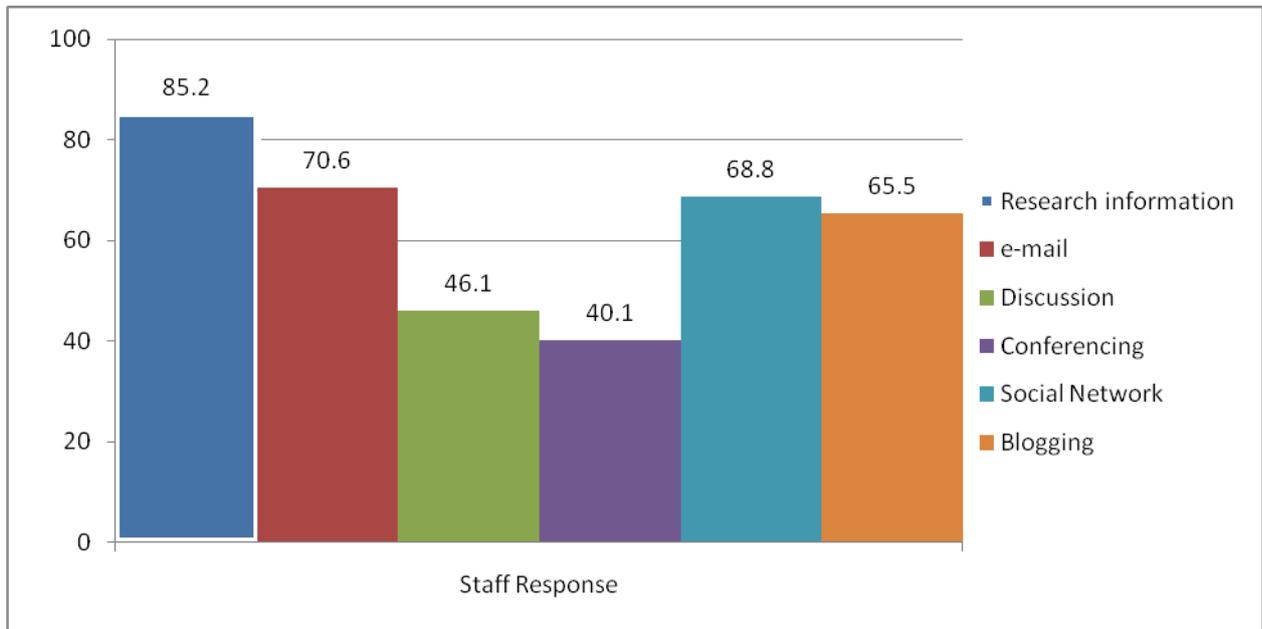
The high rate of www and e-mail usage are consistent with the general trend in the literatures showing that www is the most frequently used internet service for research work that is, it allows browsing from one subject matter to another while navigating through a heap of information. While e-mail is the fastest growing medium through which mails can be distributed electronically. (Adedeyi, 2001). Although, the overall frequency of use of all kinds of internet service by academics are quite low, due to lack of access to the internet and the need for training on such usage. The result on Table 9 shows a high response rate occasionally (53.0%) on the use of internet service.

The low rate of use of discussion groups and use net news is consistent with the findings of Libescher *et al* (1997), who posit that only a few faculty members use these resources and are mostly passive use.

Purpose for which Internet services are used

Figure 3 shows the purposes for which academic staff used internet services mainly for research information (85.2%) followed by e-mail (70.6%), Social Network (68.85), Blogging (65.5%), Discussion (43.5%) and Conferencing (40.0%). The purpose for which conferencing was least used by academic staff was lack of conferencing facilities such as web cameras, good bandwidth which is consistent with the result of Adika (2003). Today, the Internet is the fastest medium of transferring and receiving information about an on-going research, outcome of research and publication of all kinds (Alawode, 1999).

Fig. 3: Purpose for the use of Internet Service by academics.



Perceived usefulness of the Internet

The Internet has several different tools designed to search for, locate and retrieve information on the system. Fig 4 shows the various types of search tools and their usefulness. This figure shows that majority of academic staff use 'search engines' 337 (81.2%) without the knowledge of metadata search keywords, while others use search engines with proper knowledge of metadata search keywords 42 (10.0%) and others choose to use Web Directories 36 (8.8%) to search. The reason being that search engines provide ways to search the contents of millions of web page simultaneously (e.g google,yahoo, MSN, Askjeeve etc) as items are searched in its database. Less than (6.3%) respondent considered the Internet not to be very useful probably because of lack of searching skills.

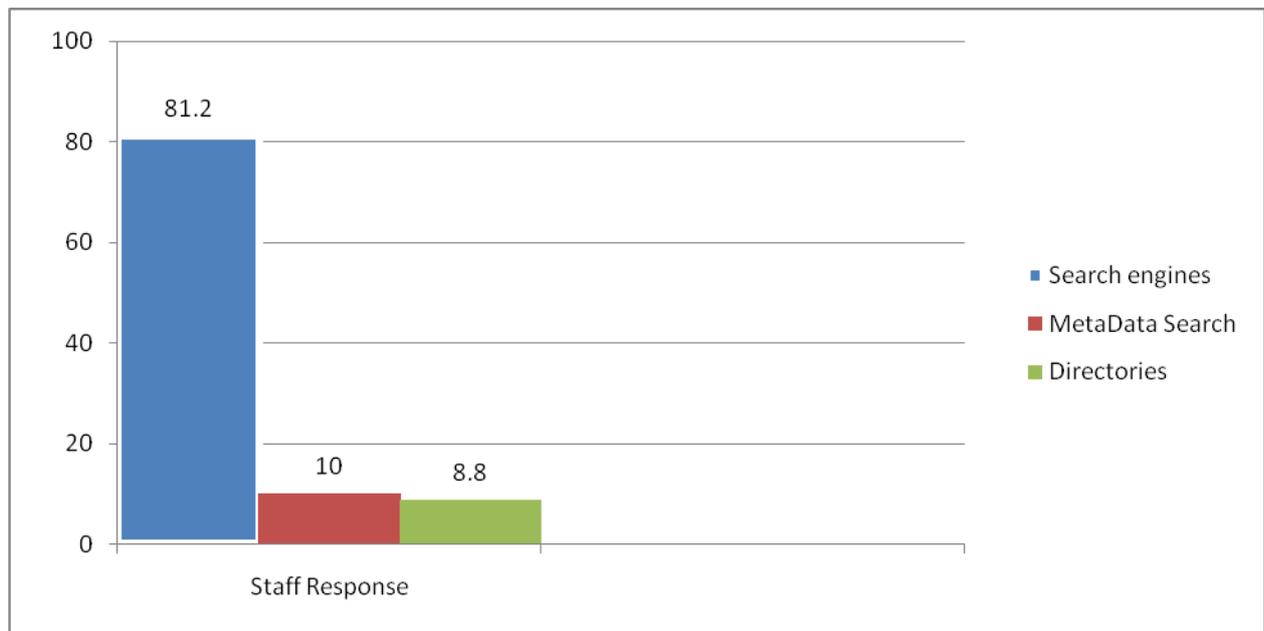
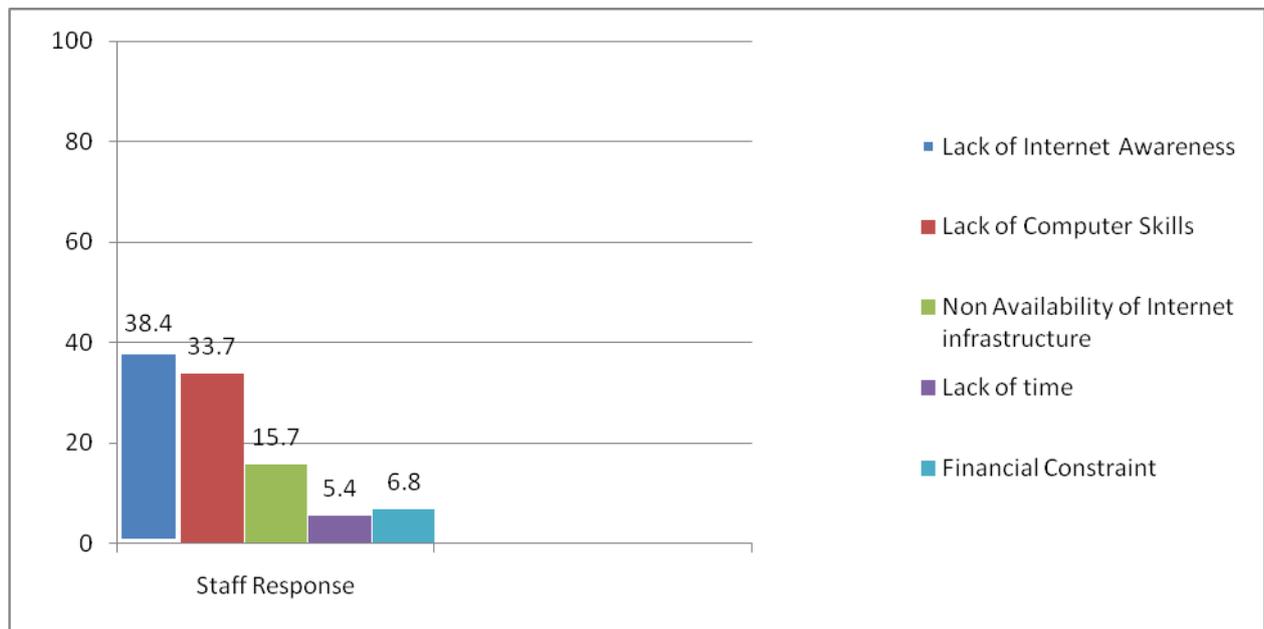


Fig. 4: perceived usefulness of the Internet by academic staff.

REASONS FOR NON-USE OF THE INTERNET

Those respondents who said they did not use the Internet (6.3%), were asked to indicate their reasons for non-use. The results in fig 5 revealed that lack of Internet awareness in the Library is the major reason for non-use. This is consistent with the findings of Ojedokun and Owolabi (2003) who found out that lack of Internet skills is one of the major constraints to effective use of the Internet. Other minor reasons include lack of computer skills, non availability of Internet infrastructures, time and financial constraint in using the cyber cafes for research work.



Conclusion/Recommendation

The purpose of this study was to investigate the extent and level of use of computers as well as access to Internet by academics in Nigerian Universities. The study shows that the awareness and use of computers were universal and components were extensively used by academics in the surveyed universities. In terms of level of use of computers three parameters were involved; frequency of use of computers, years of computer experience and accessibility to computers. The level of use of computer was found to be low as a result of low level of frequency of use of computers, low level of computer experience and lack of access to computer by academics. The study identified lack of access to the computers as a major obstacle to effective use of computer.

The study also revealed the awareness of the Internet and the services to be on the increase but the level of use of the internet service with proper knowledge of metadata search keywords still remain very low due to lack of internet awareness on the proper use of search engines, lack of computer skills, unavailability of Internet infrastructures, financial constraints and lack of time. Academic staff cannot be left out in this information age, they

are to keep abreast with the necessary trainings in computers and internet applications to update their skills in the use of these internet services for effective research outputs. A time has come where quality research productivity is the watch word, that time should be created for a thorough internet search skills for proper academic work as well as update their current approaches in research outputs.

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