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ELECTRONIC INFORMATION SEEKING BEHAVIOUR AMONG POSTGRADUATE BIO-CHEMISTRY STUDENTS AT FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE, ONDO STATE, NIGERIA

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Abstract *The study was undertaken to determine the Electronic information seeking behaviour of postgraduate Bio-chemistry students at Federal University of Technology Akure. The overall purpose of the study was to establish the level of computer competency; the attitudes towards E-resources; number of hours spent on the internet; to know which E-resources materials is being used; and to determine their awareness towards library E-resources. The study collected empirical data on electronic information seeking behaviour of graduate students. Data was gathered from forty seven (47) students out of sixty (60) postgraduate students. Findings revealed that: there is high computer competency among the postgraduate students; it also confirms that high percentage of postgraduate students have positive attitude towards e-resources; 59.57% of the students spends between one (1) to three (3) hours online at a time. The survey revealed that even though the postgraduate students have high computer competency and high value and interest for e-resources, they have not been using them. Based on these findings it recommends that the university library should improve awareness of their e-resources in other to maximise their use.*

Keyword: *Electronic Information Seeking, Behaviour, Information Communication Technology, Postgraduate Bio-Chemistry Students*

INTRODUCTION

The pattern of information seeking of the users' community has witnessed a dramatic shift with the revelation of information communication technologies Azubougu and Madu (2007) coined from Oketunji (2002) confirmed that the use of information communication technologies more particularly in Nigerian universities has of late being considered as the most realistic option of offering timely, accurate, precise, and well-organized information services. In the recent years there have been changes in the search and provision of information in academic libraries. This is as a result of information explosion and improvement on information technologies. Academic libraries irrespective of where it exist should not be left behind in this revolution of delivering and procuring information as fast as possible through the use of information technology. Toner (2008) and Bennett (2003) explained that the revolution in information technology is changing delivery of education. Obura-Okello (2010) opined that academic library should take these new trends into account while planning their services. The University library, Federal University of Technology, Akure like most other academic libraries is also actively engaged in developing her information technology (IT).

OBJECTIVES OF THE STUDY

- Establish the level of computer skills/competency of FUTA Postgraduate bio-chemistry students.
- Determine the attitudes of postgraduate bio-chemistry students towards E-resources facilities available within FUTA.
- How long do they spent on the internet.
- Establish the purpose of online searching of bio-chemistry postgraduate students in FUTA.
- Determine which E-resources materials is been used by FUTA bio-chemistry postgraduate students.
- To investigate problems encountered while using the e-resources
- Recommend appropriate measures to improve electronic information access and use in the Federal University of Technology, Akure (FUTA).

LITERATURE REVIEW

Electronic information seeking of users studies are numerous, and there exist good number of reviews of

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information seeking; information technology, OPAC and e-resources. A census survey was conducted for academic science researchers at the University of North Carolina at Chapel Hill to capture their current information seeking behaviour. Nine hundred and two (920) subjects (26%) completed responses to a 15-minute web-based survey. Survey question was designed to quantify the transition to electronic communications and how this has affected different aspects of information seeking. Findings revealed that significant changes in information seeking behaviour were found, including increase reliance on web-based resources Hemminger, & Dihuilu et al (2010).

Obura-Okello and Odongo-Ikoja (2010) quoting Swain and Panda (2009) in their research on Electronic information seeking among (LIS) Library and Information Science Postgraduate students at Makarere University, Uganda, revealed that the library users' attitude to information is gradually shifting from the printed documents to electronic resources……. They concluded that the introduction of open access Journals and other resources for instance is creating another attitudinal tendency towards e-resources.

Different subjects and settings produce different definitions of information seeking needs, and information systems designed for one setting can be unuseful in other context. This was the outcome of Wildemuth et al (1994) several studies on medical students' information and search behaviours. The study revealed that unlike years when medical students' depend solely on their lecturer notes and recommended text books, due to changes in medical education, medical students' information seeking behaviour now tilts towards the use of information technology in searching information during the last decade.

Obuh (2009) in his research, use of Electronic Resources by Postgraduate students of the Department of Library and Information Science in Delta State University, Abraka, Nigeria revealed that the level of electronic resource usage by students of the Department of Library Science in high.

A study of students of tertiary institution by Valentine, (1993) also indicated that students look for the fastest way of getting satisfactory results when carrying out research and thus tend to go for electronic information sources first.

BACKGROUND INFORMATION ON FEDERAL UNIVERSITY OF TECHNOLOGY AND FUTA INFORMATION TECHNOLOGY OF INFRASTRUCTURE

Federal University of Technology Akure (FUTA) was established in the year 1981 by an act of parliament which was latter replaced by the Federal University of Technology Decree number 13 of 1986 Olofinsawe, and Oyeniyi (2010). "The mission of the University is to ceaselessly promote technological advancement through motivated and skilled staff dedicated to teaching and research geared towards global needs and production on self-reliant high level manpower, goods and services. While the vision of the University is to be one of the best Universities of Technologies in the world, committed to carving out an enviable niche for itself as a center of excellence, epitonized by high quality programmes, produces and contributions to the society". Olofinsawe and Oyeniyi (2010) currently it has seven (7) Schools offering full time Diploma, Undergraduate and Postgraduate Study programmes. As a University of Technology, it has experienced dramatic changes in terms of information technology. The University has Computer Resource Centre (CRC) established and run by the University Management to provide internet services on Campus. It became operation and accessible in year 2005. The Computer Resource Centre also provides access to the Library and other Schools in the University. This is possible with the installation of Wireless Access Point (WAP) in these areas which link all the computer systems in the e-resources unit of the Library. Fasae, (2010) apart from that, the University have Cyber Café with about two hundred (200) computer system units. One hundred located at computer capacity hall, twenty at FUTA Café in centre for Research Development (CERAD), and eighty (80) placed at the Resource Centre Laboratory, all controlled by the computer Resource Centre (CRC). The internet speed is four (4) up links by one (1) down link with data travelling rate of 54 mbps and 5 megabytes bandwidth.

Based on the internet facilities available in the University, FUTA has embraced the electronic provision of information to facilitate its study programmes and research. In 2011, Federal University of Technology, Akure (FUTA) Library with the support of Tertiary Education Trust Fund (TETFund) and Management of the Institution have digitized and uploaded three thousand one hundred and thirty four (3134) postgraduate thesis and over one thousand four hundred and sixty two (1462) files in the University to the internet (FUTA digitization Report, 2011). With the integration of online in FUTA, and in the Library , information services like full text online journal, electronic books, electronic document delivery services, use of OPAC to search available books in the Library, FUTA Library services is gradually altering the way users seek information. Obura-Okello, (2010) reviewing Tsakomas and Papatheodorou (2006) submitted that advances in technology and transformations in the information landscape have altered the way users interact with such information systems.

METHODOLOGY

Bio-chemistry department in the school of Sciences was used for this study:- It has a total population of sixty (60).

The survey method of research was used and the instrument of data collection employed was the questionnaire. The questionnaire comprising of sixty (60) questions was personally administered and analysed using the frequency count and percentage.

RESULTS AND DISCUSSION

Characteristics of the Respondents

Sixty (60) questionnaires were distributed to the sixty (60) targeted postgraduate students of bio-chemistry. Forty-seven (47) was retrieved making (78.3%) response rate, twenty four (24) were male while nineteen (19) were female.

Bio-data

Table1. Distribution of Respondents

Age	Male	Female	Total
21	0	1	1
21-30	15	13	28
31-40	8	5	13
41-50	1	0	1
Total	**24**	**19**	**43**

Level of Computer Competency

From the table, it can be deduced that the majority of the respondents, thirty seven (37) (77%) have high level of computer competency.

Table 2. Level of Computer Competency

Computer competency	Frequency	Percent
Basic	9	19.1%
Intermediate	22	46.8%
Advanced	15	31.9%
Missing (Not tick)	1	2.1%
Total	**47**	**100%**

Perception/Attitude of Postgraduate Bio Chemistry Students Towards E-resources

Table 3 shows that 31 (65%) of the respondents agreed that they would find a great setback to carry out their academic assignments without the availability of e-resources, while nineteen (39%) respondents also agreed that they need e-resources. Other respondents eighteen (37%) also prefer e-resources to printed materials. Some respondents twenty eight (59%) also agreed that open access should be encouraged. Lastly, thirty (63%) of the respondents agreed that University needs e-resources. This result shows that bio-chemistry postgraduate students uses and needs e-resources.

Table 3. Perception towards E-resources

	Strongly agree	Agree	Disagree	Strongly disagree	Missing not tick
Academic work would suffer	13(27.7%)	18(38.3%)	2(4.3%)	2(4.3%)	12(25.5%)
I do not need E-resources	4(8.5%)	12(25.5%)	13(27.7%)	6(12.8%)	12(25.5%)
I prefer printed to E-resources	1(2.1%)	15(31.9%)	12(25.5%)	6(12.8%)	13(27.7%)
Open access should be encouraged	8(17.0%)	20(42.6%)	4(8.5%)	2(4.3%)	13(27.7%)
Every University needs E-resources	13(27.7%)	17(36.2%)	3(6.4%)	-	14(29.8%)

Number of Hours Spent on Internet

This table indicates that respondents spent more than two hours at a time on the internet (59.57%) and few spent more than four hours (4.89%) at a time. This implies that majority of the respondents use internet/e-resources on the average of four to five hours at a time.

Table 4. Hours Spent on Internet

Browsing internet	1-3 hours	4-6 hours	7-9 hours	More than 10 hours
-	28(59.57%)	7(4.89%)	1(2.12%)	3(6.38%)

Ranked Order of Purpose for Carrying Out Online Search

It can be inferred from table 5 that 87.23% of the respondents use the internet for their thesis, while 72.34% use it for general awareness purpose. Other respondents (55.31%) also use the internet for searching jobs on line, and in doing their assignment. The findings also revealed that with the use of internet, bio-chemistry postgraduate students, uses internet in checking their email, SMS, online discussion, class note, recreation leaving little or no time for blogging.

Table 5: Purpose for Carrying Out Online Search

Purpose	Frequency	Percentage
Thesis	41	87.23%
General awareness	34	72.34%
Writing papers	16	34.04%
Recreation	7	14.89%
e-mail	25	53.19%
Career	26	55.31%
SMS	8	17.02%
Online discussion	8	17.02%
Blogging	3	6.38%
Assignment	26	55.31%
Class note	6	12.76%

Most Frequently Used E-Resources and Data Base

Table 6 shows that 16(34.04%) respondents make use of e-mail, 13(27.65%) use the e-learning, while there is a sharp drop (19.14%) in the use of e-books, e-journal, (6.38%) in the use of online data base and (10.63%) in the use of DATAD. Table also revealed that there is low level (2.12%) in the use of Emerald, Agora (4.25%), EBSCO (8.51%) and other e-resources (4.25%) that are available in the University Library e-resource. With the result on table 2: on respondents competency, which is (77%) high, respondents should be quite comfortable in the use of e-resources. It can therefore be inferred that the University Library may not have marketed their e-resources to their community/users.

Which E-resources do you Make Use

Table 6. Use of E-resources

E-Resources	Frequency	Percent
CD ROM	4	8.51%
E-Learning	13	27.65%
E-mail	16	34.04%
E-book	9	19.14%
Online database	3	6.38%
DATAD	5	10.63%
(Nigerian Virtual Library)	8	17.2%
Agora	2	4.25%
EBSCO	4	8.85%
Emerald	1	2.12%
TEEAL	5	10.63%
others	2	4.25%

Problems Encountered in Using E-resources

Half of the respondents identified slow internet speed, as the major problem (63.8%), while other respondents (48.9%) have difficulty in finding information scattered into many sources. And respondents that are not knowledgeable was the least with (8.5%).

Table 7. Problems Encountered in Using E-Resources

Challenges	Yes %	No %	Missing not tick
Information not available	8(17.0%)	38(80.9%)	-
Incomplete information	16(34.0%)	30(63.8%)	1(2.1%)
Not knowledgeable	4(8.5%)	42(89.4%)	1(2.1%)
Can't use e-resources	5(10.6%)	41(87.2%)	1(2.1%)
Internet speed is slow	30(63.8%)	16(34.0%)	1(2.1%)
Information scattered into many sources	23(48.9%)	23(48.9%)	1(2.1%)

FINDINGS

- The findings revealed that there is high computer competency among the Postgraduate students.
- The survey confirm that a high percentage of postgraduate students have a positive attitude towards e-resources.
- 59.57% of the respondent spends between one to 3 hours online at a time.
- It also revealed the highest purposes of using internet, thesis (87.23%), general awareness (72.34%) career (55.31%), and the least indicated of purposes, of using internet by the students.
- Blogging (6.38%), class note (12.76%), and recreation (14.89%).
- However, over 80% agreed that information is available, while over 63% agreed that information complete.
- On the other hand, the respondents see internet speed (63.8%) and scattered information resources (48.9%) as a challenge. On the positive side, about (89%) of the respondent claimed to be knowledgeable about internet while about 987%) claimed to know how to use e-resources.
- The e-resources available in the library such as Agora (4.25%), EBSCO Host (8.51%), Emerald (2.12%), etc are poorly utilized by the Postgraduate students. However, E-mail (53.18%), and career (55.31%) are indicated as the highest used.

CONCLUSION

One of the most significant purposes of the University library is to support research. Since Post graduate students are research students, the University Library has a responsibility of providing print, non-print and e-resources to support their work.

The survey, confirms that even though the respondents have high computer competency and high value and interest for e-resources, they have not been using them.

It behooves the library to support research activity for Postgraduate students by improving internet speed and bandwidth as well as make concerted efforts to market and create awareness of their e-resource in order to maximize their use.

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