

Perception and Utilization of Electronic Resources by Undergraduate Students: The Case of the Federal University of Technology Library, Akure

Cecilia Funmilayo Daramola *

University Library, Federal University of Technology, Akure

*Corresponding author: funlayodaramola@yahoo.com

Abstract The research was carried out to assess the perception of the undergraduate students of the Federal University of Technology, Akure on the use of e-resources in the library. A total of 180 undergraduate students were randomly selected from the students who visited the e-resources section of the University within a period of eight months in 2015 (January – August). A structured questionnaire was used to collect data from the respondents; the data was analyzed using frequency counts, percentages, Likert type scale and means. The study revealed that the undergraduate students that visited the e-resources unit of the University were relatively young with a mean age of 22 years; male students visited the e-resources more than the female students. The e-resources in FUTA library are mainly used by male students that cut across most of the schools in the University. The major reasons for utilizing the e-resources were for assignment and research purposes. The E-resource frequently used was the e-journals, e-book and e-magazines. Although the students have positive perception of the e-resources, the most significant challenge faced by the students was insufficient computers in the e-library. Based on the findings, the study recommends that female students should be motivated to use the e-resources like their male counterparts. More computers should be provided in the library to cater for the needs of the students.

Keywords: *challenges, E- resources perception, E- resources services, E- resources utilization, undergraduates*

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1. Introduction

Electronic resources, according to Shamin [12] have exploded in popularity and use. The increase in the availability of online information has significantly brought about the introduction and use of electronic information resources. The availability of the Internet according to Haroon and Ata [4] has brought about dramatic changes in libraries, especially institutional libraries, in terms of how they collect, organize and disseminate information. The availability of e-resources has changed what users actually read and use. Users now tend to use only what is easily accessible. Access to e resources is influenced by three major factors; availability of computer, network infrastructure and the ability to work with the tools. According to Sharmin [12], the visit of library by students in developed nations has reduced drastically due to their ability to access e resources in their classes, rooms and hostels. However, this is not the case in the developing nations especially Nigeria, where a good proportion of the students cannot afford to purchase computers and where the cost of accessing internet is extremely high. Hence the library within the University systems provides the infrastructures and internet facilities to enhance student’s accessibility of e resources.

The basic functions of any university is to conserve the existing knowledge, to transmit knowledge through teaching, and to create new knowledge through research [2]. The university library is the university’s principal instrument in the conservation of knowledge through its rational, systematic and comprehensive acquisition of all type of human communications records, published and unpublished, written or oral in recorded form that embody the ideas of knowledge of the past since each new idea or invention grows out of accumulated and conserved knowledge. The uses of electronic information resources in the University libraries is aimed at broadening the range of available information within the library and adding value to the content by making them accessible through digital means so that students, researchers, and the entire members of the university community can access them anytime and anywhere

E library has brought about the transformation in information accessibility and utilization because it saves time since one can access publications from one’s convenience. In addition, the extent of publications available combined with easier access may improve scholars’ ability to keep abreast in their fields, and perhaps inspire new ideas and eventually enhance the quality of their work [13].

Despite the fact that the Federal University of Technology Akure made significant investments in

e-resources in the University library, the resources appear to be underutilized by the students. The study is embarked upon to investigate the perception of undergraduate students on electronic information resources utilization in the Federal University of Technology Library, Akure.

The specific objectives includes: To

- ascertain the socio economic characteristics of the respondents
- analyze the different types of electronic resources available in FUTA library
- assess the different purposes of using electronic resources by undergraduates
- assess the frequency of using e library resources by undergraduates
- assess the perception of the respondents on the adequacy of electronic information resource utilization and
- identify the problems faced by respondents while using electronic resources.

The FUTA e library was opened in the year 2006. It is located in the ground floor of the main library. It has 50 seats and is fully air-conditioned. The major equipment available at the e library include computers; printers; electronic Burners; Scanners; Mikrotik Router; Linksys; disc boxes; tables and chairs among other equipment.

The e library has six members of staff. They are: two Data entry clerk, Computer analyst, two librarians, and a porter. Some of the online databases and journal resources at FUTA Library include: Online Access to Research in the Environment; COARE; CAHERO; MIT open courseware; e journals from all disciplines, African Higher Education Research Online; Science Direct; Karger Open Access Searchable gateway; Directory of Open Access Books; Directory of Open Access Journals ; JSTOR; Architecture Week Notes; Bioline International and several others.

2. Methodology

All undergraduate students in the Federal University of Technology, Akure constitute the population for the study. However the samplings frame comprises of 180 respondents randomly selected from the students that utilize the e resources within the University Library. A questionnaire was used to elicit information from them. The questionnaire was divided into five sections: Section A -demographic information; Section B -the various types of electronic resources utilized Section C- the purposes and frequencies of using e resources by the undergraduates, Section D- The perception of the students of the electronic resources in the University Library and Section E- the challenges faced in using electronic resources in the University Library.

The eight demographics questions sought to create a profile of the participants and to identify factors that may affect use of e-resources. The second section contained nine questions on e- resources in the University library, level of computer literacy, location and access to the Internet. The third section consists of five questions on the purposes of using e resources and the frequencies of such use. The fourth section is made up of a Likert-type instrument consisting of 12 items to collect information about students' perceptions toward the utilization of

electronic information services. The responses to the items were recorded as follows: strongly agree =5, agree =4, neither agree nor disagree=3, disagree=2, and strongly disagree=1 while the last section consist of six questions investigating challenges faced in using electronic resources in the university library.

Data collected from the study was analyzed using frequency counts, percentages, mean and standard deviation.

3. Results and Discussion

3.1. Demographic Characteristics of the Respondents

Data in Table 1 shows the demographic characteristics of the respondents. The age of the respondents ranges from 16 – 25 years with a mean age of 22 years. Most of the respondents (75%) were male while 25 percent were female, the respondents cut across all the religions practices. However, there were more Christians than Muslims and African Traditional Religion. This is expected since most of the communities in the south west Nigeria are dominated by Christians.

The students using e-library resources cut across the six Schools within the University. However, School of Earth and Mineral Science (SEMS) has the highest percentage of students (23.33%), followed by School of Management Technology (SMAT) (20.0%) and School of Agriculture and Agricultural Technology (SAAT). All other schools recorded very low percentages of students in the use of the e-library. All the respondents indicated the awareness of the use of e-resources within the University Library. The high level of awareness is contrary to the findings of [10] that nearly 80 percent of respondents knew little about electronic resources in Shaanxi University, Beijing, China.

Table 1. Demographic characteristics of the students

Variable	Frequency	Percentages
Age		
15 years	0	0.00
16-20 years	75	41.67
21-25 years	80	44.44
25 years	25	13.89
Sex		
Male	135	75.0
Female	45	25.0
Religion		
Muslim	54	30.0
Christianity	120	66.67
African Traditional religion	06	3.33
School		
School of Agric. and Agricultural Technology	30	16.67
School of Science	33	18.33
School of Engineering and Engineering Tech.	36	20.0
School of Management Technology	42	23.33
School of Earth and Mineral Science	21	11.67
School of Environmental Technology	18	10.0
Awareness of the Use of E resources		
Yes	180	100
No	0	0.00

3.2. The Various E-Resources Utilized

Data in Table 2 shows the various e-resources utilized in FUTA library. According to the table, there are nine e-resources stated. Over 90 % of the respondents utilized e-journals, 13.59% utilized e-manuscripts, 62.22 % utilized e-book, and 5.5 % utilized e-thesis while 6.67 % utilized e-data archives. Also 63.89 % utilized e-newspaper, 16.67% utilized e-bibliographic database, and 27.78 % utilized e-magazine while 84.44 % utilized e-mail.

While ranking, the most used e-resources among the undergraduate students, e-journal came first followed by e-mail. E-newspaper occupied the third position while e-books occupied the fourth position. At the fifth position are e-magazines, followed by e-bibliographic database. All others (e-manuscripts, e-thesis and e-data archives) recorded very low percentages. It could be said that e-journals and e-mails are the most used e-resources at FUTA university library. This is also contrary to the findings of (Kumar and Reddy, 2014) that majority of the research scholars (54.61%) University Libraries in Andhra Pradesh considered that the print journals are very important despite the presence of e-journals.

Table 2. The various types of electronic resources utilized by the respondents

e- resources	Frequency	Percentages
1. E journal	165	91.67
2. Manuscripts	25	13.89
3. E books	112	62.22
4. E thesis	10	5.56
5. E data archives	12	6.67
6. E newspaper	115	63.89
7. E bibliographic database	30	16.67
8. E magazine	50	27.78
9. E mail	152	84.44

3.3. Purpose of Utilizing E-Resources

Data in Table 3 shows the reasons for using e-resources in FUTA library. According to the table, majority of the respondents (83.33%) visited the e-resources section in order to access their e-mails, 82.22% were there to do assignments. This supports the findings of Musa and Camble [8] that the major reasons for utilizing electronic resources by University students in Adamawa state is for assignments and research.. About 56 percent were there for research/relaxation, 32.22 percent were there to keep themselves updated with information while 31.11 percent utilized the e-resources for leisure. Also, Sajjad and Ramzy, [9] Findings show that libraries are extensively used for research needs, preparation of lectures, and for obtaining current knowledge. That highest percentage of

the students used the e-library to access e-mail and also to do assignment is expected. This is because e-mail is the most common means of accessing/receiving personal information from friends, families or institutions. The information might be from within or abroad.

Also one of the activities that boost the grades of students is the continuous assessment. Students are usually saddled with different assignments. This prompt their search for information, e-resources provides handy information for such assignments more than the printed materials. A good proportion of the undergraduates that use the e-resources section of the FUTA library for leisure might be those accessing magazines, newspaper for news/information. The category that visited for research purposes are mainly the final year students writing their final projects. E-resources provides link to sites and useful information either through journals or e-books that could be used for research writing.

It could be said that the least purpose of visiting the e-resource section of the university is for leisure. Most of the undergraduate students utilized printed newspaper/magazines in the library more than other e-resources. This might result from the belief that e-resources is strictly meant for research and academic purposes.

Table 3. The purposes of using the electronic resources

Purpose	Frequency	Percentages
1. Assignments	148	82.22
2. Research purposes	56	31.11
3. Leisure	100	55.56
4. News / Information	58	32.22
5. To access e mail	150	83.33

3.4. Frequency of Using e-resources

Efforts were made to access the frequency of use of e-resources by the undergraduate students. The utilization of the e-resources was subjected to a four point Likert scale of frequently used, often used, rarely used and not used

According to Table 4, going by the mean, the e-resources in the FUTA library mostly used by the undergraduate students was e-journals; other frequently used were e-mails, e-books and e-newspaper and e-magazines. E-resources frequently used in FUTA library by the undergraduate students are e-journal, e-mail, e-books and e-magazines. Others (e thesis, e data archives, and e bibliography) recorded very low points, although the students utilized them but not often utilized. This supports the findings of Egberongbe [3] that e journals is the most frequently used e-resources among scholars in the University of Lagos, Nigeria

Table 4. The frequency of your using the electronic resources in FUTA library

Variable	Frequency used	O	Rarely used	NOT	Total	Mean	Sig.
E journal	08	204	190	15	417	2.31	NS
E manuscript	20	150	160	55	385	2.14	NS
E book	216	240	20	36	512	2.84	S
E thesis	40	60	200	40	340	1.89	NS
E data archives	48	105	214	26	393	2.18	NS
E newspaper	216	300	40	06	562	3.12	S
E bibilograhy	0	60	60	130	250	1.39	NS
E magazine	16	90	50	121	317	1.76	NS
E mail	240	240	24	12	516	2.86	S

3.5. Perception of the Use of E-Resources

Data in Table 5 shows the perception of the undergraduate students of FUTA on the use of e-resources in the University Library. Twelve variables were outlined and also presented in a five point Likert scale ranging from strongly agreed with five points, agreed with four points, undecided with three points, disagreed with two points and strongly disagreed with one point. Also the points were added together and divided by five. This gave a mean of three (3) points. Any score more than the mean (3) are significant while scores less than the mean (3) are not significant. Going by the mean, nine of the variables were found to be significant. FUTA undergraduate students perceived that FUTA electronic resources at FUTA library were valuable (mean =3). Most of the resources needed by the students are found in the e-resource center (mean = 3.78), e-resources was perceived to have their time more than the printed materials (mean = 3.72), the use of e-resources in FUTA library is quick challenging (mean = 2.19). It's a rewarding experience to

use e-resources in FUTA library (mean = 3.72), students feel they gain a lot through the use of e-resources (mean =3.61), e-resources widen my score of learning (mean = 3.22), and e-resources provided current and updated information than printed materials (mean =3.72) and it is worthwhile using e-resources in FUTA library (mean =3.94).

The three variables that were not significant includes the use of e-resources enhances my learning abilities better than printed material (mean =2.19). I am motivated to use the e-resources in FUTA library (mean = 1.74) and e-resources provides a better way of relaxing (mean = 2.78). In essences the use of e-resources in FUTA library does not enhance students much more than printed materials, the students were not motivated to use the e-resources and that use of e-resources does not provide a better way of relaxation. (Anzari and Zuberi, 2010) (Munira Nasreen Ansari and Bushra Adeeb Zuber, 2010) affirmed that electronic resources are the best means of getting current and up-to-date information.

Table 5. How do you perceive the electronic resources in the university library?

Perception of respondents towards the use of electronic resources in the University Library

S/No.	Variables	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	Total	Sig
1.	The electronic resources are valuable	400	120	15	130	0	665	3.69
2.	Most of the resources I needed are found in e-library	300	200	150	20	10	680	3.78
3.	E-library saves time than printed materials	300	200	120	40	10	670	3.72
4.	The use of e-library resources enhance my learning abilities than printed materials	75	20	120	120	60	395	2.19
5.	The use of e-library is quite challenging	405	160	60	80	0	705	3.92
6.	I am motivated any time I use the e-resources for learning	125	20	180	120	30	313	1.74
7.	It's a rewarding experience to use e-resources in FUTA library	300	240	90	20	20	670	3.72
8.	It's worthwhile using e-library resources in FUTA library	300	240	150	20	0	710	3.94
9.	I feel I gain a lot by using e-resources for learning	300	200	90	40	20	650	3.61
10.	The use of e-resources provide better way of relaxation	175	40	165	80	40	500	2.78
11.	e-resources widen my scope of learning	200	160	165	10	35	580	3.22
12.	e-resources provides current and updated information than printed materials	300	200	120	40	10	670	3.72

3.6. Challenges of Using E-Resources in the University Library

Data in Table 6 shows the various challenges in using e-resources at FUTA library by the undergraduates. According to the table, majority of the respondents (83.3%) indicated that the electronic device/computer as a major challenge. The number of computers at the e-resources center does not commensurate with the number of students in the University. Also, 77.8% indicated technical problems as challenges. It is a fact that some of the computers on the e-resources section of the library are not utilized due to technical problems. 75% of the students mentioned poor orientation of students as a major challenge while 69.4% stated that poor internet connectivity is a challenge to the use of e-resources in FUTA library. About 35% of the students indicated poor personnel relation as a major challenge in utilizing e-resources in FUTA library. It could be affirmed that there are several challenges faced by the students' utilization of e-resources, these range from insufficient computer to technical problems to inadequate orientation of the students. Others include poor internet connectivity, lack of technical know-how on the part of the staff and poor personnel relation. This confirms that the study of

(Ferdinand et al, 2015) that the use of electronic resources by undergraduate students of Federal University of Petroleum Efunrun, Nigeria is hindered by such factors as slow network problem, lack of adequate electronic information resources facilities, high cost of access, inaccessibility of some electronic resources, difficulties in navigating through electronic resource as a result of inconsistency training for users

Table 6. The challenges faced in using electronic resources in the university library

Challenges	Frequency	Percentage
1. Insufficient electronic resources	150	83.3
2. Technical problems	140	77.8
3. Poor/inadequate orientation of students	135	75.0
4. Poor internet connectivity	125	69.4
5. Lack of technical know-how on the part of library personnel	70	38.9
6. Poor personnel relation	60	33.3

4. Summary, Conclusion and Recommendation

The study was carried out to assess the perception of the undergraduate students of the Federal University of

Technology, Akure on the use of e-resources in the library. A total of 180 undergraduate students were randomly selected from the students who visited the e-resources section of the University within a period of eight months in 2015 (January – August). A structured questionnaire was used to collect data from the respondents; the data was analyzed using frequency counts, percentage as well as Likert type scale. The study revealed that the undergraduate students that visited the e-resources unit of the University were relatively young with a mean age of 22 years; male students visited the e-resources more than the female students. The students cut across all the religious practices prevalent in FUTA environment; they also cut across six schools. However, the School of Environmental Management recorded the highest percentage followed by School of Engineering and Engineering Technology. The third position is the School of Science while School of Agriculture and Agricultural Technology occupied the fifth position. All other schools recorded low percentages of students visit.

The various types of e-resources utilized by the students are e-journals, e-mails, e-books and e-magazines all other recorded low percentages. The major reasons for using e-resources in FUTA library by the undergraduate students were to access emails, do assignment and carry out research.

The e-resources most frequently used were the e-journals. This was followed by the e-mails and the e-books. At the fourth position was the e-newspaper. The study shows that e-bibliography, e-data archives, e-thesis and e-manuscript were rarely used among the undergraduate students. The study revealed a positive perception of the students to e-resources in the FUTA library. This is because nine of the twelve variables were perceived positive about the e-resources. It shows that the students saw it as a rewarding worthwhile experience that have actually benefitted them academically. The e-resource was also perceived to have widened the scope of learning and provided current and updated information than the printed materials. However, they did not see it as enhancing learning than the printed materials. The study also revealed that the students were not motivated to use the e-resources and that the utilization of e-resources did not provide a better way of relaxation for the students. The challenges faced by the students in the use of e-resources includes insufficient computers in the unit, technical problems and poor/inadequate orientation of the students in the utilization e-resources. Others are poor internet connectivity, lack of technical know-how on the part of the library personnel and poor personnel relations.

5. Conclusion

The study identified gender differences in the use of e-resources. There was also disparity in the schools that used the e-resource unit most. Other resources not used should be improved to encourage students to use the e-resources optimally.

Recommendation

Based on the findings of the study, the study recommends that:

- Female students should be motivated to use the e-resources like their male counterparts.
- The library unit should enhance constant orientation of students on the use of all the various e-resources in the library.
- More computers should be provided in the library, the library staff should be trained on the use of e-resources.
- Technical staff should be appointed at the resource unit of FUTA library to deal with technical issues.

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