

## **Undergraduate students' motivation towards the use of electronic resources at Federal College of Education (Technical) Gombe, Nigeria**

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### **Abstract**

The purpose of this study is to examine undergraduate students' motivation towards the use of electronic resources at Federal College of Education (Technical), Gombe. The objectives of the study include: to determine the extent of motivation towards the use of e-resources by undergraduate students, to explore the level perception of the undergraduate students to acquire skills to use e-resources and to examine various challenges faced by students in the use of e-resources. This study was guided by descriptive research design. The population of this study consisted of 3725 registered undergraduate students across various Schools. Simple random sampling in probability sampling techniques was used for this study and the sample size of the study was 346. The findings of the study revealed that respondents had motivation to use e-resources for research, intellectual collaboration, build networks among users and improve personal and intellectual thoughts. It was concluded that though not all the public higher institutions in Gombe State participated in this study, e-resources in the study area were found to be useful. Students' motivation towards access to e-resources improves research and learning among the students. The study recommended that motivation of students towards the use of e-resources should be given priority if the college and other higher education intend to achieve its mandate of promoting research and learning among the students.

**Keywords:** Motivation, Electronic resources, Use, Students' perception, Academic libraries

### **Introduction**

Academic libraries are established to provide information resources that support the intellectual, recreational and research needs of the users. The use of computer, Internet, electronic resources and other online services are integral features of every academic library that requires motivation for its effective use (Thomas, O'Bannon, & Bolton, 2013). The motivation to use information resources by the users enhances learning process; research and reorienting the thinking capacity and imagination as the main processes necessary for successful learning (Ajayi, Shorunke & Aboyade, 2014). The ability to use the electronic resources provides an effective of users' cognitive activity (Singh, 2019).

Motivation is of utmost importance to users in promoting access and usage of e-resources in libraries. In the opinion of Ansari (2013), motivation is aimed at inspiring library users to be creative in the ways such as to produce best results. It is the willingness to exert high levels of effort towards goals conditioned by the

efforts and ability to satisfy users' needs in terms of enhancing research and quality learning and information need. In other words, motivation is getting somebody to do something because they want to do it.

According to Song and Bonk (2016), motivation becomes an essential part of learning process where users' interaction with electronic resources has a rigorous role. Promoting motivation to learn is one of the main principles for efficient education. Library users therefore have to be motivated to use the e-resources not only for enhancing learning and research but also for knowledge generation, preservation as well as dissemination of information. This is important because users are critical stakeholders in ensuring that libraries meet their information needs. Motivation is as such considered critical to help users to develop new thinking towards the use of information resources irrespective of conventional and electronic resources (Anunobi & Emezie, 2016).

However, study has shown that not all users especially students appreciate the importance of electronic resources to

enhanced their research work. For example, study by Lamptey (2016) indicates that the inability to inspire their library users to make maximum use of the library resources is still a challenge in public universities in Ghana. The findings from the same study also show that lack of right approach by professional librarians to motivate users will no doubt pose a challenge for the university libraries to accomplish their goals and objectives of providing the required information for teaching, learning, research, and knowledge dissemination.

E-resources have been defined in many ways by different researchers. Anaraki and Babalhavaeji. (2013) define e-resources as resources which require computer access or any electronic product that delivers a collection of data. This could be in text or other multi-media and or databases, electronic journals, collection of images, numerical, graphical and other multimedia products. From the definition, the term e-resources can also refer to all electronic devices that can be used in collecting, processing, organizing, storing and disseminating information which users can access irrespective of time and location. This may be done either on the Internet which could online or offline.

The e-resources that academic libraries procure for their users include CD-ROMs, the Internet, e-journals, e-newspapers and e-magazines, e-books, digital images, online databases and other digital networks or what is commonly referred to as digital libraries (Deborah & Goodluck, 2012). E-resources and the accompanying digital platforms provide several benefits to libraries and its users. Among these benefits are enhanced information searching, retrieval and sharing. They also give users, better access to information and speedy delivery of information (Ayoku & Okafor, 2015; Singh, 2019). Although, such e-resources can be found in all kinds of libraries such as public, special or research centers, the

users in academic libraries in particular benefit immeasurably from them.

The role of academic libraries is evolving with the adoption of new technologies in the provision of information service delivery available and accessible to users. The historical trail of e-resources began in the mid-1960s, with the introduction of machine readable catalogue which served as a directive tool to information resources, this followed the use of OPAC and bibliographic databases, these were later improved to the use of information on CD ROM databases in 1980s (Hawthorne, 2008). The recent electronic information innovations are the online databases and web-based databases, these information resources provide a broader and more information with limitless access in this 21st century. Electronic serials and e-books were also introduced during the same period. Similarly, more information on electronic format such as e-journals, e-books and full-text databases were introduced in the 1990s (Singh, 2019). Similarly, Ayoku and Okafor (2015) added that e-resources allowed users who had internet access to search and retrieve information from any geographical location. Users are now exposed to quantities of e- resources which are more cost effective and provide effective access to information which was previously not accessible or even known.

Electronic resources (e-resources) are important components of information services provision in the modern era (Gakibayo, Odonga & Okello-Obura, 2013). They provide opportunities for modern libraries to share electronic content seamlessly through various digital technology platforms, In that way they enhance access to information and services tailored to the needs of the users.

Globally, electronic resources have become a critical component of library information service delivery. They broadly include information resources that can be accessed via the Internet, storage devices

such as CD-ROMs, pen drives, and other peripheral devices through the use of computer systems. According to Ansari (2013), electronic resources are resources in which information is stored electronically and accessed through electronic systems and networks. These information resources can be found in online databases, electronic journals (e-journals), electronic books, (e-books), Internet resources, etc. E-resources can be used to supplement printed information in university libraries in order to enhance main activities of the institutions, which normally are teaching, learning and research. With regards to academic libraries, the motivation to use the available e-resources by library users has potential to impact the learning, teaching and research among students and the staff (Ani, 2008). Consequently, as Gakibayo, Odonga and Okello-Obura (2013) observed, e-resources have gradually become a major part of academic librarian's to assist users to improve research and intellectual development.

Academic libraries exist to support the community of the parent institutions (Abbas, 2014) Athanasius (2018) views academic libraries as being an integral part of colleges, universities, or other institutions of postsecondary education. They are administered to meet the information and research needs of its students and staff. The libraries are established to enhance the main activities of the institutions, which normally are teaching, learning and research. Academic libraries are set up to support the curricula offered by the parent institution. To achieve its mandate, the library engages in acquiring, organizing, preserving, storing and disseminating information resources in different formats for the benefits of its users.

In Africa, there has been a considerable growth in the use of electronic resources in university libraries through the initiative of different

organizations. Since in the 1990s, the International Network for the Availability of Scientific Publications (INASP) negotiate with international publishers on behalf of African countries for discounted prices on e-resources. The reduced subscriptions are called for to enable users to have access to scholarly works and to host some in their academic institutional repositories.

Similar initiatives as reported by Amusa and Atinmo (2016) indicated that African Universities were supported through programmes like Access Global Online Research in Agriculture (AGORA), HINARI Access to Research Initiatives, the Essential Electronic Agriculture Library (TEEAL); Programme for the Enhancement of Research Information (PERI), as well as Online Access to Research on Environment (OARE). These initiatives have contributed immensely to the availability of e- resources in African Universities.

Additionally, they help most academic libraries in Africa continue to populate their web sites/home pages with intellectual works such as postgraduate students' theses/dissertation, journal articles of faculties, inaugural lectures, annual reports, and past questions. This helps to promote accessibility of intellectual knowledge in African universities to varied users. It is within this vein that, most universities have made it obligatory that students submit their academic work in both print and electronic formats on CD-ROMs. Academic libraries have also taken advantage of the digitization processes to digitize hard copies of old theses and make other information resources more accessible to users. However, the seemingly low level of motivation for library users to be engaged in productive research through the use of these e-resources is still a challenge in some parts of developing country ( Lamptey, 2016)

In Nigeria, there has been remarkable improvement in the provision and access to electronic information resources to help users engaged in academic and research activities. In the past two decades, there have been various initiatives from government agencies, non-governmental organizations and individuals towards library digitization in Nigeria. For example, the Nigerian government initiated the Management Information System (MIS) and Nigerian Universities' Network Modules (NUNET) programmes to automate and digitize library collections (Ayoku & Okafor, 2015).

The National Universities Commission also initiated the Virtual Library Project through funding and provision of digital resources and services, such as computers, electronic resources, and smartphones as well as Internet services in higher institutions' libraries across the country (Ukwoma and Iwundu, 2016; National Universities Commission, 2017). The National Communication Commission (NCC) and National Information Technology Development Agency (NITDA) supported digital libraries in thirty three universities across the country to boost research and learning capacity through the provisions of computers, laptops, servers, Online Public Access Catalogue (OPAC)/Web OPAC and DVD (Ogochukwu, 2015; Premium Times, 2019).

It is worth noting that presently, most academic libraries in Nigeria have acquired e-resources such as e-journals and e-databases through the initiatives to assist their users in effective use of the information resources. Scholars, researchers and students which are the main users of these resources in higher educational institutions in Nigeria have access to wide range of e-resources for their academic needs.

Regrettably, studies have shown that poor perception, low motivation, poor

sense of belonging, people feeling undervalued and poorly rewarded account to poor productivity (Echezona, Ibegbulem, . & Nwegbu, 2015; Atram 2017). In some instance, this has been blamed on shortage of resources or lack of usage skills that cause low productivity in an organization. A further study by Atram (2017) reveals that lack of adequate information services; poor awareness and poor information literacy worsen lack of motivation which in turn leads to students' lack of interest for the library services.

The focus of this study was to identify the level of student motivation towards the use of electronic resources at Federal College of Education Gombe library. It further seeks to explore the level perception of the students to acquire skills to use e-resources. It is important to examine these issues because despite efforts made by the government to equip the university libraries with electronic resources, library users are still lagging behind to effectively make use of e-resources.

Literature review reveals numerous challenges students encountered with the use of e-resources which have led to a wide gap in the motivation towards the use of e-resources (Ogochukwu, 2015). The challenges on the use of e-resources can promote motivation by engaging students in activities which are enjoyable and fulfilling (Echezona, Ibegbulem and Nwegbu (2015) study indicates that, students eager for research prefer to obtain a higher quality information resources and demonstrate that the quality of the learning product enhanced with the interference on motivation.

Observing motivation issues of students' in the use of e-resources, it is worth noting that very often apart of high motivation, low motivation to learn is itself disguised by disregard for any e-resources systems. Therefore, it is necessary to clearly distinguish the reason why students are dissatisfied when

working with online learning systems, what is the nature of these negative reactions. According to Yang and Wu (2012), e-resources must focus on goals to create students' interest and increase their willingness to participate. As argued by Woodrow (2017), technology environment has a multiple effect on students' motivation and leads them to acquire better results. The ratio of total motivation to learning with work motivation in electronic resources is clearly seen in the following example. On the base of one of the public institutions, it was found that the main annoying factors when students work in e-resources are technical errors and failures. At the same time, there was a direct dependence of the degree of this irritation on the motivation to learn.

Considering the generally low degree of motivation of the main stream of most of the nowadays students, the first conclusion should be made: distance and e-resources services should work flawlessly from a technical point of view, i.e. correctly save and reproduce the necessary information. At the same time, the requirements for the quality of the interface are not as critical as the requirements for correct operation and ensuring data integrity. Any systematic error, such as regular system hangs during testing, instantly generates a wave of anger among students who are poorly motivated to learn and this general discontent is rapidly passed on to the entire contingent of students (Vasilyeva and Vasilyeva, 2019).

The e-resource must correctly provide the required information and not annoy by the interface elements. For example, annoying elements may include entering a password repeatedly, special settings of browsers can solve this problem but a full-fledged system should work when delivered without the need for additional settings in browsers. Another factor reducing the motivation of students in e-resources is a fear of everything new,

a kind of IT-xenophobia, caused, on the one hand, by low computer literacy and on the by certain conservatism (Woodrow, 2017).

Woodrow (2017) indicates that students recently started their education as first year students, experienced serious stress when introducing electronic resources. The numbers of dissatisfied participants in the experiment was close to 70 - 80% of the total number of students in the group. At the same time, students from the third year adapted to the BBL system and requirements, readily accepted and overwhelmingly found this experience useful (already 80–90% of students found significant benefits and usability of e-resources). To reduce information and technological xenophobia, in the author's opinion, motivational techniques can be applied, based precisely on the role of the librarians' personality, as a leading factor of success for students' motivation. Emwanta and Nwalo (2013) believe that key imperatives for enhancing effective use of e-resources are technology awareness, motivation, and changing learners' behavior.

### **Statement of the problem**

Despite efforts to boost academic libraries with electronic resources by the government and corporate institutions to improve learning and research process as well as enhance intellectual development (Gakibayo, Odongo & Obura, 2013). Study has shown that the inability to inspire and motivate library users to make maximum use of the library resources is still a challenge in higher institutions of learning (Lamprey, 2016). The central argument in various studies indicated that poor perception towards the use of the Internet, e-journals, e-newspapers and e-magazines, e-books, digital images, online databases and other electronic resources are prominent among library users to access information to improve research and learning process (Zeying, Yinglei,

Nicole, 2008). The argument also note that library users in some developing country especially Africa are still lagging behind to effectively make use of these resources due to poor perception to achieve the mandate of the higher education in fostering new thinking towards knowledge based-society (Atram, 2017).

In Nigeria, despite initiatives by the institutions of higher learning towards the use of e-resources, the frequency of use of electronic information resources by students is still low and the reasons are poor expectation towards the use of e-resources and lack of motivation provided by the librarians to engaged users on the benefits of the e-resources in the library (Atwin, 2018). To utilize the growing range of e-resources, students must be motivated to acquire the necessary skills for their information needs (Goodluck & George, 2014; Singh, 2019). Therefore, this study sought to explore undergraduate students' motivation towards the use of electronic resources at Federal College of Education (Technical) Gombe.

### Objectives of the study

The overall objective of this study is to investigate the student motivation towards the use of electronic resources in Gombe State University Library. Its specific objectives are:

1. To determine the extent of motivation towards the use of e-resources by undergraduate students.
2. To explore the level perception of the undergraduate students to acquire skills to use e-resources.
3. To examine various challenges faced by students in the use of e-resources

### Methods

This study was guided by descriptive research design. This methodology was adopted because the study focused on the undergraduate students' motivation towards the use of electronic resources in Federal College of Education (Technical) Gombe Library.

All undergraduate students in Federal College of Education (Technical) Gombe made up of the population for this study. The undergraduate programme of Federal College of Education (Technical) Gombe is affiliated with Abubakar Tafawa Balewa University, Bauchi. Presently, there are 3725 registered undergraduate students across various Schools in the College such as Bachelor of Technology Science Education, Bachelor of Technology Business Education, Bachelor of Technology Vocational Education and Bachelor of Technology Technical Education as shown in Table 1.

**Table 1: Distribution of the population**

<b>Programme of study</b>	<b>Population of students</b>
B. Tech Science Education	1,127
B. Tech Vocational Education	866
B. Tech Technical Education	514
B. Tech Business Education	1,218
<b>Total</b>	<b>3725</b>

Simple random sampling in probability sampling techniques was used for this study. Probability sampling is a sampling technique that permits the researcher to specify the probability or chance, that each

member of a defined population will be selected for the sample (Gay, Mills & Airasian, 2009). The students were chosen using simple random sampling for the questionnaire. Random sampling removes

bias from the selection procedure and results in representative samples (Croswell, 2012). According table1, a sample size for a population of 3500 to 3900 (N) is 346 (S). 'N' is a population size and 'S' is a sample size. However, the students' population is 3725 which falls under the range of 346 as given in the Krejcie and Morgan's table. Therefore, the sample size of the students is 346.

Questionnaire was the main instrument used for data collection for this study. A questionnaire is a self-report data collection instrument that each participant fills in as part of a research study (Johnson & Christensen, 2008). A questionnaire is a very popular form of data collection tool, especially when gathering information from large groups and when standardization is important. Questionnaire was used for collecting data for this study because it gives the researcher the ability to collect data from a large number of people within a relatively short period of time.

The permission of the school authorities was sought before the instrument administration. The researcher personally distributed the instrument to two the participants. Three hundred and fifty (350) copies of the questionnaire were distributed to the participants. However, only Two hundred and ninety five (295) copies properly filled were returned and analyzed. The administration of the instrument took a span of two weeks.

The quantitative data was analyzed using the Statistical Package for Social Sciences (SPSS) software version 24.0. SPSS statistical techniques are a major tool for data analysis in research. The choice of the SPSS systems was based on the fact that SPSS systems are the standard

analytical tools to analyze quantitative data.

A data entry form was designed for entering questionnaire data into SPSS and the corresponding data of 16 questions was entered into the system. The study variables were presented using descriptive statistics. The data collected for the research were analyzed using frequency distribution, percentage, mean and standard deviation. Data collected from the questionnaire were analyzed using descriptive statistics. The analysis and interpretations of the research findings was in line with the study objectives.

### Results

This section is concerned with data presentation, analysis, interpretation and discussion of findings. The results are presented and analyzed based on the research questions by the researcher's.

**Research objective 1:** To determine the extent of motivation towards the use of e-resources by undergraduate students.

The first objective sought to determine the extent of motivation towards the use of e-resources by undergraduate students. To address this objective the researcher identified sub- themes that addressed motivation towards the use of e-resources by students at FCE Gombe. The respondents were given statements motivation towards the use of e-resources and they were to answer by stating their level of agreement with them using a scale: Strongly Agree (SA) = 4, Agree (A) =3, Disagree (D)=2 and , Strongly Disagree (SD)= 1 respectively. Table 2 shows the statements that the respondents were presented with and how they responded

**Table 2: Motivation towards the use of e-resources by undergraduate students**

Motivation on the use of e-resources	Strongly Agree Count%	Agree Count%	Strongly Disagree Count%	Disagree Count%
e-resources promote intellectual collaboration	87 (29.4%)	88 (29.8%)	65 (22.0%)	55 (18.4%)
The initiatives on the use of e-resources promote independent learning	92 (31.1%)	95 (32.2%)	60 (20.3%)	48 (16.2%)
e-resources motivate personal and intellectual thoughts	89 (30.1%)	88 (29.8%)	67 (22.7%)	51 (17.2%)
The use of e-resources encourage learning and research activities	97 (32.8%)	92 (31.1%)	60 (20.3%)	46 (15.5%)
The use of e-resources build networks in sharing of information among networks of users	87 (29.4%)	88 (29.8%)	65 (22.0%)	55 (18.4%)
e-resources inspired users creativity in interacting with information resources	97 (32.8%)	87 (29.4%)	64 (21.6%)	47 (15.9%)
e-resources promote research and learning process	89 (30.1%)	87 (29.4%)	65 (22.0%)	54 (18.3%)

The findings revealed that 175 (59.2%) of the respondents indicates that they use e-resources to promote their intellectual collaboration, while 120 (40.4%) had a divergent view. Similarly, the finding also showed that 187 (63.3%) of the respondents revealed that various initiatives on the use of e-resources assist in promoting independent learning, while 108 (36.5%) had contrary view. On the aspect of use of e-resources to build networks in sharing of information among networks of users, 173 (59.2%) of the respondents strongly agreed or agreed with the statement, while 120 (40.4%)

disagreed or strongly disagreed. Overall, the implication of this findings in relation to motivation towards the use of e-resources suggest that most of the participants had motivation to use e-resources for research, intellectual collaboration, build networks among users and improve personal and intellectual thoughts.

**Research objective 2:** To explore the level perception of the undergraduate students to acquire skills to use e-resources.



**Perception of the undergraduate students to acquire skills to use e-resources**

Perception to acquire Skills to use e-resources	Strongly Agree	Agree	Strongly Disagree	Disagree
	Count%	Count%	Count%	Count%
I perceived e-resources as an effective way to improve thinking of the users	97 (32.8%)	92 (31.1%)	60 (20.3%)	46 (15.5%)
The perception of users on the use of e-resources in improving level of intellectual productivity	89 (30.1%)	87 (29.4%)	65 (22.0%)	54 (18.3%)
Shortage of e-resources make users to lose interest in the use of e-resources	97 (32.8%)	92 (31.1%)	60 (20.3%)	46 (15.5%)
e-resources create awareness and informed thinking in acquiring knowledge	89 (30.1%)	88 (29.8%)	67 (22.7%)	51 (17.2%)
e-resources enable users to gain information literacy on the need to expands thoughts	92 (31.1%)	95 (32.2%)	60 (20.3%)	48 (16.2%)

The finding reveals that 189 (64.0%) of the respondents perceived e-resources as an effective way to improve their thinking while, 106 (35.9%) had contrary opinion. Similarly, the findings shows that 176 (59.6%) of the respondents indicates perception on the use of e-resources in improved their level of intellectual productivity, while 119 (40.3%) claimed otherwise. On the aspect of shortage of e-resources make to make respondents to lose interest in the use of e-resources, 189 (64.0%) agreed or strongly agree with the statement, while 106 (35.9%) of the

respondents disagreed. Also, 177 (60%) of the respondents indicates that e-resources create awareness and informed their thinking to acquired knowledge, while 118 (40%) of the respondents disagreed. This implies that despites challenges of acquiring knowledge of e-resources, students still perceived electronic resources as a way of improving their skills to gain knowledge.

**Research objective 3:** To examine various challenges faced by students in the use of e-resources

**Challenges faced by students in the use of e-resources**

Challenges faced by students in the use of e-resources	Strongly Agree	Agree	Strongly Disagree	Disagree
	Count%	Count%	Count%	Count%
Lack of motivation on the use of e-resources discourage thought about the library services	60 (20.3%)	46 (15.5%)	97 (32.8%)	92 (31.1%)
Failure in the provision of adequate e-resources to promote learning and research	40 (13.5%)	76 (25.7%)	91 (30.8%)	88 (29.8%)
Proper guide on the use of e-resources rendered it ineffective	60 (20.3%)	46 (15.5%)	97 (32.8%)	92 (31.1%)
Technophobia in the use of e-resources	67 (22.7%)	51 (17.2%)	89 (30.1%)	88 (29.8%)
Low level of computer and Internet skills discourage the use of e-resources	55 (18.4%)	54 (18.3%)	92 (31.1%)	84 (28.4%)

The finding reveals that despites efforts of the respondents to gain knowledge of e-

resources for academic and research activities, 189 (64.0%) of the respondents

disagreed that lack of motivation on the use of e-resources discourage them about the library services. This is because quite numbers of the respondents use personal phones to search for information to motivate them to search for information. While, 106 (35.9%) of the respondents concurred with the statement. Also, 179 (60.6%) of the respondents also disagreed that failure in the provision of adequate e-resources to promote learning and research, while 116 (39.3) of the respondents agreed with the statement. On the aspects of technophobia in the use of e-resources 177 (60.0%) of the respondents did not accept the statement while 118 (40%) claimed challenges in technophobia. Similarly, 176 (59.6%) of the respondents indicated their disagreement on the aspects of low level of computer and Internet skills discourage on the use of e-resources, while 109 (36.9%) agreed with the statement. This implies that despite challenges of motivation on the use of e-resources as indicated in the literatures, many respondents indicate otherwise.

### **Discussion**

Objective one of the study was to determine the extent of motivation towards the use of e-resources by undergraduate students. The study found that the respondents had motivation to use e-resources for research, intellectual collaboration, build networks among users and improve personal and intellectual thoughts. The findings indicate that 175 (59.2%) of the respondents use e-resources to promote their intellectual collaboration, while 120 (40.4%) had a divergent view. The finding also showed that 187 (63.3%) of the respondents had various initiatives to use e-resources in promoting independent learning, while 108 (36.5%) had contrary view. The findings also show that 173 (59.2%) of the respondents use of e-resources to build networks in sharing of information among networks of users and 120 (40.4%) decides otherwise. The finding is in line with a study by Emwanta

and Nwalo (2013) who reported that motivation to use online public access Catalogues (OPAC) in Federal University of Agriculture Library, Abeokuta enhanced academic research productivity. This study is also in consonance with findings of Athanasius (2018) who opined that e-resources have rapidly motivated in academic settings, though the behavior varies according to the disciplines. Although, gaps still exists as not all students of Federal College of Education were motivated because many derived motivation through personal use of electronic devices like personal phone and data rather than consulting the e-resources in the library.

Objective two also reveals that 189 (64.0%) respondents perceived e-resources as an effective way to improve their thinking while, 106 (35.9%) had contrary opinion. The findings shows that 176 (59.6%) respondents indicates perception on the use of e-resources in improved their level of intellectual productivity, while 119 (40.3%) claimed otherwise. The findings also reveals that shortage of e-resources make to make respondents to lose interest in the use of e-resources, agreed or strongly agree with the statement, while 106 (35.9%) of the respondents claim otherwise. Also, 177 (60%) of the respondents indicates that e-resources create awareness and informed their thinking to acquired knowledge, while 118 (40%) had different opinions. This is in line with the study by Deborah and Goodluck (2012) who found that positive perception encourages users to make use of e-resources. The study concurred with the finding of Egberongbe (2011) who posits that there is a general indication that students' perception towards the use of e-resources.

Likewise, in terms of perception to improve new thinking among the students on the use of e-resources, Anarki and Babalhavaeji (2013) suggested that perception of students should be encourage

in accessing, searching and downloading of e-resources. Despite that perception is necessary to bridge the gap in using e-resources, findings still show that many students still lack knowledge to use e-resources because of poor perceptions towards the use of e-resources.

The third objective is the challenges faced by students when using e-resources at FCE (T) library. The study established that 189 (64.0%) had difficulties in the use of e-resources for academic and research activities by the students. This is in line with study conducted by Omeluzor Akibu and Akinwoye (2016) who posit many students in Nigeria find it difficult to conduct research with e-resources.

The study found that failure in the provision of adequate e-resources to promote learning and research. This finding corroborates with the findings of Atram (2017) who confirmed that lack of computer skills, slow network, inconsistent Internet service and power outage were major challenges faced by students. The finding also indicates that low level of computer and Internet skills discourage the use of e-resources. This finding concurred with the study of Gakibayo, Odongo and Okello-Obura (2013) and Ajayi, Shorunke and Aboyade (2014) that lack of enough computers and slow Internet connectivity. Ajayi, Shorunke and Aboyade (2014) also confirmed that a poor Internet facility is a key factor hindering the use of e-resources in the library. These findings disagreed with the finding of Ani and Ahiauzu (2016) that the Internet has been the major source of developing e-resources in Nigerian university libraries as 17 (89.5%) of the surveyed libraries have internet connectivity.

### **Conclusion**

The provision of electronic resources in higher education libraries has provided unprecedented support to modern teaching,

learning and research. Electronic resources have become a pivot in which academic programs depend on and for undergraduate students to have access to current and convenient information for their academic progress. For this reason, it is prudent for Colleges of Education to prioritize e-resources as the major information resources and ensure its potential usage. Based on the finding of the study, though not all the public higher institutions in Gombe State participated in this study, e-resources in the study area were found to be useful. Students' motivation towards access to e-resources improves research and learning among the students. The findings from the study suggest students perceived e-resources as instrument for enhancing knowledge among the students; however, the finding indicates that there are still gaps in the use of e-resources because of poor perception towards the use of e-resources in the library.

The study concludes that despite motivation and positive perception, challenges of lack of motivation on the use of e-resources discourage thought about the library services, failure in the provision of adequate e-resources to promote learning and research and low level of computer and Internet skills discourage the use of e-resources were still prominent among many students in the use of e-resources.

Based on the findings of this study, the following recommendations were made:

1. Motivation of students towards the use of e-resources should be given priority if the college and other higher education intends to achieve its mandate of promoting research and learning among the students
2. There is also the need to facilitate easy access to information as a means of enhancing perception to improve knowledge among the student

3. The study revealed that low level of computer and Internet skills discourage the use of e-resources. With regards to this, the library should sensitize users of e-resources by introducing them to the resources other than the traditional ones.

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